One Tacoma Comprehensive Plan

and Land Use Regulatory Code

Proposed Amendments for 2022

Public Review Document

Prepared for

Planning Commission Public Hearing

April 6, 2022

City of Tacoma
Planning & Development Services Department
Planning Services Division
747 Market Street, Room 345
Tacoma, WA 98402-3793
(253) 591-5030
www.cityoftacoma.org/planning

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Tacoma-Pierce County Health Department
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Section I

Introduction

PLANNING MANAGER'S LETTER TO THE COMMUNITY

March 16, 2022

Dear Community Members:

As the pandemic phase of COVID-19 looks to be waning (fingers crossed) and we strive to find a "new normal" in our lives, it is critical that we do not forget to focus on this community's long-term goals and the continued development happening in the great City of Tacoma. One way we do this is through the work of the 2022 Annual Amendment to the *One Tacoma* Comprehensive Plan and the Land Use Regulatory Code ("**2022 Amendment**").

In collaboration with the Tacoma Planning Commission and the City Council, we keep the Plan and Code current by considering updates on an annual basis. These updates enhance the clarity and applicability of the Plan and Code, and ensure they continue to provide the appropriate policy and regulatory guidance for the growth and development of the City.

The 2022 Amendment package includes the following four proposed amendments ("applications"):

(1) NewCold Land Use Designation Change (near South 46th and Orchard)
(2) South Sound Christian Schools Land Use Designation Change (near Wapato Hills Park)
(3) Work Plan for Code Amendments – South Tacoma Groundwater Protection District (STGPD)
(4) Minor Plan and Code Amendments

The complete text, staff analysis, and background materials associated with these applications are compiled in the attached **Public Review Document**. I would encourage you to review this document, participate in the virtual **Informational Meeting** on March 30th, testify at the Planning Commission's **public hearing** on April 6th, and weigh in on the proposals before the Planning Commission makes a recommendation to the City Council.

Ultimately, the Plan and Code are about setting and implementing this community's goals and priorities, so we need and appreciate your active involvement in this important work. We look forward to your continued support and shared efforts to realize the City of Tacoma's vision, especially in these challenging times.

For more information, please visit the project website at www.cityoftacoma.org/2022Amendment, e-mail us at planning@cityoftacoma.org, or contact the project manager, Stephen Atkinson, Principal Planner, at satkinson@cityoftacoma.org.

Sincerely,

BRIAN BOUDET, MANAGER
Planning Services Division

2022 Comprehensive Plan and Land Use Regulatory Code Amendments

www.cityoftacoma.org/2022amendment

PUBLIC HEARING

PLANNING COMMISSION PUBLIC HEARING

WEDNESDAY, APRIL 6, 2022 AT 5:30 PM

Virtual Meeting via Zoom:
Link: https://www.zoom.us/j/88403846060
Dial-in: +1 253 215 8782
ID: 884 0384 6060

INFORMATIONAL MEETING

WEDNESDAY, MARCH 30, 2022 AT 5:30 PM

Virtual Meeting via Zoom:
Link: https://www.zoom.us/j/83534988617
Dial-in: +1 253 215 8782
ID: 835 3498 8617

TO PROVIDE COMMENTS

Comments may be submitted on the proposals on or before April 8, 2022 at 5:00 PM.

- Testify at the Planning Commission Public Hearing
- **Email:** planning@cityoftacoma.org
- **Mail to:** Planning Commission, 747Market Street, Room 349, Tacoma, WA 98402

Public review documents are available at **www.cityoftacoma.org/2022amendment**

WHAT AMENDMENTS ARE UNDER CONSIDERATION?

APPLICATION: NEWCOLD

The proposal is to change the Land Use Designation for a 3-acre parcel located at 4601 S. Orchard Street owned by NewCold, LLC, from "Light Industrial" to "Heavy Industrial." This would allow NewCold to request a future site rezone and apply for permits to expand its existing 140-foot tall cold storage facility.

APPLICATION: SOUTH SOUND CHRISTIAN

The current Land Use Designation for the site is "Low-Scale Residential" for the 8 parcels, a total of 16 acres, near Tacoma Mall Boulevard and S. 64th Street owned by the South Sound Christian Schools and the CenterPoint Christian Fellowship. The proposal is to change the designation to: (1) "Mid-Scale Residential" for the western 4 parcels, and (2) "General Commercial" for the eastern 4 parcels. This would allow applicants to apply for a site rezone and permits to potentially develop multifamily residential and commercial uses at this location.

APPLICATION: MINOR PLAN AND CODE AMENDMENTS

Compiled by the City's planning staff, this proposal includes 15 technical, non-policy amendments to the Comprehensive Plan and the Land Use Regulatory Code, intended to keep information current, correct errors, address inconsistencies, improve clarity, and enhance applicability of the Plan and the Code.

APPLICATION: SOUTH TACOMA GROUNDWATER PROTECTION DISTRICT (STGPD)

The proposal is for a Work Plan which outlines the approach for improving STGPD related regulations to be more effective in addressing environmental and health risks. The Work Plan and its implementation represent the first-phase response to the "South Tacoma Economic Green Zone" application submitted by the South Tacoma Neighborhood Council. The second-phase response, to be undertaken later on, would be the potential transformation of the South Tacoma Manufacturing/ Industrial Center into an Economic Green Zone that fosters environmentally sustainable industry.

ENVIRONMENTAL REVIEW OF APPLICATIONS

The City has made a preliminary determination that this proposal does not have a probable significant adverse impact on the environment and has issued a preliminary Determination of Environmental Nonsignificance after review of an environmental checklist. Comments on the preliminary determination must be submitted by 5:00 pm on April 8, 2022. The City may reconsider or modify the preliminary determination in light of timely comments. The preliminary determination will become final on April 15, 2022, unless modified. The Preliminary Determination and environmental checklist are available at www.cityoftacoma.org/2022amendment.

¿Necesitas información en español? • 한국어로 정보가 필요하십니까? • Cần thông tin bằng tiếng Việt? • Нужна информация на русском? • ត្រូវការព័ត៌មានជាភាសាខ្មែរ?

planning@cityoftacoma.org

PUBLIC HEARING

PLANNING AND DEVELOPMENT SERVICES
TACOMA MUNICIPAL BUILDING
747 MARKET STREET, ROOM 345
TACOMA, WA 98402

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EXECUTIVE SUMMARY

About This Document

This is the **Public Review Document** prepared for the Planning Commission's public hearing concerning the 2022 Annual Amendment to the *One Tacoma Comprehensive Plan* and the Land Use Regulatory Code ("2022 Amendment"). This document is posted online at www.cityoftacoma.org/2022Amendment.

Applications for 2022 Amendment

The 2022 Amendment includes four applications, as briefly described below. A **one-page summary** of each application is attached to this Executive Summary, while the complete text, staff analyses, and background information associated with these applications are included in **Section II** of this document.

(1) NewCold Land Use Designation Change:
The proposal is to change the Land Use Designation for a 3-acre parcel located at 4601 S. Orchard Street owned by NewCold, LLC, from "Light Industrial" to "Heavy Industrial." This would allow development of the parcel, with future site rezone application, to accommodate future expansion of NewCold's existing 140-foot tall cold storage facility sitting on approx. 34 acres next to the parcel.

(2) South Sound Christian Schools Land Use Designation Change:
The current Land Use Designation is "Low-Scale Residential" for the 8 parcels, a total of 16 acres, near Tacoma Mall Boulevard and S. 64th St. owned by the South Sound Christian Schools and the CenterPoint Christian Fellowship. The proposal is to change the designation to: (1) "Mid-Scale Residential" for the western 4 parcels to allow for future sale and/or multi-family development, and (2) "General Commercial" for the eastern 4 parcels to allow for a future site rezoning application with the intention of developing the site with a general commercial use.

(3) Work Plan for Code Amendments – South Tacoma Groundwater Protection District (STGPD):
The proposed Work Plan outlines the approach for improving STGPD regulations to be more effective in addressing environmental and health risks. The Work Plan and its implementation represent the first-phase response to the "South Tacoma Economic Green Zone" application submitted by the South Tacoma Neighborhood Council. The second-phase response, to be undertaken later on, would be the potential transformation of the South Tacoma Manufacturing/Industrial Center into an Economic Green Zone that fosters environmentally sustainable industry.

(4) Minor Plan and Code Amendments:
Proposed by the Planning and Development Services Department, this application compiles 15 minor and non-policy amendments to the *One Tacoma* Comprehensive Plan and the Land Use Regulatory Code, intended to keep information current, correct errors, address inconsistencies, improve clarity, and enhance applicability of the Plan and the Code.

Environmental Review

Based on a review of the subjects addressed in the 2022 Amendment against an environmental checklist, the City has issued a Preliminary Determination of Environmental Nonsignificance (DNS), which is subject to public comments through April 8, 2022. The DNS and the Environmental Checklist are included in **Section III** of this document. The City may reconsider or modify the preliminary determination in light of timely comments. Unless modified, the preliminary determination would become final on April 15, 2022.

Public Hearing and Informational Meeting

The Planning Commission will conduct a public hearing on April 6, 2022 to receive public comments on the 2022 Amendment. An informational meeting will be conducted by planning staff on March 30, 2022. The notice for the public hearing and the informational meeting is included in **Section I** of this document.

Comprehensive Plan and Land Use Regulatory Code

The *One Tacoma Plan*, adopted in 2015 by Ordinance No. 28335, is Tacoma's comprehensive plan as required by the State Growth Management Act (GMA). As the City's official statement concerning future growth and development, the Comprehensive Plan sets forth goals, policies and strategies for the health, welfare and quality of life of Tacoma's residents. The *One Tacoma Plan* is a blueprint for the future character of our City. The plan can be viewed online at www.cityoftacoma.org/OneTacoma.

The Land Use Regulatory Code, Title 13 of the Tacoma Municipal Code (TMC), is the key regulatory mechanism that implements the *One Tacoma Plan*. Title 13 contains regulations and procedures for controlling land use, platting, shorelines, environment, critical areas, and historic preservation, among others. The Tacoma Municipal Code can be viewed online at www.cityoftacoma.org/MuniCode.

Annual Amendments

The *One Tacoma Plan* is subject to continuous review, evaluation and modification to remain relevant and to respond to changing circumstances. The GMA allows the Plan generally to be amended only once each year. Amendments may include adding new Plan elements, modifying existing elements, revising policies or maps, or updating data and information. All proposed modifications are reviewed concurrently to address the cumulative effect of the revisions and to maintain internal consistency among the various plan components and external consistency with regional, county, and adjacent jurisdictional plans. The GMA requires development regulations to be consistent with and to implement the Comprehensive Plan. To maintain this consistency, changes to the *One Tacoma Plan* often are accompanied by similar changes to development regulations and/or zoning classifications.

2022 Amendment Process

The general timeline and schedule for the 2022 Amendment is as follows:

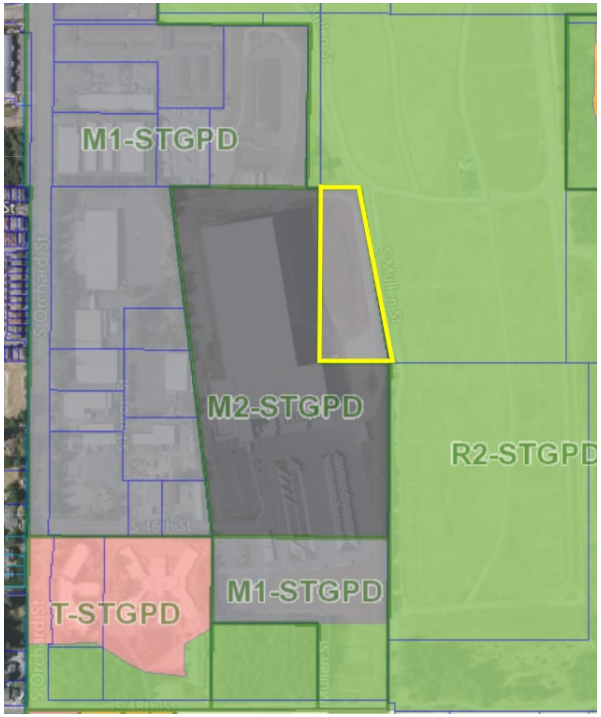
Timeline	Activity
January-March 2021	Applications accepted (submittal deadline March 31, 2021)
May-July 2021	Assessment of applications by the Planning Commission (including a Public Scoping Hearing on June 16, 2021)
July 2021 – March 2022	Technical analysis of applications by the Planning Commission and planning staff, including community outreach and engagement
March-April 2022	Public review of the 2022 Amendment package prior to public hearing
March 30, 2022	Informational Meeting with Planning Staff
April 6, 2022	Planning Commission Public Hearing
April-May 2022	Planning Commission making recommendations to the City Council
May-June 2022	City Council review and adoption

Attachments (to the Executive Summary)

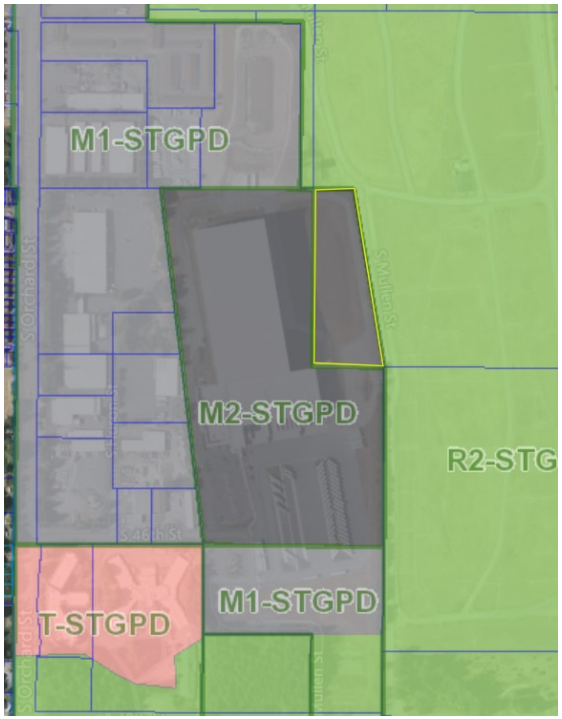
- One-Page Summaries of Applications

2022 Amendment Application: "NewCold Land Use Designation Change"

CURRENT LAND USE DESIGNATION: LIGHT INDUSTRIAL



PROPOSED LAND USE DESIGNATION: HEAVY INDUSTRIAL



Light Industrial Designation:

This designation allows for a variety of industrial uses that are moderate in scale and impact, with lower noise, odors and traffic generation than heavy industrial uses. This designation may include various types of light manufacturing and warehousing and newer, clean and high-tech industries, along with commercial and some limited residential uses. These areas are often utilized as a buffer or transition between heavy industrial areas and less intensive commercial and/or residential areas.

Heavy Industrial Designation:

This designation is characterized by higher levels of noise and odors, large-scale production, large buildings and sites, extended operating hours, and heavy truck traffic. This designation requires access to major transportation corridors, often including heavy haul truck routes and rail facilities. Commercial and institutional uses are limited and residential uses are generally prohibited.

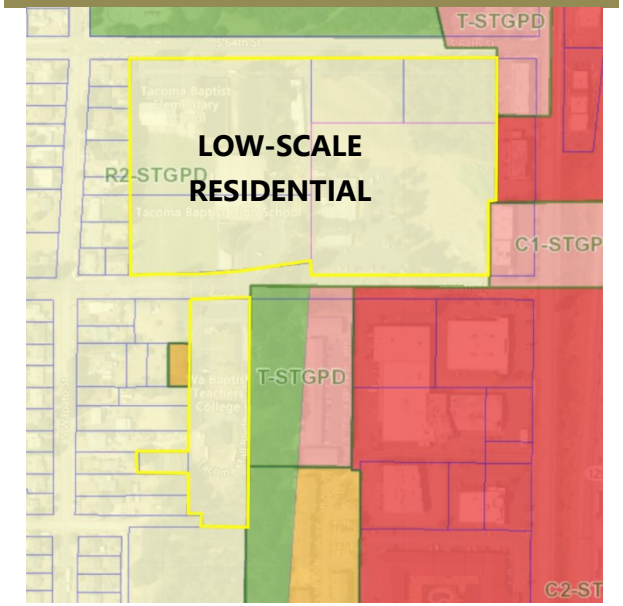
APPLICANT: NewCold Seattle, LLC
SITE LOCATION: 4601 S Orchard Street, Tacoma WA
AMENDMENT TYPE: Comprehensive Plan Future Land Use Map Amendment
WHY IS THIS CHANGE PROPOSED?
NewCold is applying for a Comprehensive Plan Land Use Designation amendment to update a parcel of the Tacoma site to allow for future expansion of an existing facility. The parcel in question is currently designated as "Light Industrial" and NewCold is requesting that the parcel be re-designated to Heavy Industrial. The existing cold storage complex sits on approximately 34 acres, and the subject parcel is an adjacent 3-acre property, directly to the east of the existing approximately 140-foot tall cold storage building.

The NewCold heavy industrial cold storage facility was completed in 2018, the facility has a storage capacity of over 25 million cubic feet in a vertical cold storage layout, with an approximate 100,000 pallet capacity. The facility is utilized by large food companies such as Trident Seafoods as a cold storage link in their supply chains.

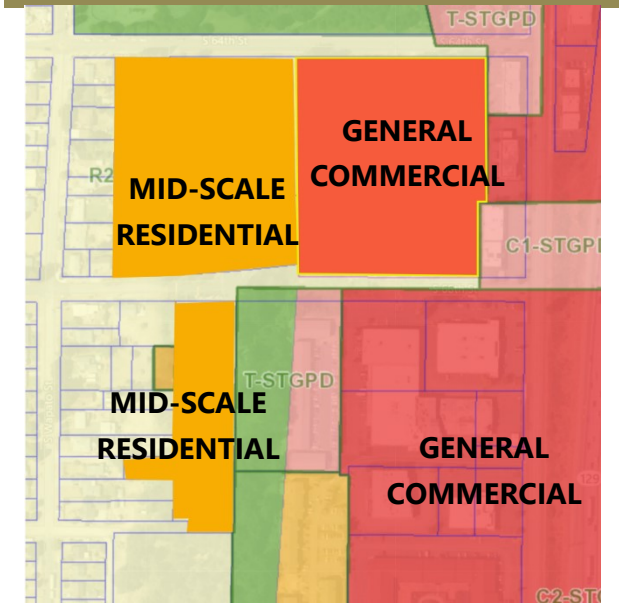
If granted, the land use designation change to Heavy Industrial would enable NewCold to apply for a rezone to an M-2 Heavy Industrial Zoning District.

2022 Amendment Application: "South Sound Christian Schools Land Use Designation Change"

CURRENT LAND USE DESIGNATION: LOW SCALE RESIDENTIAL



PROPOSED LAND USE DESIGNATIONS: MID-SCALE RESIDENTIAL & GENERAL COMMERCIAL



APPLICANT: South Sound Christian/CenterPoint Christian Fellowship
SITE LOCATION: 8 parcels generally adjacent to 2052 South 64th Street
AMENDMENT TYPE: Comprehensive Plan Future Land Use Map Amendment
WHY IS THIS CHANGE PROPOSED?
The parcel owners are working together on a joint application and wish to sell and/or redevelop portions of the site for multi-family development and general commercial development. The applicant hopes to work with Bargreen Ellingson, a South Sound area restaurant supply and design company, to expand their operations in the area. This application is a request for a Land Use Designation Change from a Low-Scale Designation to a Mid-Scale Designation on the western 4 parcels and General Commercial on the eastern 4 parcels with a total land area of approximately 15.96 acres. The Designation change would enable the applicants to seek a site rezone.

Low-scale Residential Designation:

Low-scale residential designations provide a range of housing choices built at the general scale and height of detached houses and up to three stories (above grade) in height. Standards for low-scale housing types provide flexibility within the range of building width, depth, and site coverage consistent with detached houses and backyard accessory structures, pedestrian orientation, and a range of typical lot sizes from 2,500 square feet up to 7,500 square feet. Low-scale residential designations are generally located in quieter settings of complete neighborhoods that are a short to moderate walking distance from parks, schools, shopping, transit and other neighborhood amenities.

Mid-scale Residential Designation:

Mid-scale residential designations are generally located in close proximity to Centers, Corridors and transit and provide walkable, urban housing choices in buildings of a size and scale that is between low-scale residential and the higher-scale of Centers and Corridors. Standards for mid-scale housing support heights up to 3 stories (above grade), and 4 stories in limited circumstances along corridors. Standards shall ensure that development is harmonious with the scale and residential patterns of the neighborhood through building height, scale, width, depth, bulk, and setbacks that prevent overly massive structures, provide visual variety from the street, and ensure a strong pedestrian orientation. Development shall be subject to design standards that provide for a smooth scale transitions by methods including matching low-scale building height maximums where mid-scale residential abuts or is across the street from low-scale areas.

General Commercial Designation:

This designation encompasses areas for medium to high intensity commercial uses which serves a large community base with a broad range of larger scale uses. These areas also allow for a wide variety of residential development, community facilities, institutional uses, and some limited production and storage uses. These areas are generally located along major transportation corridors, often with reasonably direct access to a highway. This designation is characterized by larger-scale buildings, longer operating hours, and moderate to high traffic generation.

2022 Amendment Application: "Work Plan for Code Amendments – South Tacoma Groundwater Protection District (STGPD)"

The following Work Plan outlines the approach for amending the Tacoma Municipal Code pertaining to the South Tacoma Groundwater Protection District (STGPD). The Work Plan represents the initial step of the first component of the two-pronged approach to addressing the original application of "South Tacoma Economic Green Zone." It has been developed based on the thoughts and suggestions from the applicant (South Tacoma Neighborhood Council) and staff from the City of Tacoma's Planning and Development Services Department (PDS) and Environmental Services Department (ES), the Tacoma Public Utilities – Tacoma Water, and the Tacoma-Pierce County Health Department (TPCHD).

1. **Major Issues:**
   (a) General program awareness.
   (b) Enforcement and monitoring.
   (c) Define "periodic update".
   (d) Review proposal for prohibited uses from application.
   (e) Code implementation and code location (including potential relocation).
   (f) Infiltration Policy.
   (g) Program Funding.

2. **Examine code amendments needed.**

3. **Community Engagement and Outreach Strategy:**
   - Stakeholders:
     - Staff Team (representing TPCHD, Tacoma Water, ES and PDS)
     - Permitted and Non-permitted Businesses
     - Homeowners and Taxpayers
     - Neighborhood Councils (South Tacoma, Central, and South End)
     - Planning Commission and City Council
     - Additional local, regional, state and federal agencies and organizations, as may be identified
   - Community Meetings; Surveys; Targeted Ads.
   - Dissemination of information, data, maps and publicity materials that are user-friendly.
   - Focus on Equity.

4. **Evaluate need and funding for consultant services.**

5. **Implementation:**
   - The Work Plan is to be carried out during the 2023 Amendment cycle, i.e. from early 2022 to June 2023.
   - To allow the flexibility to address additional issues that may arise during its implementation, the Work Plan is subject to change, depending on the directives and suggestions from the City Council, the Planning Commission, the applicant, and stakeholders.

2022 Amendment Application: "Minor Plan and Code Amendments"

No.	Issues	Proposed Amendments (Brief Description)
1.	Definition of Family	Revise the current definition of "Family" in the Land Use Code to be consistent with SB 5235 signed into law by the Governor in July 2021.
2.	Preliminary and Final Plats	Remove provisions that state that an approved preliminary short or long plat is an assurance that the Final Plat will be approved.
3.	Residential Landscaping Requirements	Reinstate landscaping buffer exemption that was inadvertently removed due to code reorganization in 2019.
4.	Homeowners' Association Owned Open Space & Other Tracts	Remove "homeowner's association" as an option for owning open spaces and other tracts, and maintain consistency with state law and County code.
5.	Reference to Definition Section	Add "(See definition "Building, height of.")" to the reference to TMC 13.01.060, so that code readers know where to look in the definitions section that is cited.
6.	Cultural Institutions and Public Benefit Use	Enhance the definition of "cultural institutions" and revise the definition of "public benefit use" accordingly.
7.	Efficiency Unit Parking Exemption	Eliminate redundancy regarding bike parking, and provide clarify regarding threshold and limitation on efficiency unit parking exemption.
8.	Single-family detached dwellings – Small Lots (Level 2)	Improve language clarity in the table of Residential District Development Standard – Minimum Lot Area.
9.	Public Facility, Public Facility Site, Public Safety Facilities, and Public Services Facilities	Clarify and consolidate definitions of these terms that are overlapping and confusing into: Public Facility Site and Public Service Facilities.
10.	Street Level Uses and Design	Clarify street level use requirements in downtown districts along Primary Pedestrian Streets.
11.	Infill Pilot Program Handbook	Add a reference to the Infill Pilot Program Handbook and clarify how the handbook is to be used to guide implementation of the program.
12.	Special Use Standards	Eliminate the inconsistencies between the Cottage Housing Special Use Standards and the Infill Pilot Program Cottage Housing standards pertaining to applicable zoning districts and minimum lot size.
13.	Two-family and Townhouse Dwelling	Revise Infill Pilot Program Two-family and Townhouse dwelling text to address vagueness related to number of townhouses permitted and minimum lot/development site size.
14.	Sign Code Update	Remove referencing to political signs, election and candidate, and improve the code to comply with current laws and remain content neutral (code unenforceable if not content neutral).
15.	Manitou Annexation Area Land Use	Align the proposed land use designations for the Manitou Annexation Area with the mid-scale and low-scale residential designations established through the recently adopted Home In Tacoma Phase 1.

Section II

Proposed Amendments and Staff Analyses

Section II-A

NewCold
Land Use Designation Change

NewCold Facility Land Use Designation Change

Staff Analysis Report

March 2, 2022

A private application to amend the land use designation on the City of Tacoma Future Land Use Map (Figure 2 of the *One Tacoma Plan*) at the subject site from a "Light Industrial" to "Heavy Industrial" designation. The applicant has expressed a desire to develop the subject 3-acre parcel in a manner consistent with their adjacent 34-acre heavy industrial cold storage facility. The applicant's future development plans would require a rezone to an M-2 Heavy Industrial Zoning District, which is not supported by the current policy. If the amendment request is approved by the City Council, a subsequent site rezone application would be required to consider the reclassification of the site to the M-2 Heavy Industrial District.

Project Summary	
Project Title:	NewCold Land Use Designation Change Request
Applicant:	NewCold Seattle, LLC – Matt Richardson, NewCold Business Manager
Location and Size of Area:	4601 S Orchard St Tacoma, WA 98466 (APN: 0220133049) Site is approximately 3 acres/130,500SF
Current Land Use and Zoning:	Site is Designated Light Industrial Zoning District: M1- STGPD Light Industrial District & South Tacoma Groundwater Protection District
Neighborhood Council Area:	South Tacoma
Staff Contact:	Larry Harala, Principal Planner, (253) 318-5626, lharala@cityoftacoma.org
Staff Recommendation:	That the Planning Commission accept public comment and begin to develop recommendations to the City Council.
Project Proposal:	See Exhibit "A", attached.

Planning and Development Services
City of Tacoma, Washington
Peter Huffman, Director

Project Manager:
Larry Harala, Principal Planner
lharala@cityoftacoma.org

Project Website:
www.cityoftacoma.org/2022Amendment

A. Area of Applicability

The subject site is located at 4601 S Orchard Street and is a 3-acre lot adjacent to the existing NewCold cold storage facility.

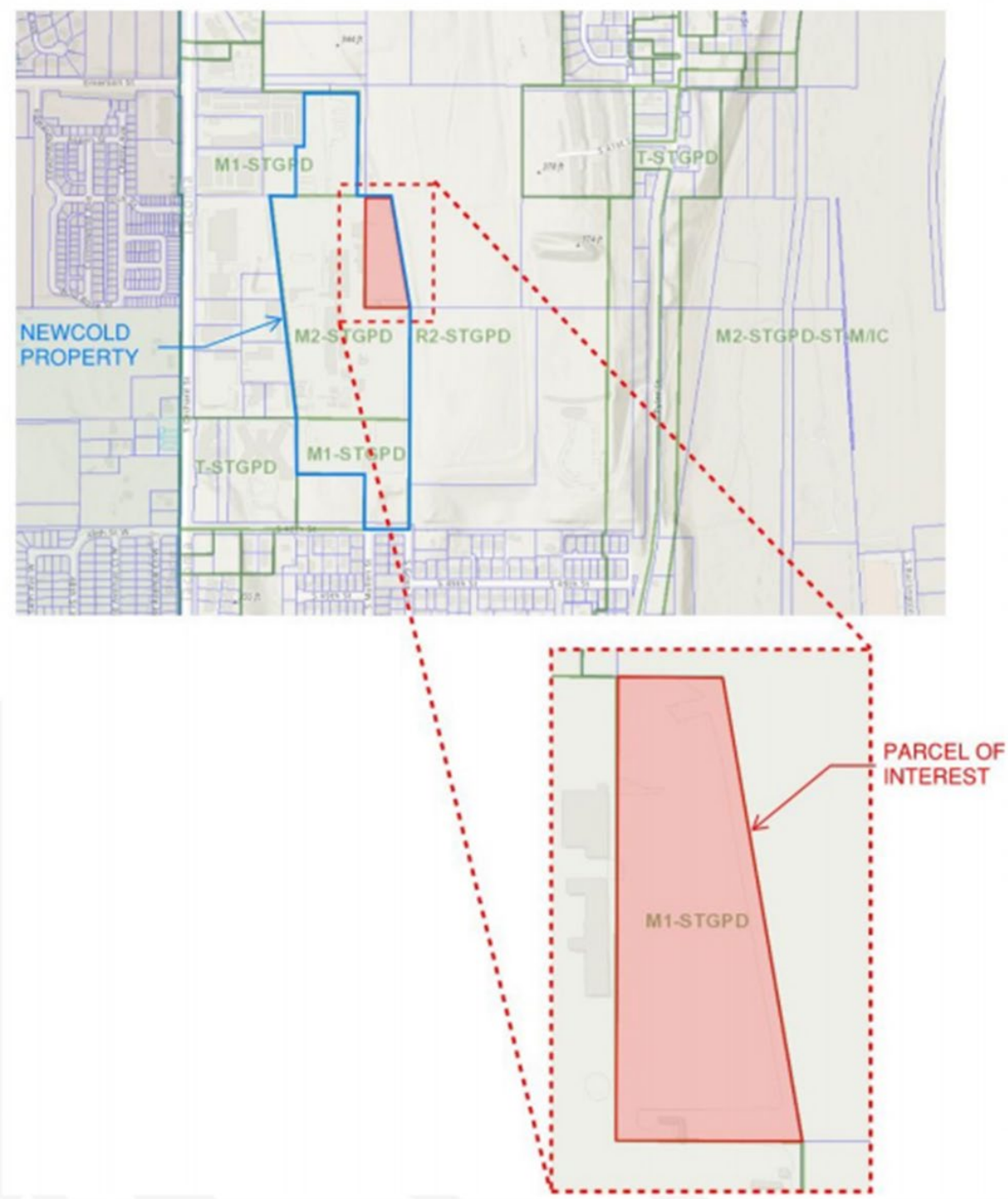


Figure 1: NewCold Property & Parcel of Interest

B. Background

The parcel in question is located east of South Orchard Street off South 46th Street. The site was graded previously for development and is flat and vacant, with no trees or other substantial vegetation. The parcel is in the northeast section of NewCold's property located at 4601 South Orchard Street. The parcel is highlighted on the previous pages above, along with the rest of NewCold's property.

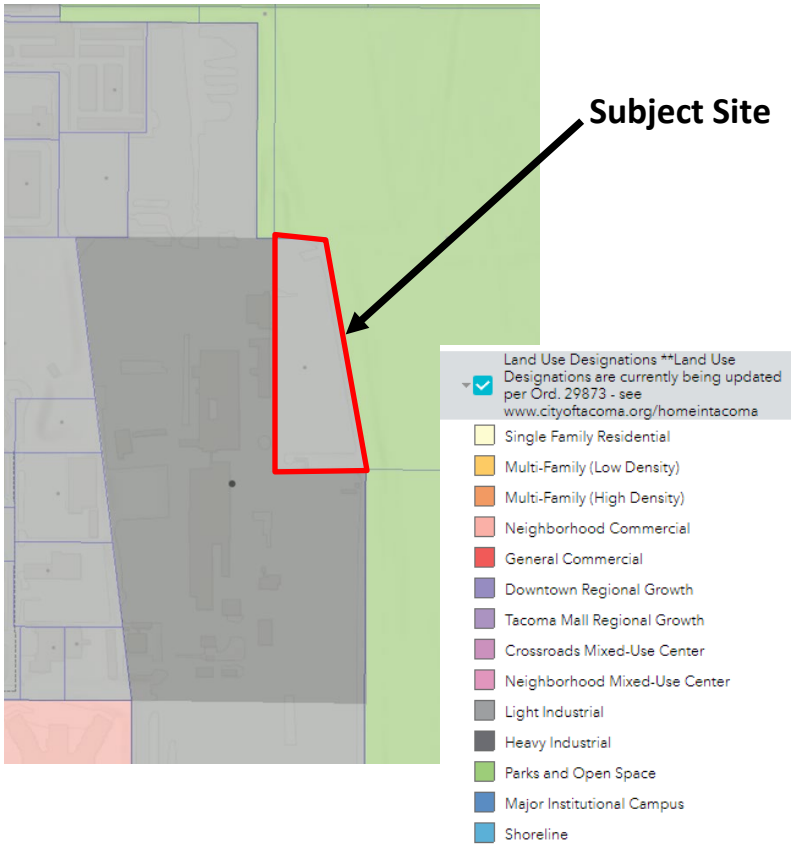
The NewCold heavy industrial cold storage facility was completed in 2018, the facility has a storage capacity of over 25 million cubic feet in a vertical cold storage layout, with an approximate 100,000 pallet capacity. The facility is utilized by large food companies such as Trident Seafoods as a cold storage link in their supply chains. The existing cold storage complex sits on approximately 34 acres, and the subject parcel is an adjacent 3-acre property, directly to the east of the existing approximately 140-foot tall cold storage building.

The parcel has been zoned M-1 Light Industrial since 1989 (Ordinance #24393) and is within the South Tacoma Groundwater Protection District (TMC 13.06.070). The surrounding site developed as a heavy industrial cold storage site has been zoned M2-Heavy Industrial since March 9, 1965 and that adjacent parcel was previously utilized as warehouse and industrial manufacturing and was redeveloped in 2015-2017 to the present use. The subject site was used for industrial storage, pipe, concrete, vehicles and equipment. (See attached Rezoning document).

Staff notes that the applicant indicated a desire for future phase expansion of the facility later onto the subject portion as part of required SEPA evaluation in 2016.

Image below: Existing Cold Storage Facility

Image below: Existing Land Use Designations



The applicant is requesting the land use designation amendment from light industrial to heavy industrial to facilitate a likely future site rezoning request from an M-1 Light Industrial District to an M-2 Heavy Industrial Zoning District. Zoning decisions must be consistent with the Comprehensive Plan, which identifies a specific relationship between the land use designations in the Plan and the implementing zoning district. The table below summarizes this relationship and the type of character and impact expected in a light industrial area and heavy industrial area.

Comprehensive Plan Land Use Designation	***Potential Uses and Impacts***	***Potential Zoning Districts*** *Per the Comprehensive Plan Urban Form Element*
Light Industrial	• Moderate sized buildings • Moderate scale production • Lower noise, odors and traffic generation. • Various types of light manufacturing and warehousing and high-tech industries, • Commercial and some limited residential uses also allowed	• M-1 – Light Industrial District
Heavy Industrial	• Higher levels of noise and odor • Large scale structures • Large scale production • Extended operating hours • Heavy Truck Traffic • Commercial and residential uses heavily restricted	• M-2 - Heavy Industrial District • PMI – Port Maritime & Industrial District

C. Analysis

It is imperative that both the Comprehensive Plan and the Code are properly maintained. The overall objective of the Minor Pan and Code Amendments is to keep the Plan and the Code current, respond to the changing circumstances, and enhance customer service. Staff analysis of this application has been conducted in accordance with TMC 13.02.070.F.2, which requires the following four provisions be addressed, as appropriate:

- A staff analysis of the application in accordance with the elements described in 13.02.070.D;
- An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;
- An analysis of the amendment options identified in the assessment report; and
- An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

a. A staff analysis of the application in accordance with the elements described in 13.02.070.D;

TMC 13.02.070.D, subsection 5.d.(1), requires that the following objectives shall be met by applications for the annual amendment:

- **Address inconsistencies or errors in the Comprehensive Plan or development regulations;**
  Staff Response: Staff does not find that this application addresses any errors or inconsistencies in the Comprehensive Plan or Municipal Code.

- **Respond to changing circumstances, such as growth and development patterns, needs and desires of the community, and the City's capacity to provide adequate services;**
  Staff Response: Staff finds that the proposal is related to changing market demands for industrial land uses and proximity to the Port of Tacoma. The proposal would potentially create new employment opportunities in Tacoma, consistent with the City's employment growth targets.

- **Maintain or enhance compatibility with existing or planned land uses and the surrounding development pattern;**
  Staff Response: Staff finds that this application is generally in keeping with the character of the surrounding designations. While there is a residential neighborhood to the west of Orchard Street, existing heavy industrial facilities (the existing NewCold facility) and light industry are present between those neighborhoods and this subject site. To the east, the site is adjacent to the Tacoma Landfill which is designated Parks and Open Space with no plans for future residential development at that location.

- **Enhance the quality of the neighborhood.** Staff has no finding on this element, rather staff will note that the key will be conditions imposed on the site-specific rezoning and the applicants plan to address possible SEPA findings and proposal to meet and/or exceed the cities development standards and requirements at the time of specific development proposal. There are further steps that would need to be taken, and this element cannot be adequately assessed at this time.

b. An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;

Staff has identified the following pertinent policies for the Planning Commission's review of the proposal for consistency with the Comprehensive Plan. Staff notes that the proposal is generally compatible with the following goals and polices contained within the One Tacoma Comprehensive Plan. Staff also finds that the applicant has made a very significant multi-million dollar investment in the adjacent site, which does provide living wage, diverse, job opportunities which promote the cities broad economic and equity goals. The applicant is making a substantial, long term, investment in Tacoma and that should be noted in terms of assessment of future development of the subject site. The applicant has high incentive to follow all federal, state and city laws, polices, requirements and directives. Furthermore, at the scoping hearing the Planning Commission received testimony stating that the facility is hiring Tacoma residents, training, promoting and educating them in ways that has allowed strong upward mobility for many residents. The applicant has stated than approximately 90-100 employees work at the facility and the average wage is well above the per capita wages for Pierce County. This request may enable expansion of the existing facility which may lead to more employment and further stabilize existing employee opportunities for continued career and wage growth.

Staff does find that there can be a nexus to the cities sustainability goals, in that efficient food storage facilities can help with food waste and also help with the cost of food for Tacomans and for people around our state and nation, perhaps even internationally. As the recent pandemic has highlighted, supply chain considerations are vital for the health of our local, regional and national economy, the City of Tacoma has incentive to ensure that local supply chain facilities are protected and allowed reasonable opportunities for expansion and growth within the goals and polices set forth by the City Council.

Urban Form:

- **Goal UF–1**: Guide development, growth, and infrastructure investment to support positive outcomes for all Tacomans.
- **Policy UF–1.1:** Ensure that the Comprehensive Plan Land Use Map establishes and maintains land use designations that can accommodate planned population and employment growth.
- **Policy UF–1.4:** Direct the majority of growth and change to centers, corridors, and transit station. areas, allowing the continuation of the general scale and characteristics of Tacoma's residential. areas.
  Policy UF–1.6: Support energy-efficient, resource-efficient, and sustainable development and transportation patterns through land use and transportation planning.
- **Policy UF–1.11:** Evaluate the impacts of land use decisions on the physical characteristics of neighborhoods and current residents, particularly underserved and under-represented communities. Avoid or reduce negative development impacts, especially where those impacts inequitably burden communities of color underserved and under-represented communities, and other vulnerable populations. b. Make needed investments in areas that are deficient in infrastructure and services to reduce disparities and increase equity and where growth and change are anticipated.

Design + Development:

- **GOAL DD–4:** Enhance human and environmental health in neighborhood design and development. Seek to protect safety and livability, support local access to healthy food, limit negative impacts on water and air quality, reduce carbon emissions, encourage active and sustainable design, and integrate nature and the built environment.
- **GOAL DD–7**: Support sustainable and resource efficient development and redevelopment.
- **GOAL DD–9:** Support development patterns that result in compatible and graceful transitions between differing densities, intensities and activities.
- **Policy DD–9.1:** Create transitions in building scale in locations where higher-density and intensity development is adjacent to lower scale and intensity zoning. Ensure that new high-density and large-scale infill development adjacent to single dwelling zones incorporates design elements that soften transitions in scale and strive to protect light and privacy for adjacent residents.
- **Policy DD–9.2:** Improve the interface between non-residential activities and residential areas, in areas where commercial or employment areas are adjacent to residential zoned land.
- **Policy DD–9.3** Use land use and other regulations to limit and mitigate impacts, such as odor, noise, glare, air pollutants, and vibration that the use or development of a site may have on adjacent residential or institutional uses, and on significant fish and wildlife habitat areas.
- **GOAL DD–10**: Ensure that all citizens have nearby, convenient and equitable access to healthy foods.

Economic Development:

- **GOAL EC–1**: Diversify and expand Tacoma's economic base to create a robust economy that offers Tacomans a wide range of employment opportunities, goods and services.
- **GOAL EC**—2: Increase access to employment opportunities in Tacoma and equip Tacomans with the education and skills needed to attain high-quality, living wage jobs.
- **Policy EC–1.12:** Actively seek investments to grow Tacoma's presence in the following target industries:
  a. Bio-medical and medical
  b. Information technology and cyber security

c. Professional services
d. Industrial and manufacturing
e. Tourism and hospitality
f. Creative economy
g. International trade
h. Finance and Insurance

- **GOAL EC–2:** Increase access to employment opportunities in Tacoma and equip Tacomans with the education and skills needed to attain high quality, living wage jobs.

Container Port:

- **GOAL CP–3.1**: *Work in partnership with the Port of Tacoma to target and recruit new businesses that support port and port-related industrial activity.*
- **GOAL CP–3.2**: Identify and consider opportunities to remove obstacles to development and to incentivize businesses that support container port and port-related industrial activity.
- **Policy CP–3.3** Consider coordinating an industrial development workforce program for local citizens. Act as a facilitator between businesses, educational institutions, trade associations and residents in order to reduce the workforce development burden of individual businesses and expand employment opportunities for citizens.

c. An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

Anticipated Economic Impact

According to NewCold, the proposed project would have the following employment benefits, and City of Tacoma Community and Economic Development Department staff consider the facility to be vital to the cities continued efforts to grow and diversify the local economy in conjunction with the container port and present employment mix of the city and south sound region.

- Phase 1 of the site brought approximately 100 jobs to Tacoma
  - Phase 2 (with the designation requested) would generate an estimated 100 new permanent jobs, temporary jobs during any development or construction activities, and seasonal jobs once operations commence.
- Many of the staff roles at the existing NewCold facility require a unique skillset and robust training is required in the following practices:
  - IT, Logistics, Automation, Engineering, Maintenance.
- NewCold asserts that it empowers its employees with the on-the-job training to be successful, and during the scoping hearing several employees testified that they had received such opportunity.
  - NewCold states that it continually invests in training and mentorship of employees
- As of 2020 –
  - NewCold Tacoma Average Annual Salary = $64,280 (the 2019 Pierce County Per Capita Income according the US Census Bureau was $34,618 for 2019).

Preliminary Traffic study, Heath & Associates (see Attachment A)

A preliminary traffic impact analysis was conducted by Heath & Associates on behalf of the applicant, the traffic engineer conducting the analysis was Aaron Van Aken, PE. The findings of the report are that the expansion is likely to increase the traffic count along Orchard Street, by an estimated 386 vehicle trips per day. The level of service for the intersection at 46th and Orchard Street would go from a B to C level, but the study indicates that might be the case regardless of an expansion of the NewCold facility or not and that this level of increased traffic does not constitute a major impact.

Preliminary Sound and Light Study, Landau and Associates (see Attachment B)

A preliminary noise and light analysis has been conducted by Landau and Associates, an environmental and geotechnical analytics firm, on behalf of the applicant. The report measured current noise and light levels at the facility and made projections based on the possible expansion of the facility. The findings were that if such an expansion were done the facility could still be in compliance with federal, state and City of Tacoma regulatory limits for both noise and sound with reasonable measures. The report points out that the facility is situated against the city landfill site and that the nearest residential properties are about 800 feet, so direct impacts to residents would be minimal. The report also examines the Joint Base Lewis McChord lighting study and finds that measures taken on the facility can ensure that it complies with general "dark sky" measures, and would comply with what that study calls for.

D. Public Outreach

Public outreach for the "NewCold Land Use Designation Amendment" application has been conducted as part of the Planning Commission's meetings when this application was on the agenda – on May 19, 2021 (reviewing scope of work), June 16, 2021 (Public Scoping Hearing), and July 21, 2021 (approval of scope of work).

Public notice for the Planning Commission Public Scoping Hearing was mailed out to over 30,000 South Tacoma residents for the scoping hearing, including residents of areas outside the city limit boundaries within 2,000 feet of this site.

Staff conducted a virtual community informational meeting on December 6th, 2021. Notice was mailed out approximately two weeks prior to the meeting, and the low attendance was in keeping with a lower public interest exhibited during the public scoping phase during the summer of 2021. The mailing for this meeting was to approximately 715 area residents and property owners within a 2,500 foot radius from the site.

The Commission is scheduled to conduct a public hearing on the 2022 Amendment on March 16, 2022 (tentatively). Additional public outreach for all the applications for the 2022 Amendment will be conducted prior to and during the public hearing process.

E. Recommendation

Staff recommends that the Planning Commission release this staff report and Exhibit "A" for public review and comment.

After the public hearing, staff will facilitate the Commission's review of public comments, decision making, and formulation of recommendations to the City Council, pursuant to TMC 13.02.070.H, as cited below:

H. Findings and recommendations.
   1. Upon completion of the public comment period and review of the public testimony, the Planning Commission will make a determination as to whether the proposed amendments are consistent with the following criteria:
      a. Whether the proposed amendment will benefit the City as a whole, will not adversely affect the City's public facilities and services, and bears a reasonable relationship to the public health, safety, and welfare; and
      b. Whether the proposed amendment conforms to applicable provisions of State statutes, case law, regional policies, and the Comprehensive Plan.
   2. The Commission will prepare a recommendation and supportive findings to forward to the City Council for consideration.

F. Exhibit

- Exhibit "A" – NewCold Land Use Designation Amendment

G. Supplemental Information

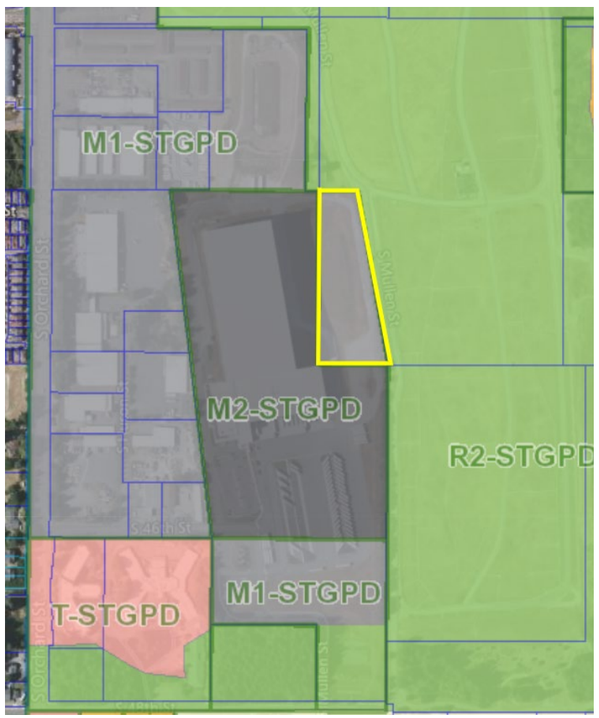
- Attachment A: Traffic Impact Analysis
- Attachment B: Noise and Light Study
- FAQ Document (shared with the South Tacoma Baptist Schools Land Use Designation Change Request)

# # #

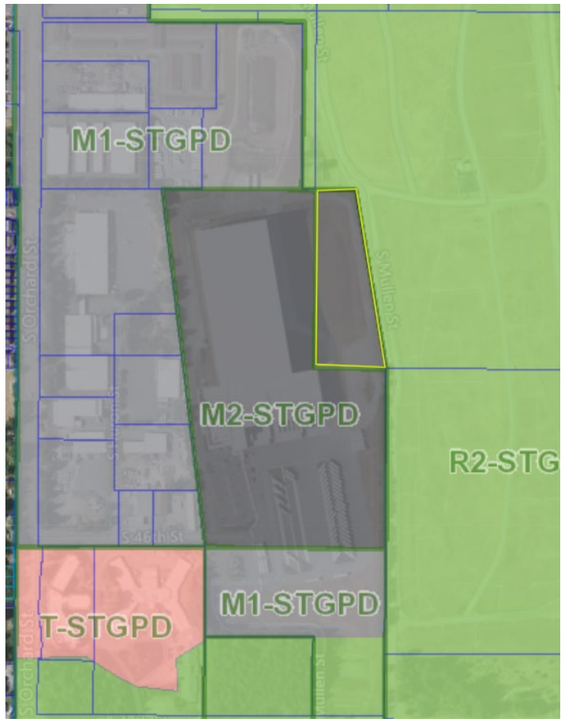
2022 Comprehensive Plan and Land Use Code Amendments

EXHIBIT A: NewCold

CURRENT LAND USE DESIGNATION: LIGHT INDUSTRIAL



PROPOSED LAND USE DESIGNATION: HEAVY INDUSTRIAL



Light Industrial Designation Description:

This designation allows for a variety of industrial uses that are moderate in scale and impact, with lower noise, odors and traffic generation than heavy industrial uses. This designation may include various types of light manufacturing and warehousing and newer, clean and high-tech industries, along with commercial and some limited residential uses. These areas are often utilized as a buffer or transition between heavy industrial areas and less intensive commercial and/or residential areas.

Heavy Industrial Designation Description:

This designation is characterized by higher levels of noise and odors, large-scale production, large buildings and sites, extended operating hours, and heavy truck traffic. This designation requires access to major transportation corridors, often including heavy haul truck routes and rail facilities. Commercial and institutional uses are limited and residential uses are generally prohibited.

APPLICANT: NewCold Seattle, LLC

SITE LOCATION: 4601 S Orchard Street, Tacoma WA

AMENDMENT TYPE: Comprehensive Plan Future Land Use Map Amendment

WHY IS THIS CHANGE PROPOSED?

NewCold is applying for a Comprehensive Plan Land Use Designation amendment to update a parcel of the Tacoma site to allow for future expansion of an existing facility. The parcel in question is currently designated as "Light Industrial" and NewCold is requesting that the parcel be re-designated to Heavy Industrial. The existing cold storage complex sits on approximately 34 acres, and the subject parcel is an adjacent 3-acre property, directly to the east of the existing approximately 140-foot tall cold storage building.

The NewCold heavy industrial cold storage facility was completed in 2018, the facility has a storage capacity of over 25 million cubic feet in a vertical cold storage layout, with an approximate 100,000 pallet capacity. The facility is utilized by large food companies such as Trident Seafoods as a cold storage link in their supply chains.

If granted, the land use designation change to Heavy Industrial would enable NewCold to apply for a rezone to an M-2 Heavy Industrial Zoning District.

To learn more: visit www.cityoftacoma.org/2022amendment or email at planning@cityoftacoma.org.

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NEWCOLD TACOMA
TRAFFIC IMPACT ANALYSIS

City of Tacoma, WA

02/1/2022

Prepared for: Sarah Remington
NewCold Seattle, LLC
4601 S Orchard St
Tacoma, WA 98466

February 2022

NEWCOLD TACOMA
TRAFFIC IMPACT ANALYSIS

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NEWCOLD TACOMA
TRAFFIC IMPACT ANALYSIS

1. INTRODUCTION

The main goals of this study focus on the assessment of existing roadway conditions and forecasts of newly generated project traffic. The first task includes the review of general roadway information on the adjacent streets serving the subject site and gathering existing vehicular volumes within a defined study area. Forecasts of future traffic and dispersion patterns on the street system are then determined using established trip generation and distribution techniques. As a final step, appropriate conclusions and mitigation measures are defined, if needed.

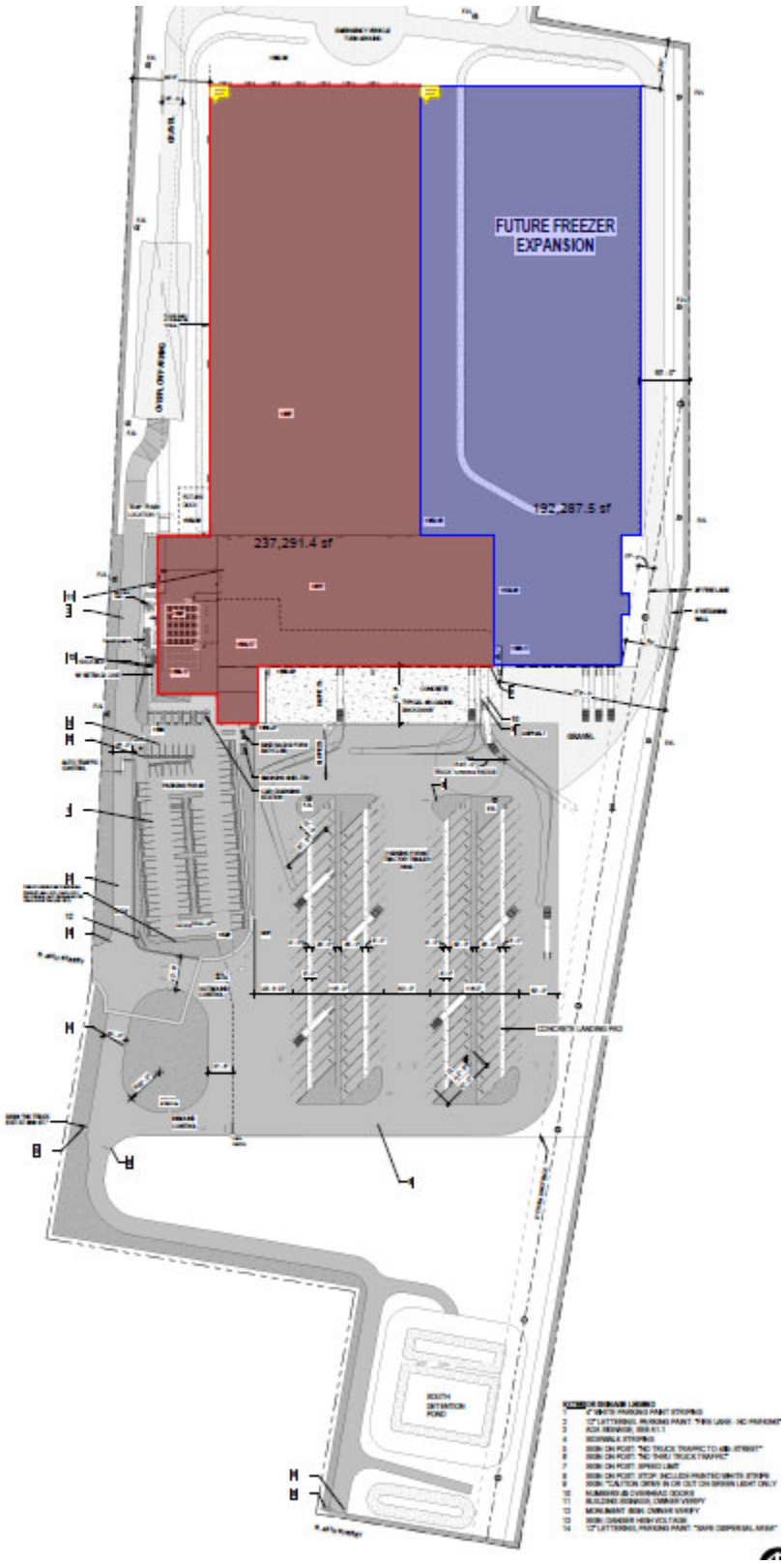
2. PROJECT DESCRIPTION

NewCold Tacoma proposes for a future expansion of an existing cold storage warehouse facility located in the city of Tacoma. The subject site is located within 33.79-acre tax parcel #: 0220133049 and is east of S Orchard Street and accessed primarily by way of S 46th Street. The existing building comprises approximately 237,291 square feet. An expansion, as predicated of a proposed rezone for the subject parcel from M1 to M2 could expand the building or construct a new building comprised of an estimated up to 200,000 square feet. This evaluation examines the existing activity occurring at the facility to derive future traffic estimates for a future project expansion. A vicinity map of the surrounding roadway network is provided below. Figure 2 illustrates a conceptual site plan with the area of expansion.

Figure 1: Vicinity Aerial

Figure 2: Conceptual Site Layout

Illustrated in red is the existing building footprint. In purple is the subject expansion area.



3. EXISTING CONDITIONS

3.1 Existing Street System

The street network serving the proposed project consists of a variety of roadways. The major roadways and arterials defined in the study area are listed and described below.

S Orchard Street: is a multi-lane, north-south, principal arterial west pf the subject site. Travel lanes are approximately 10-11 feet in width. The roadway cross-section consists of two travel lanes in either direction and a center two-way left-turn lane or left-turn lane. Sidewalk is generally provided along the east side of the roadway. The posted speed limit is 35-mph.

S 46th Street: is a two-way local roadway providing access to the subject property. As part of the NewCold Phase 1 development, the roadway at its intersection with S Orchard Street was constructed to include separate left- and right-turn lanes. No non-motorist facilities are present.

3.2 Transit Service

A review of Pierce Transit's service system indicates that transit is readily provided in the vicinity of the subject site. The nearest bus stops in relation to the subject site are provided at the intersection of S Orchard Street & S 46th Street Route 53 (~640' east of the subject parcel), serving Route 53. Route 53 – University Place provides service from the TCC Transit Center to the Tacoma Mall Transit Center. Weekday service is provided from 5:50 AM – 10:45 PM with approximately 30-minute headways. Saturday service is provided from 9:25 AM – 6:00 PM with approximately 60-minute headways. Sunday service is provided from 8:16 AM – 6:37 PM with approximately 120-minute headways. Refer to Pierce Transit's Routes & Schedules for more details.

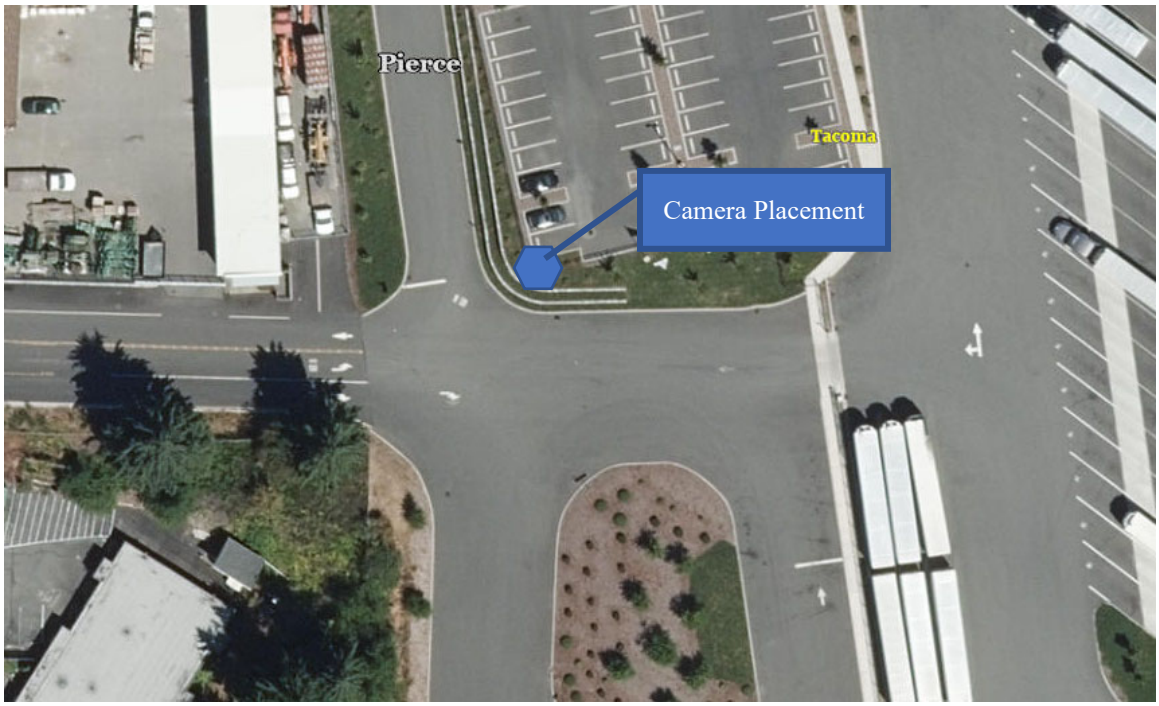
3.3 Roadway Improvements

A review of the City of Tacoma Six-Year (2022-2027) Transportation Improvement Program indicates no improvements are planned in the subject site's vicinity.

3.4 Existing Peak Hour Volumes and Travel Patterns

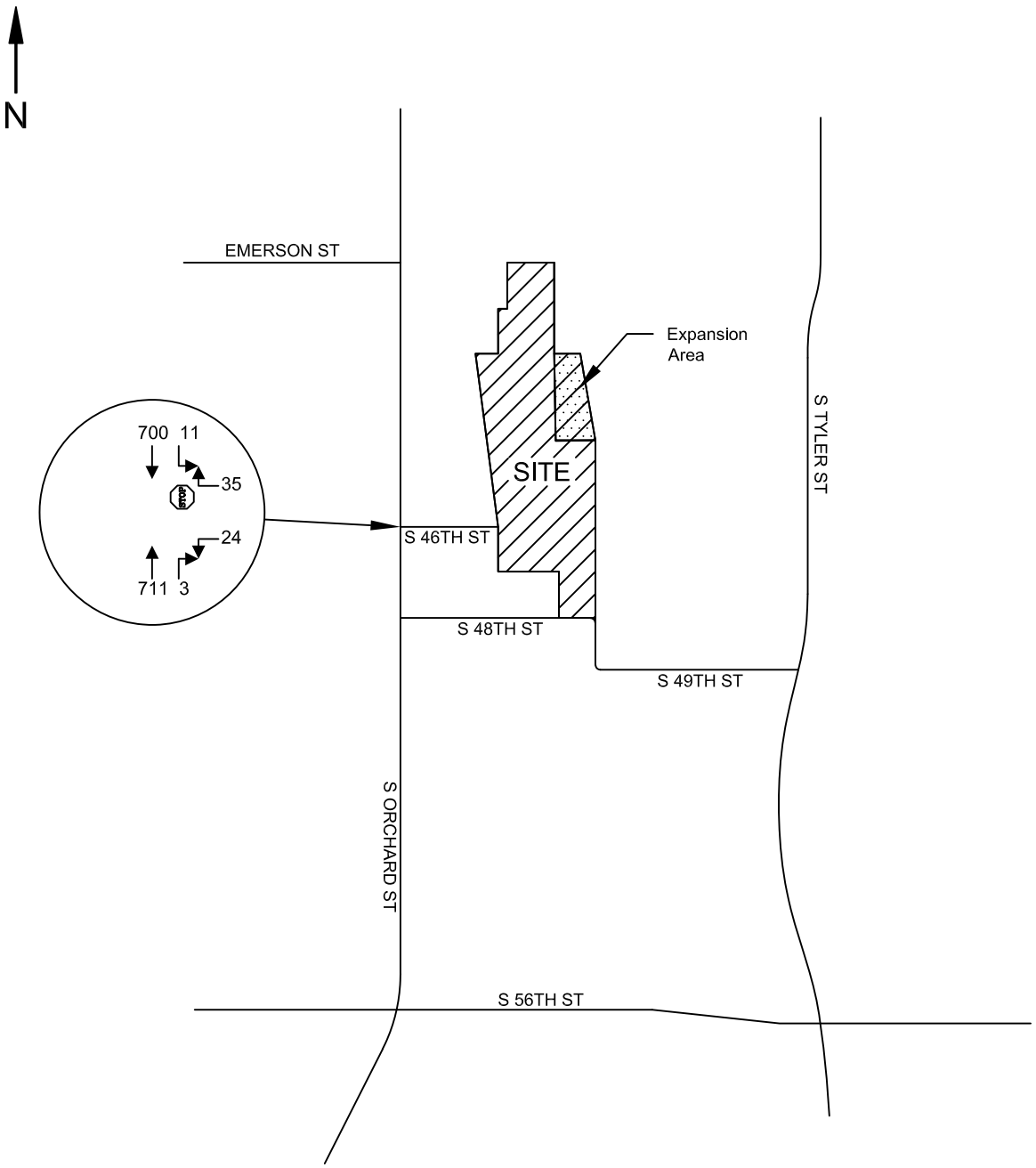
Field data for this study was obtained and collected in January of 2022. Traffic counts were performed at the study intersection of S Orchard Street & S 46th Street between the typical study period of 4:00-6:00 PM which generally represents peak conditions of the adjacent street. See Figure 3 on the following page for peak existing peak hour volumes.

In addition, a camera was placed at the location illustrated below so as to capture all arriving and departing traffic associated with NewCold operations. Counts were conducted over two 24-hour periods to obtain average daily trip and peak hour activity. Counts were administered on January 5th and 6th of 2022. More detailed data is provided in the following sections. Count sheets are provided in the appendix.



3.5 Non-Motorist Traffic

During field observations, only one bicycle was observed leaving/arriving on the site. Given the industrial nature of the development, most traffic is in the form of employees or trucks. No significant increase in non-motorist transport would be expected with a potential site expansion.



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TRAFFIC AND CIVIL ENGINEERING

NEWCOLD STORAGE

EXISTING PM PEAK HOUR VOLUMES
FIGURE 3

4. FORECAST TRAFFIC DEMAND AND ANALYSIS

4.1 Project Trip Generation

As previously mentioned, traffic counts were performed at the existing NewCold facility to observe existing travel patterns and demands. A trip rate could then be derived to apply against any future expansion for traffic volume estimates.

Data collection at the existing cold storage facility on-site analyzed by our firm was gathered via physical field counts and consisted of tracking each inbound/outbound movement. Cameras were deployed and captured peak period samples over two 24-hour weekdays. The peak period AM (7:00-9:00) midday (9:00 AM-4:00 PM) and PM (4:00-6:00) timeframes were then examined from each 24-hour count. From these peak timeframes, the one-hour reflecting the highest observed total inbound and outbound movements was then used for calculations and is considered the “peak hour.” Full-count sheets for each day and timeframe have been attached to the appendix for reference.

Table 1 below illustrates the calculated inbound and outbound trip generation rates for the average daily (ADT), AM, midday, and PM peak hours for either day. Rates are expressed in terms of vehicles per thousand square feet.

Table 1: Existing NewCold Storage Facility Trip Generation Rates

Size	Date	Vehicle Class	ADT	AM Peak Hour			Midday Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
237,291 Sq. Ft.	Wed. 1/5/2022	Passenger	233	9	3	12	11	5	16	2	8	10
		Truck	240	8	9	17	16	13	29	6	5	11
		Total	**473**	17	12	**29**	27	18	**45**	8	13	**21**
	Thurs. 1/6/2022	Passenger	229	13	1	14	10	13	23	4	12	16
		Truck	213	3	8	11	12	10	22	10	12	22
		Total	**442**	16	9	**25**	22	23	**45**	14	24	**38**
Average Trips			**458**	17	10	**27**	24	21	**45**	11	19	**30**
Average Trip Rate per 1,000 sq. ft.			**1.93**	**63%**	**37%**	**0.11**	**53%**	**47%**	**0.19**	**37%**	**63%**	**0.13**

The results indicate an average daily rate of 1.93 vehicle per 1,000 square feet, an AM peak hour rate of 0.11, midday peak hour rate of 0.19, and a PM peak hour rate of 0.13 trips per 1,000 square feet. These trip rates can then be applied to any future expansion of the similar type of use.

To further corroborate the observed trip rates, data were compared to the Institute of Transportation Engineer's *Trip Generation Manual,* 11th Edition. In review, the most comparable designation would be Land Use Code (LUC) of *157 – High-Cube Cold Storage.* See table below for trip rate comparison of the observed activity compared to ITE data.

Table 2: Trip Generation Rate Comparison

Building Size	ADT Trip Rate	AM Trip Rate	Midday Trip Rate	PM Trip Rate
NewCold	1.93	0.11	0.19	0.13
ITE	2.12	0.11	N/A	0.12

As shown in the table, NewCold trip rates are shown to have a strong correlation with respect to ITE data. The NewCold specific trip rates will be applied for trip forecasts as summarized in the below table.

Table 3: Project Trip Generation

Land Use	Size	ADT	AM Peak-Hour			Midday Peak-Hour			PM Peak-Hour		
			In (63%)	Out (37%)	Total	In (53%)	Out (47%)	Total	In (37%)	Out (63%)	Total
NewCold	~200,000 sq. ft.	**386**	14	8	**22**	20	18	**38**	10	16	**26**

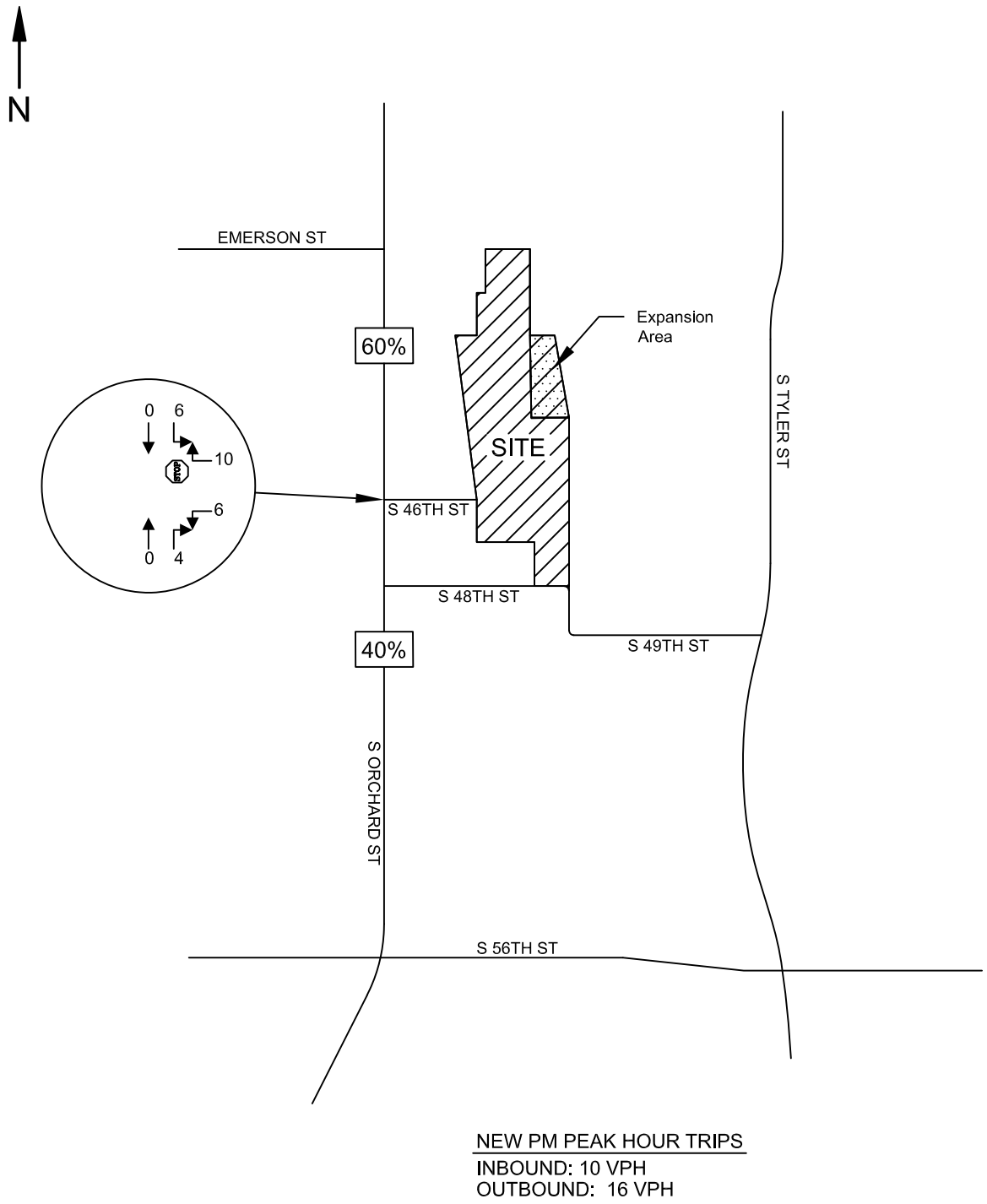
Based on the derived trip generation rates, the proposed expansion of up to 200,000 square feet of the existing use can be expected to generate 386 new average daily trips, 22 new AM peak hour trips, 38 midday peak hour trips, and 26 new PM peak hour trips. Approximately half of the traffic could be in the form of trucks based on existing observations of heavy vehicle composition.

4.2 Distribution & Assignment

Trip distribution describes the anticipated travel routes for inbound and outbound project traffic during the peak hour study period. Traffic to and from the subject site was assigned with a 60/40 north/south split on S Orchard Street based on existing travel patterns identified from the intersection. Figure 4 illustrates the PM peak hour trip distribution and assignment.

4.3 Future Peak Hour Volumes

A 6-year horizon of 2028 was used for future traffic delay analysis. Forecast 2028 background traffic volumes were derived by applying a 2.0 percent compound annual growth rate to the existing volumes shown in Figure 3. This growth rate is higher than the typical City growth rate of 1.2 percent to remain conservative. Forecast 2028 PM peak hour volumes without and with a future expansion are shown in Figure 5.



NEW PM PEAK HOUR TRIPS
INBOUND: 10 VPH
OUTBOUND: 16 VPH

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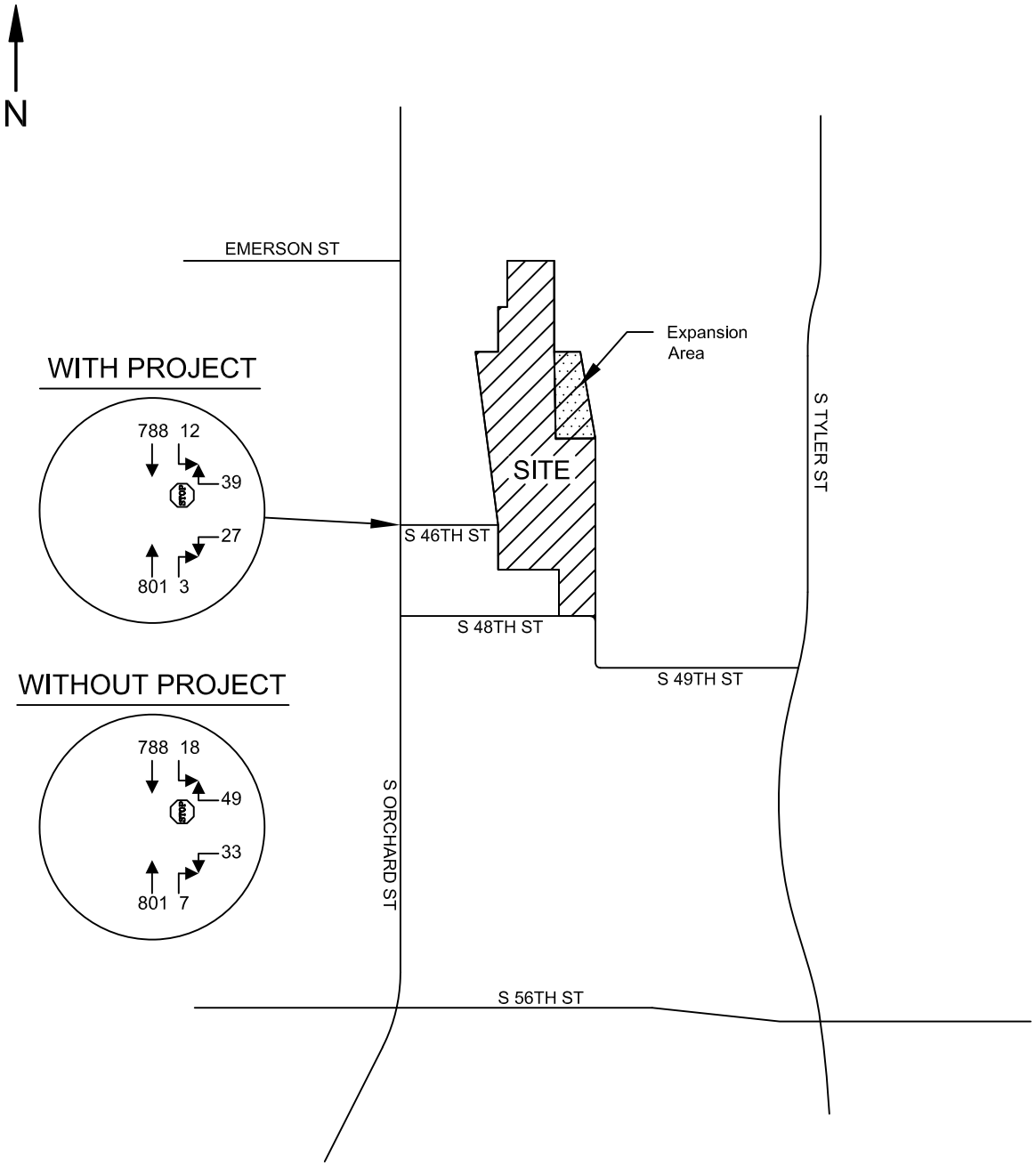
NEWCOLD STORAGE
TRIP DISTRIBUTION & ASSIGNMENT - PM PEAK HOUR
FIGURE 4



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NEWCOLD STORAGE

FORECAST 2028 PM PEAK HOUR VOLUMES
FIGURE 5

4.4 Future Level of Service

Peak hour delays were determined through the use of the *Highway Capacity Manual* 6th Edition. Capacity analysis is used to determine level of service (LOS) which is an established measure of congestion for transportation facilities. The range[1] for intersection level of service is LOS A to LOS F with the former indicating the best operating conditions with low control delays and the latter indicating the worst conditions with heavy control delays. Detailed descriptions of intersection LOS are given in the 2016 Highway Capacity Manual. Level of service calculations were made through the use of the *Synchro 11* analysis program. Table 4 summarizes existing and forecast 2028 PM peak hour delays without and with the proposed NewCold Tacoma development.

Table 4: Forecast 2028 PM Peak Hour Level of Service

Delays given in Seconds Per Vehicle

			Existing		*2028 Background*		*2028 w/ Expansion*	
Intersection	**Control**	**Approach**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
S Orchard Street & S 46th Street	Stop	Westbound	B	14.4	C	15.7	C	16.0

As summarized in the above table, the primary study intersection receiving project-generated traffic is shown to operate with acceptable LOS C conditions with or without the proposed expansion under the forecast 2028 PM peak hour. The project's additional traffic demands with a potential expansion are not shown to create a significant impact to the study area.

---

[1] *Signalized Intersections - Level of Service*

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤20
C	> 20 and ≤35
D	> 35 and ≤55
E	> 55 and ≤80
F	> 80

Stop Controlled Intersections – Level of Service

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤15
C	> 15 and ≤25
D	> 25 and ≤35
E	> 35 and ≤50
F	> 50

Highway Capacity Manual, 6th Edition

5. CONCLUSIONS AND MITIGATION MEASURES

The intent of this impact study was to examine the impacts from a potential expansion of up to 200,000 square feet of cold storage warehouse. Existing on-site is an approximate 237,291 square foot building occupied by NewCold. A portion of the site is proposed to be rezoned from M1 to M2 which could then allow a building expansion and/or new building. Traffic counts and observations were performed at the existing facility so as to develop a trip rate than can be applied to a future expansion for traffic estimates.

Based on the two 24-hour counts, an expansion of around 200,000 square feet could produce an additional 386 daily trips with 22 trips occurring in the AM peak hour, 38 trips in the midday peak hour, and 26 trips in the PM peak hour. These trip projections are also consistent with ITE data for cold storage warehouse. Approximately half of the traffic coming to and from NewCold were observed as truck traffic. Observations indicated the majority of site-generated traffic to enter through the study intersection of S Orchard Street & S 46th Street. Currently, the intersection was shown to operate with LOS B conditions in the PM peak hour. Under the six-year horizon of 2026, service levels were shown to operate at LOS C with or without a future NewCold expansion. Overall, no significant impact was identified as a result of a potential 200,000 square foot expansion.

Please feel free to contact should there be any questions.

NEW COLD TACOMA
TRAFFIC IMPACT ANALYSIS

APPENDIX

LEVEL OF SERVICE

The following are excerpts from the *2016 Highway Capacity Manual - Transportation Research Board Special Report 209.*

Six LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service represents a range of operating conditions and the driver's perception of those conditions.

Level-of-Service definitions

Level of service A represents primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delay at signalized intersections is minimal.

Level of service B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver in the traffic stream is only slightly restricted and delays are not bothersome.

Level of service C represents stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than in LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the average free-flow speed for the arterial classification.

Level of service D borders on a range in which small increases in flow may cause substantial increases in approach delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of free-flow speed.

Level of service E is characterized by significant delays and average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.

Level of service F characterizes arterial flow at extremely low speeds, from less than one-third to one-quarter of the free-flow speed. Intersection congestion is likely at critical signalized locations, with long delays and extensive queuing.

Heath & Associates

PO Box 397
Puyallup, WA 98371

File Name : 4807a
Site Code : 00004807
Start Date : 1/4/2022
Page No : 1

Groups Printed- Passenger + - Heavy

	S Orchard Street From North			S 46th St From East			S Orchard St From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
04:00 PM	192	4	196	10	6	16	0	153	153	365
04:15 PM	162	5	167	5	5	10	1	184	185	362
04:30 PM	155	2	157	16	16	32	2	170	172	361
04:45 PM	203	3	206	8	2	10	0	178	178	394
Total	712	14	726	39	29	68	3	685	688	1482
05:00 PM	180	1	181	6	1	7	0	179	179	367
05:15 PM	201	3	204	5	1	6	0	144	144	354
05:30 PM	188	1	189	8	3	11	0	153	153	353
05:45 PM	164	3	167	7	1	8	0	149	149	324
Total	733	8	741	26	6	32	0	625	625	1398
Grand Total	1445	22	1467	65	35	100	3	1310	1313	2880
Apprch %	98.5	1.5		65	35		0.2	99.8		
Total %	50.2	0.8	50.9	2.3	1.2	3.5	0.1	45.5	45.6	
Passenger +	1428	11	1439	52	32	84	3	1295	1298	2821
% Passenger +	98.8	50	98.1	80	91.4	84	100	98.9	98.9	98
Heavy	17	11	28	13	3	16	0	15	15	59
% Heavy	1.2	50	1.9	20	8.6	16	0	1.1	1.1	2

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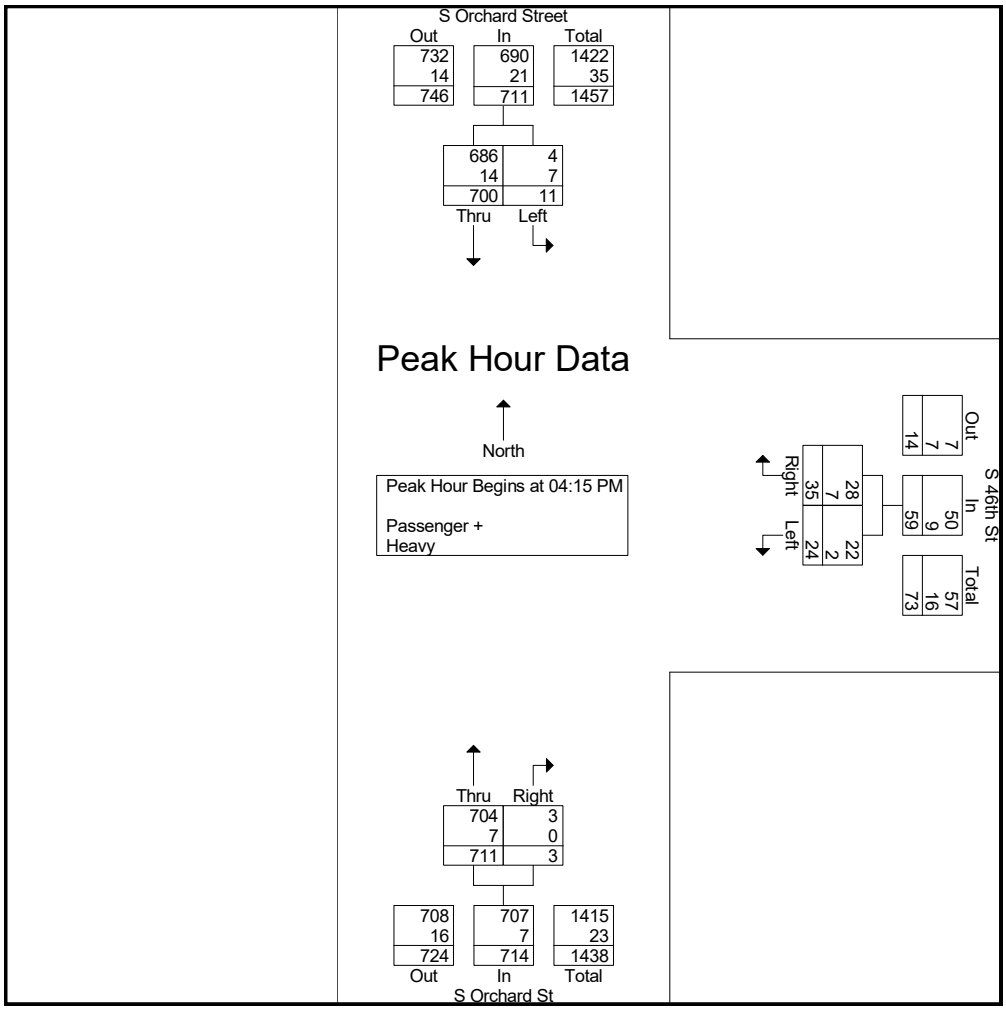
File Name : 4807a
Site Code : 00004807
Start Date : 1/4/2022
Page No : 2

	S Orchard Street From North			S 46th St From East			S Orchard St From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	162	**5**	167	5	5	10	1	**184**	**185**	362
04:30 PM	155	2	157	**16**	**16**	**32**	**2**	170	172	361
04:45 PM	**203**	3	**206**	8	2	10	0	178	178	**394**
05:00 PM	180	1	181	6	1	7	0	179	179	367
Total Volume	700	11	711	35	24	59	3	711	714	1484
% App. Total	98.5	1.5		59.3	40.7		0.4	99.6		
PHF	.862	.550	.863	.547	.375	.461	.375	.966	.965	.942
Passenger +	686	4	690	28	22	50	3	704	707	1447
% Passenger +	98.0	36.4	97.0	80.0	91.7	84.7	100	99.0	99.0	97.5
Heavy	14	7	21	7	2	9	0	7	7	37
% Heavy	2.0	63.6	3.0	20.0	8.3	15.3	0	1.0	1.0	2.5



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Puyallup, WA 98371

File Name : 4807b2
Site Code : 00004807
Start Date : 1/5/2022
Page No : 1

Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
12:00 AM	0	0	0
12:15 AM	0	0	0
12:30 AM	0	0	0
12:45 AM	0	0	0
Total	0	0	0
01:00 AM	0	0	0
01:15 AM	0	0	0
01:30 AM	0	0	0
01:45 AM	0	0	0
Total	0	0	0
02:00 AM	0	0	0
02:15 AM	0	0	0
02:30 AM	0	0	0
02:45 AM	0	2	2
Total	0	2	2
03:00 AM	0	1	1
03:15 AM	1	0	1
03:30 AM	0	1	1
03:45 AM	0	1	1
Total	1	3	4
04:00 AM	0	1	1
04:15 AM	2	2	4
04:30 AM	2	5	7
04:45 AM	3	5	8
Total	7	13	20
05:00 AM	3	4	7
05:15 AM	1	7	8
05:30 AM	4	6	10
05:45 AM	3	11	14
Total	11	28	39
06:00 AM	1	4	5
06:15 AM	4	4	8
06:30 AM	7	2	9
06:45 AM	0	4	4
Total	12	14	26
07:00 AM	3	6	9
07:15 AM	3	2	5
07:30 AM	4	6	10
07:45 AM	0	3	3
Total	10	17	27

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File Name : 4807b2
Site Code : 00004807
Start Date : 1/5/2022
Page No : 2

Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
08:00 AM	6	3	9
08:15 AM	2	5	7
08:30 AM	0	1	1
08:45 AM	4	2	6
Total	12	11	23
09:00 AM	1	3	4
09:15 AM	2	8	10
09:30 AM	3	5	8
09:45 AM	2	5	7
Total	8	21	29
10:00 AM	8	2	10
10:15 AM	5	7	12
10:30 AM	4	5	9
10:45 AM	3	3	6
Total	20	17	37
11:00 AM	7	2	9
11:15 AM	5	8	13
11:30 AM	5	7	12
11:45 AM	3	4	7
Total	20	21	41
12:00 PM	5	8	13
12:15 PM	4	5	9
12:30 PM	4	1	5
12:45 PM	4	1	5
Total	17	15	32
01:00 PM	9	8	17
01:15 PM	6	2	8
01:30 PM	2	6	8
01:45 PM	4	3	7
Total	21	19	40
02:00 PM	5	0	5
02:15 PM	7	2	9
02:30 PM	3	4	7
02:45 PM	4	3	7
Total	19	9	28
03:00 PM	5	1	6
03:15 PM	3	5	8
03:30 PM	2	4	6
03:45 PM	5	0	5
Total	15	10	25
04:00 PM	7	1	8
04:15 PM	3	1	4

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File Name : 4807b2
Site Code : 00004807
Start Date : 1/5/2022
Page No : 3

Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
04:30 PM	2	2	4
04:45 PM	1	4	5
Total	13	8	21
05:00 PM	5	1	6
05:15 PM	4	1	5
05:30 PM	4	1	5
05:45 PM	0	1	1
Total	13	4	17
06:00 PM	4	2	6
06:15 PM	0	2	2
06:30 PM	4	1	5
06:45 PM	0	1	1
Total	8	6	14
07:00 PM	0	3	3
07:15 PM	0	0	0
07:30 PM	2	2	4
07:45 PM	1	0	1
Total	3	5	8
08:00 PM	2	0	2
08:15 PM	1	1	2
08:30 PM	1	2	3
08:45 PM	2	0	2
Total	6	3	9
09:00 PM	1	3	4
09:15 PM	1	0	1
09:30 PM	0	1	1
09:45 PM	1	2	3
Total	3	6	9
10:00 PM	2	0	2
10:15 PM	2	3	5
10:30 PM	4	1	5
10:45 PM	4	1	5
Total	12	5	17
11:00 PM	1	1	2
11:15 PM	1	1	2
11:30 PM	1	0	1
11:45 PM	0	0	0
Total	3	2	5
12:00 AM	0	0	0
Grand Total	234	239	473
Apprch %	100	100	
Total %	49.5	50.5	
Passenger +	115	118	233
% Passenger +	49.1	49.4	49.3
Heavy	119	121	240
% Heavy	50.9	50.6	50.7

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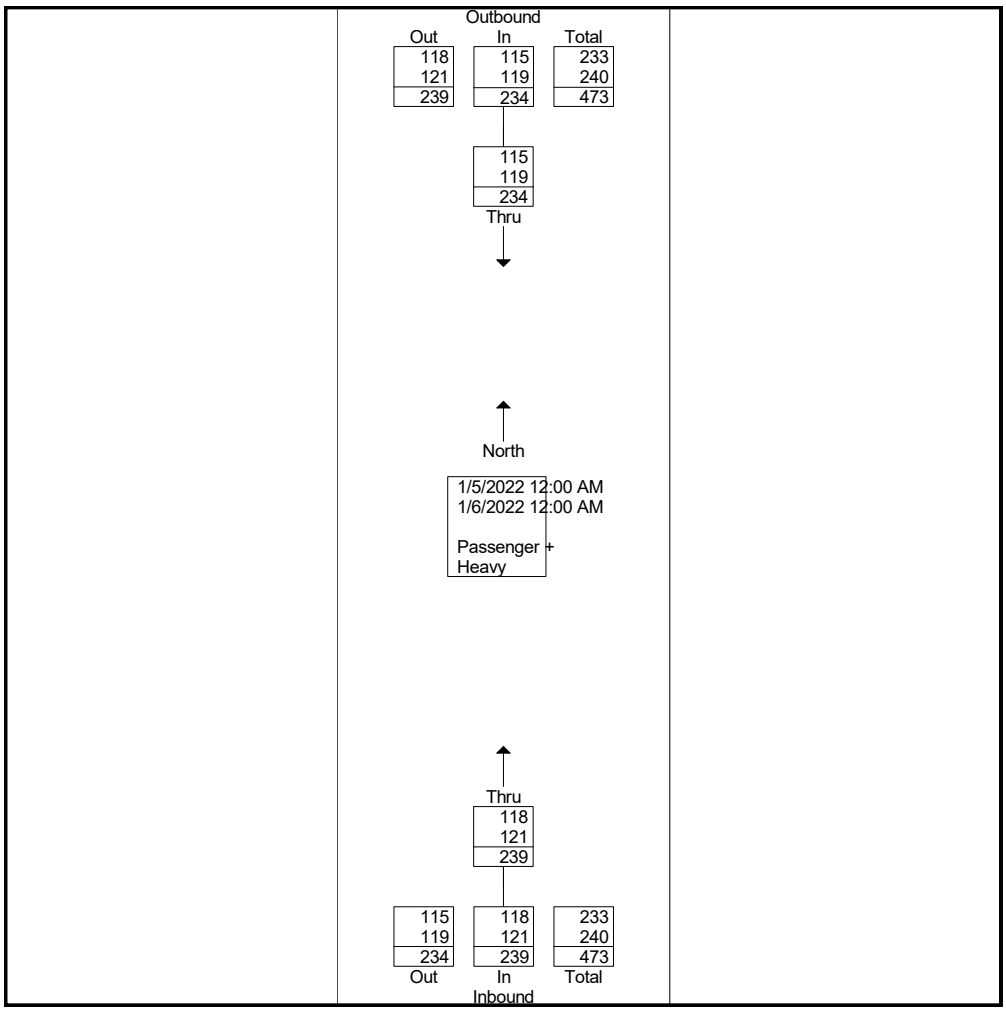

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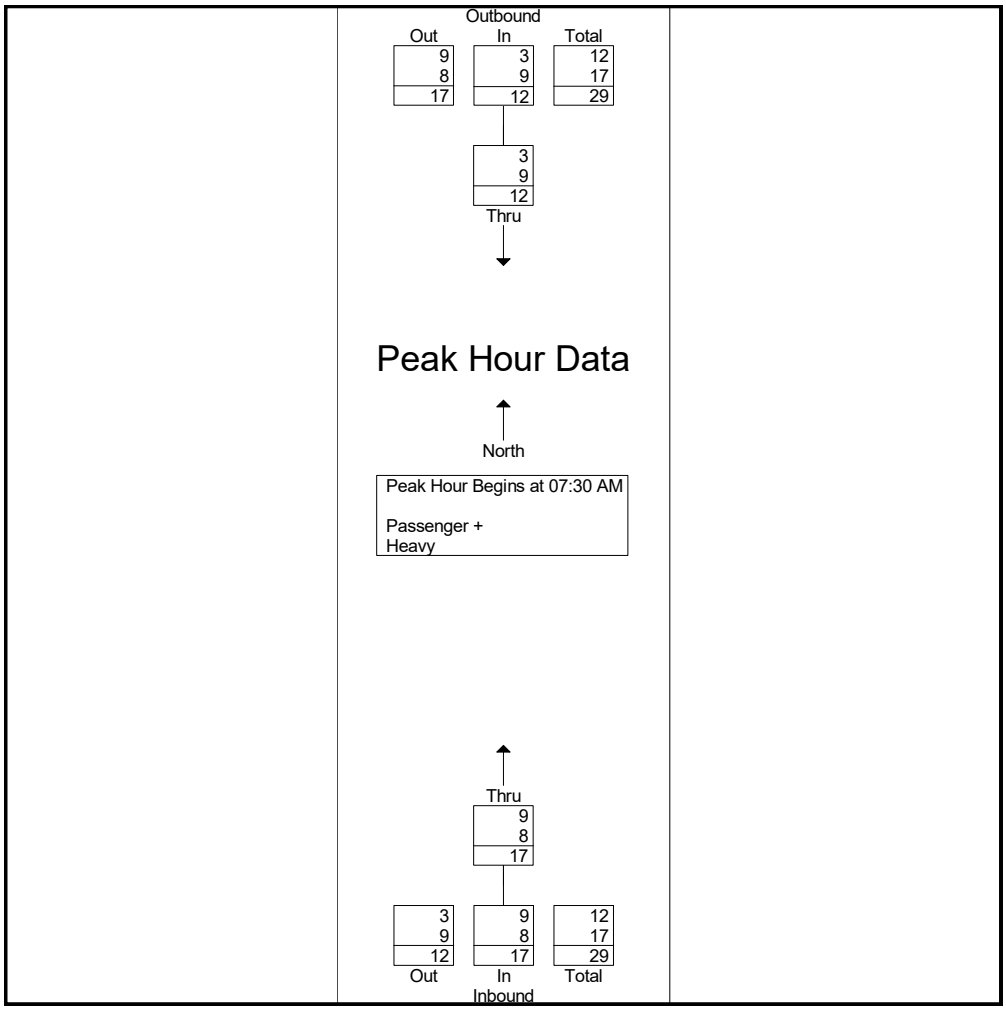
Puyallup, WA 98371

File Name : 4807b2
Site Code : 00004807
Start Date : 1/5/2022
Page No : 5

	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 07:30 AM					
07:30 AM	4	4	**6**	**6**	**10**
07:45 AM	0	0	3	3	3
08:00 AM	**6**	**6**	3	3	9
08:15 AM	2	2	5	5	7
Total Volume	12	12	17	17	29
% App. Total	100		100		
PHF	.500	.500	.708	.708	.725
Passenger +	3	3	9	9	12
% Passenger +	25.0	25.0	52.9	52.9	41.4
Heavy	9	9	8	8	17
% Heavy	75.0	75.0	47.1	47.1	58.6



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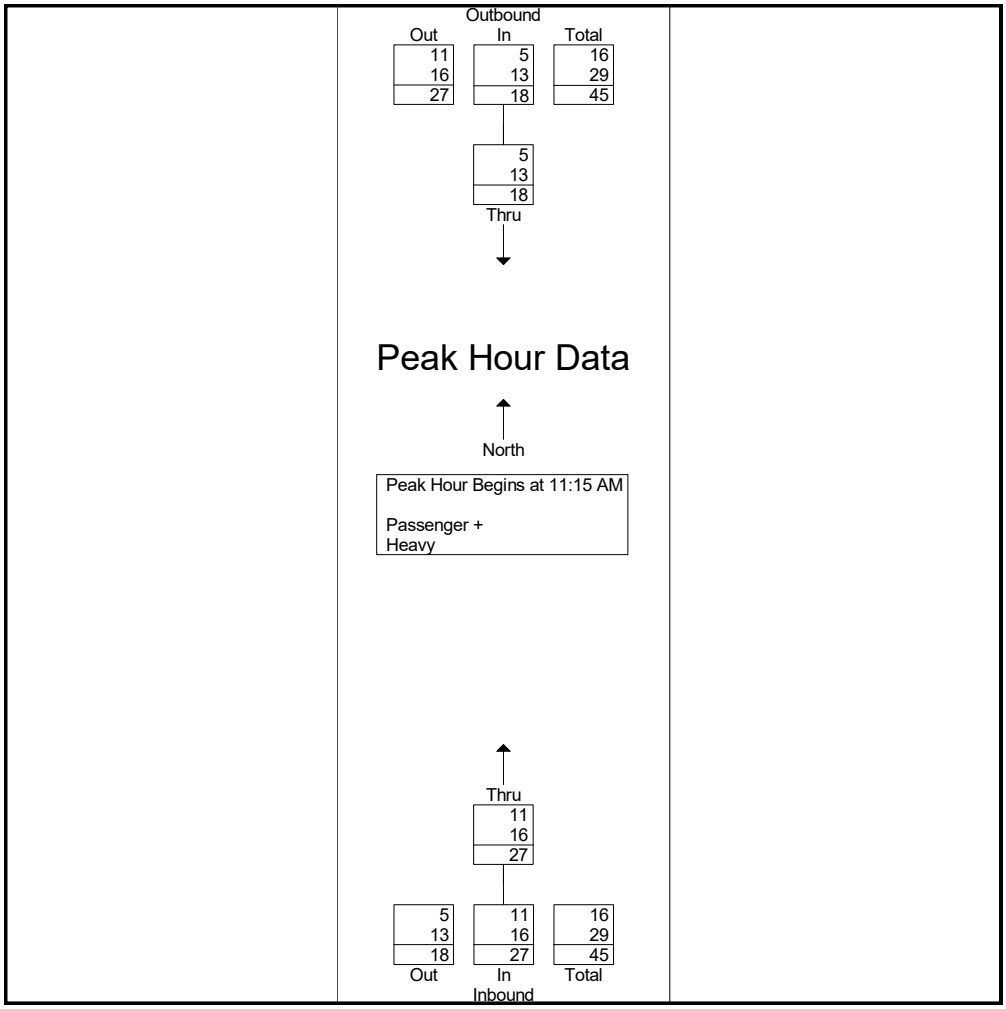
File Name : 4807b2
Site Code : 00004807
Start Date : 1/5/2022
Page No : 6

	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 09:00 AM to 03:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 11:15 AM					
11:15 AM	**5**	**5**	**8**	**8**	**13**
11:30 AM	5	5	7	7	12
11:45 AM	3	3	4	4	7
12:00 PM	5	5	8	8	13
Total Volume	18	18	27	27	45
% App. Total	100		100		
PHF	.900	.900	.844	.844	.865
Passenger +	5	5	11	11	16
% Passenger +	27.8	27.8	40.7	40.7	35.6
Heavy	13	13	16	16	29
% Heavy	72.2	72.2	59.3	59.3	64.4



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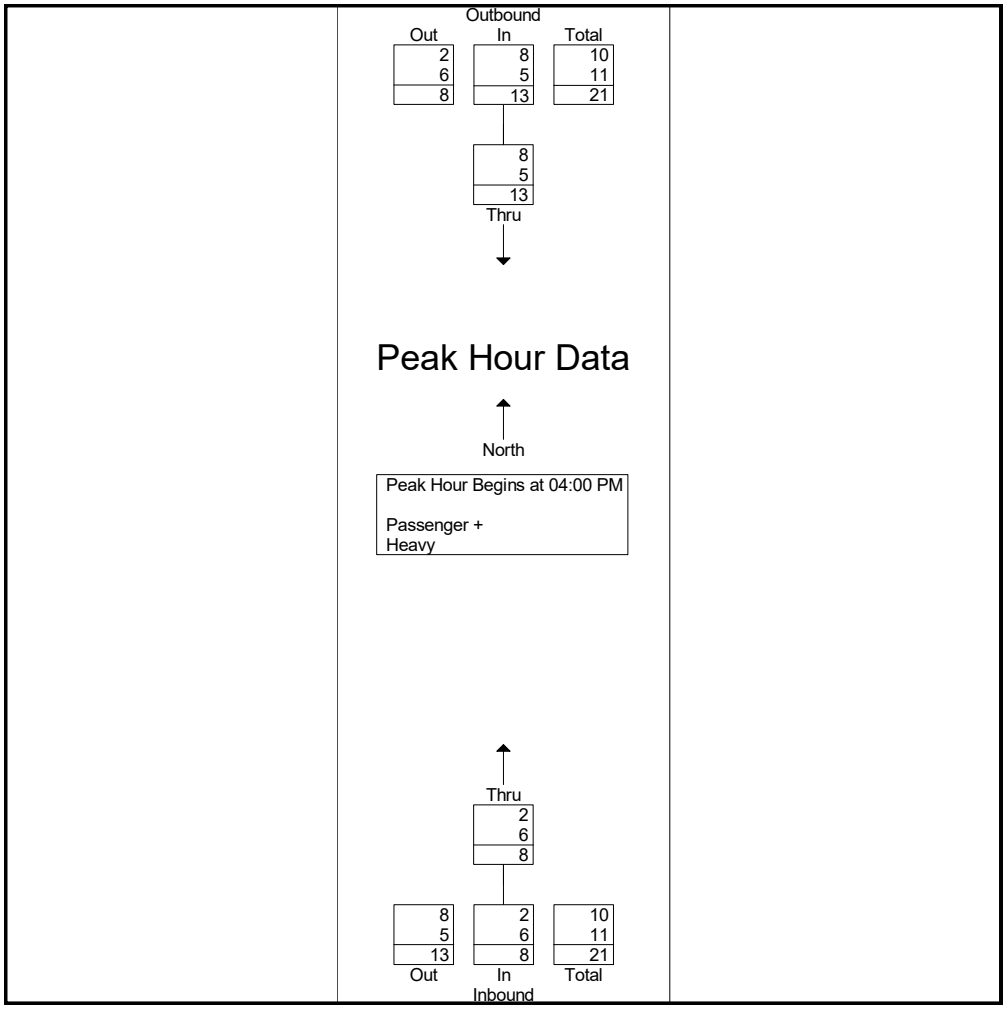
File Name : 4807b2
Site Code : 00004807
Start Date : 1/5/2022
Page No : 7

	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 04:00 PM					
04:00 PM	**7**	**7**	1	1	**8**
04:15 PM	3	3	1	1	4
04:30 PM	2	2	2	2	4
04:45 PM	1	1	**4**	**4**	5
Total Volume	13	13	8	8	21
% App. Total	100		100		
PHF	.464	.464	.500	.500	.656
Passenger +	8	8	2	2	10
% Passenger +	61.5	61.5	25.0	25.0	47.6
Heavy	5	5	6	6	11
% Heavy	38.5	38.5	75.0	75.0	52.4



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File Name : 4807c2
Site Code : 00004807
Start Date : 1/6/2022

Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
12:00 AM	0	0	0
12:15 AM	0	0	0
12:30 AM	0	0	0
12:45 AM	0	0	0
Total	0	0	0
01:00 AM	0	0	0
01:15 AM	0	0	0
01:30 AM	0	0	0
01:45 AM	0	0	0
Total	0	0	0
02:00 AM	0	0	0
02:15 AM	0	0	0
02:30 AM	0	0	0
02:45 AM	0	0	0
Total	0	0	0
03:00 AM	0	0	0
03:15 AM	0	0	0
03:30 AM	0	0	0
03:45 AM	0	0	0
Total	0	0	0
04:00 AM	0	0	0
04:15 AM	0	0	0
04:30 AM	1	3	4
04:45 AM	3	4	7
Total	4	7	11
05:00 AM	1	6	7
05:15 AM	3	2	5
05:30 AM	0	11	11
05:45 AM	0	6	6
Total	4	25	29
06:00 AM	1	6	7
06:15 AM	3	0	3
06:30 AM	3	3	6
06:45 AM	4	4	8
Total	11	13	24
07:00 AM	5	2	7
07:15 AM	4	3	7
07:30 AM	1	6	7
07:45 AM	1	2	3
Total	11	13	24

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File Name : 4807c2
Site Code : 00004807
Start Date : 1/6/2022
Page No : 2

Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
08:00 AM	3	5	8
08:15 AM	2	2	4
08:30 AM	1	2	3
08:45 AM	3	4	7
Total	9	13	22
09:00 AM	4	1	5
09:15 AM	2	2	4
09:30 AM	2	4	6
09:45 AM	4	1	5
Total	12	8	20
10:00 AM	0	3	3
10:15 AM	5	3	8
10:30 AM	1	2	3
10:45 AM	3	1	4
Total	9	9	18
11:00 AM	4	1	5
11:15 AM	5	4	9
11:30 AM	3	6	9
11:45 AM	5	7	12
Total	17	18	35
12:00 PM	5	3	8
12:15 PM	2	4	6
12:30 PM	3	5	8
12:45 PM	1	1	2
Total	11	13	24
01:00 PM	3	5	8
01:15 PM	3	1	4
01:30 PM	6	10	16
01:45 PM	6	7	13
Total	18	23	41
02:00 PM	6	2	8
02:15 PM	5	3	8
02:30 PM	7	5	12
02:45 PM	5	3	8
Total	23	13	36
03:00 PM	4	3	7
03:15 PM	7	5	12
03:30 PM	5	5	10
03:45 PM	5	3	8
Total	21	16	37
04:00 PM	6	3	9
04:15 PM	7	4	11

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File Name : 4807c2
Site Code : 00004807
Start Date : 1/6/2022
Page No : 3

Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
04:30 PM	5	3	8
04:45 PM	6	4	10
Total	24	14	38
05:00 PM	6	3	9
05:15 PM	5	3	8
05:30 PM	6	2	8
05:45 PM	6	4	10
Total	23	12	35
06:00 PM	3	4	7
06:15 PM	3	2	5
06:30 PM	2	1	3
06:45 PM	3	3	6
Total	11	10	21
07:00 PM	1	0	1
07:15 PM	1	0	1
07:30 PM	0	1	1
07:45 PM	1	2	3
Total	3	3	6
08:00 PM	1	2	3
08:15 PM	0	0	0
08:30 PM	1	0	1
08:45 PM	0	1	1
Total	2	3	5
09:00 PM	0	3	3
09:15 PM	0	1	1
09:30 PM	0	0	0
09:45 PM	1	4	5
Total	1	8	9
10:00 PM	0	0	0
10:15 PM	0	0	0
10:30 PM	6	1	7
10:45 PM	0	0	0
Total	6	1	7
11:00 PM	0	0	0
11:15 PM	0	0	0
11:30 PM	0	0	0
11:45 PM	0	0	0
Total	0	0	0
12:00 AM	0	0	0
Grand Total	220	222	442
Apprch %	100	100	
Total %	49.8	50.2	
Passenger +	112	117	229
% Passenger +	50.9	52.7	51.8
Heavy	108	105	213
% Heavy	49.1	47.3	48.2

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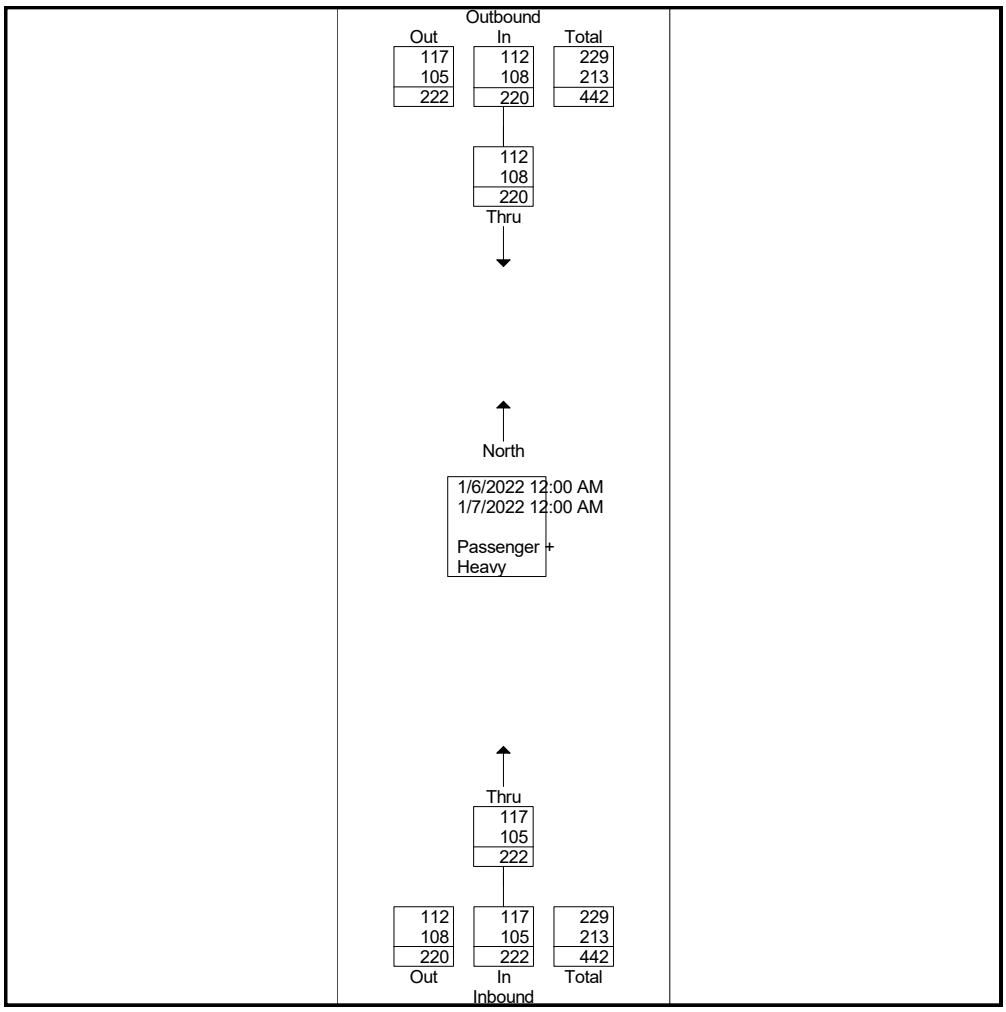

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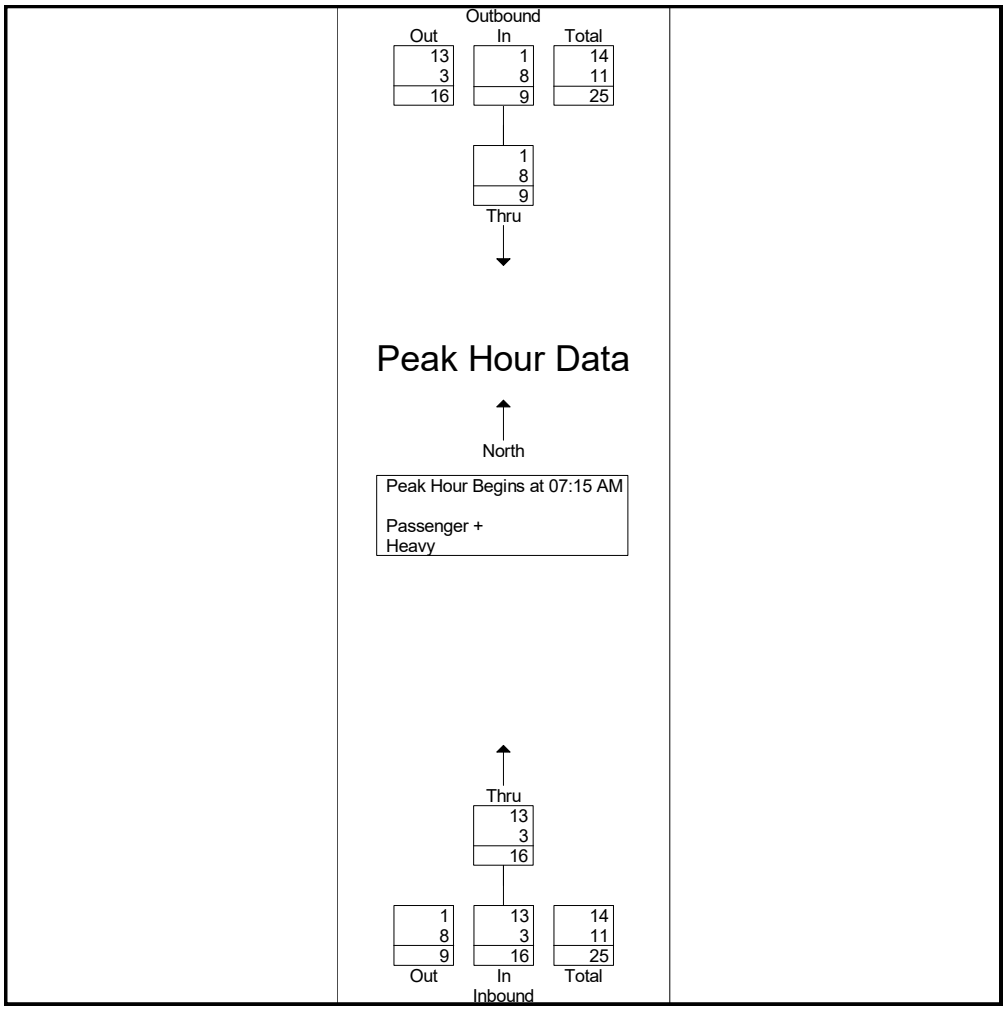
File Name : 4807c2
Site Code : 00004807
Start Date : 1/6/2022
Page No : 5

	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 07:15 AM					
07:15 AM	**4**	**4**	3	3	7
07:30 AM	1	1	**6**	**6**	7
07:45 AM	1	1	2	2	3
08:00 AM	3	3	5	5	**8**
Total Volume	9	9	16	16	25
% App. Total	100		100		
PHF	.563	.563	.667	.667	.781
Passenger +	1	1	13	13	14
% Passenger +	11.1	11.1	81.3	81.3	56.0
Heavy	8	8	3	3	11
% Heavy	88.9	88.9	18.8	18.8	44.0



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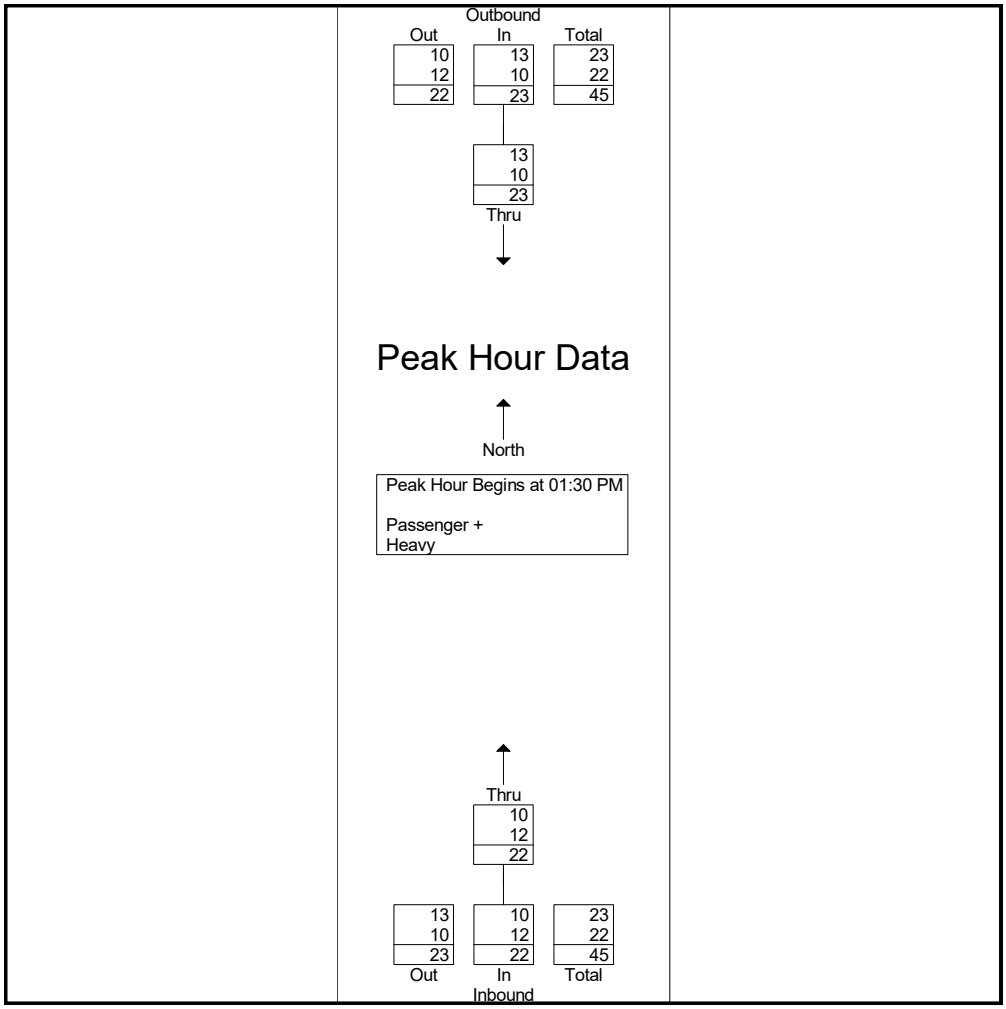
Puyallup, WA 98371

File Name : 4807c2
Site Code : 00004807
Start Date : 1/6/2022
Page No : 6

	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 09:00 AM to 03:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 01:30 PM					
01:30 PM	**6**	**6**	**10**	**10**	**16**
01:45 PM	6	6	7	7	13
02:00 PM	6	6	2	2	8
02:15 PM	5	5	3	3	8
Total Volume	23	23	22	22	45
% App. Total	100		100		
PHF	.958	.958	.550	.550	.703
Passenger +	13	13	10	10	23
% Passenger +	56.5	56.5	45.5	45.5	51.1
Heavy	10	10	12	12	22
% Heavy	43.5	43.5	54.5	54.5	48.9



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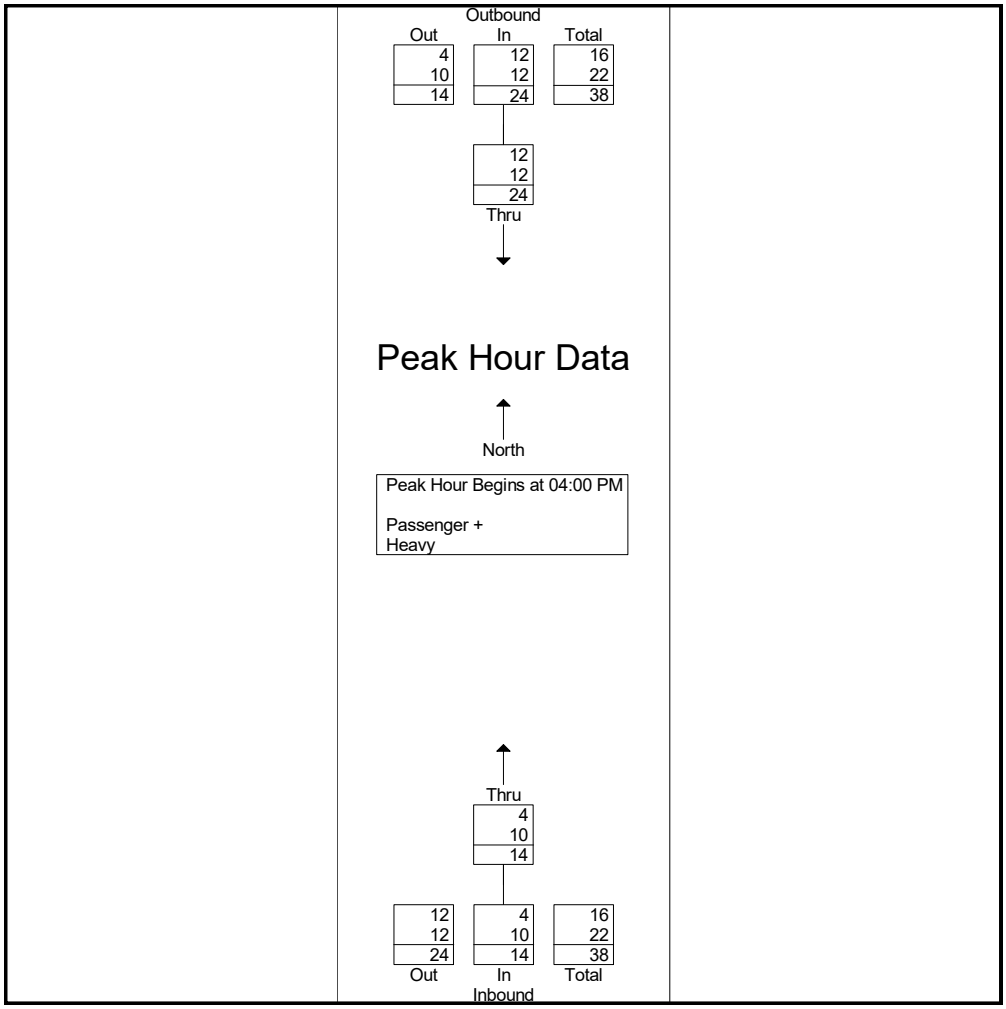
File Name : 4807c2
Site Code : 00004807
Start Date : 1/6/2022
Page No : 7

	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 04:00 PM					
04:00 PM	6	6	3	3	9
04:15 PM	**7**	**7**	**4**	**4**	**11**
04:30 PM	5	5	3	3	8
04:45 PM	6	6	4	4	10
Total Volume	24	24	14	14	38
% App. Total	100		100		
PHF	.857	.857	.875	.875	.864
Passenger +	12	12	4	4	16
% Passenger +	50.0	50.0	28.6	28.6	42.1
Heavy	12	12	10	10	22
% Heavy	50.0	50.0	71.4	71.4	57.9



Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	35	711	3	11	700
Future Vol, veh/h	24	35	711	3	11	700
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	20	1	1	64	2
Mvmt Flow	26	37	756	3	12	745

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1155	380	0	0	759	0
Stage 1	758	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.96	7.3	-	-	5.38	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.5	-	-	2.84	-
Pot Cap-1 Maneuver	181	569	-	-	542	-
Stage 1	408	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	177	569	-	-	542	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	408	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	300	569	542	-
HCM Lane V/C Ratio	-	-	0.085	0.065	0.022	-
HCM Control Delay (s)	-	-	18.1	11.8	11.8	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0.2	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	39	801	3	12	788
Future Vol, veh/h	27	39	801	3	12	788
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	20	1	1	64	2
Mvmt Flow	29	41	852	3	13	838

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1299	428	0	0	855	0
Stage 1	854	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.96	7.3	-	-	5.38	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.5	-	-	2.84	-
Pot Cap-1 Maneuver	145	528	-	-	486	-
Stage 1	363	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	141	528	-	-	486	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	363	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	263	528	486	-
HCM Lane V/C Ratio	-	-	0.109	0.079	0.026	-
HCM Control Delay (s)	-	-	20.4	12.4	12.6	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	0.4	0.3	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	49	801	7	18	788
Future Vol, veh/h	33	49	801	7	18	788
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	20	1	1	64	2
Mvmt Flow	35	52	852	7	19	838

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1313	430	0	0	859	0
Stage 1	856	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Critical Hdwy	6.96	7.3	-	-	5.38	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.5	-	-	2.84	-
Pot Cap-1 Maneuver	142	526	-	-	483	-
Stage 1	362	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	136	526	-	-	483	-
Mov Cap-2 Maneuver	259	-	-	-	-	-
Stage 1	362	-	-	-	-	-
Stage 2	564	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	259	526	483	-
HCM Lane V/C Ratio	-	-	0.136	0.099	0.04	-
HCM Control Delay (s)	-	-	21.1	12.6	12.8	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	0.1	-

February 16, 2022

NewCold Seattle, LLC
4601 South Orchard Street
Tacoma, WA 98466

Attn: Sarah Remington

Transmitted via email to: ***sarah.remington@newcold.com***

Re: Results of Noise and Light/Glare Study
NewCold Facility
Tacoma, Washington
Landau Project No. 2042001.010

Dear Ms. Remington:

At the request of NewCold Seattle, LLC (NewCold) and the City of Tacoma (City), Landau Associates, Inc. (Landau) conducted a noise impacts study and light and glare evaluation to inform NewCold's application for a comprehensive plan land-use designation amendment. This report describes the existing regulatory environment, existing land-use designation and development of the property, and potential changes associated with the requested amendment. Additional details on the characteristics of sound and noise used to support this evaluation are provided in Attachment 1.

Background

NewCold currently owns an approximately 34-acre property located at 4601 South Orchard Street (Pierce County Parcel No. 0220133049), in Tacoma, Washington (NewCold Facility), which includes an existing cold-storage warehouse. The center of the parcel is designated heavy industrial (M-2) with the exception of an approximately 3-acre area east of the existing building, which is designated light industrial (M-1). NewCold is requesting a land-use designation change of this light industrial portion of the parcel (Site; see Figure 1) to heavy industrial to allow construction of a second high-cube refrigerated distribution warehouse building adjacent to the east of the existing building. The comprehensive plan land-use designation amendment is the first of several steps before approval would be granted to NewCold. Future steps include review of project-specific designs and consideration of project-specific impacts.

The City's Planning and Development Services has requested that NewCold provide a noise and light/glare study to document potential changes in noise or light impacts to surrounding properties.

Nearby Land Use

Land adjacent to the Site that is to the north, east, and southeast is currently part of the Tacoma Recovery and Transfer Center (landfill, designated "parks and open space"). NewCold owns the

adjacent property to the northwest, west, southwest, and south, which is designated M-2 and developed with NewCold's existing cold storage facility.

The nearest properties with residential land-use designations are located as follows (see Figure 1):

- Orchard Park Health and Rehabilitation Center, designated neighborhood commercial and developed with a nursing home, is located approximately 800 feet to the southwest of the Site. The existing NewCold Facility blocks the line-of-site between the Orchard Park property and the Site.
- Forest Hill Village Apartments, designated low-density multi-family, is located approximately 800 feet east of the Site, on the opposite side of the landfill.
- Orchard Terrace, designated low-density multi-family, is located approximately 1,000 feet northwest of the Site, opposite property designated light-industrial and developed with a stormwater pond, storage and towing facilities.
- A neighborhood designated single-family residential is located approximately 1,400 feet south of the Site (see Figure 1), separated from the Site by the existing NewCold Facility, light industrial property, the landfill, and undeveloped land designated as parks and open space. The northern boundary of the neighborhood is approximately 550 feet south of the existing truck trailer staging area.

Topography

Land on the west side of the NewCold Facility slopes steeply downward to the adjacent properties to the west. The elevation difference between the NewCold Facility and the adjacent properties to the west is approximately 20 feet, so that the roofs of the adjacent buildings are approximately at ground level compared to the operational areas at NewCold. As shown in Attachment 1, this creates a partial barrier, reducing noise and light impacts at the adjacent properties to the west.

To the north and east of the NewCold Facility, the ground surface of the landfill is approximately 20 feet higher than the ground surface of the NewCold Facility, creating a natural barrier to light and noise for adjacent properties to the north and west.

Land Use Regulatory Code

The proposed land-use designation change would apply to any potential future use of the Site, including but not limited to NewCold's proposed expansion. The Tacoma Land Use Regulatory Code, Title 13 of the Tacoma Municipal Code (TMC), establishes the requirements for an M-1 Light Industrial District and an M-2 Heavy Industrial District. Table 1 outlines the difference between light and heavy industrial land use as applicable to potential noise and light/glare impacts.

Table 1: Comparison of Light Industrial and Heavy Industrial Land Use

Characteristic	Light Industrial (M-1)	Heavy Industrial (M-2)
Intended use types	Light manufacturing, warehousing, commercial or civic uses.	Heavy industrial and manufacturing uses that can reasonably be accommodated without adverse impacts on the public's health, welfare, or safety.
Potential impacts on surrounding properties	Complementary and not detrimental to existing or proposed neighboring industrial, commercial, or residential uses. Transition between industrial operations and existing activities and character of the community in which the district is located.	Potential for extended operating hours, heavy truck traffic, and higher levels of outdoor noise.
Development Standards	No difference in lot area or setbacks. Height limit of 75 feet in M-1 and 100 feet in M-2 (with exceptions).	

As shown in the table above and addressed in the Noise and Light/Glare sections below, Title 13 of the TMC does not provide quantitative regulatory differences between M-1 and M-2 for noise or light impacts. All future development would be required to comply with City and Washington State noise limits (described below). Changing the land-use designation of the Site would not change the applicable noise limits.

Noise

The following subsections address potential noise impacts to surrounding properties based on the proposed change in land-use designation.

Tacoma Municipal Code

Chapter 8.122 of the TMC governs noise impacts within the city limits. The TMC does not provide absolute maximum permissible sound levels, rather TMC 8.122.060 specifies maximum permissible sound levels in excess of the ambient sound level (Table 1), applicable to continuous sound measured within a receiving property. These sound levels are not dependent on the land use or zoning of the property; therefore, the proposed change in land-use designation of the Site would not change the maximum permissible sound levels, as shown in Table 2.

Table 2: Maximum Permissible Sound Levels in Excess of Ambient Sound Level

	Outdoors	Indoors
7:00 a.m. to 10:00 p.m. (daytime)	10 dBA	6 dBC
10:00 p.m. to 7:00 a.m. (nighttime)	5 dBA	3 dBC

dBA – A-weighted decibels

dBC – C-weighted decibels

dBA and dBC are sound level weighting systems based on human sensitivity to sound. A-weighting discriminates against low frequencies (similar to human hearing) while C-weighting measures uniformly over the frequency range audible to humans.

Impulsive sounds[1] may increase the total sound level by less than 15 dBA above the ambient sound level when there are fewer than 10 impulses within 1 hour during daytime hours or fewer than 4 impulses within 1 hour during nighttime hours. If the number of impulses exceeds the allowable number, the maximum permissible sound levels shown in Table 2 apply.

Washington Administrative Code

Chapter 173-60-040 of the Washington Administrative Code provides maximum permissible environmental noise levels by the environmental designation for noise abatement (EDNA) of the noise source and receiver, as defined below.

- Class A EDNAs are lands where human beings reside and sleep, generally including residences (single- and multi-family) and other living facilities.
- Class B EDNAs are lands involving uses requiring protection against noise interference with speech such as commercial services and recreational facilities not intended for human habitation (parks and open space, for example).
- Class C EDNAs are lands involving economic activities of such a nature that higher noise levels may be anticipated, such as industrial or agricultural lands.

Heavy industry and light industrial properties both fall under EDNA Class C; therefore, the proposed change in land-use designation would not change the maximum permissible environmental noise levels, as shown in Table 3.

Table 3: Maximum Permissible Environmental Noise Levels

EDNA of Noise Source	EDNA of Receiving Property		
	Class A	Class B	Class C
Class A (Residential)	55 dBA	57 dBA	60 dBA
Class B (Commercial)	57 dBA	60 dBA	65 dBA
Class C (Industrial)	60 dBA	65 dBA	70 dBA

Between the hours of 10 p.m. and 7 a.m., the noise limitations described in Table 2 are reduced by 10 dBA for receiving properties within Class A EDNAs. At any hour of the day or night the applicable noise limitations may be exceeded for any receiving property by no more than:

- 5 dBA for a total of 15 minutes in any 1-hour period; or
- 10 dBA for a total of 5 minutes in any 1-hour period; or
- 15 dBA for a total of 1.5 minutes in any 1-hour period.

[1] "Impulsive sound" is sound that is of short duration where each peak of sound lasts 1 second or less. The sound is characterized by abrupt onset and rapid decay (TMC 8.122.010).

Existing Noise Environment

Existing noise sources within the NewCold Facility include operation of rooftop compressors and oxygen reduction systems associated with the refrigeration system (southwestern portion of the existing NewCold building), truck traffic entering and leaving the NewCold Facility, noise associated with unloading of materials in the loading bays (primarily inside the loading bays), and operation of refrigeration equipment on truck trailers parked in the staging area. Trucks do not use air brakes while in the NewCold Facility. The staging area is equipped with hookups allowing refrigerated trucks to operate without the need for trucks to idle.

Landau conducted baseline noise monitoring at the existing NewCold Facility to establish existing conditions for the Site. Prior to arriving on Site, Landau requested information regarding the timing of operations at the NewCold and adjacent facilities from a NewCold representative. The noise study was planned for mid-day (11:00 a.m. through 2:30 p.m.) on Tuesday, February 1 to measure noise levels at full operational load.

Each measurement included a recorded 15-minute L_{eq} (equivalent continuous sound level) and L_{max} (maximum sound level) in A-weighted decibels using a Norsonic Model 118 noise meter, set on "fast" mode. Landau personnel also observed ambient noise during each measurement in order to note noises (e.g., passing vehicles, alarms, etc.) that contribute to overall noise measurements. Weather conditions were ideal for noise monitoring, overcast to clear with no precipitation and little to no wind.

Measurements 1 and 2 (the same physical location) were taken at the property line closest to the rooftop compressors and oxygen reduction systems located in the southwestern portion of the existing building. NewCold personnel informed Landau staff that during especially warm weather, noise associated with rooftop compressors and oxygen reduction systems is louder than observed during the Site visit. NewCold briefly activated the compressors to operate at higher load to allow Landau to conduct a brief measurement; however, due to the low ambient temperature, operating for an extended time and at a higher load was not possible without risking damage to the equipment. Measurement 1 represents this brief period of compressor operation.

Measurements were taken near property lines to approximate existing noise levels at neighboring properties, with the exception of the following:

- Location 6: The measurement was taken as close as safely possible to the loading dock activities to capture the highest noise levels on Site.
- Location 7: The measurement was taken between the truck trailer staging area and the vegetated area to the south of the NewCold Facility. This location was selected to measure noise associated with the NewCold Facility without excessive contribution from vehicles driving on South 48th Street.

Measurement locations are shown on Figure 1. Equivalent continuous sound level (L_{eq}), maximum sound level (L_{max}), and a description of observed noise sources for each location are shown in Table 4.

Table 4: Baseline Noise Levels

#	Measurement Location (Adjacent Property Type)	Time and Predominant Observed Noise Sources	15-minute Continuous Sound Level (L_{eq})	Maximum Sound Level (L_{max})
1	West of rooftop cooling equipment, with compressors[a] (light industrial)	11:48 a.m. Compressors starting up, operating and shutting down. Background traffic noise, and adjacent business operations.	57.5	77.1
2	West of rooftop cooling equipment without compressors (light industrial)	11:53 a.m. Noise from inside NewCold building, vehicle traffic on South Orchard Street and other nearby roads, backup alarms from offsite, other adjacent business operations.	55.3	66.4
3	Northwest corner of NewCold Facility (light industrial)	12:15 p.m. Vehicle traffic on nearby roads, generator engine running at adjacent business to the west, other adjacent business operations.	56.1	62.1
4	Northern NewCold boundary near communications tower (parks and open space)	12:39 p.m. Maintenance work and vehicle operating at landfill, traffic on nearby roads, equipment associated with communications tower, airplanes.	47.3	64.8
5	Eastern Site boundary near landfill (parks and open space)	1:00 p.m. Truck engines and truck trailer refrigeration equipment in NewCold loading area, noise associated with unloading trucks.	45.8	64.7
6	East side of loading dock area between dock and staged trucks (interior of NewCold Facility)	1:19 p.m. Idling trucks, trucks entering loading area, truck trailer refrigeration equipment.	73.2	90.4
7	Southeast of truck trailer staging area (interior of NewCold Facility)	1:39 p.m. Trucks moving within loading area, truck trailer refrigeration equipment.	54.2	69.3
8	Southwest corner of NewCold Facility (residential)	2:00 p.m. Trucks entering NewCold Facility on South 46th Street, truck trailer refrigeration equipment.	54.3	68.7

a. Measurement 1 was 3 minutes 11 seconds in duration, corresponding with the amount of time the compressors were able to be operated. All other measurements were conducted for 15 minutes.

With the exception of the brief period of compressor operation, observed predominant noise sources along the northwestern and northern portions of the property consisted of operations at adjacent properties, traffic on surrounding roadways, and airplanes. In the southern and central-eastern portions of the property, truck traffic and trailer refrigeration equipment were the primary observed

noise sources. Continuous noise levels at all property line locations were well below Washington's maximum permissible continuous noise levels for industrial operations when compared to the limit for residential receiving properties (60 dBA). As described in Attachment 1, noise attenuates at a rate of approximately 6 to 7.5 dBA per doubling of distance; therefore, noise levels at the nearest residential receiving properties would be well below typical residential background noise levels (50 to 60 dBA) without accounting for intervening topography and vegetation, which would further attenuate noise. No impulse noises were noted from NewCold operations.

Proposed Future Use

NewCold plans to expand the existing refrigerated storage facility to the east, adding a second high-cube warehouse adjacent to the existing structure. The design of the new structure has not been finalized, but current plans include incorporating more energy-efficient and quieter compressor equipment than the equipment used to cool the existing warehouse.

Noise from increased truck and employee traffic serving the expanded facility would also contribute to the local noise environment. However, traffic volume associated with light industrial use of the Site (current designation, which includes warehouses or light manufacturing) would not differ from NewCold's proposed expansion. Traffic impacts associated with the proposed amendment are addressed in the traffic impacts analysis completed by others.

Although NewCold does not intend to sell the property, changing the land-use designation of the Site from M-1 to M-2 could allow for more intensive use of the Site in the future, potentially allowing for more intensive manufacturing processes. Any future development would be required to comply with City and Washington State noise limits for all adjacent and nearby properties. As described above, nearby properties include industrial properties to the northwest, west and south, park or open space to the north and east (currently landfill), and non-adjacent residential properties described above and shown on Figure 1. Changing the land-use designation of the Site would not change the applicable noise limits.

Light and Glare

The following subsections address potential light and glare impacts to surrounding properties based on the proposed change in comprehensive plan land-use designation.

Regulations and Standards

The City does not have lighting regulations specific to industrial operations; however, anyone developing the Site would be required to obtain land-use and building permits prior to development and would be required to comply with all relevant design standards.

The City's Land Use Regulatory Code, Title 13 of the TMC, contains outdoor lighting regulations for off-street parking areas and for transitional areas between non-residential and residential uses.

Standards include use of indirect illumination or floodlighting directed away from adjacent properties to minimize spillover light on surrounding properties.

Joint Base Lewis-McChord Lighting Study Report

In 2019, the Joint Base Lewis-McChord (JBLM) Lighting Study Report[2] was published to assess and improve regional lighting equipment and practices within and in the regions surrounding JBLM (including Tacoma). The report addresses light pollution prevention and mitigation measures and suggests that communities adopt lighting standards to improve aesthetics; minimize glare and light trespass; improve safety for drivers, cyclists, and pedestrians; and improve visibility of the night sky.

The basic principles of light pollution prevention include shielding light so that it is directed only to the intended area, use only the amount of light necessary to the task, and employ light sources with warm-toned light.

The Lighting Study Report makes the following recommendations applicable to the NewCold facility:

- Street lights should be fully shielded to direct light downward with no opaque or reflective elements facing upward. The light source (bulb) should not extend below the shielding. Lights should not be angled, but should be directed directly toward the ground. Modern light-emitting diode (LED) lighting should be the appropriate brightness for the application and should use a warm white light (2,700 Kelvin [K] to 3,000K color temperature).
- Like street lights, wall-mounted lights should be fully shielded to direct light downward toward the area to be illuminated. The light source should not extend below the shielding. Modern LED lighting should be the appropriate brightness for the application and should use a warm white light.

Existing Lighting

Fixtures currently installed at the NewCold Facility consist of highly energy-efficient directional LED lighting. Exterior lighting includes fully shielded street lamp-type lighting in the passenger vehicle and truck parking areas in the southern portion of the property and along an access roadway following the perimeter of the NewCold Facility, including the eastern portion of the Site. Wall-mounted, fully shielded directional LED light fixtures are mounted on the south side of the building to illuminate the employee entrances and above the large loading bay doors. Additional wall-mounted directional light fixtures are present above each human-scale door on the north side of the building. All existing light fixtures are downward-directional with opaque, non-reflective housings that extend below the light source and reduce spillover to adjacent areas. Lighting is located at an appropriate height for the application. See Attachment 2 for photographs of existing light fixtures.

[2] MEI. 2019. Draft: Joint Base Lewis-McChord Lighting Study Report. Monrad Engineering, Inc. April 5.

Proposed Future Lighting

NewCold intends to expand into the Site through construction of a second high-cube refrigerated warehouse building adjacent to the existing building. The proposed building is expected to be the same height and dimensions as the existing high-cube building. No additional street lighting is currently planned as part of the proposed expansion. Lighting would include wall-mounted fixtures over any human-scale doors along the north and east sides of the new building. No new loading bays are currently planned, but if additional loading bays are added in the future, they would be equipped with shielded directional lighting similar to the existing lighting.

The specific light fixtures to be used in the proposed expansion have not been identified, but NewCold is committed to using lighting fixtures and placement that minimize light pollution and light encroachment into surrounding properties. This includes, but is not limited to, use of the newest available LED-type light fixtures allowing precise control of lighting color and brightness compared to legacy light sources, and use of external shielding on all fixtures to prevent light trespass.

While little to no light encroachment is expected due to the use of appropriate lighting, the existing NewCold structure would provide an additional barrier to the west and south. The uphill slope to the landfill would obscure light and glare to the north and east of the Site. The nearest properties designated for residential use are located a minimum of 800 feet from the Site; therefore, no light impacts to nearby residences would be expected due to NewCold's planned use of the Site.

While NewCold has no intention of selling the Site, the proposed designation change would apply to any future development. However, as described under Land Use Regulatory Code above, a change from M-1 to M-2 would not allow for more intrinsically light-intensive uses or result in any changes to regulations regarding lighting on the Site.

LANDAU ASSOCIATES, INC.

Amy Maule
Senior Scientist

Mark Brunner
Senior Associate

AEM/MWB/RAS/ccy
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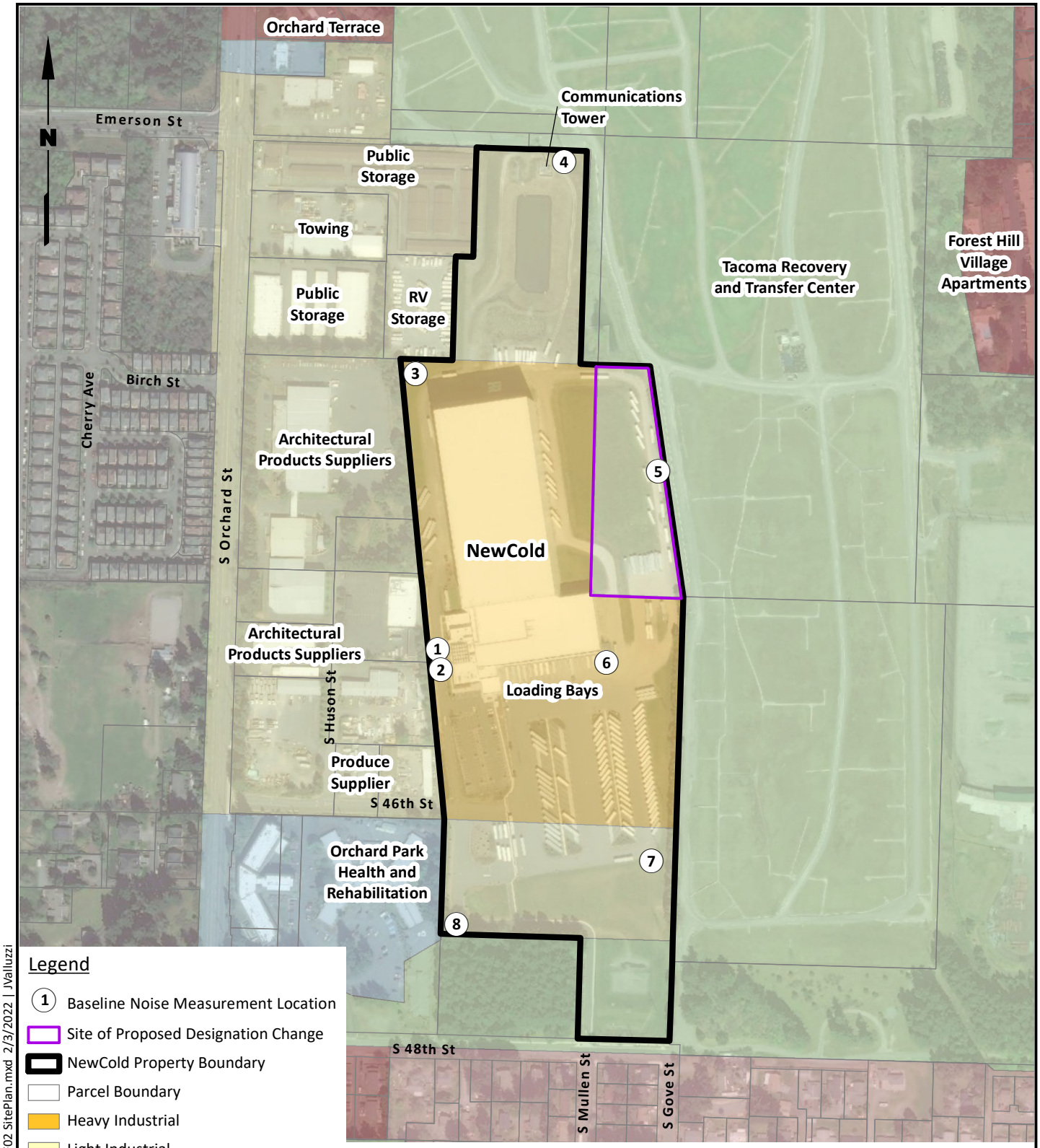
Attachments

Figure 1: Site Plan
Attachment 1: Characteristics of Sound and Noise
Attachment 2: Photographs of Existing Lighting at NewCold Facility



Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Source: ESRI World Imagery; Pierce County GIS

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LANDAU ASSOCIATES

NewCold Noise and Light/Glare Study Tacoma, Washington	**Site Plan**	Figure 1

ATTACHMENT 1

Characteristics of Sound and Noise

Attachment 1
Characteristics of Sound and Noise

Definition of Sound

Sound is created when objects vibrate, resulting in a minute variation in surrounding atmospheric pressure, called sound pressure. The human response to sound depends on the magnitude of a sound as a function of its frequency and time pattern (EPA 1974). Magnitude is a measure of the physical sound energy in the air. The range of magnitude the ear can hear, from the faintest to the loudest sound, is so large that sound pressure is expressed on a logarithmic scale in units called decibels (dB). Loudness refers to how people subjectively judge a sound and varies between people.

Sound is measured using the logarithmic decibel scale, so doubling the number of noise sources, such as the number of cars on a roadway, increases noise levels by 3 A-weighted decibels (dBA). A-weighted decibels are noise level measurements that account for relative loudness perceived by human hearing because humans are less sensitive to very low-pitch or high-pitch noises. Therefore, when you combine two noise sources emitting 60 dBA, the combined noise level is 63 dBA, not 120 dBA. The human ear can barely perceive a 3 dBA increase, while a 5 dBA increase is about one and one-half times as loud. A 10 dBA increase appears to be a doubling in noise level to most listeners. A tenfold increase in the number of noise sources will add 10 dBA.

In addition to magnitude, humans also respond to a sound's frequency or pitch. The human ear is very effective at perceiving frequencies between 1,000 and 5,000 hertz (Hz), with less efficiency outside this range. Environmental noise is composed of many frequencies. A-weighting (dBA) of sound levels is applied electronically by a sound level meter and combines the many frequencies into one sound level that simulates how an average person hears sounds of low to moderate magnitude.

Definition of Noise

Noise is unwanted or unpleasant sound. Noise is a subjective term because, as described above, sound levels are perceived differently by different people. Magnitudes of typical noise levels are shown in Table 1.1.

Table 1.1: Typical Noise Levels

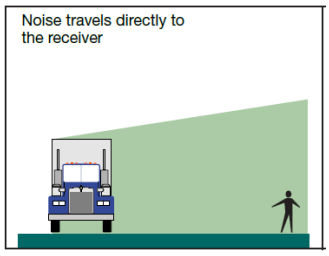
Noise Source	Decibel Level	Effect/Perception	Relative Loudness (human judgement of sound levels)
Jet aircraft takeoff from carrier (50 feet)	140 dBA	Threshold of pain	64 times as loud
Loud rock concert near stage	120 dBA	Uncomfortably loud	16 times as loud
Power lawn mower, motorcycle, garbage truck	100 dBA	Very loud; serious damage possible in 8-hr exposure	4 times as loud
Motorcycle or heavy truck at 25 ft	90 dBA	Likely damage in 8-hr exposure	2 times as loud
Garbage disposal, dishwasher	80 dBA	Moderately loud; possible damage in 8-hr exposure.	Reference loudness
Radio or TV-audio, vacuum cleaner	70 dBA	Upper 70s are annoyingly loud to some people.	½ as loud
Conversation in restaurant, office, background music	60 dBA	Fairly quiet	¼ as loud
Quiet suburb, conversation at home	50 dBA		⅛ as loud
Library, bird calls, lowest limit of urban ambient sound	40 dBA		
Quiet rural area	30 dBA	Very Quiet	
Whisper, rustling leaves	20 dBA		
Breathing	10 dBA	Barely audible	

Sources: Beranek (1988) and EPA (1974).

Sound Propagation

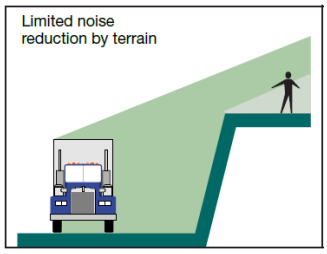
Sound propagation, or how far the sound travels, is affected by the terrain and the elevation of the receiver relative to the noise source. Noise levels can be reduced by breaking the line of sight between the receiver and the noise source.

- Level ground: noise travels in a straight path between the source and receiver.



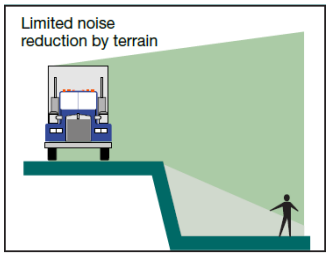
Level Ground

- Depressed source/elevated receiver: terrain may act like a partial noise barrier and reduce noise levels if it crests between the source and receiver.



Depressed source/elevated receiver

- Elevated source/depressed receiver: the edge of the roadway acts as a partial noise barrier. Even a short barrier, like a concrete safety barrier, can reduce noise levels at the subgrade receiver.



Elevated source/depressed receiver

Line and Point Sources

Noise levels decrease with distance from the noise source. For a line source, like a highway, noise levels decrease 3 dBA for every doubling of distance, e.g., from 50 feet to 100 feet, between the source and the receiver over hard ground (concrete, pavement) or 4.5 dBA over soft ground (grass). For point source, like most construction noise, the levels decrease between 6 and 7.5 dBA for every doubling of distance.

Effects of Noise

The Federal Highway Administration noise abatement criteria are based on speech interference, which is a well-documented impact that is relatively reproducible in human response studies. Environmental noise indirectly affects human welfare by interfering with sleep, thought, and conversation. Prolonged exposure to very high levels of environmental noise can cause hearing loss and the US Environmental Protection Agency (EPA) has established a protective level 70 dBA $L_{eq}(24)$ for hearing loss (EPA 1974). Noise also can affect some types of wildlife during certain activities.

Noise Level Descriptors

The equivalent sound level (L_{eq}) is a measure of the average noise level during a specified period of time. A 1-hour period, or hourly L_{eq} [$L_{eq}(h)$], is used to measure highway noise. L_{eq} is a measure of total noise during a time period that places more emphasis on occasional high noise levels that accompany

general background noise levels. For example, if you have two different sounds, and one contains twice as much energy, but lasts only half as long as the other, the two would have the same L_{eq} noise levels.

Either the total noise energy or the highest instantaneous noise level can describe short-term noise levels, such as those from a single truck passing by. The sound exposure level is a measure of total sound energy from an event and is useful in determining what the L_{eq} would be over a period when several noise events occur. L_{max} is the maximum sound level that occurs during a single event and is related to impacts on speech interference and sleep disruption. L_{min} is the minimum sound level during a period of time.

With L_n, "n" is the percent of time that a sound level is exceeded and is used to describe the range of sound levels recorded during the measurement period. For example, the $L_{8.3}$ is the noise level that is exceeded 8.3 percent of the time, or 5 minutes in any hour, and the $L_{2.5}$ is the noise level that is exceeded 2.5 percent of the time, or 1.5 minutes in any hour. Sound varies in the environment and people will generally find a higher, but constant, sound level more tolerable than a quiet background level interrupted by higher sound level events. For example, steady traffic noise from a highway is normally less bothersome than loud alarms or occasional impact noises in an otherwise quiet area.

References

Beranek, Leo L., ed. 1988. Noise and Vibration Control, rev ed. Washington, DC: Institute of Noise Control Engineering.

EPA. 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Publication No. 550/9-74-004. US Environmental Protection Agency. March.

Photographs of Existing Lighting at NewCold Facility

1. Street lamp-style light fixture.

2. Street lamp-style light fixture.

LANDAU ASSOCIATES

NewCold
Noise and Light/Glare Study
Tacoma, Washington

Photographs of Existing Lighting at NewCold Facility

Figure
2-1

3. Light fixture over human-scale door.

4. Light fixture over human-scale door.

LANDAU ASSOCIATES	NewCold Noise and Light/Glare Study Tacoma, Washington	**Photographs of Existing Lighting at NewCold Facility**

Figure
2-2

5. Light fixture over loading bays.

LANDAU ASSOCIATES	NewCold Noise and Light/Glare Study Tacoma, Washington	**Photographs of Existing Lighting at NewCold Facility**

Figure
2-3

FAQ

March 2, 2022

ANNUAL AMENDMENTS

The One Tacoma Plan is subject to continuous review, evaluation, and potentially modification to remain relevant and to respond to changing circumstances. The GMA allows the Plan generally to be amended only once each year. Amendments may include adding new Plan elements, modifying existing elements, revising policies or maps, or updating data and information. All proposed modifications are reviewed concurrently to address the cumulative effect of the revisions and to maintain internal consistency among the various plan components and external consistency with regional, county, and adjacent jurisdictional plans. The GMA requires development regulations to be consistent with and to implement the Comprehensive Plan. To maintain this consistency, changes to the One Tacoma Plan often are accompanied by similar changes to development regulations and/or zoning classifications.

Each city and county planning under GMA must conduct a thorough review of its comprehensive plan every eight years, according to the schedule provided in RCW 36.70A.130, and revise its plan if necessary. In addition, these jurisdictions may consider smaller comprehensive plan amendments no more than once per year, with some exceptions (RCW 36.70A.130(2)). Rather than adopting changes on a piecemeal basis, proposed amendments must be considered "concurrently so the cumulative effect of the various proposals can be ascertained."

The process begins with the scoping phase during which time the Planning Commission considers whether applications meet the following criteria, which is outlined under Tacoma Municipal Code, Title 13.02.070, Comprehensive Plan amendment procedures.

- Applications are received no later than the last day of May (however earlier deadlines can be set),
- The Planning Commission has 120 days to decide on acceptance
- Application completeness
- Under the jurisdiction of the Planning Commission
- Repetitive/duplicative
- Staff conducts a preliminary review
    - Basic options analysis is conducted
- Request is manageable and reasonable given city/departmental staffing, budget, and resources

Planning and Development Services

City of Tacoma, Washington

Peter Huffman, Director

Project Manager:

Larry Harala, Principal Planner

lharala@cityoftacoma.org

Project Website:

www.cityoftacoma.org/2022Amendment

Based on that criterion the planning commission evaluates the applications and accepts the docket for that cycle then directs staff to work with the applicants to conduct analysis and public outreach. The Planning Commission has this opportunity to give staff preliminary feedback on the type of analysis, outreach, and overall evaluation it would like to see. Given that there is finite staff time and resources, and that often studies, and specialized analysis can be expensive for applicants and time consuming, it is important that such direction is given early in the process with reasonable time to meet Planning Commission expectations. Staff will then conduct analysis, working with the applicant, and conduct public outreach.

The Planning Commission will release the pack for public review, hold a public hearing, and then make a final determination based on whether the proposed amendments are consistent with the following criteria:

- Whether the proposed amendment will benefit the City as a whole, will not adversely affect the City's public facilities and services, and bears a reasonable relationship to the public health, safety, and welfare; and
- Whether the proposed amendment conforms to applicable provisions of State statutes, case law, regional policies, and the Comprehensive Plan.

After the Planning Commission renders its decision, the Commission will forward its findings to the City Council for a public hearing and review resulting in a final decision.

COMPREHENSIVE PLAN, LAND USE REGULATORY CODE AND THE FUTURE LAND USE MAP

THE ONE TACOMA PLAN

The One Tacoma Plan has been adopted most recently, in December of 2021 by Ordinance No. 28793, is Tacoma's comprehensive plan as required by the State Growth Management Act (GMA). As the City's official statement concerning future growth and development, the Comprehensive Plan sets forth goals, policies and strategies for the health, welfare and quality of life of Tacoma's residents. The One Tacoma Plan is a blueprint for the future character of our City. The plan can be viewed online at www.cityoftacoma.org/OneTacoma.

It is important to remember that a comprehensive plan and a zoning ordinance are two separate tools that are used in conjunction with one another. A comprehensive plan acts in a guiding role and provides recommendations on how land should be utilized to meet the needs and desires of the community, whereas a zoning ordinance regulates land uses as recommended by the plan.

THE LAND USE REGULATORY CODE

Title 13 of the Tacoma Municipal Code (TMC), is the key regulatory mechanism that implements the One Tacoma Plan. Title 13 contains regulations and procedures for controlling land use, platting, shorelines, environment, critical areas, and historic preservation, among others. The Tacoma Municipal Code can be viewed online at www.cityoftacoma.org/Planning (and click on "Tacoma Municipal Code").

THE FUTURE LAND USE MAP

It is typical for cities and counties throughout Washington to adopt a future land Use Map. The Land Use Map sets the direction of future growth in a community. The future land use map, which is policy-oriented, is then implemented in large part by the official zoning map, a regulatory tool. Since these maps are so closely linked, a zoning change cannot be approved unless it is consistent with the future land use map.

In the City of Tacoma, The Future Land Use Map of the One Tacoma Plan (figure 2 of the Urban Form element), illustrates the City's intended future land use pattern through the geographic distribution of residential and commercial areas, the designation of mixed-use and manufacturing/industrial centers, as well as shoreline and single-family detached designations. These designations correspond to specific zoning districts and use and development standards that implement the policies of the One Tacoma Plan. Per the Washington State Growth Management Act and the Tacoma Municipal Code, the City's Land Use Regulations, including zoning districts, should be consistent with the policies of the One Tacoma Plan.

WHAT IS A LAND USE DESIGNATION CHANGE?

The One Tacoma Plan Future Land Use Map land use designations are in place to communicate the long-range plan for land use patterns throughout the city. These proposals seek to re-designate the respective sites from the one designation to slightly more intense designations in order to accommodate changing development patterns within the area and also seeks to more closely align the designation

WHAT IS A PLAN OR CODE AMENDMENT?

A Plan Amendment is the process through which the city considers changes, additions, and updates to the One Tacoma Comprehensive Plan and a Code amendment would be the same considerations pertaining to the Land Use Regulatory Code. The intent of the amendment process is to review all these changes concurrently, where appropriate, so that the cumulative effects can be considered. According to the State Growth Management Act, local comprehensive plans cannot be amended more than once a year.

WHAT IS SITE SPECIFIC REZONING AND HOW DOES IT DIFFER FROM THE COMPREHENSIVE PLAN LAND USE DESIGNATION?

The city of Tacoma as most counties and cities throughout Washington State and the United States, utilizes zoning to define and regulate uses and development standards on land through the city. This is a more focused set of use restrictions, development standards and other regulations. Zoning differs from Land Use Designation in that it is specific and tied actual development and use of the site. The Comprehensive Plan Land Use Designation is tied to the cities overall goals imbedded in the comprehensive plan, it is a long-term vision, and not specific. Zoning is tied to the Land Use Designation, but is an implementation of it specific to actual development and use of the given site.

SEPA PROCESS

During the annual amendment process a SEPA review is done per guidance from Washington State Administrative Code, Chapter 197-11 WAC, The City of Tacoma SEPA process is regulated under Title 13.12, Environmental Code. Administration of the code is primarily through our SEPA process administered by Planning and Development Services with ongoing advisement from the City of Tacoma City Attorney, and our SEPA official.

During non-project actions such as our Annual Amendment cycle the evaluation is at a "big picture" level with the focus on identifying analysis that will be needed at the next step of the given process. In the case of the Comprehensive Land Use Designation Change requests, that is asking applicants to provide preliminary studies on a site specific, yet non-project, basis. Examples might include traffic studies, general light and noise impact studies, possibly preliminary environmental evaluations, and assessments. However, studies relating directly to a given development project would not be required at this time, rather at time of triggering event.

COMMON SEPA TRIGGERS
WORK OCCURRING WITHIN CRITICAL AREAS AND/OR ON LANDS WHOLLY OR PARTLY COVERED BY WATER
CONSTRUCTION OF RESIDENTIAL STRUCTURES – MORE THAN 20 DWELLING UNITS
CONSTRUCTION OR DEMOLITION OF A BUILDING – GREATER THAN 12,000 SQUARE FEET
CONSTRUCTION OF A PARKING LOT – MORE THAN 40 VEHICLES
FILL OR EXCAVATION – MORE THAN 500 CUBIC YARDS
INSTALLATION OR REMOVAL OF IMPERVIOUS TANKS ON INDUSTRIAL PROPERTY – CAPACITY OF MORE THAN 60,000 GALLONS
STORMWATER, WATER, & SEWER UTILITIES – MORE THAN 12 INCHES IN DIAMETER
INSTALLATION OF WIRELESS FACILITIES – ON A RESIDENCE OR SCHOOL OR WITHIN AN AREA ZONED RESIDENTIAL
CONSTRUCTION OF A WIRELESS TOWER – 60 FEET OR TALLER OR WITHIN A RESIDENTIAL ZONE
CERTAIN LAND USE DECISIONS – REZONE

In addition to SEPA evaluation the City of Tacoma has robust critical area code which governs all allowed/permitted activities and development on lands within the City of Tacoma. These include our Critical Area Code (Title 13 Land Use Regulatory Code, 13.11), Shoreline Code (Title 19 Shoreline Master Program), and the Stormwater Manual (2021 SWMM), South Tacoma Groundwater Protection District (Title 13 Land Use Regulatory Code, 13.06.070.D). See attached tip sheet below.

WHAT PROTECTIONS ARE THERE FOR TREES/TREE CANOPY

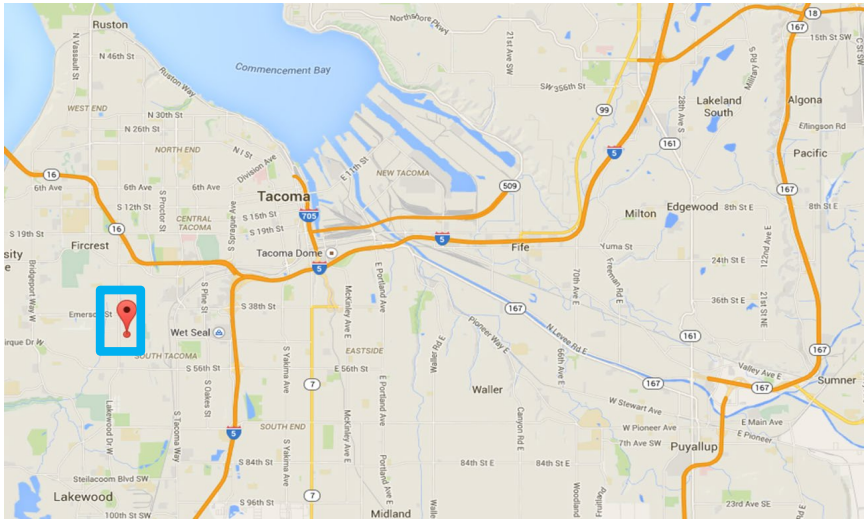
The City of Tacoma has a framework of critical area and environmental codes in place to help preserve what remains of Tacoma's natural environment. Tree Canopy protection has become increasingly important to the city and over the years there have been many actions taken. Most recently the City of Tacoma adopted the Urban Forest Management Plan in 2019 (tacomatreeplan.org).

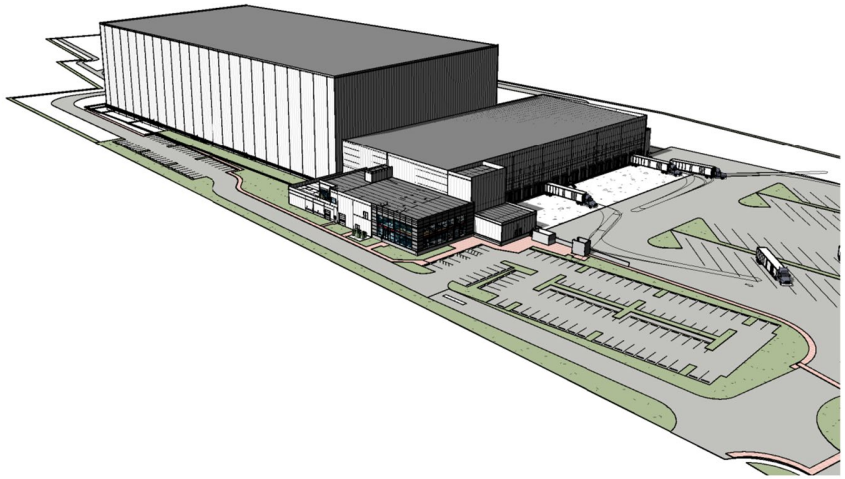
Additionally Title 13 has tree canopy coverage requirements for new development in residential and commercial zoning districts. As well as landscaping standards in all zoning districts which promote increased tree canopy coverage. (

The Tacoma City Council passed Resolution No. 40509 in December 2019, declaring a climate emergency in Tacoma and calling for a transformative climate action plan to reduce community greenhouse gas (GHG) emissions and adapt to climate impacts we can no longer avoid. As we plan for our collective climate future, the City of Tacoma needs to hear continually from communities that are historically underrepresented, underserved, made vulnerable communities, or expected to experience the first or worst impacts of climate change. By centering frontline communities' priorities, Tacoma's new plan invests in both climate action and environmental justice. Tree canopy coverage is a vital component of the plan and represents a tangible action the city can perform to help meet the goals of the plan.

Introduction to NewCold Tacoma

Facts & Figures





- **Address:** 4601 S. Orchard St., Tacoma
- **Distance to Port:** 9 miles
- **High-Bay – Phase I:** 102,000 pallet positions
- **High-Bay Footprint:** 156,704 sq. ft.
- **High-Bay Height:** 137 ft. (~21,500,000 cubic ft.)
- **Dispatch Floor:** 54,622 sq. ft.
- **Pick Floor:** 54,622 sq. ft.
- **VAL Area:** 4,361 sq. ft.
- **Docks IN / OUT:** 8 / 9
- **Cranes:** 8 “Stacker” Cranes:
- **Yard Operations:** 80+ powered positions
- **Anchor Tenant:** Trident Seafoods
- **Employment:** 75+ (at full capacity)

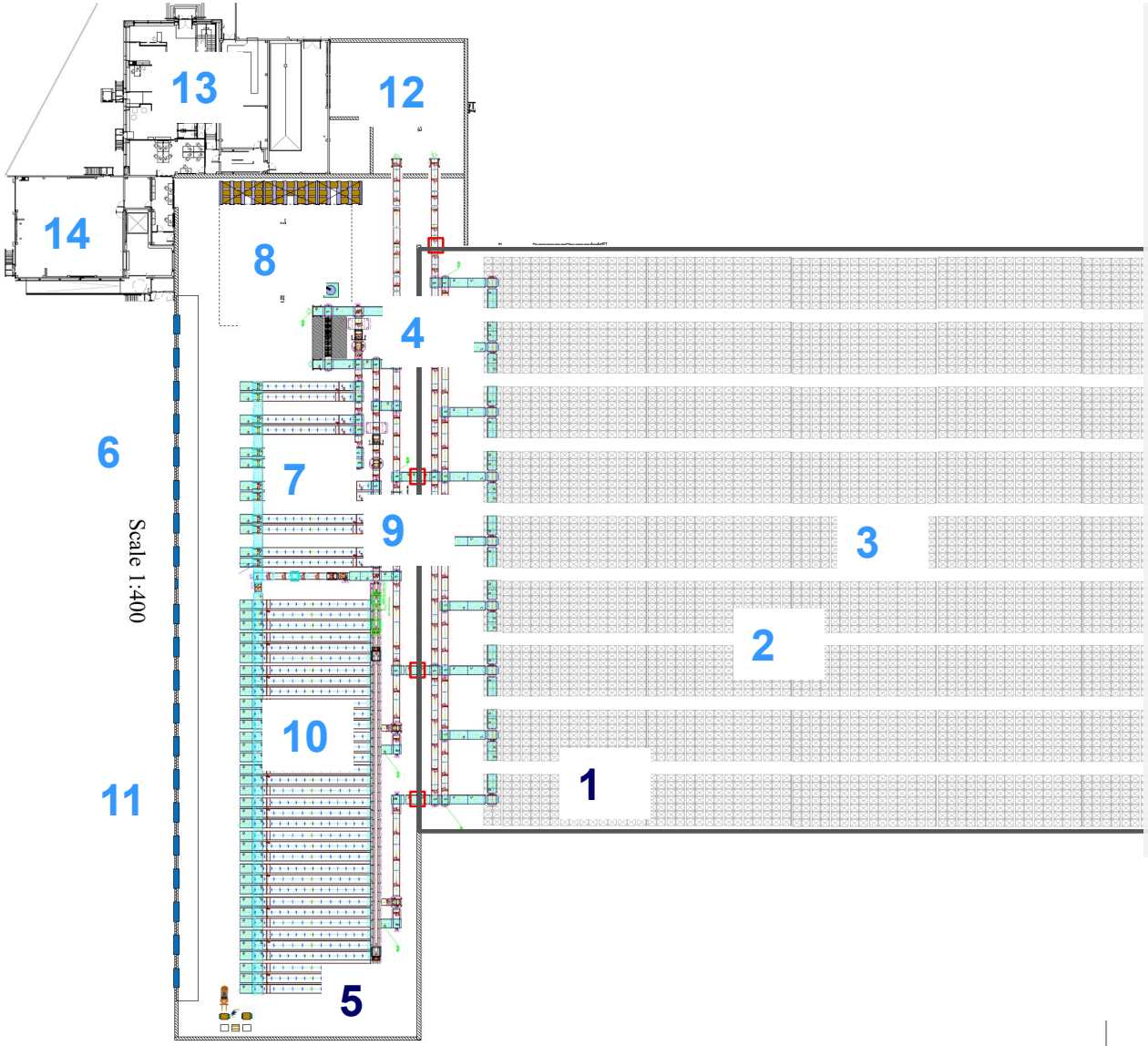
NewCold Tacoma was the first venture of NewCold into the U.S. market. This site is meant to be the showcase site for NewCold and is extremely important for the future – expansion, training, etc.

Advantages of Automation

1. Consistent high-quality, efficient cold store operation
2. Market leading service levels
3. Sustainable (50% less energy consumption)
4. Protecting product integrity & food safety
5. Showcase in your supply chain
6. Driver for standardization and continuous improvement throughout the supply chain
7. Improved inventory management (reporting, tracking & tracing, data sharing / EDI) & forecasting
8. Creating centers of gravity (creating frozen food and cold storage clusters) and synergies in transport; Creating competitive advantage
9. Creating high quality employment opportunities & enabling our employees to outperform with leading technology

NewCold Tacoma

The Cold Store Solution



What are we looking at:

1. High-Bay
2. Crane aisles
3. Racking
4. Conveyor system
5. Expedition Area
6. Inbound docks
7. Inbound Buffers
8. Recovery area
9. Elevator to pick floor
10. Outbound buffers
11. Outbound docks
12. VAL Area
13. Offices
14. Technical Area

Developed by Experts

1. Solution Design by NewCold
   - Most experienced team in the industry
   - Proven track record of > 20 successfully operating automated warehouses
   - Standard design (building blocks)

2. Professional Project Development by NewCold & Fisher Construction
   - Overall Project Management by NewCold
   - Cooperation with Leading US Food Processing and Coldstore Construction Company: Fisher Construction
   - And Other Key Equipment Suppliers

3. Implementing Systems & People by NewCold
   - Standard Operating Procedures
   - Testing & Training; Connecting Systems & People
   - Start-up Support

Managed by Passionate Professionals

1. Standard Operating Procedures
   - Standard Operating Procedures (SOP)
   - Customer Focus: SOP tailored to Trident – NewCold partnership
   - Key Performance Indicators (KPI)

2. Continuous Improvement
   - Business Analysis to identify improvement projects
   - Joint projects (inside and outside the cold store walls)

3. High Service Levels
   - Full tracking & tracing supported by state of the art warehouse management system (WMS)
   - FEFO / BBD / Lot Code
   - Standard Operating Procedures (for all stakeholders)
   - Short warehouse lead time
   - KPI's (steady state operation)

NewCold Tacoma – Site Video

Available upon request…

Site Construction Time Lapse

- **Live Camera Link**

https://app.oxblue.com/open/fisher/newcoldtacoma

State Environmental Policy Act (SEPA)

The SEPA process is a Washington State requirement intended to ensure that state and local agencies consider the likely environmental consequences of a proposal before acting on the proposal. All government decisions require environmental review, but may not be subject to procedural requirements under the Act.

WHEN SEPA IS REQUIRED

Many projects are exempt from SEPA requirements under either state law (WAC 197-11-800) or through local regulations (TMC 13.12.800).

The Most Common* SEPA Triggers
Work occurring within critical areas and/or on lands wholly or partly covered by water
Construction of residential structures – more than 20 dwelling units
Construction or demolition of a building – greater than 12,000 square feet
Construction of a parking lot – more than 40 vehicles
Fill or excavation – more than 500 cubic yards
Installation or removal of impervious tanks on industrial property – capacity of more than 60,000 gallons
Stormwater, water, & sewer utilities – more than 12 inches in diameter
Installation of wireless facilities – on a residence or school or or wihin an area zoned residential
Construction of a wireless tower – 60 feet or taller or within a residential zone
Certain land use decisions – Rezone

*For a comprehensive list, see WAC 197-11-800.

SEPA PROCESS

Submittal of SEPA materials **in a separate land use application** should occur at the time of building permit submittal (if there is no associated land use permit) or along with the application for an associated Major Land Use Decision. Additional materials may be requested, such as a geotechnical report, critical areas report, or a cultural resources assessment. A Planner can help you determine if additional materials are needed.

A completed Environmental Checklist is the form the City uses to gather information in order to make a SEPA determination. Applicants are required to submit a checklist along with any required information for the associated building or land use permit. Copies of the Environmental Checklist form are available at the Planning and Development Serice Department, 747 Market Street, 3rd Floor and they are also located online: http://www.ecy.wa.gov/programs/sea/sepa/forms.htm A separate copy of the site plan, building elevations, and other required materials should be submitted. **All application materials must be submitted in electronic PDF format on compact disc (CD) or online at TacomaPermits.org. See Electronic File Standards Tip Sheet.**

- SEPA submittals for building permits can be taken in over the counter at the Permit Intake Center. They will be reviewed for completeness before being taken in.
- SEPA submittals associated with major Land Use Decisions can only be taken in concurrently with the associated Land Use application at the pre-application meeting. The Determination is issued with the Land Use Decision and the 14-day appeal periods run concurrently.
- SEPAs associated with building permits take approximately 30 days to process and have a 21-day appeal period; building permits will not be issued until the SEPA process is complete.

OTHER LEAD AGENCIES

If a Determination has already been issued for the project by a different lead agency, of if the project has previously been subject to NEPA (National Environmental Policy Act) a copy of that Determination along with the associated Environmental Checklist may satisfy the City's SEPA requirement.

Other agencies include School Districts, Park Districts, State Agencies, County Agencies, Local Air Pollution Authorities, and the Port of Tacoma.

Other Lead Agencies, such as the Port of Tacoma, can issue SEPA Determinations for work within their jurisdiction.

State Environmental Policy Act (SEPA)

FILLING OUT THE ENVIRONMENTAL CHECKLIST

Section A

- It is helpful if the contact information for the person preparing the checklist is provided.
- The project description should be thorough and not rely on other permit documents.
- To the extent the requirements for SEPA (or "triggers") are known they should be listed.
- If you know of prior environmental review related to the proposal or the site, please inform BLUS staff. Part or all of that review may satisfy the City's requirements.

Section B

- Leave a wide right margin for staff to make notes.
- The answer "not applicable" should be avoided and, when used, should include an explanation.
- Please feel free to contact City Staff for assistance when answering questions about the Comprehensive Plan, zoning designations, historic status, and other related questions.
- The checklist questions apply to all parts of the proposal, even if they are going to happen at different times or on different parcels.
- When additional studies are required, they should be referenced in the checklist.

Signature Section

- The checklist must be signed by the applicant and the processing fee must be included, for the submittal to be accepted.

THRESHOLD DETERMINATION

Following review of the checklist and supporting information, the City will make a "Threshold Determination" for the proposal. There are three different types of Threshold Determinations:

- DNS (Determination of Non-Significance) – the most common determination; this means that the proposal is not anticipated to have a significant impact on the environment.
- MDNS (Mitigated Determination of Non-Significance) – means that impacts to the environment were identified while processing the Determination, but conditions have been included in the Determination and related land use and/or building permits that will mitigate the impact(s).
- DS (Determination of Significance) – means that there will be probable significant adverse impacts to the environment which cannot be mitigated and an EIS (Environmental Impact Statement) must be prepared. If it is anticipated that a project will result in an EIS, likely that the applicant will be contacted and asked to provide additional information.

ADDITIONAL REPORTS

During the scoping meeting process, requests for additional reports may be identified. The applicant may also inquire about triggers for additional reports by visiting the Permit Intake Center, 747 Market Street, or by calling 253-591-5030.

ASARCO Soil Sampling

Development proposals located in areas with a probability of high amounts of contamination from the ASARCO Plume may require soil testing. The Department of Ecology (DOE) provides an online Facilities Atlas Map to help determine the level of contamination: http://www.ecy.wa.gov/fs/

Cultural Resources Assessment

Proposals within a Shoreline District, within Puyallup Tribal Boundaries, or on a historically significant site require a Cultural Resources Report. Depending on the scope and location of the project, an Unanticipated Discovery Plan by an approved Archaeologist may suffice.

Traffic Impact Analysis

Based upon the amount of traffic your proposal may generate, a traffic worksheet or a full Traffic Impact Analysis may be requested. A Traffic Engineer can be reached at 591-5500.

Critical Areas Report

Projects within wetlands, fish and wildlife habitat conservation areas, or associated buffers will require a critical areas report. Projects within flood-sensitive areas may require elevation cerificates, and areas with steep slopes (greater than 40% grade) often require submittal of a geotechnical report.

APPLICABLE REGULATIONS

Tacoma Municipal Code 13.12 - Environmental Code
Washington Administrative Code 197-11 SEPA Rules

Section II-B

South Sound Christian Schools
Land Use Designation Change

South Sound Christian/CenterPoint Christian Fellowship Land Use Designation Amendment

Staff Analysis Report

March 2, 2022

This application is a request for a Land Use Designation Change request from Low-Scale Residential to Mid-Scale Residential on the western 4 parcels (A, B, C, and D, see map page 2-3), and from Low-Scale Residential to General Commercial on the eastern 4 parcels and a site Rezoning request pertaining to a total of 8-parcels with a total land area of approximately 15.96 acres. The Land Use Designation change request is being made to facilitate a future rezone application for the western 4 properties to be rezoned from R2 to R4L, and the 4 parcels on the east side closer to the Tacoma Mall Blvd alignment to be rezoned to C-2 General Commercial.

Project Summary	
Project Title:	South Sound Christian/CenterPoint Christian Fellowship Land Use Designation Amendment
Applicant:	South Sound Christian/CenterPoint Christian Fellowship
Location and Size of Area:	8-Parcels generally adjacent to 2052 South 64th Street 15.96 acres / 694,260 SF
Current Land Use and Zoning:	Land Use Designation: Low Scale Residential Zoning: R-2-STGPD Single Family Dwelling District and South Tacoma Groundwater Protection District
Neighborhood Council Area:	South Tacoma
Staff Contact:	Larry Harala, Principal Planner, (253) 318-5626, lharala@cityoftacoma.org
Staff Recommendation:	That the Planning Commission accept public comment and begin to develop recommendations to the City Council.
Project Proposal:	See Exhibit "A", attached.

Planning and Development Services
City of Tacoma, Washington
Peter Huffman, Director

Project Manager:
Larry Harala, Principal Planner
lharala@cityoftacoma.org

Project Website:
www.cityoftacoma.org/2022Amendment

A. Area of Applicability

The subject site is located at 2052 South 64th Street and includes 8 parcels with an approximate land are of 15.96 acres.

- Parcel numbers 032030-1024 and 032030-1189 (referred to as Parcel "A" and "B" on the maps below). Located south of South 66th Street the 2.38-acre and 0.179-acre parcels are owned by South Sound Christian Schools. Parcel A currently has multiple buildings on site and parking and is used for administrative purposes. The southernmost portion of the parcel is undeveloped and forested. Parcel B is undeveloped and currently used as a vegetable garden.
- Parcels 032030-1073 and 032030-1075 (referred to as Parcels "C" and "D" respectively) are owned by South Sound Christian and are part of the Tacoma Baptist School site. The sites total 7.34 acres and contain the school, gymnasium, a large field and associated parking for the uses.
- Parcels 302030-1193 and 032030-1194 (referred to as Parcels "E" and "F" respectively) are owned by South Tacoma Baptist Church (CenterPoint Christian Fellowship). Both parcels are undeveloped and located east of the Tacoma Baptist School site and north of CenterPoint Church. Together, the two parcels total approximately 2.06 acres.
- Parcel 032030-1159 (referred to as Parcel "G") is owned by South Tacoma Baptist Church (CenterPoint Christian Fellowship) This parcel consists of 4 acres and contains the church and associated parking. Additionally, parcel 032030-1158 (referred to as Parcel "H") is a parcel set aside for tax exemption status for CenterPoint Christian Fellowship, totals 1-acre in area and is not shown on the map with a parcel outline as it is contained within the 4 acres of Parcel 032030-1159 (Parcel "G").

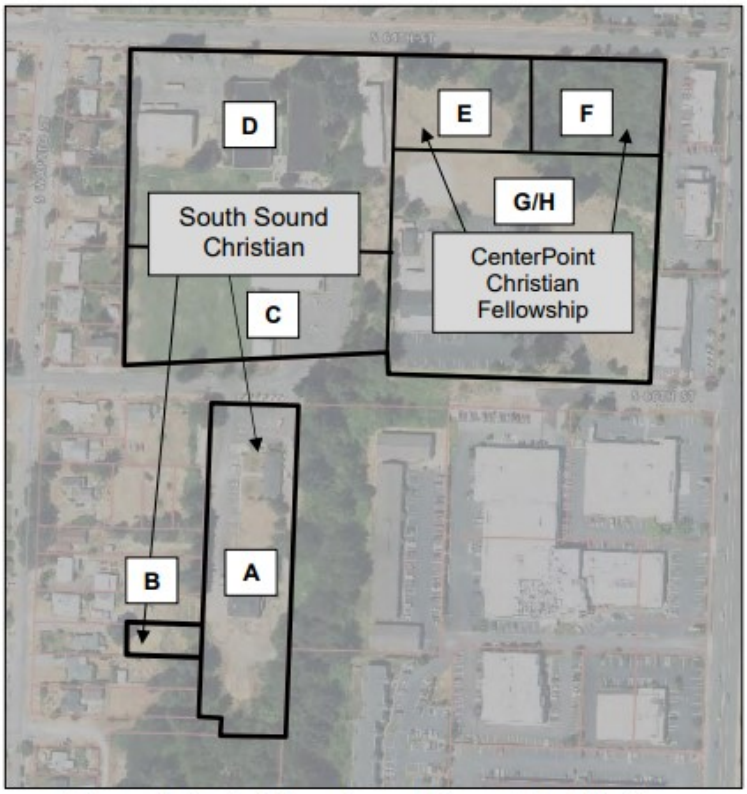


Figure 1: Project Parcels and Owner Identification

B. Background

The subject parcels presently contain a mix of uses but are primarily religious institution and educational institution developments. The parcel owners are working together on a joint application and wish to sell and/or redevelop portions of the site for multi-family development and general commercial development. They applicant hopes to work with Bargreen Ellingson a South Sound area restaurant supply and design company who wishes to expand their operations in the area on development of the parcels E, F, G, H, those requested for redesignation to General Commercial.
This area has been zoned R-2-STGPD Single Family Dwelling District for many years and is also within the South Tacoma Groundwater Protection District (TMC 13.09).

In 2019 the parcel south of South 66th Street ("A") was re-designated from Multi-Family (Low Density) to Single Family Residential, given the assumed educational use and adjacent lands. However, the site has not been used for educational purposes for over 15 years. The school functions on an entirely separate, larger property to the north, with the buildings on the parcel used only for storage and administrative offices.

The original application requested a designation change from Single Family Residential back to Multi-Family (Low-Density). However, those designations have been modified under Home in Tacoma Phase 1. As part of Home in Tacoma, the areas designated Single Family Residential were replaced by Low Scale Residential. Based on this change, the new proposal would amend the land use designation from Low Scale Residential to Mid-Scale Residential. The following table depicts the relationship between the Comprehensive Plan Land Use Designations and implementing zoning districts.

Comprehensive Plan Land Use Designation	***Potential Uses and Impacts***	***Potential Zoning Districts***
Low Scale residential	• Traditional neighborhood scale, height • Low to moderate density • Development oriented to the streets • Pedestrian friendly • Lot sizes from 2,500 -7,500 SF • Single Family Detached up to Triplex/Cottage developments • 10-45 dwelling unit per acre density levels	• R-1 Low-Scale Residential District • R-2 Residential District • R-2SRD Low-scale Residential Special Review District • HMR-SRD Historic Mixed Residential District *These zoning categories are subject to change during Home in Tacoma Phase II
Mid-Scale Residential	• Generally located proximate to Centers Corridors and higher frequency transit • Walkable • Greater housing type diversity • More emphasis on multiunit development • 15-45 dwelling unit per acre density levels	• R-3 Mid-scale Residential • R-4L Mid-scale Residential *These zoning categories are subject to change during Home in Tacoma Phase II
General Commercial	• Medium to high intensity commercial • Larger scale commercial development • Wide range of commercial development type	• C-2 General Community Commercial District • PDB Planned Development Business District

	• Typically located adjacent to highway/transportation corridors • If residential in nature moderate to higher density of around 45-75 units per acre	• HM Hospital Medical District

C. Analysis

It is imperative that both the Comprehensive Plan and the Code are properly maintained. The overall objective of the Minor Pan and Code Amendments is to keep the Plan and the Code current, respond to the changing circusmtances, and enhance customer service. Staff analysis of this application has been conducted in accordance with TMC 13.02.070.F.2, which requires the following four provisions be addressed, as appropriate:

- A staff analysis of the application in accordance with the elements described in 13.02.070.D;
- An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;
- An analysis of the amendment options identified in the assessment report, if applicable; and
- An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

a. A staff analysis of the application in accordance with the elements described in 13.02.070.D;

TMC 13.02.070.D, subsection 5.d.(1), requires that the following objectives shall be met by applications for the annual amendment:

- **Address inconsistencies or errors in the Comprehensive Plan or development regulations; Staff finds no errors in the Comprehensive Plan are being corrected by this application.**

- **Respond to changing circumstances, such as growth and development patterns, needs and desires of the community, and the City's capacity to provide adequate services; Staff finds that this application does respond to a change in Tacoma's need for more housing availability, more housing type variety, and more affordable housing.**

- **Maintain or enhance compatibility with existing or planned land uses and the surrounding development pattern; Staff finds that, this application potentially accomplishes this objective, in that commercial development on a portion of this site as well as low scale multi-family would maintain or enhance compatibility of these sites with the surrounding development pattern.**

- **Enhance the quality of the neighborhood. Staff finds that, there is an opportunity to enhance the quality of the neighborhood with quality development. Close attention will need to be given during any subsequent rezoning, and development of these sites to ensure this is accomplished.**

b. An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;

Per the most recent update via the Home in Tacoma Project, The Future Land Use Map designates the subject parcels as Low-Scale Residential. For parcels G,H,F the adjacent future land use designations include Neighborhood Commercial and General Commercial to the East; Parks and Open Space, and Neighborhood and General Commercial to the north; Low Scale Residential, Parks and Open Space, and Neighborhood and General Commercial to the south. For parcel A and B, south of 66th Street, the adjacent future land use designations include Parks and Open Space, Neighborhood Commercial, and Mid-Scale Residential to the east, Low-Scale Residential to the south and north, and Mid-Scale Residential and Low-Scale Residential to the west.

The applicant asserts that amending the comprehensive plan land use designations would provide for consistency with the surrounding area and with the comprehensive plan. Staff notes that the recent Planning Commission and City Council actions relating to the Home in Tacoma Project, amended the One Tacoma Comprehensive Plan in an effort to expand potential for affordable housing, and greater housing variety diversity among other key objectives. Criteria was established surrounding the Mid-Scale designation linked to proximity to centers, higher frequency transit and transportation corridors. Parcels A,B,C,D would be seeking the mid-scale designation. This is not unprecedented in the area as sites that are near and/or adjacent to these sites have that designation. Staff does not find concurrency with the outlined criteria for midscale designation, but does acknowledge some nuance to consider given the surrounding designations.

While staff does not find this area currently has complete, walkable neighborhoods, staff does note proximity to open space and to a commercial corridor which gives potential to develop into such. Staff finds that this area has strong potential to develop into a more walkable community and that transit along Tacoma Mall Blvd in the future is a possibility and presently there is transit as close as Oakes & 66th (route 53). If density and employment increases in the area, added transit and frequency would be more viable.

Relevant comprehensive plan goals and policies:

- Policy H–1.3 Encourage new and innovative housing types that meet the evolving needs of Tacoma households and expand housing choices in all neighborhoods. These housing types include single family dwelling units; multi- dwelling units from duplexes to multifamily developments; small units; accessory dwelling units; pre-fabricated homes such as manufactured, modular; co-housing and clustered housing.
- Policy H–1.9 Apply infill housing approaches to create additional housing opportunities for low and mid-range (Missing Middle) housing types.
- GOAL H–3 Promote safe, healthy housing that provides convenient access to jobs and to goods and services that meet daily needs. This housing is connected to the rest of the city and region by safe, convenient, affordable multimodal transportation.
- Goal UF-1 Guide development, growth, and infrastructure investment to support positive outcomes for all Tacomans.
- Policy UF-1.3 Promote the development of compact, complete and connected neighborhoods where residents have easy, convenient access to many of the places and services they use daily including

grocery stores, restaurants, schools and parks, that support a variety of transportation options, and which are characterized by a vibrant mix of commercial and residential uses within an easy walk of home.

- Goal DD–9 Support development patterns that result in compatible and graceful transitions between differing densities, intensities and activities.
- Policy DD–4.3 Encourage residential infill development that complements the general scale, character, neighborhood patterns and natural landscape features of neighborhoods. Consider building forms, scale, street frontage relationships, setbacks, open space patterns, and landscaping. Allow a range of architectural styles and expression, and respect existing entitlements.
- GOAL DD–12 Integrate and harmonize development with the natural environment.

The comprehensive plan amendment of the eastern parcels, E-H, to General Commercial is not incompatible with the surrounding future land use designations or current development patterns. The key to development of these sites will be preservation of sensitive critical area components and development that is harmonious and compatible with adjacent parklands. Staff finds that there are many options that can accommodate that, and that continued scrutiny and focus on these aspects in any subsequent rezoning request and development action would be part of those reviews and actions.

c. An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

Preliminary Critical Area Review

The applicant, per feedback from City of Tacoma, Planning and Development Services critical areas staff, engaged a consultant to do a preliminary evaluation of parcels designated above as C, D, E, F, G, H. Comprising approximately 13.4 acres. An examination of the site relative to wetlands, species habitat and to City of Tacoma Biodiversity Corridor code was conducted. No wetlands or endangered species were identified on any of the subject parcels, nor were any indicators such as hydric soils or known wetlands vegetation types were found. The consultant did not conclude that the site would qualify as a biodiversity corridor site.
On February 18, 2022, City of Tacoma Planning and Development Services critical area staff conducted a review of the preliminary environmental assessment. Staff found:

- The report indicates that there are no wetlands or streams on the property. However, Oregon White Oaks, a priority species, was noted on Data Sheet SP2. Note: The soil pit map shows areas C/D, E, F, G/H and the data sheets number the soils pits and thus, I do not precisely know where the Oregon White Oaks are located although I suspect they are within the northeast heavily vegetated corner.

- Oregon White Oaks (Garry Oaks) are protected under the Cities Critical Area code (TMC 13.11). Guidance for their protection can be found in Washington State Department of Fish and Wildlife "Management Recommendations for Washington's Priority Habitats - Oregon White Oak Woodlands". In addition, Garry Oak-Conifer habitat is a forest community habitat that provides contiguous aerial

pathways for the State Threatened western gray squirrel, and important roosting, nesting, and feeding habitat for birds and mammals found within the urban environment. Staff also note that conifers were included in the data sheets and additional information such as a tree survey is likely to be required to further evaluate habitat.

- Priority Oregon white oak (Quercus garryana) woodlands consist of stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is greater than or equal to 25%; or where total canopy coverage of the stand is greater than 25%, but Oak accounts for at least 50% of the canopy coverage present. The latter is often referred to as an oak savanna.

- In urban or urbanizing areas, single oaks, or stands of oaks less than 1 acre may also be considered a priority when found to be particularly valuable to fish and wildlife (i.e., they contain many cavities, have a large diameter at breast height [dbh], are used by priority species, or have a large canopy).

- A Critical Area Verification permit process will likely be required prior to any rezone process in order to determine whether the extent of protected areas on site. this will include verification of the non-wetland and no-Biodiversity Area/Corridor determinations in the report.

Preliminary Traffic Analysis

The applicant, per feedback from City of Tacoma, Public Works, Traffic Engineering staff engaged Heath & Associates, Aaron Van Aken, PE, to conduct a preliminary traffic analysis. The analysis concluded that probable development resulting from approval of this request, and subsequent necessary rezoning and development permit requests would not generate sufficient traffic to greatly impact the surrounding areas. The findings were that most of the added trips to the adjacent roadways from low scale multi-family development would utilize Wapato Street, 66th Street (for westbound trips) and then 64th Street for eastbound travel. Commercial development on parcels, C, D, E, F, G, H would be contained on 64th and 66th (for westbound entry onto Tacoma Mall Blvd). The findings were that possible future infrastructural and traffic controlling features may be necessary, but ultimately the probable increase in development density that approval of this request and subsequent, rezoning and development applications would result in, would be manageable and appropriate for the surrounding transportation network. Staff will note that at the subsequent rezoning, and permitting phases city of Tacoma Public Works, traffic engineering staff will be closely monitoring development of these sites and ensuring that such mitigations would be made.

Preliminary Assessment of Connectivity of 66th, 68th, and 70th Streets

Specifically AHBL examined the viability of completing 66th and 70th Streets at a future time to provide greater connectivity and completion of the city street grid and found that due to the extreme slope that bisects the area. In the case of 66th street an average 7.9% grade is measured, with a portion being upwards of 26%, and thus the street is not eligible per the city's own standards. 70th Street would have an average of 21.5% grade with some area over 30%. While 68th street is not specifically called out it is in the middle of both 66th and 70th and has similar dynamics and slope profile. The consulting engineers conclude the cost

and engineering challenge involved would be unwarranted given the potential gain and benefit to the roadway network, and the relatively small increase any potential development in this area might create. An examination of possible pedestrian trail connectivity was not specifically examined; however, staff will note that the same dynamics would be at play and slope would be a challenge relative to the need for Americans with Disabilities Act considerations and provision of a trail that would have a gentle grade for all users. A pedestrian trail would likely be very cost prohibitive given the severe slope in the area. See the attached memo marked Exhibit "C."

Staff will also note that undeveloped property to the south is designated open space, and the private multi-family properties to the south do not have viable connectivity options to the proposed parcels and thus added southern roadway connections to "Parcel A" (former Western Baptist Teachers College site, APN 0320301024) across other private properties is unlikely, however site connectivity to 68th street seems possible, however as mentioned 68th street being completed to the east is unlikely and infeasible. At the time of this staff report the consultant has not been requested to examine that connection, but it has been noted and will be examined if possible prior completion of the planning commission's final consideration.

D. Public Outreach

Public outreach for this application has been conducted as part of the Planning Commission's meetings when this application was on the agenda – on May 19, 2021 (reviewing scope of work), June 16, 2021 (Public Scoping Hearing), and July 21, 2021 (approval of scope of work).

Public notice for the Planning Commission Public Scoping Hearing was mailed out to over 30,000 South Tacoma residents for the scoping hearing, including residents of areas outside the city limit boundaries within 2,000 feet of this site.

Staff conducted a virtual community informational meeting on December 6th, 2021. Notice was mailed out approximately two weeks prior to the meeting, and the low attendance was in keeping with a lower public interest exhibited during the public scoping phase during the summer of 2021. The mailing for this meeting was to approximately 715 area residents and property owners within a 2,500 foot radius from the site.

The Commission is scheduled to conduct a public hearing on the 2022 Amendment on March 16, 2022 (tentatively). Additional public outreach for all the applications for the 2022 Amendment will be conducted prior to and during the public hearing process.

E. Recommendation

Staff recommends that the Planning Commission release this staff report and Exhibit "A" for public review and comment.

After the public hearing, staff will facilitate the Commission's review of public comments, decision making, and formulation of recommendations to the City Council, pursuant to TMC 13.02.070.H, as cited below:

H. Findings and recommendations.
   1. Upon completion of the public comment period and review of the public testimony, the Planning Commission will make a determination as to whether the proposed amendments are consistent with the following criteria:
      a. Whether the proposed amendment will benefit the City as a whole, will not adversely affect the City's public facilities and services, and bears a reasonable relationship to the public health, safety, and welfare; and
      b. Whether the proposed amendment conforms to applicable provisions of State statutes, case law, regional policies, and the Comprehensive Plan.
   2. The Commission will prepare a recommendation and supportive findings to forward to the City Council for consideration.

F. Exhibit

- Exhibit "A" – South Sound Christian/CenterPoint Christian Fellowship Land Use Designation Amendment"

G. Supplemental Information

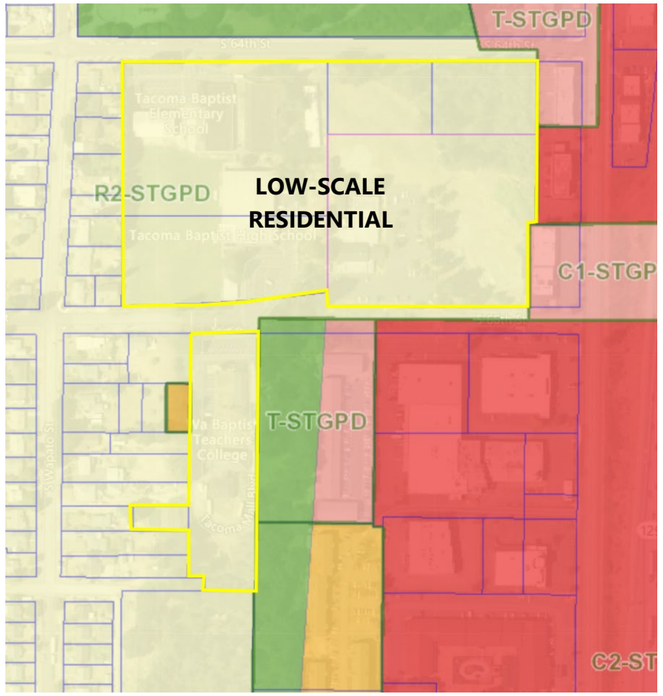
- Attachment "A" – Traffic Assessment
- Attachment "B" – S. 66th-70th Streets East-West Connection Feasibility Assessment
- Attachment "C" – Habitat Assessment
- FAQ Document (shared with the NewCold Land Use Designation Change Request)

# # #

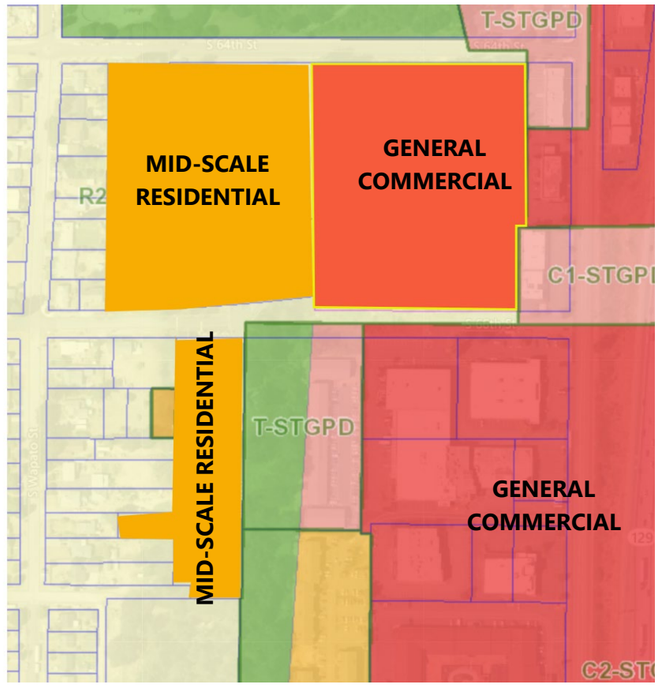
2022 Comprehensive Plan and Land Use Code Amendments

EXHIBIT A: South Sound Christian/CenterPoint Christian

CURRENT LAND USE DESIGNATION: LOW SCALE RESIDENTIAL



PROPOSED LAND USE DESIGNATION: MID-SCALE RESIDENTIAL & GENERAL COMMERCIAL



APPLICANT: South Sound Christian/CenterPoint Christian Fellowship

SITE LOCATION: 8 parcels generally adjacent to 2052 South 64th Street

AMENDMENT TYPE: Comprehensive Plan Future Land Use Map Amendment

WHY IS THIS CHANGE PROPOSED?

The parcel owners are working together on a joint application and wish to sell and/or redevelop portions of the site for multi-family development and general commercial development. The applicant hopes to work with Bargreen Ellingson, a South Sound area restaurant supply and design company, to expand their operations in the area.

This application is a request for a Land Use Designation Change from a Low-Scale Designation to a Mid-Scale Designation on the western 4 parcels and General Commercial on the eastern 4 parcels with a total land area of approximately 15.96 acres.

The Designation change would enable the applicants to seek a site rezone.

CURRENT LAND USE DESIGNATION:

Low-scale Residential Designation Description:
Low-scale residential designations provide a range of housing choices built at the general scale and height of detached houses and up to three stories (above grade) in height. Standards for low-scale housing types provide flexibility within the range of building width, depth, and site coverage consistent with detached houses and backyard accessory structures, pedestrian orientation, and a range of typical lot sizes from 2,500 square feet up to 7,500 square feet. Low-scale residential designations are generally located in quieter settings of complete neighborhoods that are a short to moderate walking distance from parks, schools, shopping, transit and other neighborhood amenities.

PROPOSED LAND USE DESIGNATIONS

Mid-scale Residential Designation Description:
Mid-scale residential designations are generally located in close proximity to Centers, Corridors and transit and provide walkable, urban housing choices in buildings of a size and scale that is between low-scale residential and the higher-scale of Centers and Corridors. Standards for mid-scale housing support heights up to 3 stories (above grade), and 4 stories in limited circumstances along corridors. Standards shall ensure that development is harmonious with the scale and residential patterns of the neighborhood through building height, scale, width, depth, bulk, and setbacks that prevent overly massive structures, provide visual variety from the street, and ensure a strong pedestrian orientation. Development shall be subject to design standards that provide for a smooth scale transitions by methods including matching low-scale building height maximums where mid-scale residential abuts or is across the street from low-scale areas.

General Commercial Designation Description:
This designation encompasses areas for medium to high intensity commercial uses which serves a large community base with a broad range of larger scale uses. These areas also allow for a wide variety of residential development, community facilities, institutional uses, and some limited production and storage uses. These areas are generally located along major transportation corridors, often with reasonably direct access to a highway. This designation is characterized by larger-scale buildings, longer operating hours, and moderate to high traffic generation.

To learn more: visit www.cityoftacoma.org/2022amendment or email at planning@cityoftacoma.org.

Attachment A

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT
TRAFFIC ASSESSMENT

City of Tacoma, WA

Prepared for: Ron Nelson
c/o: Bill Herried
South Sound Christian Schools
2052 S 64th Street
Tacoma, WA 98409

January 2022

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT
TRAFFIC IMPACT ANALYSIS

1. INTRODUCTION

The main goals of this study focus on the assessment of roadway/non-motorist conditions and forecasts of newly generated project traffic in relation to a proposed comprehensive plan zoning amendment for the tax parcel #'s: 032030-1024; -1189; -1073; -1075; -1193; -1194; & -1159. The first task includes the review of existing parcel characteristics, permissible land use development and general roadway information on the adjacent street system. Forecasts of future traffic and dispersion patterns on the street system are then determined using established trip generation and distribution techniques for two alternatives. The first includes a forecast analysis encompassing site trip generation under existing zoning ordinances. The second alternative accounts for a zoning amendment, permitting the development of multi-family and commercial uses. As a final step, appropriate conclusions and mitigation measures are defined.

2. PROJECT DESCRIPTION

This report summarizes anticipated traffic impacts related to a comprehensive plan amendment request for tax parcel #'s: 032030-1024; -1189; -1073; -1075; -1193; -1194; & -1159 in the city of Tacoma. The subject site is located south of S 64th Street, east of S Wapato Street and west of S Tacoma Boulevard on a cumulative 15.96-acres. The subject site is currently designated as Single-Family Residential (R2) zoning. The primary aspect of this proposal is to seek a comprehensive plan amendment from the above designation to permit the development of multi-family (western 4 parcels) and commercial (eastern 4 parcels) uses. Surrounding roadway descriptions and additional subject site parcel characteristics are provided in the following section. Figure 1 below shows the vicinity map of the area.

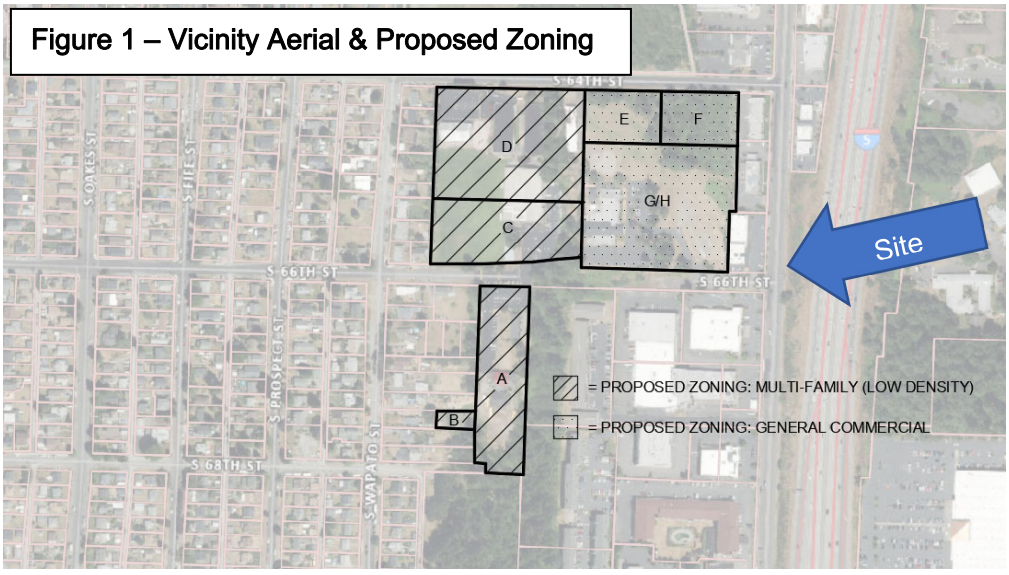


Figure 1 – Vicinity Aerial & Proposed Zoning

3. EXISTING CONDITIONS

3.1 Existing Street System

The street network serving the proposed project consists of a variety of roadways. The major roadways and arterials defined in the study area are listed and described below.

Table 1: Roadway Network

Functional Classification	Roadway	Speed Limit	Lanes	Street Parking	Sidewalk	Bike Facilities
Collector	Tacoma Mall Blvd	35 mph	2-3	Yes	Yes	No
Local	S 64th St	25 mph*	2	Yes	Some	No
	S 66th St	25 mph*	2	Yes	Some	No
	S Wapato St	25 mph*	2	Yes	Some	No

* No posted speed limit observed so the City standard 25 mph applies.

3.2 Roadway Improvement Projects

A review of the current City of Tacoma Six-Year Transportation Improvement Program (2022-2027) indicates projects are planned in the study area. Capacity-related projects and improvements affecting the study intersections are included below:

LID 8668: S 66th St & Wapato (WBS: $LID--8668R): This project includes alley and street asphalt paving and new curb and gutter. The project has a total estimated cost of $923,300.

South 74th Street: Tacoma Mall Blvd to West City Limits (WBS: $PWKS-00005): The project will construct grind and overlay improvements and install ADA compliant curb ramps where needed. Total project cost is estimated at $4,400,000.

56th Street South and Cirque Drive Corridor Improvements: S Washington St to Tacoma Mall Blvd (WBS: PWK-G0006): This project will replace pavement along the corridor, upgrade curb ramps and sidewalks to meet ADA requirements, install traffic signal upgrades and install bike facilities on a parallel route connecting the South Tacoma Sounder Station with the Tacoma Mall Transit Center. Total project cost is estimated at $11,637,651.

3.3 Active Transport

Non-Motorist Facilities:

School-aged children residing in the subject site would attend either Arlington Elementary (0.70-miles walking distance southwest of the subject site) or Gray Middle School (1.30-miles walking distance west). Tacoma Mall Boulevard and the north side of S 66th Street provide curb and sidewalk. Elsewhere, non-motorist infrastructure is discontinuous. It should be noted that Sound Christian Academy, a private pre-k through 12th grade school, is located on-site. Signage alerting drivers of pedestrian crossings associated with the school is available on S 66th Street and S 64th Street in the vicinity of the subject site. Mini-traffic circles are provided at S 66th Street's nearby intersections with S Wapato Street and S Fife Street. Moreover, speed humps reducing driver speed are provided are provided along S Wapato Street in the subject site vicinity.

Transit Service

A review of the Pierce Transit service schedule indicates Route 53 – University Place provides transit service in close proximity to the subject site. The nearest stops are provided at S Oakes Street's intersections with S 64th Street and S 66th Street (~0.30-miles walking distance west of the subject site). The route provides connections between the TCC Transit Center and Tacoma Mall Transit Center with stops provided in University Place along 27th Street W/40th Street W/Grandview Drive W and in South Tacoma. Weekday service is provided from 5:50 AM – 10:45 PM with approximately 30-minute headways during peak travel hours. Saturday service is provided from approximately 8:25 AM – 6:00 PM with approximately 60-minute headways. Sunday service is provided from approximately 8:16 AM – 6:37 PM with approximately 120-minute headways.

Moreover, Route 202 – S 72nd Street provides bus stops 0.60-miles walking distance south of the subject site at S 74th Street & S Wapato Street. The route services the 72nd Street corridor providing connection between the Lakewood Transit Center and the 72nd Street Transit Center. Weekday service is provided from 6:00 AM – 10:18 PM with approximately 30-minute headways during peak travel hours. Saturday service is provided from approximately 8:45 AM – 9:58 PM with approximately 30-minute headways. Sunday service is provided from approximately 9:20 AM – 9:18 PM with approximately 30-minute headways.

Refer to Pierce Transit's routes & schedules for further details.

4. ZONING & DEVELOPMENT POTENTIAL

Under existing zoning regulations, the subject site could be developed via single-family land use. To calculate approximately how many structures could be constructed in accordance with City standards, the total area of each parcel was measured (acreage/feet^2). Values were derived from the Pierce County Assessor. It should be noted that by taking the total site area, assumptions include all existing structures to be demolished and the site redeveloped to maximum single-family potential. While this scenario is not anticipated to occur, it presents a conservative trip generation analysis.

Per Tacoma Municipal Code 13-191, single-family structures within R-2 zoning require a standard minimum lot size of 5,000 square feet. Multi-family development within the proposed Comprehensive Plan Amendment scenario requires a minimum lot size of 6,000 square feet plus 1,500 square feet/unit in excess of 4 units. Lastly, approximately 70% of the total land area was assumed to be developable for the proposed commercial space (C2 zoning). This 30% reduction accounts for building setbacks, parking and more. Table 2 summarizes the permissible number of developable units within each parcel under existing zoning and proposed comprehensive plan amendment conditions.

Table 2: Permissible Development Estimates

Existing Zoning	Parcel	Available Developable Area	Existing Zoning Dev. Estimate (Single-Family)	Proposed Comp. Plan Amend. Dev. Estimate (Multi-Family: A-D / Commercial: E-H)
Single-Family (R-2)	A	2.38-acres / ~103,455 SF	20 S-F DU's	69 M-F DU's
	B	0.18-acres / ~7,840 SF	1 S-F DU's	5 M-F DU's
	C	2.58-acres / ~112,500 SF	22 S-F DU's	75 M-F DU's
	D	4.76-acres / ~207,346 SF	41 S-F DU's	138 M-F DU's
	E	1.00-acres / ~43,560 SF	8 S-F DU's	~215,300 SF of commercial space
	F	1.06-acres / ~46,211 SF	9 S-F DU's	
	G/H	5.00-acres / ~217,800 SF	43 S-F DU's	
Total Subject Site Development Potential			144 S-F DU's	287 M-F DU's; ~215,300 SF Comm.

As illustrated in Table 2, approximately 144 single-family dwelling units may be constructed on-site should the entire site be redeveloped with single-family land use. Under the proposed comprehensive plan amendment estimates, approximately 287 multi-family dwelling units and ~215,300 square feet of commercial space may be constructed should the entire subject site be redeveloped under the proposed comprehensive plan amendment. This estimate assumes a maximum redevelopment of the subject parcels currently occupied by CenterPoint Christian Fellowship church. Therefore, these are conservative estimates as redevelopment of the entire subject site is not planned.

5. FUTURE TRAFFIC CONDITIONS

5.1 Project Trip Generation

Trip generation is defined as the number of vehicle movements that enter or exit a site during a designated time period such as a specific peak hour or an entire day. Data presented in this analysis was derived from the Institute of Transportation Engineer's (ITE) publication *Trip Generation,* 11th Edition. If development were to occur under existing zoning regulations, the designated land use would be classified as Single-Family Detached Housing (LUC 210). Should the comprehensive plan amendment be approved, proposed development could consist of multi-family and commercial development. It should be noted that a tenant is identified should the C2 comprehensive plan amendment become enacted. One development option for parcels E, F G and H could comprise a warehouse use by Bargreen Ellingson, a restaurant supply company. As such, the designated land uses would be classified as Multi-Family Housing Mid-Rise (LUC 220) and Warehousing (LUC 150) under the proposed comprehensive plan amendment development scenario.

ITE average rates were used to determine trip ends with dwelling units used as the input variable for the existing and comprehensive plan amendment residential land uses. Equations and square footage, which comprise more conservative trip estimates when compared with rates, were used for LUC 150. Table 3 below summarizes anticipated vehicular movements for the average weekday daily trips (AWDT), AM peak hour and PM peak hour. ITE Trip Generation sheets have been attached to the appendix for reference.

Table 3: Project Trip Generation

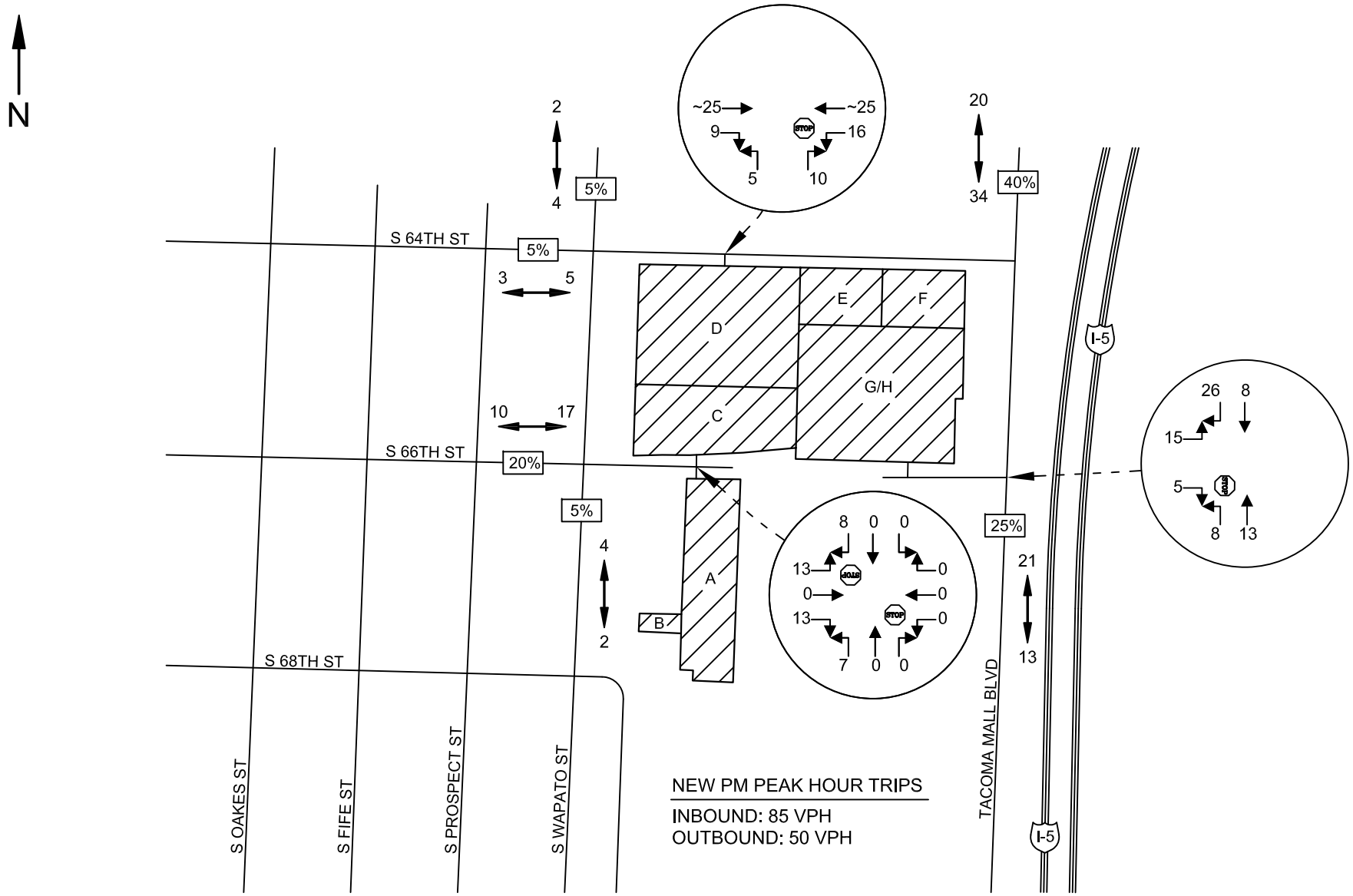
Land Use	Units	AWDT	AM Peak-Hour Trips			PM Peak-Hour Trips		
			In	Out	Total	In	Out	Total
Existing Zoning:								
Single-Family Detached – LUC 210	144 DU's	1358	26	75	**101**	85	50	**135**
Proposed Comp. Plan Amendment:								
Multi-Family (Low-Rise) – LUC 220	287 DU's	1934	28	87	**115**	92	54	**146**
Warehousing – LUC 150	215.3 KSF	378	38	11	**49**	14	38	**52**
Proposed Comp. Plan Amendment Total		2312	66	98	**164**	106	92	**198**

Based on the data presented in Table 3, site redevelopment under existing single-family zoning conditions is anticipated to generate approximately 1358 average weekday trips with 101 trips (26 in/75 out) occurring during the AM peak hour and 135 trips (85 in/50 out) occurring during the PM peak hour.

Proposed comprehensive plan amendment site redevelopment is anticipated to generate 2312 average weekday trips with 164 trips (66 in/98 out) occurring during the AM peak hour and 198 trips (106 in/92 out) occurring during the PM peak hour.

5.2 Trip Distribution and Assignment

Trip distribution describes the process by which project generated trips are dispersed on the street network surrounding the site. Figure 2 illustrates PM peak hour trip distribution & assignment under Scenario 1: forecast site redevelopment under existing single-family zoning conditions. Figure 3 illustrates PM peak hour trip generation and distribution under Scenario 2: forecast site redevelopment given proposed comprehensive plan amendment conditions. Percentages and assignments of project-generated traffic are based on proximity to major arterial routes and destinations. Subject parcels A-C are anticipated to access the site via S 66th Street from the west. Parcel D is anticipated to continue access via S 64th Street and parcels E-H are anticipated to be accessed via S 66th Street by way of Tacoma Mall Boulevard.

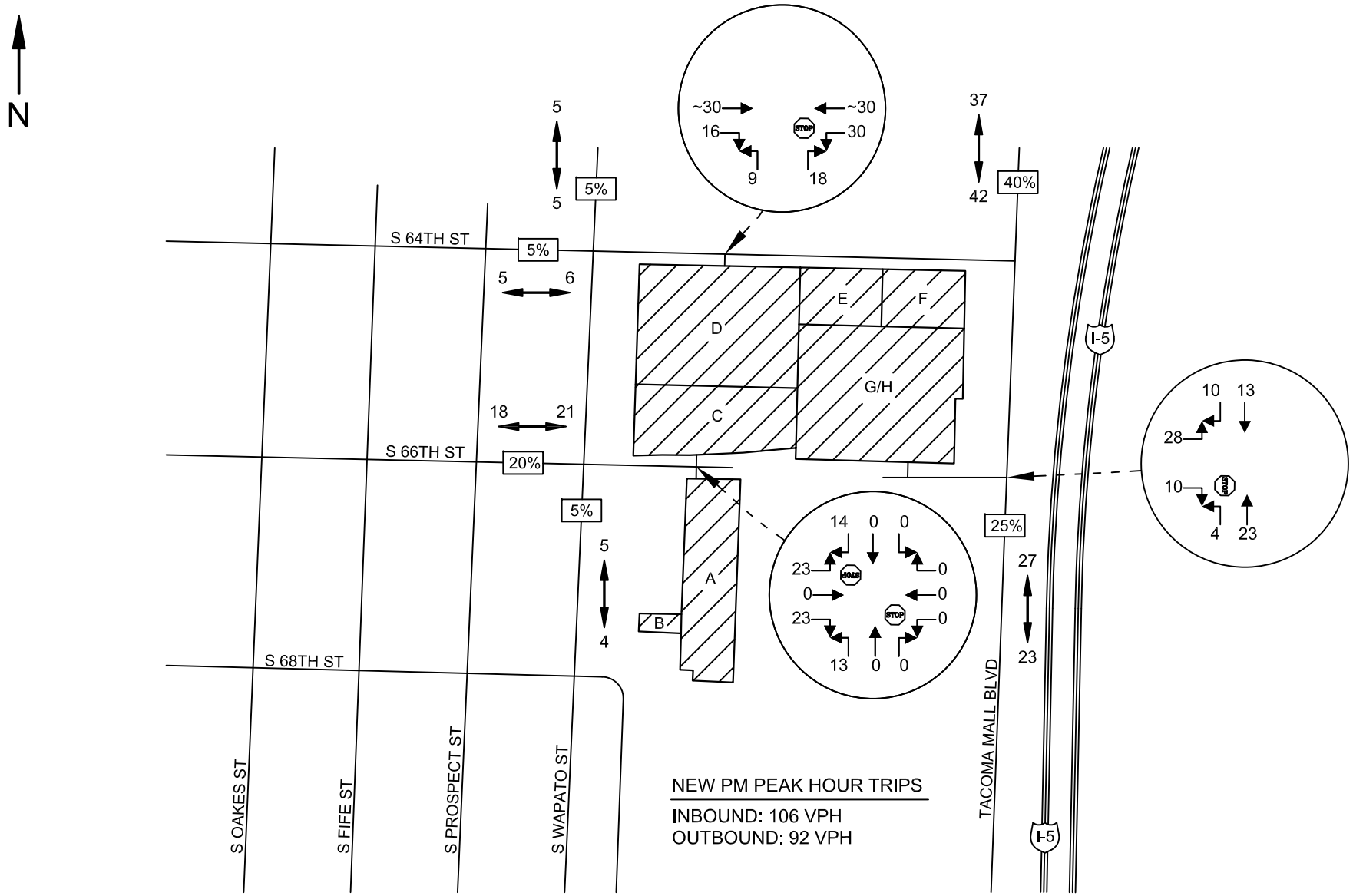


HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
SCENARIO 1: SITE REDEVELOPMENT UNDER EXISTING ZONING (SINGLE-FAMILY)
FIGURE 2



HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
SCENARIO 2: SITE REDEVELOPMENT UNDER PROPOSED REZONE (MULTI-FAMILY/COMMERCIAL)
FIGURE 3

6. SUMMARY

The South Sound Comprehensive Plan Amendment project proposes a future amendment to existing zoning. The comprehensive plan amendment request encompasses tax parcel #'s: 032030-1024; -1189; -1073; -1075; -1193; -1194; & -1159 (15.96-acres), located in the city of Tacoma. The subject site is currently zoned as Single-Family Residential (R2) zoning. The proposed comprehensive plan amendment and future associated rezone would permit the development of multi-family in the western 4 parcels and a commercial use in the eastern 4 parcels.

Future buildout assumptions encompassed two trip generation and distribution scenarios. Scenario 1 assumes the entire subject site be redeveloped under existing single-family zoning. Scenario 2 assumed the entire subject site to be redeveloped under the proposed comprehensive plan amendment, permitting multi-family and commercial development. Based on trip generation estimates derived from approximate development potential, Scenario 1 is anticipated to generate approximately 135 PM peak hour trips (85 in / 50 out). Moreover, Scenario 2 is anticipated to generate approximately 198 PM peak hour trips (106 in / 92 out). Approximate PM peak hour trip distribution and assignment for each development scenario are outlined in Figures 2 and 3. It should again be noted that these are conservative estimates as the future assumptions encompassed complete redevelopment of every subject site parcel.

The majority of trips would be traveling to/from Tacoma Mall Boulevard. Under either analysis scenario, less than 100 PM peak hour trips would be traveling along any local roadway segment in the vicinity of the subject site. Therefore, the proposed comprehensive plan amendment and future associated rezone is not found to have a significant impact to surrounding local roadway operations. Should the proposal differ from the land use assumptions evaluated herein, an additional study may be required at such time. It should be noted that speed reduction strategies such as speed humps and neighborhood traffic circles are provided on the surrounding roadway system. To mitigate potential impacts as a result of the proposed comprehensive plan amendment and future associated rezone, additional infrastructure may be required as a part of site development.

Please feel free to contact should you require additional information.

Single-Family Detached Housing
(210)

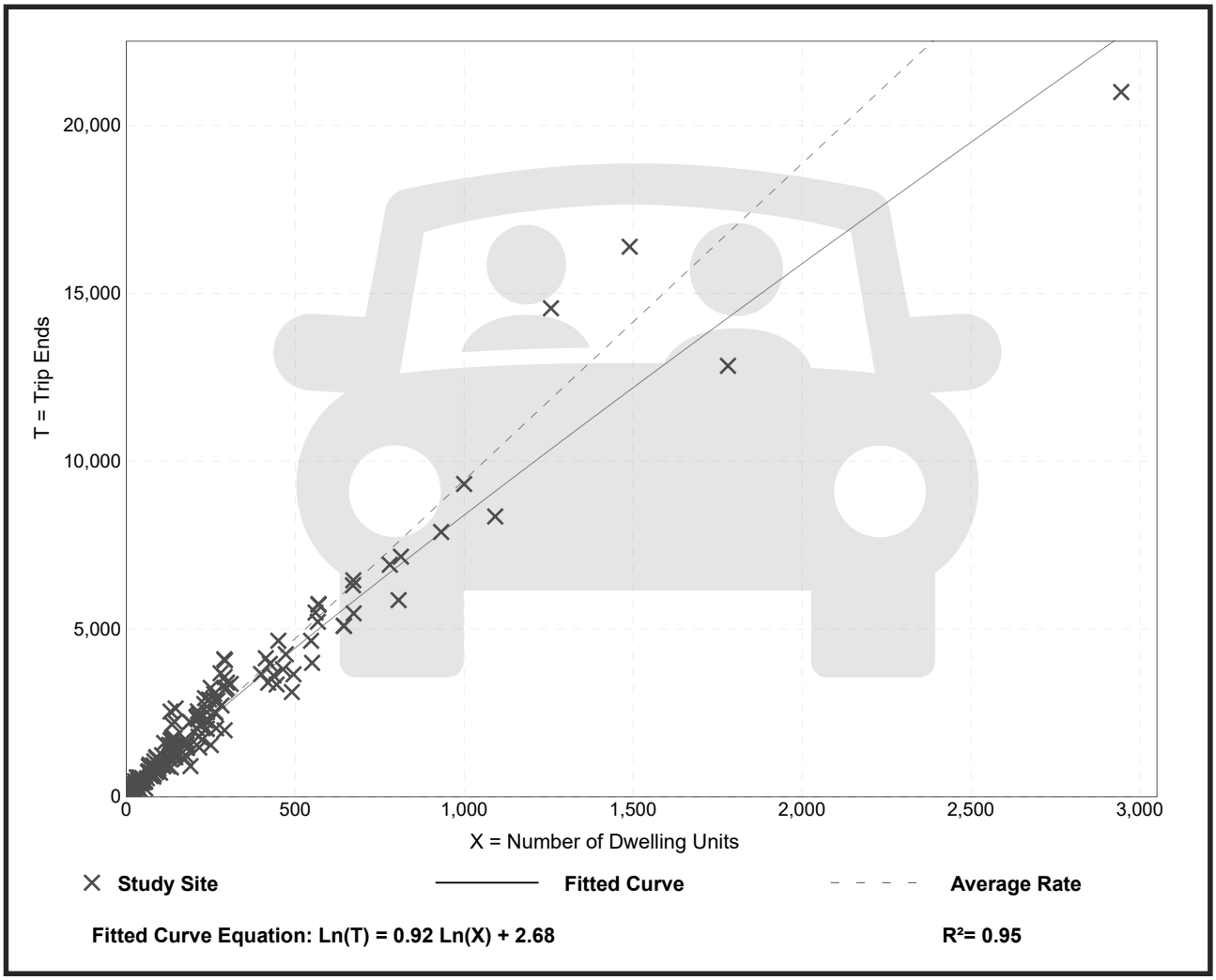
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



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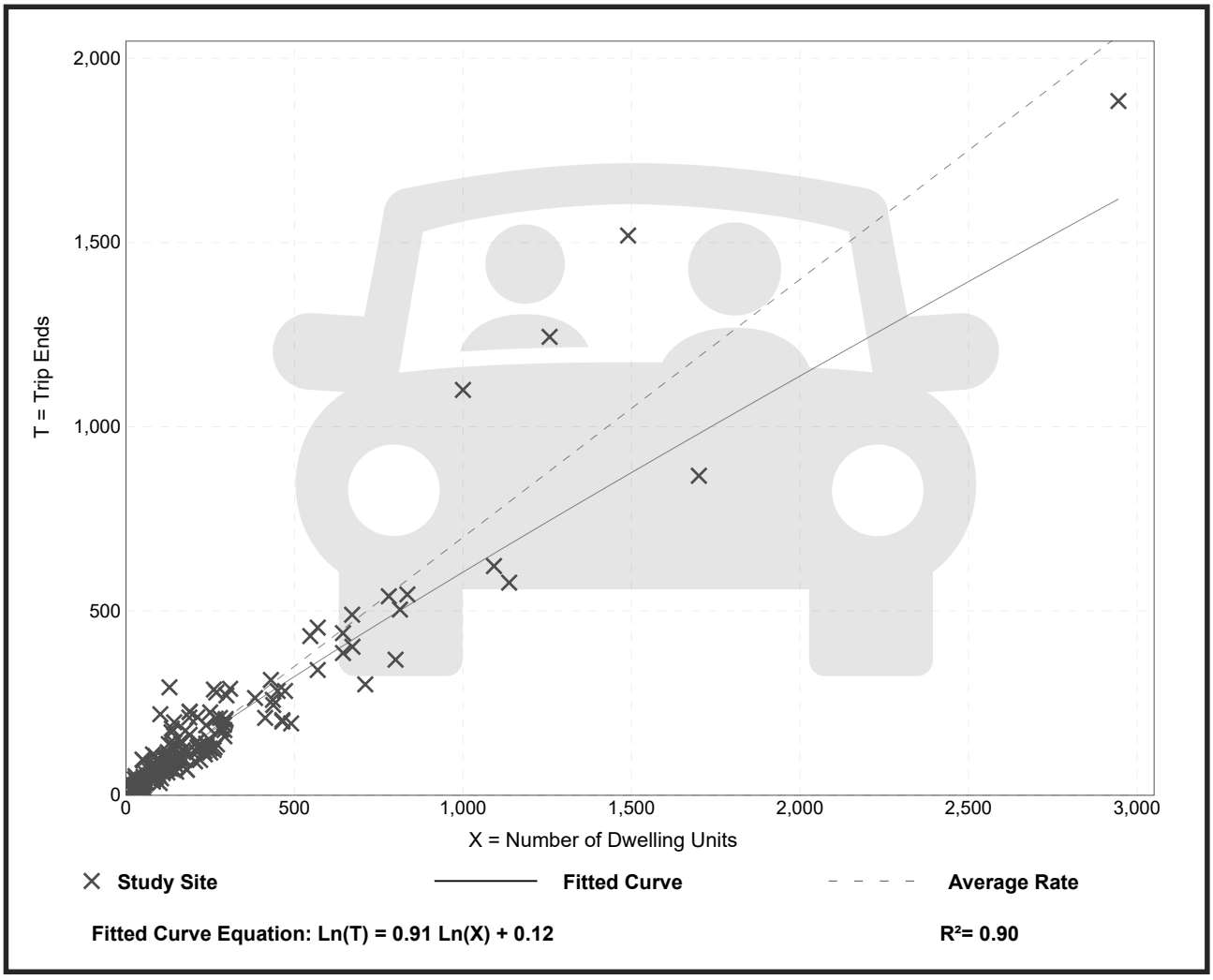
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



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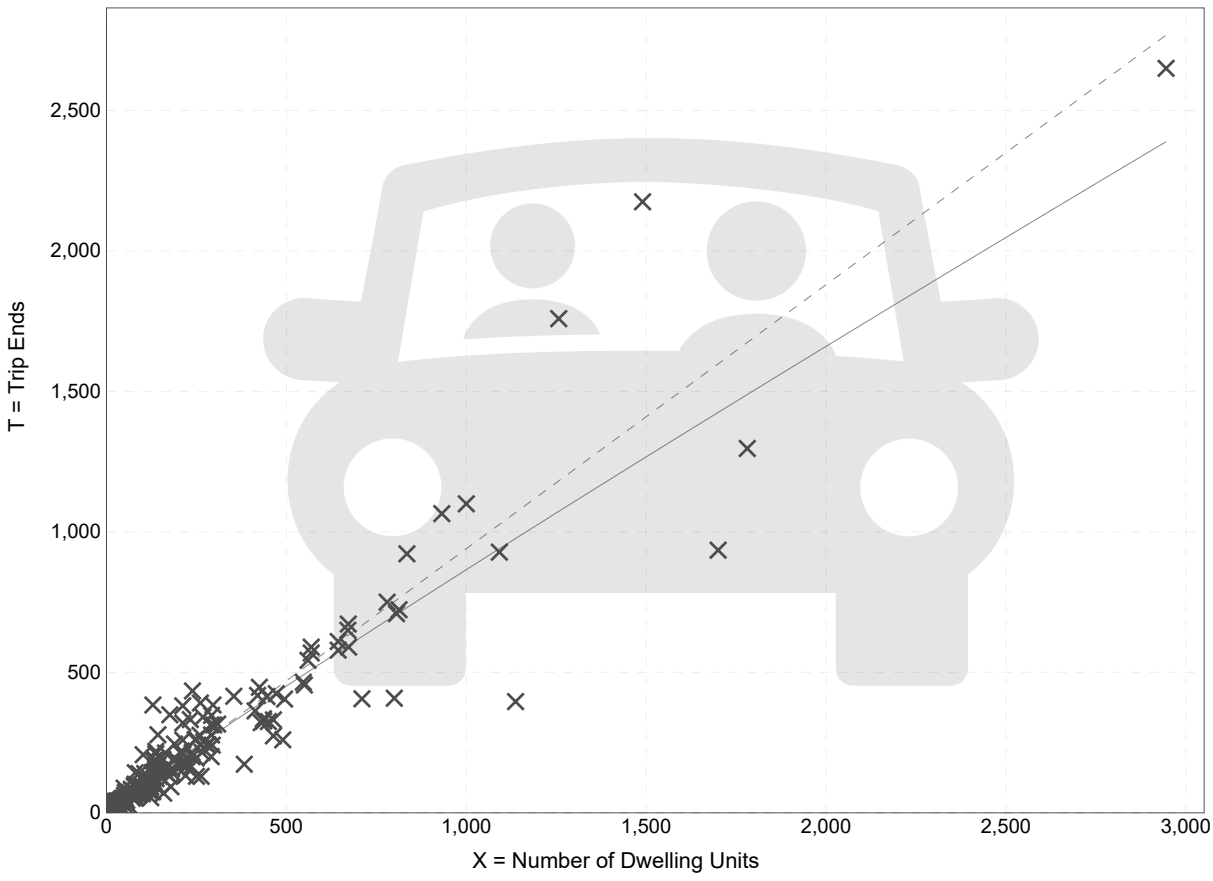
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



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Warehousing
(150)

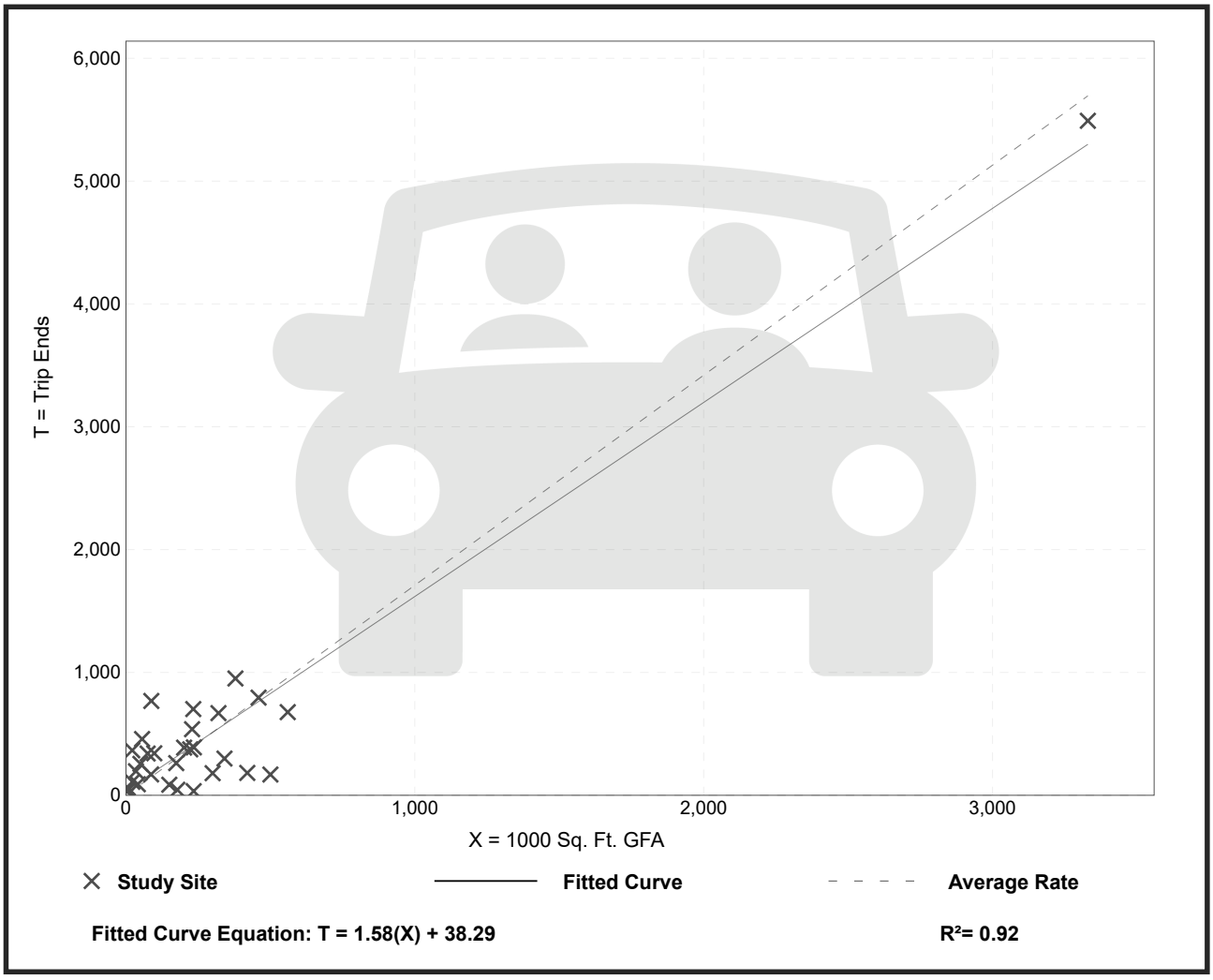
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. 1000 Sq. Ft. GFA: 292
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.71	0.15 - 16.93	1.48

Data Plot and Equation



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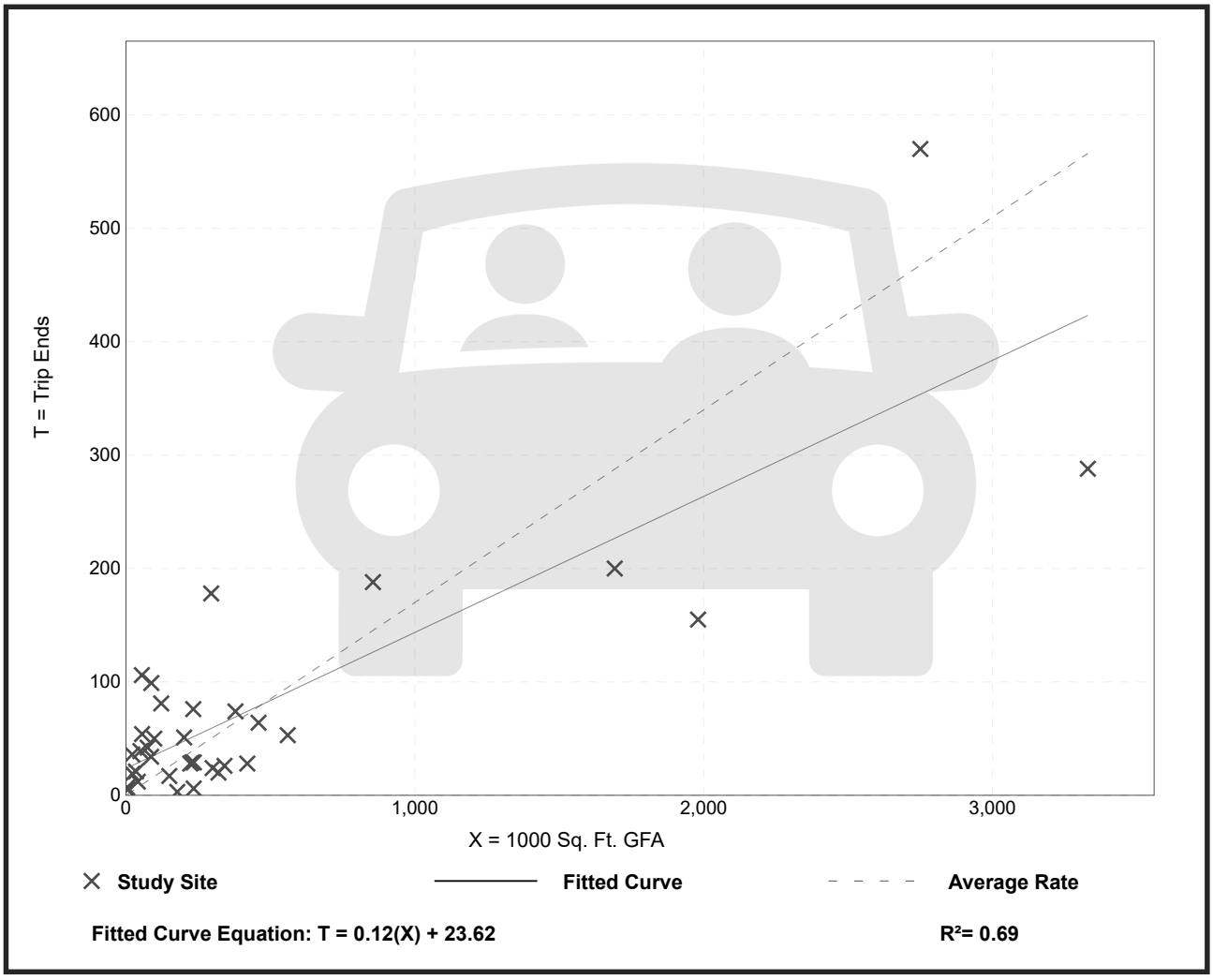
Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 36
Avg. 1000 Sq. Ft. GFA: 448
Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.19

Data Plot and Equation



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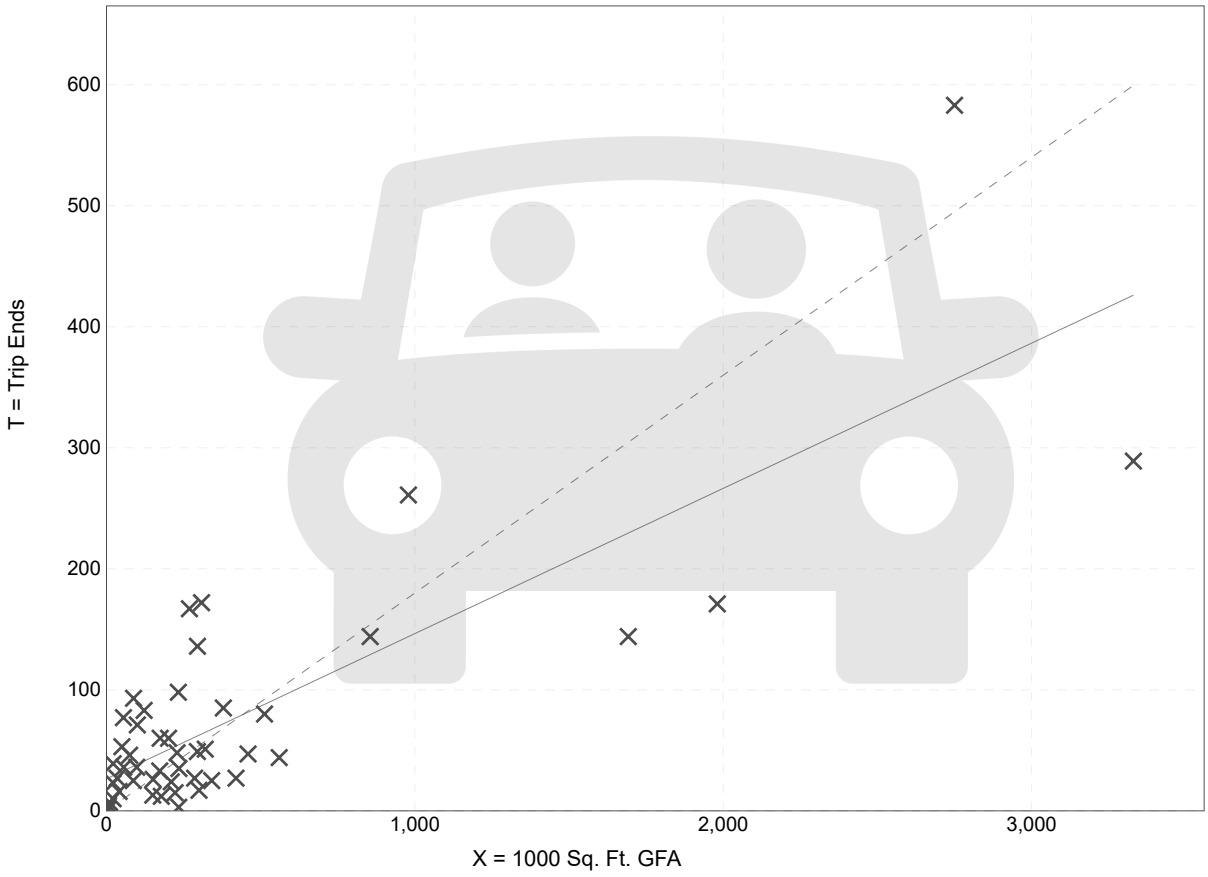
Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 49
Avg. 1000 Sq. Ft. GFA: 400
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.01 - 1.80	0.18

Data Plot and Equation



Fitted Curve Equation: T = 0.12(X) + 26.48 **R^2= 0.65**

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Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

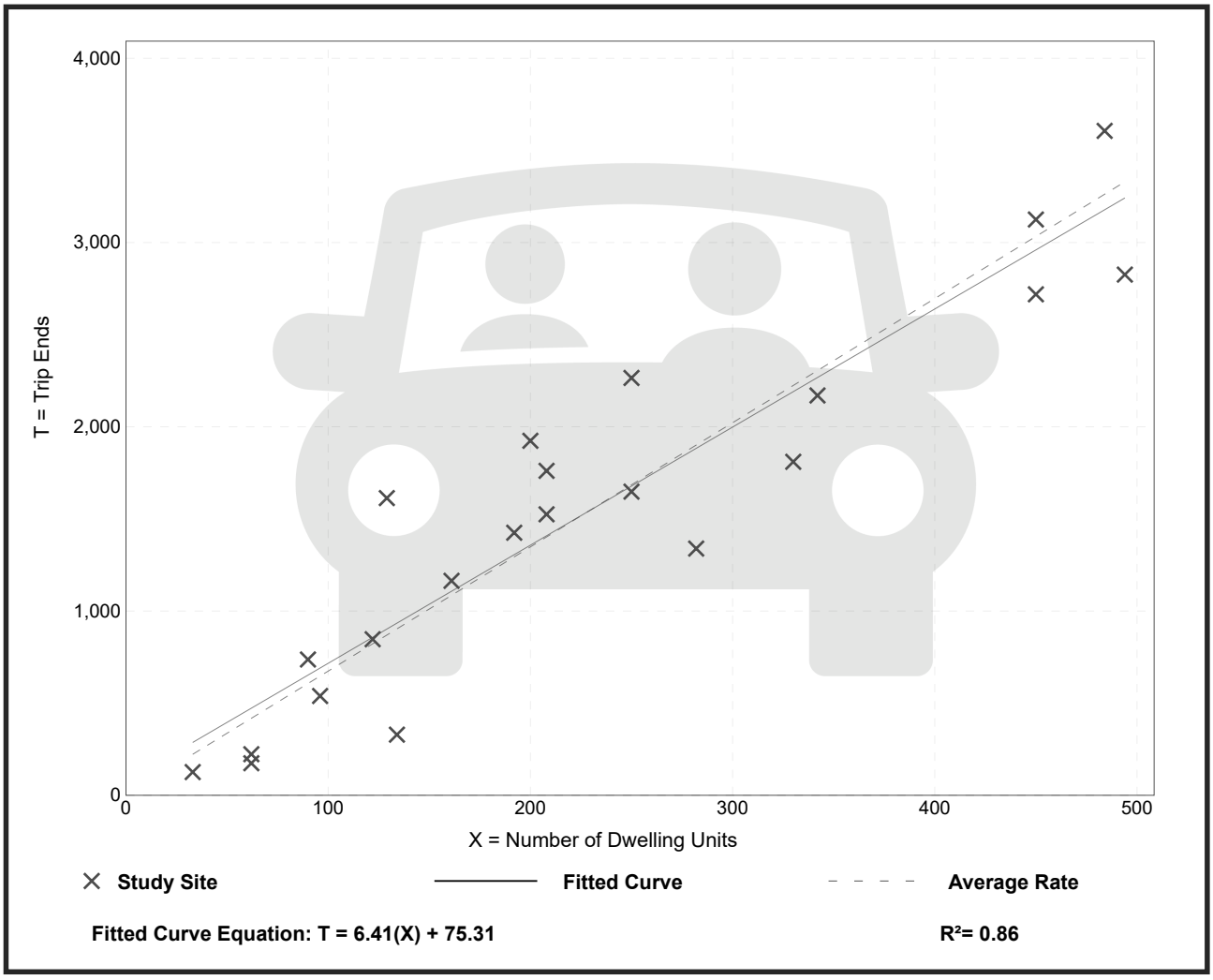
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



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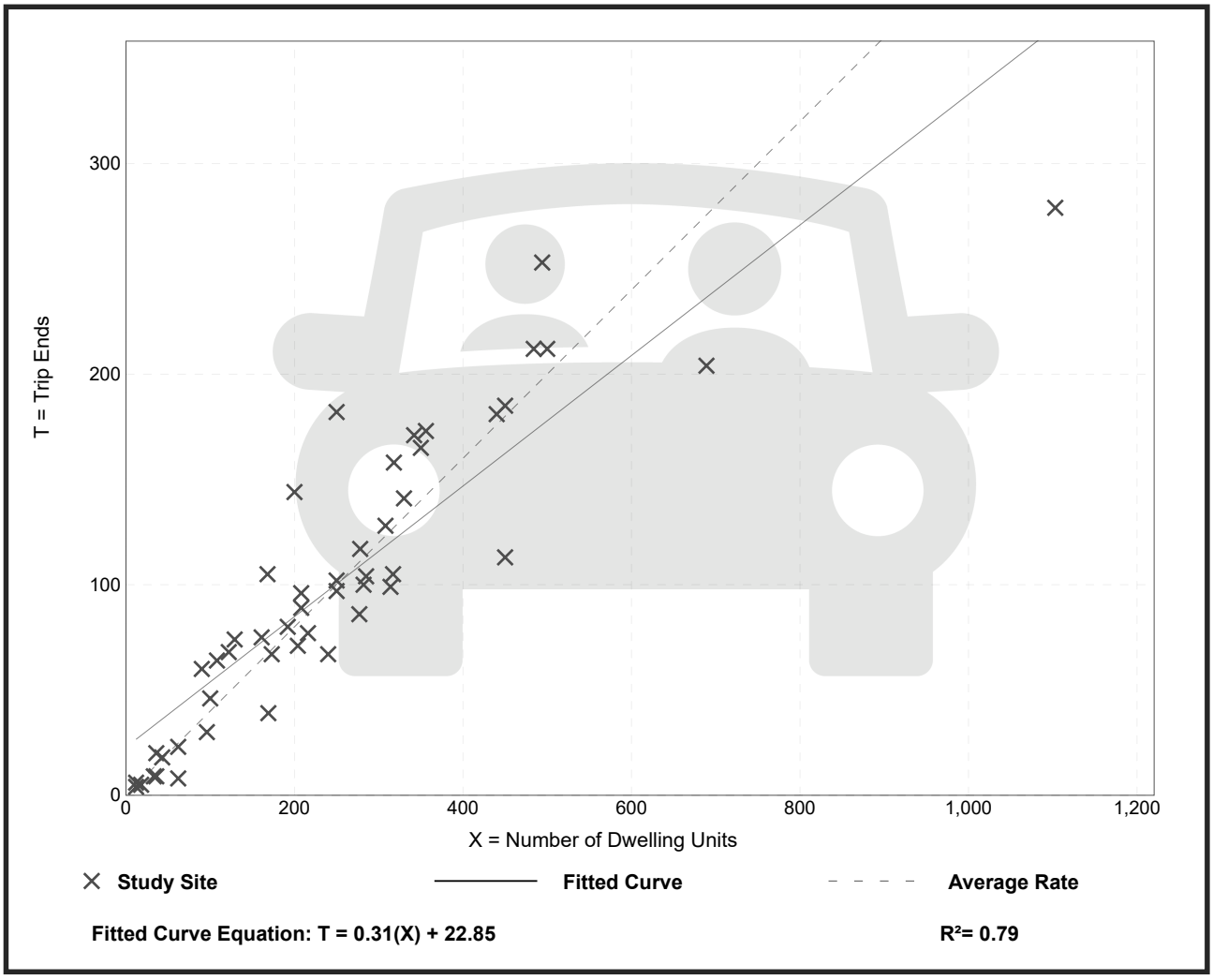
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



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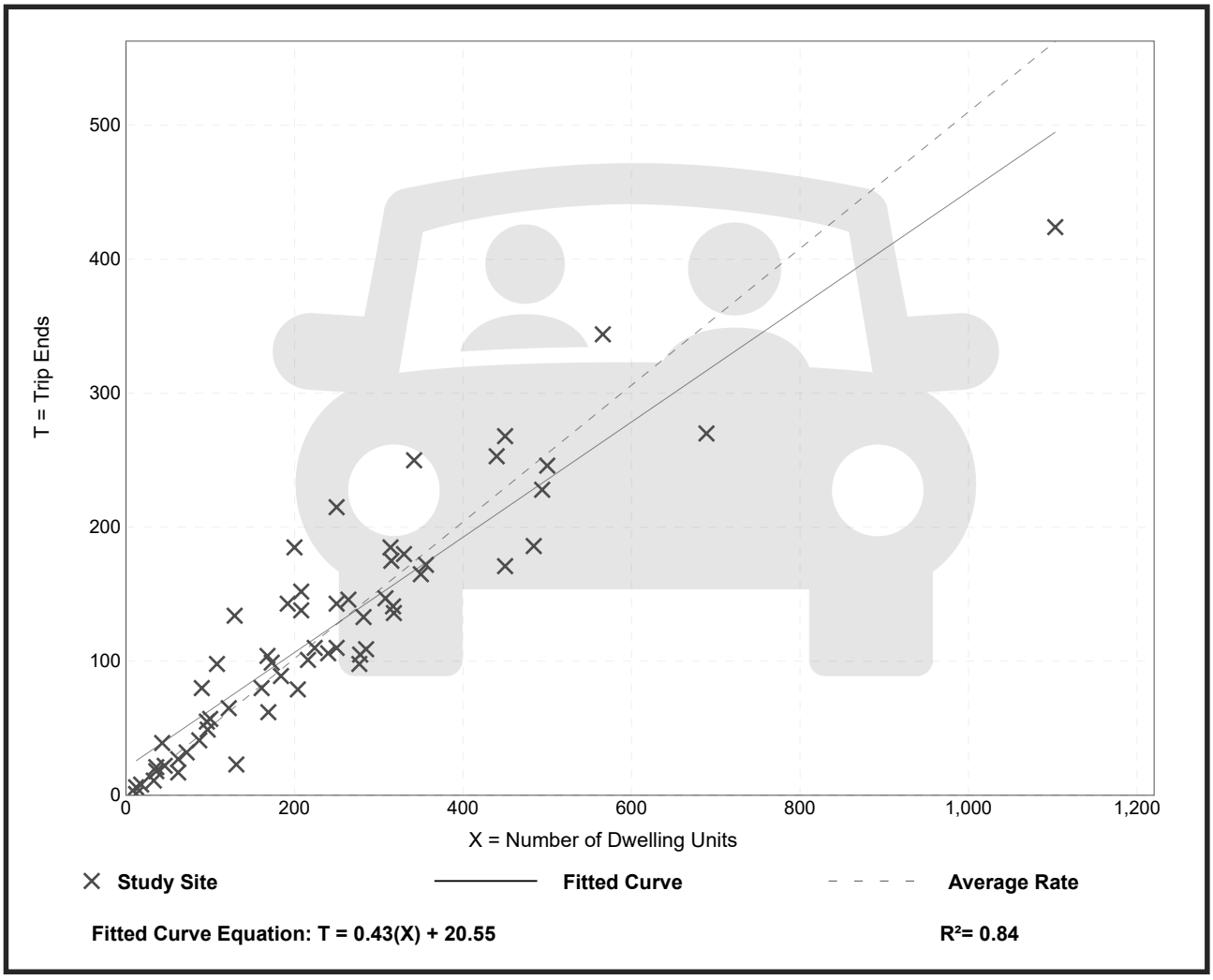
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



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PROJECT MEMO

TO:	Larry Harala Principal Planner City of Tacoma – Planning and Development Services 747 Market Street – Room 345 Tacoma, WA 98402	**DATE:**	February 22, 2022
FROM:	Steve Nickison Tacoma - (253) 383-2422	**PROJECT NO.:** **PROJECT NAME:**	2200382.BP South Sound Christian Comprehensive Plan Amendment
SUBJECT:	South 66th Street and South 70th Street – East-West Connection Feasibility Memo		

Introduction

In conjunction with AHBL's planning efforts, our civil engineering team analyzed the existing conditions of South 66th Street to assess the feasibility of constructing the remainder of the street to the south of the project site in order to connect to the two ends of the street presently disconnected. Currently, the eastern portion of S. 66th Street connects to several commercial establishments and a church. An existing apartment complex to the west of the commercial building butts against the right-of-way. The western portion of the street serves several residences and the Tacoma Baptist Schools site. The existing conditions, street feasibility and implications of connecting the street are discussed in detail below.

South 70th Street was also analyzed to assess the feasibility of connecting the currently disconnected eastern and western portions of the roadway. The existing conditions, street feasibility and implications of connecting the street are also discussed in detail below.

South 66th Street

Existing Conditions

The western section of road is a 32-foot-wide residential street, while the eastern section is a 44-foot-wide commercial street. Portions of the area between the two sections of street have grass and minor scrub brush. A roughly 190-foot section is heavily wooded with large trees on a steep existing hillside.

The current elevations of S. 66th Street are approximately 253 feet at the western end of the road where it connects to the Tacoma Baptist Schools site and 312 feet at the eastern end of the road where is connects to the adjacent church. It is approximately 745 feet between these two points in the road, leading to an average grade of 7.9%. Most of this elevation differential occurs over through the 190 feet of wooded hillside (±26% grade).

Adjacent developments at the eastern side of the street connection area consist of a parking lot, fence line, and concrete retaining wall at the northern property line of the commercial development on the south-east side of the study area. The existing church on the north-east side of the study area has an existing parking lot on its southern property line which steeply slopes from the parking lot to the anticipated roadway area. Additionally, several power poles (likely distribution) run along this parking lot edge and continue to the west. At the western end of the street, S. 66th street turns into a site access road for Tacoma Baptist Schools and connects to several parking lots. The road runs adjacent to an existing soccer field and storage building which lie roughly 6 feet below the existing road elevation.

At the western side of the right-of-way, a 66-inch diameter storm trunk main runs north-south. An 8" sewer main appears to run east-west through the road study area. This sewer main is only 3-4 feet below grade. Utility information was gathered from City of Tacoma GIS.

Street Feasibility and Implications

A proposed street connection in this location would need to taper its width between the two portions of roadway. To minimize disturbance, this would need to occur on the eastern end of the street. As explained above, the average grade in this area is ±7.9%.

To construct a roadway in this area with proper vertical curves, while maintaining access to both portions of the Tacoma Baptist School site would require an average grade closer to 18% which greatly exceeds the current maximum slope per the City of Tacoma right-of-way design manual. This would also require a significant cut out of the area which would cause a significant disturbance to the steep wooded hillside. The amount of tree removal would extend beyond the road extents due to weakened root structures of surrounding trees. Additional investigation would be required to assess the slope stability in this area. The roadway cut necessitates new retaining walls between the roadway and both the church and commercial properties on the eastern side of the street. The existing apartment complex may require a retaining wall to prevent undermining the building. The roadway cut would also uncover the existing sewer main and require its replacement. The existing power infrastructure in this area would likely require relocation.

At the Tacoma Baptist Schools site, the cut section would turn into a fill section as the road transitions down to existing grade which would require a complete reconstruction of both of the schools parking lots on the north and south side of the street. The space occupied would also remove a significant amount of parking stalls which would need to be reconstructed elsewhere. The raised road elevation here would require additional retaining walls to transition the elevation difference between the existing sports field and maintenance building. Walls in this area would need to be designed to not disturb the 66in diameter storm trunk main in the vicinity.

The implications above relate only to the road construction. Adding sidewalk on either side of the street further exacerbates these issues.

South 70th Street

Existing Conditions

The western section of road is a 22-foot-wide residential street, while the eastern section is a 40 foot-wide commercial street which necks down to 32-feet wide to the east. The area between the two sections of road consists of a steep forested hillside, private single-family residence, apartment complex building and parking, as well as a large retaining wall and driveway for an adjacent hardware store.

The current elevations of S. 70th Street are approximately 240 feet at the western end of the road where it serves the single-family residence and 326 feet at the eastern end of the road where is connects to the adjacent apartment complex. It is approximately 400 feet between these two points in the road, leading to an average grade of 21.5%.

Street Feasibility and Implications

A proposed street connection in this location would not be able to hold a linear alignment between S. Trafton St and Tacoma Mall Boulevard without significant impacts to adjacent properties and significant deviations from City of Tacoma road design standards. Additionally, this road connection would require acquisition and demolition of the single-family residence, southern apartment complex building, and ROW acquisition from the commercial properties along the eastern portion of S. 70th Street.

Construction of a roadway here would likely require removal of an existing 10-foot-tall retaining wall which retains fire lane and vehicle access around the adjacent hardware store. It does not appear possible to remove this retaining wall without significant modifications to the hardware store site and building. These impacts would likely continue into the adjacent strip mall site as-well further triggering building and site impacts.

Average road grade across this area would be upwards of 22%. Factoring in transition lengths for vertical curves, the average road grade would be closer to 30%.

Conclusion

The above design considerations seek to provide criteria for potential road construction to connect the two ends of South 66th Street and the two ends of South 70th Street.

South 66th Street

In our opinion, the road cannot be constructed without significant grading and retaining walls, major tree impacts, and considerable site changes to the Tacoma Baptist Schools site. Additional impacts to existing utilities and mitigation to major storm infrastructure also need to be considered. With these factors in mind, connecting South 66th Street is not feasible.

South 70th Street

In our opinion, the road cannot be constructed without significant property acquisition, building and site modifications to private businesses, and non-standard road design. Outside of these factors, a proposed roadway would be upwards of 30% steep which is nearly four times greater than the maximum grade identified in the City's right-of-way design manual. With these factors in mind, connecting South 70th Street is not feasible.

Sincerely,

Steve Nickison, EIT
Project Engineer

David Nason, PE
Principal

02/22/2022

SLN/DN

c: Emily Adams, AICP - AHBL
Wayne Carlson, FAICP - AHBL

Attachment C

CENTERPOINT CHRISTIAN SCHOOL/SOUTH SOUND CHRISTIAN SCHOOLS

HABITAT ASSESSMENT

PREPARED BY:

GRETTE ASSOCIATES LLC
2102 NORTH 30TH STREET, SUITE A
TACOMA, WASHINGTON 98403
(253) 573-9300

JANUARY 2022

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

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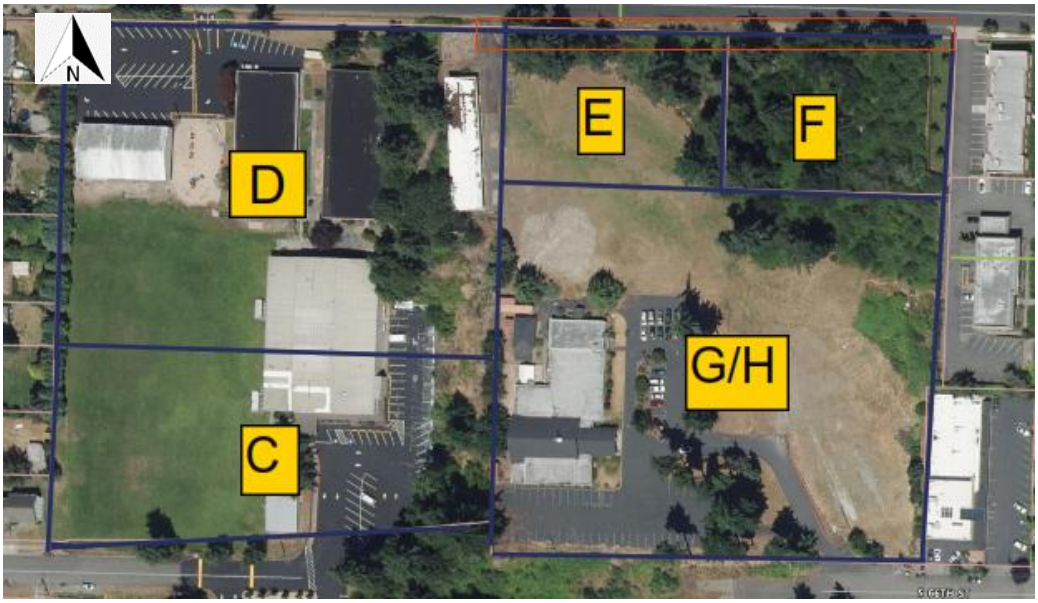
1.1 INTRODUCTION

Grette Associates is under contract with CenterPoint Christian Fellowship and South Sound Christian Schools to visit the site located at 2041 S. 66th St. (Pierce County parcels 0320301073, 0320301075, 3020301193, 0320301194, 0320301159, and 0320301158) in Tacoma, WA, and perform reconnaissance for the presence of wetlands, natural water features and fish and wildlife habitat conservation areas (FWHCAs) situated on and within 300 feet of the properties. The Pierce County tax parcels previously described will be further referred to in this report as the "subject parcels" and are individually described as sites C, D, E, F, and G/H (Figure 1). The subject parcels encompass a total area of 13.4 acres and are situated between S.66th St and S64th St in the City of Tacoma, Washington (Attachment A). This report is intended to satisfy the City of Tacoma's request for a habitat assessment on the subject parcels and is prepared using Chapter 13.11 of the City of Tacoma Municipal Code (TMC) guidance. The following report does not include the assessment of slopes or geologically hazardous areas.

Figure 1. Subject Parcels



2.1 DATABASE REVIEW

Critical Areas are regulated by agencies at the local, state, and federal levels. The appropriate jurisdictional databases were queried to ascertain if any critical areas or their buffers exist on or within 300 feet of the subject parcels.

2.1.1 Local Critical Area Inventory

A review of the City of Tacoma's GIS DART Map was conducted to identify any known critical areas located within the subject parcels (COT, 2022). According to DART, there are no wetlands, streams, floodways, flood hazard areas, or FWHCAs on or within 300 feet of the subject parcels. The City of Tacoma does map the entire area and subject parcels as being in an aquifer recharge

area. North of the subject parcels, approximately 71' across South 64th Street, Tacoma DART GIS maps a Biodiversity Area/Corridor (BAC) known as the Wapato Hills Urban Wildlife Habitat.

2.1.2 National Wetlands Inventory

The U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI) was queried to determine if any aquatic features have been previously identified within the subject parcels. The search of the USFWS GIS database shows no wetlands or other aquatic features mapped on or within 300 feet of the subject parcels.

2.2 WDFW Priority Species and habitat

The WDFW Priority Species and Habitat Mapper was queried to determine if any known locations of priority habitat and species exist on the subject parcels. The PHS data mapper on the web shows that the Western Pond Turtle and Little Brown Bat have the potential to exist on the subject parcels.

2.2.1 Western Pond Turtle - *Actinemys marmorata*

The PHS on the Web mapper designates the general area of the subject parcels to be a potential area of occurrence of Western Pond Turtle. The Western Pond Turtle is listed as endangered in the State of Washington but is not listed federally. The closest aquatic habitat and listed occurrence of the Western Pond Turtle is over 1200 feet away across Interstate 5 at Wapato Park.

2.2.2 Big Brown Bat - *Eptesicus fuscus*

The species is present throughout Washington and roosting primarily occurs in dilapidated buildings or large live or dead trees in the early stages of decay. The Big Brown Bat is listed by PHS on the web to potentially occur near the subject parcels but has no listed occurrence on the subject parcels.

3.1 METHODS and Results

Grette Associates completed a site visit on January 13, 2022, to identify any wetlands, streams, or FWHCAs within the subject parcels. The subject parcels were traversed, and data was collected and assessed according to the wetland criteria defined in the U.S. Army Corps of Engineers (USACE) *Federal Wetland Delineation Manual* (1987) and the Corps' *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (2010). The subject parcels were also evaluated to identify any natural water feature that would be classified as a stream according to WAC 222-16-030 and Chapter 13.11 of the Tacoma Municipal Code (TMC). Potential Biodiversity Areas/Corridor within the subject parcels were evaluated based on the requirements defined in TMC 13.11.510

3.1.1 Wetland Results

No wetland features were identified on the subject parcels during Grette Associates' site assessment. Parcel C is developed and consists of a school classroom building and the southern portion of a soccer field with an approximate 70 stall parking lot. Parcel D is developed with the northern portion of the soccer field and contains school administrative buildings as well as an approximately 40 stall parking facility and two school classroom buildings. Parcels E and F are vacant lots containing a field and forested areas covered in Himalayan Blackberry (*Rubus armeniacus*) and native trees. Parcels G/H consists of the CenterPoint Christian School building facility with an approximately 70 stall parking lot and vacant field to the east of the buildings. The parcels contain infrastructure generally associated with school facilities (driveways, walkways, outside seating, etc.). During the site assessment, Grette Associates did not observe any indication of seasonal hydrology that would meet wetland hydrology indicators defined in the USACE's *Regional Supplement* (2010). More specifically, surface water, surface saturation, water-stained leaves, watermarks, or algal mats were not observed. Furthermore, no vegetation that would suggest a potential wetland feature was observed.

Figure 2. Vacant Field on Parcel G/H

Figure 3. Facing North from Parcel G/H to Parcel F

Figure 4. Vacant Field Parcel E

During the site visit, Grette Biologists assessed areas to evaluate soils and hydrology on each parcel. No hydric soil indicators were identified in the assessed areas (Figures 5 and 6). Datasheets are provided at the end of the report in Attachment B.

Figure 5. Soil Test Pit Locations

Figure 6. Soil Test Pit Photos

Test Pit C

Test Pit D

Test Pit F

Test Pit G/H

3.1.2 Stream Results

No streams were identified on the subject parcels. These findings are further backed up by the data gathered from queried databases summarized above.

3.1.3 Biodiversity Areas/Corridors Results

Per TMC 13.11.510, BACs are those areas that provide quality functions and habitat for wildlife access and/or movement across the landscape. In general, BACs are undeveloped areas with a vertically diverse assemblage of ***native*** vegetation containing multiply canopy layers and/or areas that are horizontally diverse with a mosaic of habitats and microhabitats (TMC 13.11.510).

North of the subject parcels is an undeveloped forested area that is mapped as a BAC from data gathered from Tacoma DART GIS data. The area is labeled as Wapato Hills Urban Wildlife Habitat and is separated from the subject parcels by South 64th Street. The parcels to the south, east, and west of the subject parcels are largely developed. Parcels E and F are largely comprised of a vegetative community consisting of a mix of native and nonnative vegetation dominated by Himalayan blackberry, English ivy (*Hedera helix*), and sword fern (*Polystichum munitum*).

Based on a rapid coverage assessment utilizing the guidance defined in the USACE's Regional Supplement (2010), coverage of nonnative species is approximately 60-65 percent of the total sub-canopy. Given the dominance of nonnative vegetation within the sub-canopy and parcel size, the parcels do not meet the definition of a Biodiversity Area due to the lack of a vertically diverse assemblage of native vegetation. Furthermore, given the existing development and lack connectivity to adjacent undeveloped forested areas, the subject parcels do not provide suitable habitat to be considered a corridor.

Figure 7. Vegetation Community in Parcels E and F

4.1 SUMMARY

In summary, Grette Associates did not identify any wetlands, streams, or FWHCAs, per TMC 13.01.110, within 300 feet of the subject parcels. The results summarized in this technical memorandum have fulfilled the critical areas evaluation requirements requested by the city.

If you have any questions on this wetland reconnaissance, please contact me at (253) 573-9300 or by email at donnyn@gretteassociates.com.

Regards,

Donny Neel

Donny Neel
Biologist

References

City of Tacoma DART GIS. (COT). 2022. https://dart.cityoftacoma.org/#20210121 Queried on January 18, 2022.

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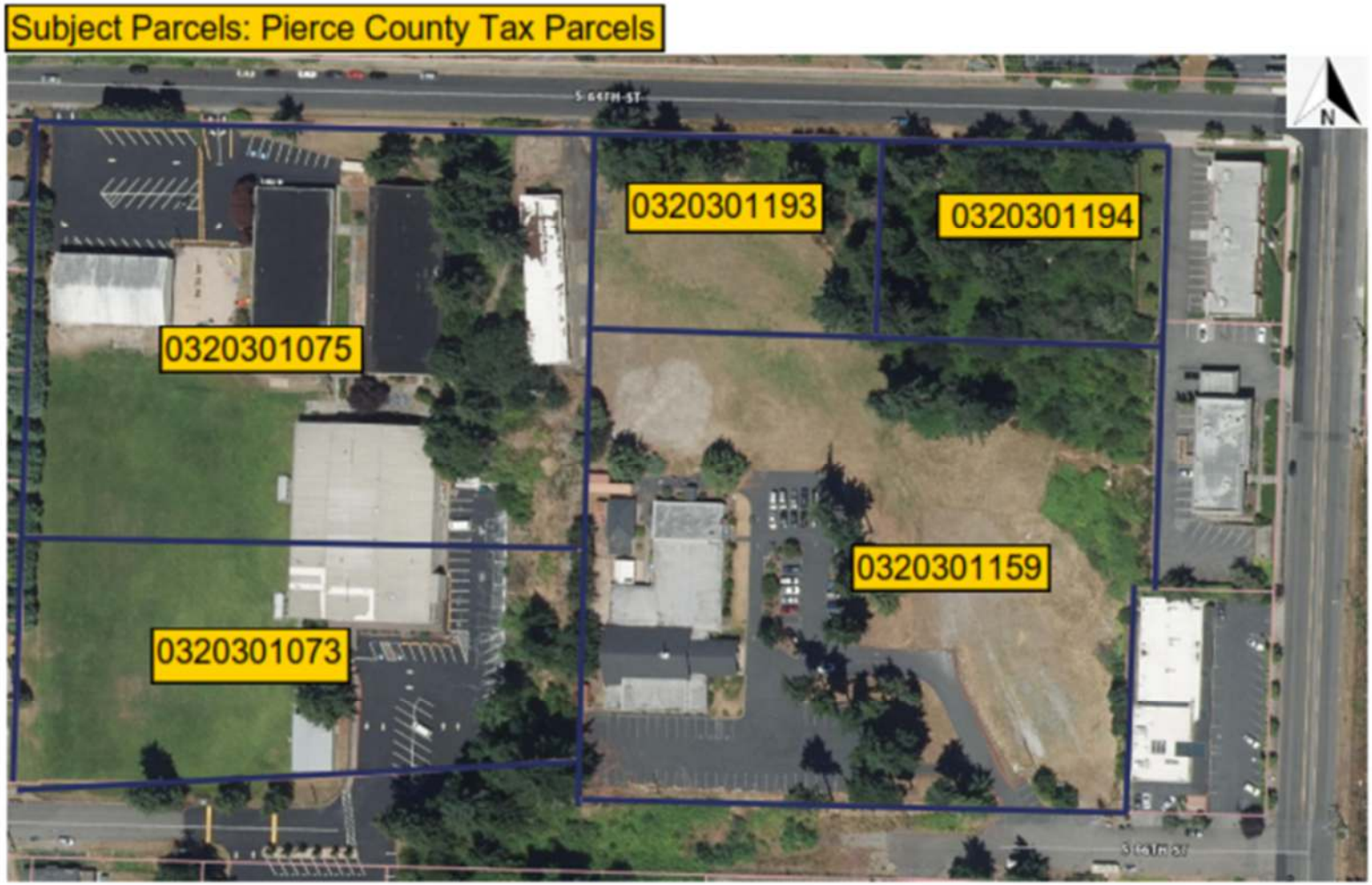
HABITAT ASSESSMENT

APPENDIX A: SITE MAP


Subject Parcels: Pierce County Tax Parcels
0320301193
0320301194
0320301075
0320301159
0320301073
N

CENTERPOINT CHRISTIAN SCHOOL/SOUTH SOUND CHRISTIAN SCHOOLS

HABITAT ASSESSMENT

APPENDIX B: DATA SHEETS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Center Point GM City/County: Tacoma / Pierce Sampling Date: 1/13/22
Applicant/Owner: State: WA Sampling Point: SP1
Investigator(s): JD, DW Section, Township, Range:
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): Lat: Long: Datum:
Soil Map Unit Name: NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No (If no, explain in Remarks.)
Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No ✓	**Is the Sampled Area within a Wetland?** Yes No ✓
Hydric Soil Present?	Yes ✓	No	
Wetland Hydrology Present?	Yes	No ✓	

Remarks:
The site has been developed and a large portion has been leveled with gravel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Rhododendron	5		FACU
2. Black Berry	10	Y	FAC
3. Eastern Red cedar	15	Y	FACU
4. Scotch Broom	5		UPL
5.			
30: 175 20: 7	35 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Plantain	25		FACU
2. Field grass	75	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
30: 50 20: 20	100 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No ✓

Remarks:

SOIL

Sampling Point: SP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	90	2.5YR 4/6	5%	C	M	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock Layer

Depth (inches): 8"

Hydric Soil Present? Yes ✓ No ___

Remarks:

Consistant

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No NO Depth (inches): ___

Water Table Present? Yes ___ No NO Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No NO Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Consistant rain within the last week

Did not reach water table Did

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Center Point F City/County: Tacoma / Pierce Sampling Date: 1/13/22

Applicant/Owner: State: WA Sampling Point: SP 2

Investigator(s): DN, JLD Section, Township, Range:

Landform (hillslope, terrace, etc.): hilltop Local relief (concave, convex, none): Convex Slope (%): 10%

Subregion (LRR): Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____ No ✓	
Wetland Hydrology Present?	Yes ____ No ✓	

Remarks:
Majority of the property is up on a hill
Largely undisturbed

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Madrone	50	Y	FACU
2. Oak, Oregon white	50		UPL
3. Red Alder	10		FAC
4.			
	110 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Evergreen Black	15		FACU
2. Himalayan	45	Y	FACU
3. Beaked hazelnut	25	Y	FACU
4. Salal	40	Y	FACU
5.			
	125 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Salal	40		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0 = Total Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

SOIL

Sampling Point: SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Silt loam	
7-18	10YR 4/2	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

No redox observed

Soil were not observed to be saturated

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No indicators seen

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Center Point E City/County: Tacoma / Pierce Sampling Date: 1/13/22

Applicant/Owner: State: WA Sampling Point: SP 3

Investigator(s): JLD, DN Section, Township, Range:

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Done Slope (%): 0

Subregion (LRR): Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Regularly mowed field

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Hemlock WR	30	Y	FACU
2. Madrone	5		UPL
3.			
4.			
	30 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	5 = Total Cover		

Herb Stratum (Plot size: 3')			
1. Plantain English	45%	Y	FACU
2. Grass Field (Poa Annua)	75%	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

SOIL

Sampling Point: SP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	2.5Y 3/2	100					Silt Loam	
3-11+	10YR 3/2	100					Sandy loam	Restrictive by rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Cobbel Rock

Depth (inches): 11"

Hydric Soil Present? Yes ____ No ✓

Remarks:

No Redox observed Soils were not observed as Saturated

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No Field Indicators observed

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Tacoma Baptist School D/C City/County: Tacoma / Pierce Sampling Date: 1/13/22
Applicant/Owner: State: WA Sampling Point: SP4
Investigator(s): SID, DN Section, Township, Range:
Landform (hillslope, terrace, etc.): minor SLOPE Local relief (concave, convex, none): Convex Slope (%): 3 ±
Subregion (LRR): Lat: Long: Datum:
Soil Map Unit Name: NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ✓, Soil ✓, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____ No ✓	
Wetland Hydrology Present?	Yes ____ No ✓	

Remarks:
The SP was taken in a maintained sports field across form western Red cedare hedge low present + Maintained 10 yr +

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. W. R. Cedar	65	Y	FAC
2.			
3.			
4.			
	65 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. N/A	Ø		
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. Ryegrass Field Grass	100	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: SP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	100	Ø					

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): 7"

Hydric Soil Present? Yes ____ No ✓

Remarks:

No Redox observed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No field indicators observed.

FAQ

March 2, 2022

ANNUAL AMENDMENTS

The One Tacoma Plan is subject to continuous review, evaluation, and potentially modification to remain relevant and to respond to changing circumstances. The GMA allows the Plan generally to be amended only once each year. Amendments may include adding new Plan elements, modifying existing elements, revising policies or maps, or updating data and information. All proposed modifications are reviewed concurrently to address the cumulative effect of the revisions and to maintain internal consistency among the various plan components and external consistency with regional, county, and adjacent jurisdictional plans. The GMA requires development regulations to be consistent with and to implement the Comprehensive Plan. To maintain this consistency, changes to the One Tacoma Plan often are accompanied by similar changes to development regulations and/or zoning classifications.

Each city and county planning under GMA must conduct a thorough review of its comprehensive plan every eight years, according to the schedule provided in RCW 36.70A.130, and revise its plan if necessary. In addition, these jurisdictions may consider smaller comprehensive plan amendments no more than once per year, with some exceptions (RCW 36.70A.130(2)). Rather than adopting changes on a piecemeal basis, proposed amendments must be considered "concurrently so the cumulative effect of the various proposals can be ascertained."

The process begins with the scoping phase during which time the Planning Commission considers whether applications meet the following criteria, which is outlined under Tacoma Municipal Code, Title 13.02.070, Comprehensive Plan amendment procedures.

- Applications are received no later than the last day of May (however earlier deadlines can be set),
- The Planning Commission has 120 days to decide on acceptance
- Application completeness
- Under the jurisdiction of the Planning Commission
- Repetitive/duplicative
- Staff conducts a preliminary review
    - Basic options analysis is conducted
- Request is manageable and reasonable given city/departmental staffing, budget, and resources

Planning and Development Services

City of Tacoma, Washington

Peter Huffman, Director

Project Manager:

Larry Harala, Principal Planner

lharala@cityoftacoma.org

Project Website:

www.cityoftacoma.org/2022Amendment

Based on that criterion the planning commission evaluates the applications and accepts the docket for that cycle then directs staff to work with the applicants to conduct analysis and public outreach. The Planning Commission has this opportunity to give staff preliminary feedback on the type of analysis, outreach, and overall evaluation it would like to see. Given that there is finite staff time and resources, and that often studies, and specialized analysis can be expensive for applicants and time consuming, it is important that such direction is given early in the process with reasonable time to meet Planning Commission expectations. Staff will then conduct analysis, working with the applicant, and conduct public outreach.

The Planning Commission will release the pack for public review, hold a public hearing, and then make a final determination based on whether the proposed amendments are consistent with the following criteria:

- Whether the proposed amendment will benefit the City as a whole, will not adversely affect the City's public facilities and services, and bears a reasonable relationship to the public health, safety, and welfare; and
- Whether the proposed amendment conforms to applicable provisions of State statutes, case law, regional policies, and the Comprehensive Plan.

After the Planning Commission renders its decision, the Commission will forward its findings to the City Council for a public hearing and review resulting in a final decision.

COMPREHENSIVE PLAN, LAND USE REGULATORY CODE AND THE FUTURE LAND USE MAP

THE ONE TACOMA PLAN

The One Tacoma Plan has been adopted most recently, in December of 2021 by Ordinance No. 28793, is Tacoma's comprehensive plan as required by the State Growth Management Act (GMA). As the City's official statement concerning future growth and development, the Comprehensive Plan sets forth goals, policies and strategies for the health, welfare and quality of life of Tacoma's residents. The One Tacoma Plan is a blueprint for the future character of our City. The plan can be viewed online at www.cityoftacoma.org/OneTacoma.

It is important to remember that a comprehensive plan and a zoning ordinance are two separate tools that are used in conjunction with one another. A comprehensive plan acts in a guiding role and provides recommendations on how land should be utilized to meet the needs and desires of the community, whereas a zoning ordinance regulates land uses as recommended by the plan.

THE LAND USE REGULATORY CODE

Title 13 of the Tacoma Municipal Code (TMC), is the key regulatory mechanism that implements the One Tacoma Plan. Title 13 contains regulations and procedures for controlling land use, platting, shorelines, environment, critical areas, and historic preservation, among others. The Tacoma Municipal Code can be viewed online at www.cityoftacoma.org/Planning (and click on "Tacoma Municipal Code").

THE FUTURE LAND USE MAP

It is typical for cities and counties throughout Washington to adopt a future land Use Map. The Land Use Map sets the direction of future growth in a community. The future land use map, which is policy-oriented, is then implemented in large part by the official zoning map, a regulatory tool. Since these maps are so closely linked, a zoning change cannot be approved unless it is consistent with the future land use map.

In the City of Tacoma, The Future Land Use Map of the One Tacoma Plan (figure 2 of the Urban Form element), illustrates the City's intended future land use pattern through the geographic distribution of residential and commercial areas, the designation of mixed-use and manufacturing/industrial centers, as well as shoreline and single-family detached designations. These designations correspond to specific zoning districts and use and development standards that implement the policies of the One Tacoma Plan. Per the Washington State Growth Management Act and the Tacoma Municipal Code, the City's Land Use Regulations, including zoning districts, should be consistent with the policies of the One Tacoma Plan.

WHAT IS A LAND USE DESIGNATION CHANGE?

The One Tacoma Plan Future Land Use Map land use designations are in place to communicate the long-range plan for land use patterns throughout the city. These proposals seek to re-designate the respective sites from the one designation to slightly more intense designations in order to accommodate changing development patterns within the area and also seeks to more closely align the designation

WHAT IS A PLAN OR CODE AMENDMENT?

A Plan Amendment is the process through which the city considers changes, additions, and updates to the One Tacoma Comprehensive Plan and a Code amendment would be the same considerations pertaining to the Land Use Regulatory Code. The intent of the amendment process is to review all these changes concurrently, where appropriate, so that the cumulative effects can be considered. According to the State Growth Management Act, local comprehensive plans cannot be amended more than once a year.

WHAT IS SITE SPECIFIC REZONING AND HOW DOES IT DIFFER FROM THE COMPREHENSIVE PLAN LAND USE DESIGNATION?

The city of Tacoma as most counties and cities throughout Washington State and the United States, utilizes zoning to define and regulate uses and development standards on land through the city. This is a more focused set of use restrictions, development standards and other regulations. Zoning differs from Land Use Designation in that it is specific and tied actual development and use of the site. The Comprehensive Plan Land Use Designation is tied to the cities overall goals imbedded in the comprehensive plan, it is a long-term vision, and not specific. Zoning is tied to the Land Use Designation, but is an implementation of it specific to actual development and use of the given site.

SEPA PROCESS

During the annual amendment process a SEPA review is done per guidance from Washington State Administrative Code, Chapter 197-11 WAC, The City of Tacoma SEPA process is regulated under Title 13.12, Environmental Code. Administration of the code is primarily through our SEPA process administered by Planning and Development Services with ongoing advisement from the City of Tacoma City Attorney, and our SEPA official.

During non-project actions such as our Annual Amendment cycle the evaluation is at a "big picture" level with the focus on identifying analysis that will be needed at the next step of the given process. In the case of the Comprehensive Land Use Designation Change requests, that is asking applicants to provide preliminary studies on a site specific, yet non-project, basis. Examples might include traffic studies, general light and noise impact studies, possibly preliminary environmental evaluations, and assessments. However, studies relating directly to a given development project would not be required at this time, rather at time of triggering event.

COMMON SEPA TRIGGERS

WORK OCCURRING WITHIN CRITICAL AREAS AND/OR ON LANDS WHOLLY OR PARTLY COVERED BY WATER
CONSTRUCTION OF RESIDENTIAL STRUCTURES – MORE THAN 20 DWELLING UNITS
CONSTRUCTION OR DEMOLITION OF A BUILDING – GREATER THAN 12,000 SQUARE FEET
CONSTRUCTION OF A PARKING LOT – MORE THAN 40 VEHICLES
FILL OR EXCAVATION – MORE THAN 500 CUBIC YARDS
INSTALLATION OR REMOVAL OF IMPERVIOUS TANKS ON INDUSTRIAL PROPERTY – CAPACITY OF MORE THAN 60,000 GALLONS
STORMWATER, WATER, & SEWER UTILITIES – MORE THAN 12 INCHES IN DIAMETER
INSTALLATION OF WIRELESS FACILITIES – ON A RESIDENCE OR SCHOOL OR WITHIN AN AREA ZONED RESIDENTIAL
CONSTRUCTION OF A WIRELESS TOWER – 60 FEET OR TALLER OR WITHIN A RESIDENTIAL ZONE
CERTAIN LAND USE DECISIONS – REZONE

In addition to SEPA evaluation the City of Tacoma has robust critical area code which governs all allowed/permitted activities and development on lands within the City of Tacoma. These include our Critical Area Code (Title 13 Land Use Regulatory Code, 13.11), Shoreline Code (Title 19 Shoreline Master Program), and the Stormwater Manual (2021 SWMM), South Tacoma Groundwater Protection District (Title 13 Land Use Regulatory Code, 13.06.070.D). See attached tip sheet below.

WHAT PROTECTIONS ARE THERE FOR TREES/TREE CANOPY

The City of Tacoma has a framework of critical area and environmental codes in place to help preserve what remains of Tacoma's natural environment. Tree Canopy protection has become increasingly important to the city and over the years there have been many actions taken. Most recently the City of Tacoma adopted the Urban Forest Management Plan in 2019 (tacomatreeplan.org).

Additionally Title 13 has tree canopy coverage requirements for new development in residential and commercial zoning districts. As well as landscaping standards in all zoning districts which promote increased tree canopy coverage. (

The Tacoma City Council passed Resolution No. 40509 in December 2019, declaring a climate emergency in Tacoma and calling for a transformative climate action plan to reduce community greenhouse gas (GHG) emissions and adapt to climate impacts we can no longer avoid. As we plan for our collective climate future, the City of Tacoma needs to hear continually from communities that are historically underrepresented, underserved, made vulnerable communities, or expected to experience the first or worst impacts of climate change. By centering frontline communities' priorities, Tacoma's new plan invests in both climate action and environmental justice. Tree canopy coverage is a vital component of the plan and represents a tangible action the city can perform to help meet the goals of the plan.

State Environmental Policy Act (SEPA)

The SEPA process is a Washington State requirement intended to ensure that state and local agencies consider the likely environmental consequences of a proposal before acting on the proposal. All government decisions require environmental review, but may not be subject to procedural requirements under the Act.

WHEN SEPA IS REQUIRED

Many projects are exempt from SEPA requirements under either state law (WAC 197-11-800) or through local regulations (TMC 13.12.800).

The Most Common* SEPA Triggers
Work occurring within critical areas and/or on lands wholly or partly covered by water
Construction of residential structures – more than 20 dwelling units
Construction or demolition of a building – greater than 12,000 square feet
Construction of a parking lot – more than 40 vehicles
Fill or excavation – more than 500 cubic yards
Installation or removal of impervious tanks on industrial property – capacity of more than 60,000 gallons
Stormwater, water, & sewer utilities – more than 12 inches in diameter
Installation of wireless facilities – on a residence or school or or wihin an area zoned residential
Construction of a wireless tower – 60 feet or taller or within a residential zone
Certain land use decisions – Rezone

*For a comprehensive list, see WAC 197-11-800.

SEPA PROCESS

Submittal of SEPA materials **in a separate land use application** should occur at the time of building permit submittal (if there is no associated land use permit) or along with the application for an associated Major Land Use Decision. Additional materials may be requested, such as a geotechnical report, critical areas report, or a cultural resources assessment. A Planner can help you determine if additional materials are needed.

A completed Environmental Checklist is the form the City uses to gather information in order to make a SEPA determination. Applicants are required to submit a checklist along with any required information for the associated building or land use permit. Copies of the Environmental Checklist form are available at the Planning and Development Serice Department, 747 Market Street, 3rd Floor and they are also located online: http://www.ecy.wa.gov/programs/sea/sepa/forms.htm A separate copy of the site plan, building elevations, and other required materials should be submitted. **All application materials must be submitted in electronic PDF format on compact disc (CD) or online at TacomaPermits.org. See Electronic File Standards Tip Sheet.**

- SEPA submittals for building permits can be taken in over the counter at the Permit Intake Center. They will be reviewed for completeness before being taken in.
- SEPA submittals associated with major Land Use Decisions can only be taken in concurrently with the associated Land Use application at the pre-application meeting. The Determination is issued with the Land Use Decision and the 14-day appeal periods run concurrently.
- SEPAs associated with building permits take approximately 30 days to process and have a 21-day appeal period; building permits will not be issued until the SEPA process is complete.

OTHER LEAD AGENCIES

If a Determination has already been issued for the project by a different lead agency, of if the project has previously been subject to NEPA (National Environmental Policy Act) a copy of that Determination along with the associated Environmental Checklist may satisfy the City's SEPA requirement.

Other agencies include School Districts, Park Districts, State Agencies, County Agencies, Local Air Pollution Authorities, and the Port of Tacoma.

Other Lead Agencies, such as the Port of Tacoma, can issue SEPA Determinations for work within their jurisdiction.

State Environmental Policy Act (SEPA)

FILLING OUT THE ENVIRONMENTAL CHECKLIST

Section A

- It is helpful if the contact information for the person preparing the checklist is provided.
- The project description should be thorough and not rely on other permit documents.
- To the extent the requirements for SEPA (or "triggers") are known they should be listed.
- If you know of prior environmental review related to the proposal or the site, please inform BLUS staff. Part or all of that review may satisfy the City's requirements.

Section B

- Leave a wide right margin for staff to make notes.
- The answer "not applicable" should be avoided and, when used, should include an explanation.
- Please feel free to contact City Staff for assistance when answering questions about the Comprehensive Plan, zoning designations, historic status, and other related questions.
- The checklist questions apply to all parts of the proposal, even if they are going to happen at different times or on different parcels.
- When additional studies are required, they should be referenced in the checklist.

Signature Section

- The checklist must be signed by the applicant and the processing fee must be included, for the submittal to be accepted.

THRESHOLD DETERMINATION

Following review of the checklist and supporting information, the City will make a "Threshold Determination" for the proposal. There are three different types of Threshold Determinations:

- DNS (Determination of Non-Significance) – the most common determination; this means that the proposal is not anticipated to have a significant impact on the environment.
- MDNS (Mitigated Determination of Non-Significance) – means that impacts to the environment were identified while processing the Determination, but conditions have been included in the Determination and related land use and/or building permits that will mitigate the impact(s).
- DS (Determination of Significance) – means that there will be probable significant adverse impacts to the environment which cannot be mitigated and an EIS (Environmental Impact Statement) must be prepared. If it is anticipated that a project will result in an EIS, likely that the applicant will be contacted and asked to provide additional information.

ADDITIONAL REPORTS

During the scoping meeting process, requests for additional reports may be identified. The applicant may also inquire about triggers for additional reports by visiting the Permit Intake Center, 747 Market Street, or by calling 253-591-5030.

ASARCO Soil Sampling

Development proposals located in areas with a probability of high amounts of contamination from the ASARCO Plume may require soil testing. The Department of Ecology (DOE) provides an online Facilities Atlas Map to help determine the level of contamination: http://www.ecy.wa.gov/fs/

Cultural Resources Assessment

Proposals within a Shoreline District, within Puyallup Tribal Boundaries, or on a historically significant site require a Cultural Resources Report. Depending on the scope and location of the project, an Unanticipated Discovery Plan by an approved Archaeologist may suffice.

Traffic Impact Analysis

Based upon the amount of traffic your proposal may generate, a traffic worksheet or a full Traffic Impact Analysis may be requested. A Traffic Engineer can be reached at 591-5500.

Critical Areas Report

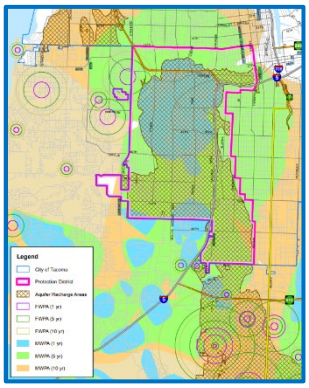
Projects within wetlands, fish and wildlife habitat conservation areas, or associated buffers will require a critical areas report. Projects within flood-sensitive areas may require elevation cerificates, and areas with steep slopes (greater than 40% grade) often require submittal of a geotechnical report.

APPLICABLE REGULATIONS

Tacoma Municipal Code 13.12 - Environmental Code
Washington Administrative Code 197-11 SEPA Rules

Section II-C

Work Plan for Code Amendments – South Tacoma Groundwater Protection District



Work Plan for Code Amendments

South Tacoma Groundwater Protection District

Staff Analysis Report

February 16, 2022

Project Summary	
Project Title	Work Plan for South Tacoma Groundwater Protection District Code Amendments
Applicant:	South Tacoma Neighborhood Council
Location and Size of Area:	South Tacoma Groundwater Protection District Overlay (STGPD); 5000+ acres
Current Land Use and Zoning:	Land Use Designations and Zoning Districts: Various Overlays: • STGPD: South Tacoma Groundwater Protection District • ST-M/IC: South Tacoma Manufacturing/Industrial Center • ACD: Airport Compatibility District • PRD: Planned Residential Development
Neighborhood Council Areas:	South Tacoma (entirety), South End (partial) and Central (partial)
Proposal Summary:	The "South Tacoma Economic Green Zone" application seeks to (1) improve current regulations and standards applicable to the STGPD and the aquifer recharge areas, so they are more effective in addressing environmental and health risks; and (2) transform the South Tacoma Manufacturing/Industrial Center into an Economic Green Zone that fosters environmentally sustainable industry specifically within South Tacoma. The City of Tacoma proposes a two-pronged (or two-stage) approach to addressing the application, i.e., (1) STGPD Code Amendments (including developing a work plan and implementing the work plan), and (2) Economic Green Zone Designation. This Work Plan for STGPD Code Amendments outlines the approach for addressing the first stage, and upon acceptance by the City Council during the 2022 Amendment cycle, will be carried out during the 2023 Amendment cycle.

Planning and Development Services
City of Tacoma, Washington
Peter Huffman, Director

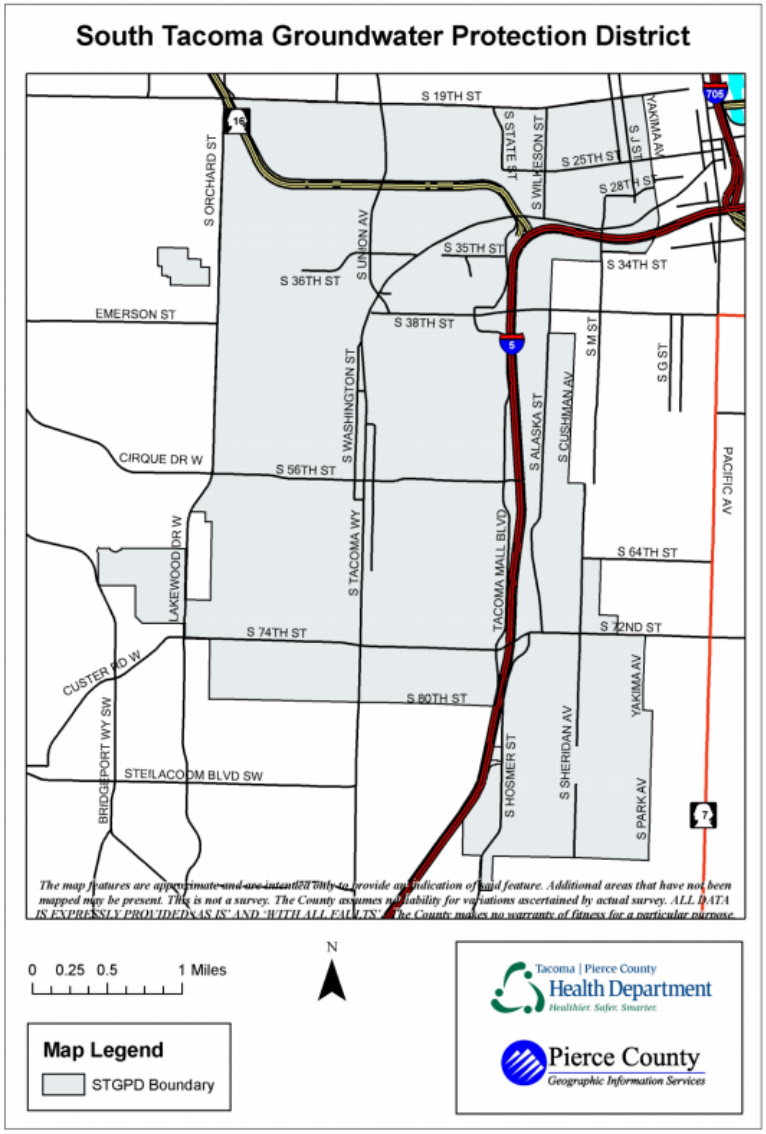
Project Manager:
Lihuang Wung, Senior Planner
253-591-5682; lwung@cityoftacoma.org

Project Website:
www.cityoftacoma.org/2022Amendmen

A. The "South Tacoma Economic Green Zone" Application

In March 2021, the South Tacoma Neighborhood Council submitted the "South Tacoma Economic Green Zone" application to the City of Tacoma for consideration during the process of Proposed Amendments to the One Tacoma Comprehensive Plan and/or Land Use Regulatory Code for 2022 ("2022 Amendment").

The application provides that the South Tacoma groundwater aquifer system serves as a significant source of drinking water for the City of Tacoma. Groundwater typically supplies about 5% of Tacoma's water in the summer and supplements the supply from the Green River at other times of the year. Groundwater from this aquifer could supply up to 40% of Tacoma's drinking water. In 1988 the City of Tacoma adopted Tacoma Municipal Code (TMC) Chapter 13.09 - South Tacoma Groundwater Protection District (STGPD) to protect this important resource. This regulation had a major update in 2006, with minor adjustment during the Tacoma Mall Subarea Plan adoption in 2018 and is currently located in TMC 13.06.070.D. The STGPD program is managed by the Tacoma-Pierce County Health Department (Health Department) who work in close collaboration with the City of Tacoma and Tacoma Water.



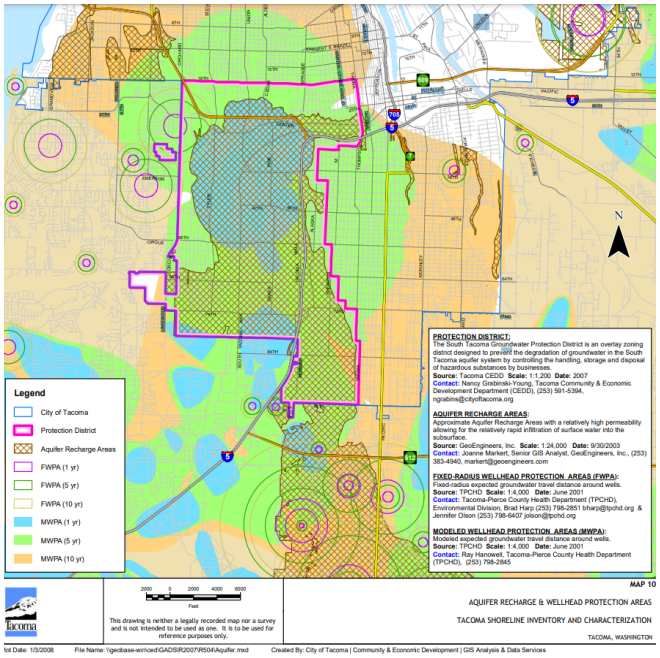
The focus of the STGPD program is pollution prevention. Facilities are generally regulated based upon their use or handling of hazardous substances (whether product or waste). Facilities also may be regulated if they have drywells or stormwater infiltration systems on site. Regulated facilities receive a permit and biennial site inspections from the Health Department. Compliance issues or complaints may trigger additional inspections. Whenever possible, inspections are meant to provide educational and technical assistance to businesses to achieve voluntary compliance. There are likely additional unregulated businesses that also need to come into the program.

The application seeks to:

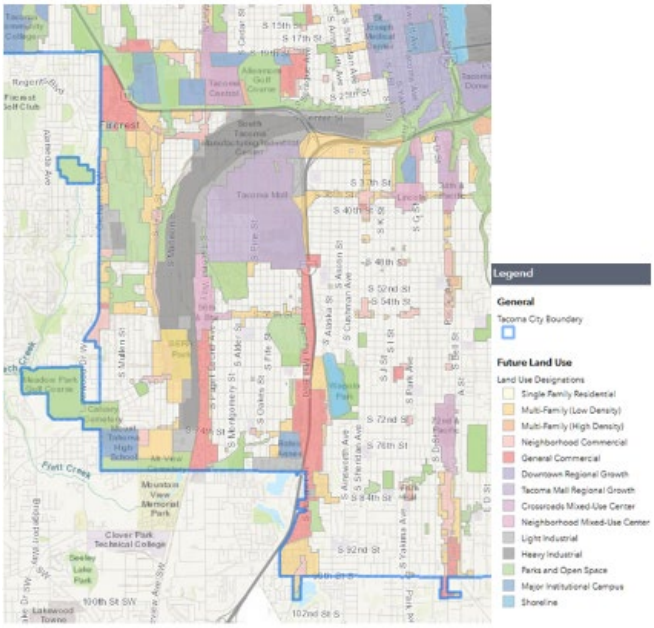
- Update the One Tacoma Comprehensive Plan and the TMC applicable to the STGPD and the aquifer recharge areas to address environmental and health risks and further prioritize protection of the STGPD; and
- Transform the South Tacoma Manufacturing/Industrial Center into an Economic Green Zone that fosters environmentally sustainable industry specifically within South Tacoma, above and near this water source.

(The application is posted on the website: www.cityoftacoma.org/2022Amendment)

Aquifer Recharge Areas and Wellhead Protection Areas



South Tacoma Manufacturing/Industrial Center (gray)



B. Assessment of the Application

The Planning Commission conducted an assessment of the application, in accordance with the requirements of the Tacoma Municipal Code (TMC), Section 13.02.070.E, with feedback provided by interested and concerned citizens through a Public Scoping Hearing in June 2021. On July 21, 2021, the Commission made a determination to move the application forward for technical analysis through the 2022 Amendment cycle and beyond. The Commission approved the following two-pronged (or two-stage) approach to addressing the application as recommended by planning staff:

1. **STGPD Code Amendments** - Update TMC Section 13.06.070.D pertaining to STGPD. This work will be done in the future 2023 Amendment Cycle, with creation of a work plan to occur during the 2022 Amendment cycle, developed in collaboration with the City of Tacoma Environmental Services Department, Tacoma Public Utilities – Tacoma Water, and the Tacoma-Pierce County Health Department. The work plan may include review of allowed land uses, review of the One Tacoma Comprehensive Plan, refinement of allowed uses and boundaries, and periodic update of the STGPD to ensure the regulations fulfill the intent of protecting the district. It is noted that the STGPD encompasses not only the entire South Tacoma Neighborhood Council area, but also part of the South End Neighborhood Council and Central Neighborhood Council areas.

2. **Creation of an Economic Green Zone** – Further evaluation will be given to formation of a green economic/industrial zone, including what the creation of such a land use designation would mean for the City of Tacoma, what would be required to move forward on this request, what the community engagement strategy should entail, how this request plays into the City's ongoing economic development activities and environmental goals, what incentives and code adjustments are required to attract Green Industry to the City's manufacturing/industrial centers, what grant funding opportunities there may be, and how the implementation of the recently adopted 2030 Climate Action Plan and Climate Adaptation Strategy (Resolution No. 40878, November 30, 2021) may be taken into consideration.

(The Assessment Report is available on the website: www.cityoftacoma.org/2022Amendment)

C. The Work Plan for Code Amendments

The following Work Plan for the South Tacoma Groundwater Protection District (STGPD) Code Amendments represents the initial step of the first component of the two-pronged approach to addressing the original application of "South Tacoma Economic Green Zone." It has been developed based on the thoughts and suggestions from the applicant (South Tacoma Neighborhood Council) and staff from the City of Tacoma's Planning and Development Services Department (PDS) and Environmental Services Department (ES), the Tacoma Public Utilities – Tacoma Water, and the Tacoma-Pierce County Health Department (TPCHD).

1. **Major Issues:**
   (a) General program awareness.
   (b) Enforcement and monitoring.
   (c) Define "periodic update".
   (d) Review proposal for prohibited uses from application.
   (e) Code implementation and code location (including potential relocation).
   (f) Infiltration Policy.
   (g) Program Funding.

2. **Examine code amendments needed.**

3. **Community Engagement and Outreach Strategy:**
   - Stakeholders:
     - Staff Team (representing TPCHD, Tacoma Water, ES and PDS)
     - Permitted and Non-permitted Businesses
     - Homeowners and Taxpayers
     - Neighborhood Councils (South Tacoma, Central, and South End)
     - Planning Commission and City Council
     - Additional local, regional, state and federal agencies and organizations, as may be identified
   - Community Meetings; Surveys; Targeted Ads.
   - Dissemination of user-friendly information, data, maps and publicity materials.
   - Focus on Equity.

4. **Evaluate need and funding for consultant services.**

5. **Implementation:**
   - The Work Plan is to be carried out during the 2023 Amendment cycle, i.e. from mid-2022 to June 2023.
   - To allow the flexibility to address additional issues that may arise during its implementation, the Work Plan is subject to change, depending on the directives and suggestions from the City Council, the Planning Commission, the applicant, and stakeholders.

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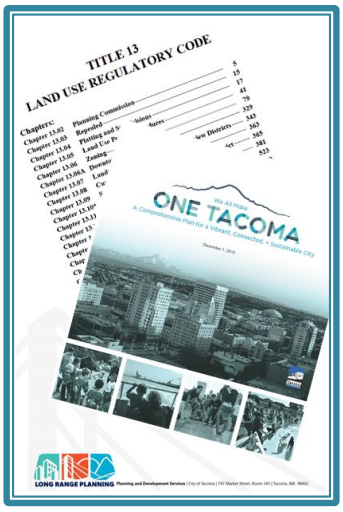
Section II-D

Minor Plan and Code Amendments

Minor Plan and Code Amendments

Staff Analysis Report

March 2, 2022



The "Minor Plan and Code Amendments" is one of the applications for the 2022 Annual Amendment to the *One Tacoma* Comprehensive Plan and Land Use Regulatory Code (or"2022 Amendment"). The application compiles a number of proposed amendments to the *One Tacoma Plan* and the Tacoma Municipal Code (primarily Title 13 – Land Use Regulatory Code) that are under the purview of the Planning Commission.

Proposed amendments do not suggest substantive or policy-level changes to the Plan or the Code; they are intended to correct minor errors, address inconsistencies, keep information current, and clarify and improve provisions that, through implementation of the Plan and the Code, are found to be unclear or not fully meeting their intent.

There are 15 issues compiled in this application, as shown in Exhibit "A", which also documents staff analysis of the issues and the thought process for the corresponding proposed amendments.

Project Summary	
Project Title:	Minor Plan and Code Amendments
Applicant:	Planning and Development Services Department
Location and Size of Area:	Citywide
Current Land Use and Zoning:	Various
Neighborhood Council Area:	Citywide
Staff Contact:	Lihuang Wung, (253) 591-5682, lwung@cityoftacoma.org
Staff Recommendation:	That the Planning Commission accept public comment and begin to develop recommendations to the City Council.
Project Proposal:	See Exhibit "A" – Issues and Proposed Amendments

Planning and Development Services
City of Tacoma, Washington
Peter Huffman, Director

Project Manager:
Lihuang Wung, Senior Planner
253-591-5682; lwung@cityoftacoma.org

Project Website:
www.cityoftacoma.org/2022Amendmen

A. Area of Applicability

Citywide - in various zoning districts and geographical areas.

B. Background

The "Minor Plan and Code Amendments" application facilitates an annual process for staff to improve the clarity and effectiveness of the *One Tacoma* Comprehensive Plan and the Tacoma Municipal Code (TMC) – primarily Title 13 Land Use Regulatory Code. The application compiles issues identified by staff, customers of the Planning and Development Services Department, the Planning Commission, the Transportation Commission, the City Council, and/or the public. Those issues are generally not substantive enough to rise to the level of a stand-alone application for consideration during the annual amendment process.

The *One Tacoma Plan* is a blueprint for the future character of our City. It guides our community's development over the long term and describes how our community's vision for the future is to be achieved. The plan takes a long-range perspective on such topics as land use, transportation, housing, capital facilities, parks and the environment that address the physical, social, and economic health of the City. It also sets standards for roads and other infrastructure, identifies how they will be paid for, and establishes the basis for zoning and development regulations.

The *One Tacoma Plan* is a compilation of Book I and Book II. Book I contains twelve chapters (or elements), with aspirational goals and policies identified for each element that provide the means for Tacoma to grow and prosper and yet maintain the unique character of the city for current and future generations. Book II includes selected implementation programs and strategies.

Book I: Goals + Policies

1. Introduction + Vision
2. Urban Form
3. Design + Development
4. Environment + Watershed Health
5. Housing
6. Economic Development
7. Transportation
8. Parks + Recreation
9. Public Facilities + Services
10. Container Port
11. Engagement, Administration + Implementation
12. Downtown

Book II: Implementation Programs + Strategies

1. Shoreline Master Program
2. Capital Facilities Program
3. Downtown Regional Growth Center Plans
4. Historic Preservation Plan

The Land Us Regulatory Code is the key regulatory mechanism that implements the Comprehensive Plan, as cited below:

> ***"Land Use Regulations –***
> *Land use regulations are laws that establish what can or can't be built in a given location. The key regulatory mechanism that implements the Comprehensive Plan is Tacoma's Land Use Regulatory Code. This code contains the development regulations that govern the manner by which land is used, developed, or redeveloped in the City. This code is found in Title 13 of the Tacoma Municipal Code and includes regulations for platting, zoning, shorelines and critical areas."*
>
> *(One Tacoma Comprehensive Plan,*
> *"Engagement, Administration + Implementation" Element,*
> *p. 11-10)*

C. Analysis

It is imperative that both the Comprehensive Plan and the Code are properly maintained. The overall objective of the Minor Pan and Code Amendments is to keep the Plan and the Code current, respond to the changing circumstances, and enhance customer service. Staff analysis of this application has been conducted in accordance with TMC 13.02.070.F.2, which requires the following four provisions be addressed, as appropriate:

a. A staff analysis of the application in accordance with the elements described in 13.02.070.D;
b. An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;
c. An analysis of the amendment options identified in the assessment report; and
d. An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

a. A staff analysis of the application in accordance with the elements described in 13.02.070.D;

TMC 13.02.070.D, subsection 5.d.(1), requires that the following objectives shall be met by applications for the annual amendment:

- **Address inconsistencies or errors in the Comprehensive Plan or development regulations;**
  There are some issues included in the Minor Plan and Code Amendments, as shown in Exhibit "A", intended to address inconsistencies and errors. There are also a number of issues intended to provide clarity or clarifications to existing language. For example:
  - #2 Preliminary and Final Plats – This proposal clarifies that an approved preliminary short or long plat is not an assurance that the final plat will be approved.
  - #3 Residential Landscaping Requirements – The proposal addresses the inadvertent error due to code reorganization and clarifies the regulatory intent.
  - #5 Reference to Definition Section – The proposal provides clarity so that code readers know where to look in the definitions section that is cited.
  - #7 Efficiency Unit Parking Exemption – This proposal eliminates redundancy regarding bike parking and clarifies the threshold and limitation on efficiency unit parking exemption.
  - #8 Single-family Detached Dwellings – This proposal improves and clarifies language in the table of Residential District Development Standard – Minimum Lot Area.
  - #9 Public Facility, Public Facility Site, Public Safety Facilities, & Public Service Facilities – This proposal consolidates and clarifies these definitions that are somewhat repetitive, overlapping, and confusing.
  - #12 Special Use Standards – This proposal ensures consistency between HMR-SRD (zoning exclusion and minimum lot size) and TMC 13.05.010.A.7.c (Infill Pilot Program conditional use permits).
  - #13 Two-family and Townhouse Dwelling – This proposal clarifies the number of townhouses permitted and minimum site size pertaining to Infill Pilot Program Two-family and Townhouse dwelling.

- **Respond to changing circumstances, such as growth and development patterns, needs and desires of the community, and the City's capacity to provide adequate services;**
  - #4 Homeowners' Association Owned Open Space & Other Tracts – Current code allows open space and other tracts to be owned by a homeowners' association or the property owners within the subdivision, or dedicated to the public. Homeowners' associations often go defunct/bankrupt, resulting in open

spaces not used as intended. This proposal, by removing "homeowners' association" as an option for owning open spaces and other tracts, responds to changing circumstances and needs and desires of the community, and enhances the City's capacity to provide adequate services.

- #10 Street Level Uses and Design – Proposed clarification pares the requirement down to just indicate that the spaces on the street level within downtown zoning districts incorporate elements to accommodate commercial uses. By providing more flexibility for prospective developers, this proposal is responding to the needs and desires of the community.
- There are three proposed amendments associated with the Residential Infill Pilot Program 1.0 and 2.0, i.e., #11 Infill Pilot Program Handbook (adding a reference to the Infill Pilot Program Handbook), #12 Special Use Standards (ensuring consistency between HMR-SRD and Infill Pilot Program), and #13 Two-family and Townhouse Dwelling (clarifying definition and site size pertaining to Infill Pilot Program Two-family and Townhouse dwelling). These proposals are responding to the changing circumstances resulted from the implementation of the Infill Pilot Program.

- **Maintain or enhance compatibility with existing or planned land uses and the surrounding development pattern;**
  - #6 Cultural Institutions and Public Benefit Use – This proposal not only enhances the definitions of "cultural institutions" and "public benefit use", but also ensures the compatibility of lands uses allowed within the specified zoning districts.
  - #10 Street Level Uses and Design – By allowing prospective developers more flexibility in ensuring the spaces on the street level within downtown zoning districts are properly designed to accommodate commercial uses, this proposal helps to ensure compatibility of existing land uses.
  - #15 Manitou Annexation Area Land Use – This proposal aligns the previously adopted proposed land use designations for the Manitou Annexation Area with the newly adopted land use destinations for residential districts City-wide as per Home in Tacoma Project Phase 1. This proposal continues to respect the existing land uses in the Manitou Area and maintain the land use compatibility with the adjacent South Tacoma Neighborhood area.

- **Enhance the quality of the neighborhood.**
  - #4 Homeowners' Association Owned Open Space & Other Tracts – This proposal helps ensure that open spaces are maintained and utilized in the neighborhood as they are intended for.
  - The three proposed code amendments associated with the Residential Pilot Infill Program, i.e., #11 Infill Pilot Program Handbook, #12 Special Use Standards, and #13 Two-family and Townhouse Dwelling, are intended to support the effective implementation of the pilot program, which in turn would help enhance the quality of the neighborhood.
  - #14 Sign Code Update – This proposal includes a clarification that one sign per candidate, issue, or event may be placed, and that the limit of one sign is not suspended during an election. This provision should help enhance the quality of the neighborhood.

b. An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;

- #1 Definition of Family – This proposal modifies the current definition of "family" in the land use code to be consistent with RCW 35.21 and 35A.21, which were amended in July 2021 per SB 5235. This proposal also carries out the Planning Director's Rule #03-2021 established in July 2021 in response to SB 5235.

- #2 Preliminary and Final Plats – This proposal modifies the current code language to be consistent with RCW 58.17.100 (Review of Preliminary Plats).
- #4 Homeowners' Association Owned Open Space & Other Tracts – This proposal removes "homeowners' association" as an option for owning open spaces and other tracts, and maintains consistency with RCW 58 (Boundaries and Plats) that does not require local jurisdictions to include ownership by homeowners' associations as an option and with Pierce County's code (Chapter 8.F30.030) that has no allowance for homeowners' associations.
- #14 Sign Code Update – The proposal brings code into compliance with current laws. Without this change, staff are barred from enforcing clutter created by temporary signs.
- #15 Manitou Annexation Area Land Use – This proposal aligns the proposed land use designations for the Manitou Annexation Area as established by Ordinance No. 28609, adopted by the City Council on September 24, 2019, with the "Low-Scale Residential" and "Mid-Scale Residential" Future Land Use Map designations through the Home In Tacoma Project Phase 1 that was adopted by the City Council on December 7, 2021, per Ordinance No. 28793.

c. An analysis of the amendment options identified in the assessment report;

An Assessment Report for this application was presented to the Planning Commission on May 19, 2021, and an additional Staff Report presented on July 21, 2021, after the Public Scoping Hearing on June 16, 2021. Both reports indicate that most of the proposed amendments are intended to address inconsistencies, correct errors, and/or provide clarification. The proposals are usually unequivocal and straightforward, requiring no alternative analysis. Some of the proposed amendments require certain level of analysis, in which cases the analysis was conducted based on the feedback and suggestions from internal customers (i.e., staff who use and interpret the Plan and the Code) and external customers (e.g., developers and permit applicants). The thought processes for all of the proposed amendments are documented in Exhibit "A".

d. An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

Since all proposed amendments are intended to address inconsistencies, correct errors, maintain compliance with State and local laws, respond to changing circumstances, and maintain or enhance compatibility with existing/planned land uses and the surrounding development pattern, their impacts are expected to be positive.

D. Public Outreach

Public outreach for the "Minor Plan and Code Amendments" application has been conducted as part of the Planning Commission's meetings when this application was on the agenda – on May 19, 2021 (reviewing scope of work), June 16, 2021 (Public Scoping Hearing), and July 21, 2021 (approval of scope of work). The first report of issues, analysis and proposed amendments for this application (i.e., the earlier version of Exhibit "A") was reviewed by the Commission on January 19 and February 16, 2022. The Commission's comments and suggestions have been incorporated into the current Exhibit "A" (attached). The Commission is scheduled to conduct a public hearing on the 2022 Amendment on April 6, 2022. Additional public outreach for all the applications for the 2022 Amendment will be conducted prior to and during the public hearing process.

E. Next Step

After the public hearing, staff will facilitate the Commission's review of public comments, decision making, and formulation of recommendations to the City Council, pursuant to TMC 13.02.070.H, as cited below:

H. Findings and recommendations.
   1. Upon completion of the public comment period and review of the public testimony, the Planning Commission will make a determination as to whether the proposed amendments are consistent with the following criteria:
      a. Whether the proposed amendment will benefit the City as a whole, will not adversely affect the City's public facilities and services, and bears a reasonable relationship to the public health, safety, and welfare; and
      b. Whether the proposed amendment conforms to applicable provisions of State statutes, case law, regional policies, and the Comprehensive Plan.
   2. The Commission will prepare a recommendation and supportive findings to forward to the City Council for consideration.

F. Exhibit

- Exhibit "A" – Minor Plan and Code Amendments – Issues and Proposed Amendments (March 2, 2022)

# # #

Minor Plan and Code Amendments – Issues and Proposed Amendments

March 2, 2022

No.	Issues and Assessments	Proposed Amendments
1.	**Definition of Family (Director Rule 03-2021)** • TMC 13.01.060.F Zoning Definitions Senate Bill 5235 (SB 5235), signed into law by the Governor, effective July 25, 2021, includes a key restriction on how local governments define and regulate residential unit occupancies. For the City of Tacoma, currently, "Family" is defined in TMC 13.01.060.F as follows: *"Family." One or more persons related either by blood, marriage, adoption, or guardianship, and including foster children and exchange students, or a group of not more than six unrelated persons, living together as a single nonprofit housekeeping unit; provided, however, any limitation on the number of residents resulting from this definition shall not be applied if it prohibits the City from making reasonable accommodations to disabled persons in order to afford such persons equal opportunity to use and enjoy a dwelling as required by the Fair Housing Amendments Act of 1988, 42 U.S.C. 3604(f)(3)(b).* Per the new State law, these types of broad zoning limitations on the number of unrelated individuals that can live in a dwelling unit are no longer allowed. Per the PDS Director's Rule 03-2021, effective July 25, 2021, the City will no longer use this definition to limit residential occupancy. This issue and potential permanent corrective code amendments should be included in the scope of work for the 2022 Amendment.	• **Replace the current definition of "Family" in the Land Use Code with the following:** "Family." One or more persons, related or unrelated, living together as a single household where all members have common access to and use of living, kitchen and other shared spaces. (Note: This definition change achieves basic consistency with the new state law. However, the state law, as well as policy adopted through Home In Tacoma Phase 1 call for a more holistic review of the use of the term "family" and of other standards that limit the number of people who can live in a dwelling unit. Also note that based on the Planning Commission's comments and suggestions on 01/19/22, including using the term "household" instead of "family", staff provided the following: Staff concurs that the proposed "family" definition is essentially the same as "household". However, while changing the "family" definition achieves consistency with the state law, it is an interim step. Because the term "family" is currently used widely in the TMC, staff recommends taking more time as part of the Home In Tacoma Phase 2 analysis before potentially replacing it.)

No.	Issues and Assessments	Proposed Amendments
2.	**Preliminary and Final Plats** • TMC 13.04 Platting and Subdivisions Based on the decision for the Morcos Preliminary Plat, our attorney has recommended that we take out language that states that an approved preliminary short or long plat is an assurance that the Final Plat will be approved. This language is not provided for in the RCW 58.17.100; rather it was added in by a previous PW's Director many years ago. Proposed amendments are needed to improve consistency with State law.	• **Amend TMC 13.04.090.F. as follows:** "After approval of a preliminary short plat application by the Director, the short plat shall be filed with the Pierce County Auditor for recording, and only after such filing shall the short plat be deemed approved and accepted by the City of Tacoma. ~~The approved short subdivision decision, however, shall be assurance to the subdivider that the short plat will be recorded~~ provided that:….." • **Amend TMC 13.04.100.D. as follows:** "Approval of the preliminary plat is a tentative approval and does not constitute final acceptance of the plat. Approval of the preliminary plat, however, ~~shall be assurance to the subdivider that the final plat~~ will be approved; provided, that:……"
3.	**Residential Landscaping Requirements** • TMC 13.06.09.J.5. Landscaping Buffers In the code prior to the reorganization, landscaping was exempt for single, two, and 3 family homes. In the old code, landscaping buffers were also in this section and therefore exempt. The re-organized code moved buffers into a new section that does not have the same exemption listed in the applicability. 1. Exemptions: a. Single, two and three-family and townhouse developments are exempt from all landscaping requirements, with the exceptions that street trees are required in X Districts, and in all districts.	• **Amend TMC 13.06.09.J.5. by adding an additional exemption that has the same effect that the antiquated code had, as follows:** 13.06.09.J.5. Landscaping Buffers c. Exceptions (7) Single-, two-, three-family and townhouse developments are exempt from all landscaping buffer requirements.

No.	Issues and Assessments	Proposed Amendments
4.	**Homeowners' Association Owned Open Space & Other Tracts** • TMC 13.04.090.H.20 & 100.F.20 Short Plat/Short Subdivision Procedures The code allows open space & other tracts to be owned by a homeowner's association, the property owners within the subdivision or dedicated to the public. The homeowner's association should be removed as an option. These often go defunct/bankrupt, taxes aren't paid & the tract reverts to Pierce County which auctions it off. This causes problems because the new owner usually wants to develop the open space or other tract. Our code should ensure that property taxes are paid on these tracts by requiring they are included as a proportional interest for each property owner in the plat. That way Pierce County assesses each property owner in the plat a portion of the tax for the tract along with the taxes for their individual homes. RCW 58 has no provisions that require local jurisdictions to include ownership by a Homeowners' association as an option. Pierce County's code (Chapter 8.F30.030) also has no allowance for Homeowners' Association.	• **Amend TMC 13.04.090.H.20 as follows:** 20. Common facilities and open spaces shall be located on separate, individual tracts, unless otherwise approved by the Director, and shall be dedicated, reserved or otherwise held in common ~~by a homeowners' association or~~ by a proportional ownership interest shared among all of the property owners within the short subdivision, or alternatively, and only if acceptable to the receiving public agency, dedicated to the public • **Amend TMC 13.04.100.F.20 as follows:** 20. Common facilities and open spaces shall be located in separate, individual tracts unless otherwise approved by the Hearing Examiner, and shall be dedicated, reserved or otherwise held in common ~~by a homeowners' association or~~ by a proportional ownership interest shared among all of the property owners within the subdivision, or alternatively, and only if acceptable to the receiving public agency, dedicated to the public.
5.	**Reference to Definition Section** • TMC 13.06.080.A.5.c Special Use Standards Suggest adding "(See definition "Building, height of.")" to the reference to TMC 13.01.060, so that code readers know where to look in the definitions section that is cited.	• **Amend TMC 13.06.080.A.5.c as follows:** (2) Height shall be limited to the most restrictive of the following: • The maximum height for detached ADUs shall be 18 feet, measured per the Building Code, or up to 20 feet with incorporation of either parking below or above the DADU structure (not next to), or with certification of the DADU under Built Green criteria with 4 stars, or equivalent environmental certification. • The conversion of an existing accessory structure taller than 18 feet may be authorized through issuance of a Conditional Use Permit. • In View Sensitive Districts, the maximum height shall be 15 feet, measured per TMC 13.01.060. (Refer to the definition for "Building, height of"), and allowance of additional height is subject to TMC 13.05.010.B Variances.

No.	Issues and Assessments	Proposed Amendments
6.	**Cultural Institutions and Public Benefit Use** • TMC 13.01.060.C and .P Zoning Definitions Suggest clarifying the definition of "Cultural Institutions" to indicate that such uses are not limited to museums, as the current language might suggest. Also, this definition is listed twice in the section, where the 2nd occurrence should be deleted. The "art gallery or museum" currently included in the definition of "Public Benefit Use" should be replaced with "cultural institutions." It is also suggested that the "community meeting rooms" option be deleted from the definition of "Public Benefit Use." We have found applicants are inclined to use this as a sort of "loophole", to basically circumvent having to do any actual commercial space option on the ground floor where required. With this change, they will be designing to commercial standards regardless in the downtown areas. Also, "Public benefit use" should be added as a use category to these use charts of TMC 13.06.030, TMC 13.06.040, and TMC 13.06.060. Indicate which districts allow, prohibit, and required conditional use permits for this use in these districts.	• **Amend TMC 13.01.060.C as follows:** "Cultural institutions." Institutions displaying or preserving objects of interest in one or more of the arts or sciences~~. This classification includes museums.~~, such as a museum, or cultural center, operated by a non-profit organization, offering services to the community. ~~"Cultural institutions." Institutions displaying or preserving objects of interest in one or more of the arts or sciences. This classification includes museums.~~ • **Amend TMC 13.01.060.P as follows:** "Public benefit use." ~~As used in Section 13.06.050 – Downtown, public~~ Public benefit uses shall include any of the following uses: 1. Day care available to the general public 2. Human services, such as employment counseling and walk-in clinics 3. Recreation, such as health clubs 4. Community meeting rooms 5. ~~Art gallery or museum~~ Cultural institutions 6. Drop-in centers for youth or seniors • **Amend use charts of TMC 13.06.030, 13.06.040, and 13.06.060 as follows:** Add "Public benefit use" as a use category to these use charts and indicate which districts allow, prohibit, and required conditional use permits for this use in these districts. (Note that based on the Planning Commission's suggestions on 01/19/22 and 03/02/22, the "community meeting room" would not be deleted and consideration should be given to adding "faith-based organizations", or equivalent, to the list of public benefit uses.)
7.	**Efficiency Unit Parking Exemption** • TMC 13.06.090.C.3.i. Required off-street parking for Downtown Districts Suggest cleaning up and clarifying the language in the off-street parking exemption for group housing, student housing and efficiency units in Downtown Districts. The current provision pertaining to bicycle parking spaces can be removed, because all units are already required to provide more bike parking spaces than what is called out here regardless. The "(whichever is greater)" is vague language and should be clarified.	• **Amend 13.06.090.C.3.i. as follows:** (f) Group housing; student housing; and, efficiency multi-family dwellings (250-450 sf in size) are exempt from vehicular parking requirements (with the exception of required accessible parking), provided the following: ~~• A minimum of 0.75 bicycle spaces per dwelling or unit are provided in an indoor, locked location.~~ • Within a single building, no more than 20 dwelling units~~, or 50% of the total dwelling units (whichever is greater),~~ may utilize this bonus. For buildings that are greater than 40 dwelling units, 50% of the total dwelling units may utilize this bonus.

No.	Issues and Assessments	Proposed Amendments
8.	**Single-family detached dwellings – Small Lots (Level 2)** • TMC 13.06.020.F.1.k Residential District Development Standards (row "k" of the table) Several clarification type of amendments to row "k" of the table of Residential District Development Standards are suggested, as follows: 1. The placement of the "Additional exceptions to Minimum Lot Requirements" under the title line of the row "Single-family detached dwellings – Small Lots (Level 2)" causes confusion with customers. The additional exceptions are only applicable to single-family detached dwelling lots, not to all uses in the R district. Since the lead paragraph (the first paragraph in the right section) already explains that these exceptions can be applied for the Level 2 small lot minimum size, removing this placement under the title line should help eliminate the confusion. 2. The wording of the lead paragraph, however, often leads customers to think all they need is a variance to get a smaller Level 2 lot. The latest example is a 7,440 sf lot that wanted to subdivide into a 3,000 sf and 4,440 sf lot through a variance. 3. The Planned Residential District phrase isn't necessary because it's set out separately later in the section (020.F.1.m). 4. The language about design standards is extraneous because these are by definition Level 2 lots and subject to all standards. 5. The pipestem exception is listed above in 020.F.1.j and also in the section about small lots (13.06.020.J) and not needed here.	• **Amend TMC 13.06.020.F.1.k as follows:** k. Single-family detached dwellings – Small Lots (Level 2): / ~~Additional exceptions to Minimum Lot Area Requirements~~ One of the following exceptions may be applied per parcel to ~~allow for reductions in minimum lot area below the Single-family Level 1~~ achieve Level 2 Small Lot ~~minimum size~~ without a variance, to the following minimum lot sizes ~~Except in the case of a Planned Residential District~~ ~~without grant of a variance~~: R-1: 4,500 sq. ft.; R-2, R-2SRD, HMR-SRD: 3,000 sq. ft.; R-3 and above: 2,500 sq. ft. Lot Size Averaging – Infill: To provide for consistency with pre-existing development patterns, the average size of lots along the street frontage and block (excluding the site) may be substituted for the zoning district minimum lot size. Lot Size Averaging – Subdivisions: Within proposed Short and Full Plats, lots are permitted to a minimum size of 4,500 square feet in the R-1 District and 3,000 square feet in the R-2, R2-SRD and HMR-SRD Districts, provided that the overall average lot size within the Short or Full Plat meets the Small Lots minimum lot size of the zoning district. Critical areas and buffers may not be counted toward lot size averaging. Alley lot area credit: In R-1, R-2, and R2-SRD and HMR-SRD Districts, half of the width of abutting alleys which are utilized for vehicular access to the lot may be counted toward the required minimum lot area, up to an additional reduction equivalent to 10 percent of the Standard Minimum Lot Size. ~~Level 2 Small Lots must meet the Level 2 Small Lot Design Standards of Section 13.06.100.F.~~ ~~Small lot exceptions are not applicable to pipestem lots.~~

<table>
<tr><th>No.</th><th>Issues and Assessments</th><th>Proposed Amendments</th></tr>
<tr><td>9.</td><td><u>Public Facility/Site and Public Safety/Services Facilities</u>

• TMC 13.01.060.P Zoning Definitions

Currently, there are definitions for “Public facility”, “Public facility site”, “Public safety facilities”, and “Public service facilities” included in this section. These definitions are somewhat repetitive, overlapping, and confusing. It is suggested that these be consolidated into two categories: “Public Facility Site” and “Public Service Facilities”, in order to improve the clarity and implementation effectiveness of the code.

“Public safety” and “public service facilities” are currently already bundled together in all use tables. This change will not affect allowed uses.

Along with the suggested consolidation of definitions, the land use charts of TMC 13.06.020.D.4, 13.06.030.D.4, 13.06.040.E.3, and 13.06.060.E.4 should be updated to remove “public safety” as separate use.</td><td>• Amend TMC 13.01.060.P as follows:

~~“Public facility.” Any facility funded in whole or part with public funds, which provides service to the general public, including, but not limited to, public schools, public libraries, community centers, public parks, government facilities, or similar uses.~~

~~“Public facility site.” An existing public or quasi-public site developed with an existing public or quasi-public facility, including, but not limited to, substations, water reservoirs, or standpipes; police or fire stations; sewer or refuse utility facilities; other governmental facilities, parks, or open space areas; hospitals; public or private schools; and churches.~~

<u>“Public facility site.” A public or quasi-public site developed with a facility that provides service to the general public, and is funded in whole or part with public funds. This definition may include, but is not limited to schools, public libraries, community centers, public parks, government facilities, substations, water reservoirs, or standpipes; police or fire stations; sewer or refuse utility. This general classification does not include other government facility sites that are more specifically defined and regulated, such as correctional and detention facilities, parks, schools, and utilities.</u>

~~“Public safety facilities.” Facilities for public safety and emergency services, including facilities that provide police and fire protection and ambulance services.~~

“Public service facilities.” Facilities owned, operated, or occupied by a government agency that provide a governmental service to the public, such as public libraries, courthouses, post offices, community centers, ~~and~~ government offices<u>, police and fire protection, and ambulance services</u>. This general classification does not include other government facilities that are more specifically defined and regulated, such as correctional and detention facilities, parks, schools, ~~public safety facilities,~~ and utilities.

• Amend land use charts of TMC 13.06.020.D.4, 13.06.030.D.4, 13.06.040.E.3, and 13.06.060.E.4 as follows:

Remove “public safety” as separate use. Example:

<table><tr><td>~~Public safety and~~ public service facilities</td><td>P</td><td>P</td><td>P</td><td>P</td><td></td></tr></table></td></tr>
</table>

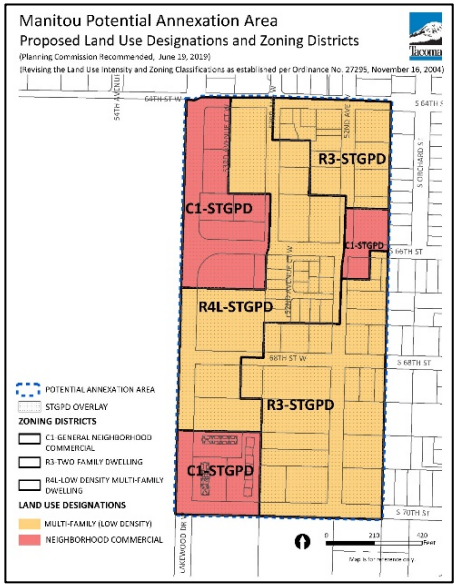
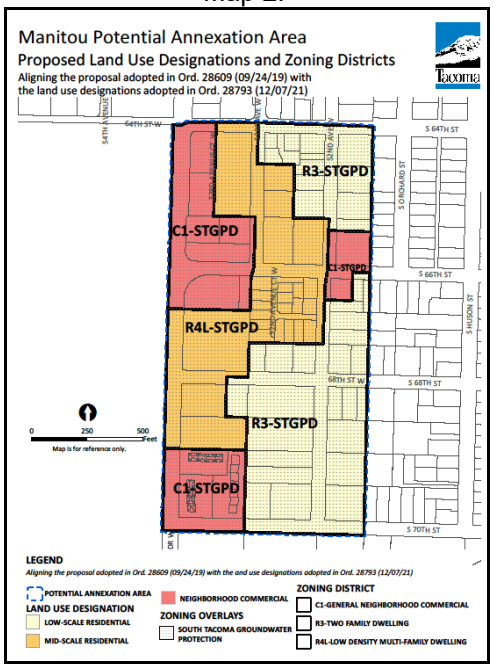
No.	Issues and Assessments	Proposed Amendments
10.	**Street Level Uses and Design** • TMC 13.06.100.D.3.b Downtown District Minimum Building Design Standards – Street Level Uses and Design – Primary Pedestrian Streets In implementing the downtown design standards, currently we offer the option of having a store and not meeting the standards, which results in situations that are hard to monitor or enforce. If the idea is conversion/ability to use for commercial purposes, then we should have everything built that way. The proposal is to take use requirements out of the development standards – which is especially important with new tenants because nearly all of the time we don't know who tenants will be. Also, the current sentences pertaining to nonconforming are extremely confusing and should be removed. (In response to the Planning Commission's suggestion on 01/19/22 to ensure the intent of the code is maintained through the proposed amendments, staff provided the following: The proposed amendment would streamline the code by deferring to the more flexible of the two existing options, i.e., the build-to commercial standards option, allowing developers to just meet the design standards so that future commercial uses can be accommodated. The proposed lead-in statement would clarify the intent of the requirement, which is to support pedestrian-oriented/street-activating commercial uses.)	• **Amend TMC 13.06.100.D.3.b as follows:** b. Primary Pedestrian Streets. To support pedestrian-oriented/street-activating commercial uses such as retail, restaurants, cultural or entertainment uses, hotel lobbies, personal service uses, parcel and mail services, the customer service portion of banks, credit unions, savings and loan associations, or Public Benefit Uses, anyAny new building, the addition to any building, or any substantially altered building fronting on a Primary Pedestrian Street shall comply with either subparagraphs a. or b. the design requirements below: (1) At The floor area abutting at least 25 percent of the linear sidewalk level frontage shall incorporate these elements, along with any other required basic or additional design standards. consist of any of the following uses: retail; restaurants; cultural or entertainment uses, hotel lobbies; travel agencies; personal service uses; parcel and mail services; copy centers; check-cashing facilities; the customer service portion of banks, credit unions, and savings and loan associations; or Public Benefit Uses. Uses at the sidewalk level frontage lawfully in existence on January 10, 2000, the time of reclassification to the above districts, shall be considered legal nonconforming uses and may continue, although such uses do not conform to this standard. (2) The floor area abutting at least 25 percent of the linear sidewalk level frontage shall be designed and constructed to accommodate future conversion to the uses listed in subparagraph a. above, and may be occupied by any use allowed in the zoning district. The area designed and constructed to accommodate future conversion shall meet the following standards, in addition to any other required basic or additional design standards. (a) The distance from the finished floor to the finished ceiling above shall be at least 12 feet. (b) The area must have a minimum average depth of 25 feet measured from the sidewalk level façade. (c) The sidewalk level façade must include a pedestrian entrance or entrances to accommodate a single or multiple tenants or be structurally designed so entrances can be added when converted to the building uses listed in subparagraph a. above. (d) At least 25 percent of the sidewalk level façade of the portion of the building designed and constructed to accommodate future conversion to listed uses shall provide transparency through the use of windows and doors for the area located between 2 feet above grade and 12 feet above grade.

No.	Issues and Assessments	Proposed Amendments
11.	**Infill Pilot Program Handbook** • TMC 13.05.060 Residential Infill Pilot Program Add a reference in the code to the Infill Pilot Program Handbook and clarify how the handbook is to be used to guide implementation of the program.	• **Amend TMC 13.05.060.F by adding a subsection "g", as follows:** F. Review process. The Director will convene a special advisory review body which shall function in an advisory capacity to provide input prior to the Director or Hearing Examiner's decision and conditions of approval. *** 3. The special advisory review body will assess the consistency of the proposal with the following criteria. All proposals submitted under the provisions of this section must demonstrate the following: *** g. Consistency with Residential Infill Pilot Program Handbook. The proposed development must demonstrate consistency with the housing type-specific standards and Design Elements contained within the latest version of the Residential Infill Pilot Program Handbook. • **Amend TMC 13.05.060 by adding a subsection "G", as follows:** G. Residential Infill Pilot Program Handbook. The Director shall prepare, and update as appropriate, an Infill Pilot Program Handbook to illustrate the design intent, clarify and explain the standards for each housing type, clarify the permit process, and provide additional information of use to program applicants and the special advisory review body.

No.	Issues and Assessments	Proposed Amendments
12.	**Special Use Standards** • TMC 13.06.080 Special Use Standards To facilitate an effective implementation of the Infill Pilot Program, this section of Special Use Standards should be modified to add zoning district exception for accuracy per TMC 13.05.010.A.7.c (pertaining to conditional use permits for infill pilot program), fix grammatical error, and revise minimum lot size for consistency with 13.05.010.A.7.c(1).	• **Amend TMC 13.06.080 as follows:** 13.06.080 Special Use Standards C. Cottage Housing 1. Applicability. Cottage housing developments may be proposed in all residential districts except HMR-SRD. 3. Procedures. b. Application. Proponents shall submit all required complete applications, including applicable fees. However, project proponents may choose to stage their applications by initially applying for the Conditional Use Permit ~~and~~ for approval under the Residential Infill Pilot Program. 4. Use standards. b. Minimum site size. Cottage housing developments require a minimum net site size of 7,000 ~~10,000~~ square feet.
13.	**Two-family and Townhouse Dwelling** • TMC 13.05.010.A.7 Infill Pilot Program Conditional Use Permit • TMC 13.05.060.C.1 Infill Pilot Program Applicability Current text is a little vague in describing townhouses and the required site size. Clarifications are needed to improve the clarity and implementation effectiveness of the code.	• **Amend TMC 13.05.010.A.7 as follows:** a. Two-family housing development may be allowed by conditional use permit in R-2 Districts. In addition to the General Criteria, a conditional use permit for a two-family dwelling or two townhouse dwelling units in R-2 Districts shall only be approved upon a finding that such use is consistent with all of the following criteria: (1) The proposed ~~lot~~ development site is a minimum lot size of 6,000 square feet in size. • **Amend TMC 13.05.060.C.1 as follows:** C. Applicability The provisions of this section apply to the following categories of residential infill: 1. Two-family dwelling or two townhouse dwelling units ~~development~~ within the R-2 District;

14.	**Sign Code Update** • TMC 13.01.060.S Zoning Definitions • TMC 13.06.090.I.3.b Sign Standards – General Sign Regulations – Exempt Signs • TMC 13.06.090.I.3.k Sign Standards – General Sign Regulations – Temporary Signs Signs regulated based on content have been found to be illegal and unenforceable. We have two types of signs that are clearly regulated based on content – political signs and real estate signs. These proposed changes "fix" the temporary sign sections in such a way to bring into compliance with current laws. In making changes, staff have researched legal cases and benchmarked jurisdictions that have undergone similar exercises. For the last 18 months, the City has informally been administering the sign code as proposed here-in. Without this change, staff are barred from enforcing clutter created by temporary signs. This effort includes a code change to TMC Title 2 related to Political Signs. It is noted that based on the Planning Commission's suggestions on 01/19/22, the proposed amendments would remove the reference to "candidates" (to stay content neutral), allow up to two signs per issue or event, and require permission from the property owner for signs placed on the property or the adjacent right-of-way (see amendments to TMC 13.06.090.I.3.k.(1)).	• **Amend 13.01.060.S as follows:** ~~"Sign, off-premises open house or directional sign." A sign advertising a transaction involving:~~ ~~1. A product sold in a residential zone;~~ ~~2. A product that cannot be moved without a permit; and/or~~ ~~3. A product with a size of at least 3,200 cubic feet.~~ ~~"Sign, real estate." Any sign which is only used for advertising the sale or lease of ground upon which it is located or of a building located on the same parcel of ground.~~ "Sign, temporary." A~~n on-premises~~ sign, banner, balloon, feather sign, pennant, valance, A-board, or advertising display constructed of cloth, canvas, fabric, paper, cardboard, plywood, wood, wallboard, plastic, sheet metal, or other similar light material, with or without a frame, which is not permanently affixed to any sign structure and which is intended to be displayed for a limited time only. • **Amend TMC 13.06.090.I.3.b as follows:** ~~(13) Political signs, as set forth in Title 2.~~ ~~(14) Real estate signs, 12 square feet or less, located on the site. Condominiums or apartment complexes shall be permitted one real estate sign with up to 12 square feet per street frontage. Such sign(s) may be used as a directory sign that advertises more than one unit in the complex.~~ (15) ~~Off-premises open house or directional signs~~ Temporary on-premise or off-premise signs, subject to the ~~following~~ regulations in TMC 13.06.090.I.3.k ~~(a) The signs may be placed on private property or on the right-of-way adjacent to said private property, with the permission of the abutting property owner. The signs shall be displayed in such a manner as to not constitute a traffic hazard or impair or impede pedestrians, bicycles, or disabled persons. If either condition is not met, the abutting property owner or the City may remove the sign.~~ ~~(b) Signs shall not be fastened to any utility pole, street light, traffic control device, public structure, fence, tree, shrub, or regulatory municipal sign.~~ ~~(c) A maximum of three off-premises open house or directional signs will be permitted per single-family home. One additional open house or directional sign identifying the open house shall be permitted at the house being sold.~~ ~~(d) Signage shall not exceed four square feet in area per side (eight square feet total) and three feet in height. Off-premises open house or directional signs shall not be decorated with balloons, ribbons, or other decorative devices.~~ ~~(e) Signage shall only be in place between the hours of 11:00 a.m. and 6:00 p.m., when the seller of the product, or the seller's agent, is physically present at the location of the product.~~

No.	Issues and Assessments	Proposed Amendments
		• **Amend TMC 13.060.090.I.3.k as follows:** Special regulations governing temporary signs are as follows: (1) Unless otherwise regulated in TMC 13.06.090.4, a property owner, or another party with approval of the property owner, may place ~~the one~~ up to two signs per issue or event ~~may be placed~~ on private property or on the right-of-way adjacent to said private property~~, with the permission of the abutting property owner~~. The sign~~s~~ shall be displayed in such a manner as to not constitute a traffic hazard or impair or impede pedestrians, bicycles, or disabled persons. If either condition is not met, the abutting property owner or the City may remove the sign. ~~During an election, the limit of one sign is suspended.~~ (2) Signs shall not be fastened to any utility pole, street light, traffic control device, public structure, fence, tree, shrub, or regulatory municipal sign. ~~(3) All temporary signs must be authorized by the public or private property owner.~~ (4~~2~~3) All temporary signs shall be securely fastened and positioned in place so as not to constitute a hazard to pedestrians or motorists. (~~6~~4) All temporary signs shall meet vehicular sight distance requirements established by the Traffic Engineer. (5) No temporary sign shall project over or into a public right-of-way or property except properly authorized banners over streets (see Title 9). (6) Temporary signs are prohibited in a medium, traffic circle, or the roadway itself. (~~2~~7) No flashing temporary signs of any type shall be permitted. (8) Unless otherwise regulated in TMC 13.06.090.4, signage shall not exceed 4 square feet in area per side (eight square feet total) and three feet in height. (~~1~~9)The duration of display of a temporary sign shall not exceed six months in any 12-month period~~, unless otherwise noted~~ OR the temporary sign must be removed within 14 days of the event for which it is intended, whichever is less. ~~(7) The regulations governing the size, number, and type of temporary signs are located in Section 13.06.090.I.4.~~ (10) See TMC 13.06.090.I.3.c for additional prohibitions related to temporary signs.

No.	Issues and Assessments	Proposed Amendments
15.	**Manitou Annexation Area Land Use** • Future Land Use Map and other relevant maps and text in the Comprehensive Plan The City Council adopted Ordinance No. 28609 on September 24, 2019, setting forth the Proposed Land Use Designations and Zoning Districts for the Manitou Potential Annexation Area ("Proposed Manitou Land Use") to be effective upon the area's annexation to the City. The land use designations for residential areas in the City have recently been replaced with the "Low-Scale Residential" and "Mid-Scale Residential" Future Land Use Map (FLUM) designations through the Home In Tacoma Project – Phase 1 that was adopted by the City Council on December 7, 2021, per Ordinance No. 28793. There is a need to update the residential land use designation portion of the Proposed Manitou Land Use in accordance with the new FLUM designations. The proposed update (shown in the next column) would integrate the new FLUM designations, and continue to adhere to the intent of Ordinance No. 28609 by respecting the existing land uses in the Manitou area. It is appropriate for such update to be considered a minor amendment to the Comprehensive Plan, based on the legal advice from the City Attorney's Office. Background information about the Manitou Annexation and the Home In Tacoma projects can be viewed at, respectively, www.cityoftacoma.org/Manitou and www.cityoftacoma.org/homeintacoma.	• Replace the "Multifamily (Low Density)" Future Land Use Map (FLUM) designation included in Ordinance 28609 with the "Mid-Scale Residential" designation for those areas with a predominance of existing multi-family and mobile home uses (which are also intended for R4L zoning), and with the "Low-Scale Residential" designation for areas with a predominance of existing single-family uses (intended for R-3 zoning). This distinction reflects the Council's intent in designating different zoning districts along with the FLUM designations. • No change is recommended to the "Neighborhood Commercial" designation, which would apply to the areas with existing commercial parcels, or to the South Tacoma Groundwater Protection Overlay District. • To reflect the changes, Map 1 (which was adopted in Ordinance No. 28609) would be replaced with Map 2, as follows: Map 1.  Map 2. 

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Section III

Environmental Checklist and Determination of Environmental Nonsignificance

City of Tacoma

Preliminary Determination of Environmental Nonsignificance

2022 Annual Amendment to the One Tacoma Comprehensive Plan and Land Use Regulatory Code

SEPA File Number: LU22-0041

TO: All Departments and Agencies with Jurisdiction

SUBJECT: Preliminary Determination of Environmental Nonsignificance

In accordance with WAC 197-11-340, a copy of the Preliminary Determination of Environmental Nonsignificance for the project described below is transmitted:

Applicant: City of Tacoma
Planning and Development Services Department
747 Market Street, Room 345
Tacoma, WA 98402

Proposal:
2022 Annual Amendment to the One Tacoma Comprehensive Plan and the Land Use Regulatory Code (2022 Amendment), which includes the following four applications (or subjects):

(1) NewCold Land Use Designation Change
(2) South Sound Christian Schools Land Use Designation Change
(3) Work Plan for South Tacoma Groundwater Protection District Code Amendments
(4) Minor Plan and Code Amendments

The complete text of the proposed amendments and the associated staff analysis reports are available for review on the website at www.cityoftacoma.org/2022Amendment. No hard copies are available for review at the office due to the COVID-19 pandemic.

Location: City of Tacoma

Lead Agency: City of Tacoma

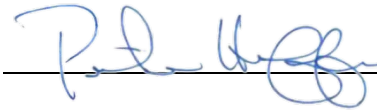
City Contact: Lihuang Wung
Planning and Development Services Department
747 Market Street, Room 345
Tacoma, WA 98402
(253) 591-5682 or lwung@cityoftacoma.org

The lead agency for this proposal has made a preliminary determination that this project does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2) (c). This decision was made after review of an environmental checklist and other information on file with the lead agency. This information is available to the public upon request. This Preliminary Determination of Nonsignificance (DNS) is issued under WAC 197-11-340(2). **Comments must be submitted by 5:00 p.m. on April 8, 2022**. The Responsible Official will reconsider the DNS based on timely comments and may retain, modify, or, if significant adverse impacts are likely, withdraw the DNS. **Unless modified by the City, this determination will become final on**

April 15, 2022. There is no administrative appeal for this determination. Appeals must be filed in conjunction with appeals of the adopted amendments to the Growth Management Hearings Board; appeals shall be taken in accordance with procedures and limitations set forth in RCW 43.21C.075 and WAC 242-02. In addition to Growth Management Hearings Board requirements, a copy of the appeal shall be filed with the Planning and Development Services Department, 747 Market Street, Room 345, Tacoma, Washington 98402.

The Puyallup Tribe is notified that this initiates the consultation process.

Responsible Official: Peter Huffman
Position/Title: Director, Planning and Development Services Department

Signature:  (Peter Huffman)

SEPA Officer Signature:  (Shirley Schultz)

Issue Date: March 15, 2022
Comment Deadline: April 8, 2022, 5:00 p.m.

NOTE: The issuance of this Preliminary DNS does not constitute project approval. Future project applicants must comply with all other applicable requirements of the City of Tacoma and other agencies with jurisdiction prior to receiving development permits.

c: Puyallup Tribe of Indians, Planning and Land Use Department, 3009 E. Portland Ave., Tacoma, WA 98404 (U.S. mail only)
Puyallup Tribe of Indians, David Duenas, Building Official, David.Duenas@PuyallupTribe-nsn.gov
Puyallup Tribe of Indians, Brandon Reynon, Tribal Archeologist, Brandon.Reynon@PuyallupTribe-nsn.gov
Puyallup Tribe of Indians, Jeffrey Thomas, TFW Program Director, Jeffrey.Thomas@puyalluptribe-nsn.gov
Puyallup Tribe of Indians, Russ Ladley, Fisheries Program Director, Russ.Ladley@PuyallupTribe-nsn.gov
Puyallup Tribe of Indians, Andrew Strobel, Planning and Land Use Director, Andrew.Strobel@PuyallupTribe-nsn.gov
Puyallup Tribe of Indians, Jennifer Messenger, Land Use Planner, Jennifer.Messenger@PuyallupTribe-nsn.gov
Puyallup Tribe of Indians, Robert Barandon, Land Use Planner, Robert.B.Barandon@PuyallupTribe-nsn.gov
Puyallup Tribe of Indians, Carol Ann Hawks, Historic Preservation Director, CarolAnn.Hawks@PuyallupTribe-nsn.gov
Puyallup Tribe of Indians, Charlene Matheson, Special Project Planner, Charlene.Matheson@Puyalluptribe-nsn.gov
Puyallup Tribe of Indians, Char Naylor, Assistant Director Fisheries/Water Quality, Char.Naylor@puyalluptribe-nsn.gov
Puyallup Tribe of Indians, Lisa A. Anderson, Environmental Attorney, Lisa.Anderson@PuyallupTribe-nsn.gov
Tacoma Public School District 10, Robert Sawatzky, Planning & Construction Director, planning@tacoma.k12.wa.us
Tacoma Planning and Development Services Department, Shirley Schultz, Shirley.schultz@cityoftacoma.org
Tacoma Planning and Development Services Department, Reuben McKnight, reuben.mcknight@cityoftacoma.org
Tacoma Pierce County Health Department, SEPA Review Team, sepa@tpchd.org
Port of Tacoma, Jason Jordan, jjordan@portoftacoma.com
Metro Parks Tacoma, Matthew F. Keough, matthewke@tacomaparks.com
Metro Parks Tacoma, Joe Brady, joeb@tacomaparks.com
Pierce Transit, Bus Stop Program, Tina Vaslet, tvaslet@piercetransit.org
Puget Sound Clean Air Agency, Steve Van Slyke, stevev@pscleanair.org
Department of Ecology, separegister@ecy.wa.gov
Department of Natural Resources, SEPA Center, sepacenter@dnr.wa.gov
Department of Transportation, Olympia Region Development Services Team, OR-SEPA-REVIEW@wsdot.wa.gov

File: Planning and Development Services

SEPA ENVIRONMENTAL CHECKLIST

SEPA File Number: LU22-0041

A. BACKGROUND

1. Name of proposed project, if applicable:

2022 Annual Amendment to the One Tacoma Comprehensive Plan and the Land Use Regulatory Code (2022 Amendment), which includes the following four applications (or subjects):

(1) NewCold Land Use Designation Change
(2) South Sound Christian Schools Land Use Designation Change
(3) Work Plan for South Tacoma Groundwater Protection District Code Amendments
(4) Minor Plan and Code Amendments

2. Proponent/applicant:

City of Tacoma
Planning and Development Services Department
747 Market Street, Room 345
Tacoma, WA 98402-3701

3. Contact:

Lihuang Wung
Planning and Development Services Department
747 Market Street, Room 345
Tacoma, WA 98402-3701
Phone: (253) 591-5682
E-mail: lwung@cityoftacoma.org

4. Date checklist prepared:

March 11, 2022

5. Agency requesting checklist:

City of Tacoma, Planning and Development Services Department

6. Proposed timing or schedule (including phasing, if applicable):

Timeline	Activity
January-March 2021	Applications accepted (submittal deadline March 31, 2021)
May-July 2021	Assessment of applications by the Planning Commission (including a Public Scoping Hearing on June 16, 2021)
July 2021 – March 2022	Technical analysis of applications by the Planning Commission and planning staff, including community outreach and engagement
April 6, 2022	Planning Commission Public Hearing
April-May 2022	Planning Commission making recommendations to the City Council
May-June 2022	City Council review and adoption

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

The One Tacoma Comprehensive Plan and the Land Use Regulatory Code are amended on an annual basis consistent with the State Growth Management Act (GMA). The proposed changes to the text, maps and policies of the One Tacoma Plan will apply to future land use and development. Proposed changes to the Land Use Regulatory Code and the Official Zoning Map will provide the basis to evaluate and regulate future development proposals.

Concerning Subject #1, NewCold Land Use Designation Change (hereinafter referred to as NewCold), the proposed Heavy Industrial land use designation would allow the subject parcel, with appropriate site rezone, to accommodate future expansion of the adjacent existing cold storage facility (a heavy industrial use). Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

Concerning Subject #2, South Sound Christian Schools Land Use Designation Change (hereinafter referred to as Christian Schools), the proposed Mid-Scale Residential designation for the western 4 parcels would allow future multi-family development and the proposed General Commercial designation for the eastern 4 parcels would allow future commercial use. Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

Subject #3, Work Plan for South Tacoma Groundwater Protection District (STGPD) Code Amendments (hereinafter referred to as Work Plan), in itself is not connected with any future additions, expansions or further related activity. However, future implementation of the Work Plan, i.e., the code amendments endeavors prescribed therein, will have to coordinate with or factor in various development projects/activities and groundwater related enforcement/monitoring programs within the STGPD area.

Subject #4, Minor Plan and Code Amendments (hereinafter referred to as Minor Amendments), compiles 15 minor and non-policy amendments to the One Tacoma Comprehensive Plan and the Land Use Regulatory Code. One of the 15 amendments is connected with a future expansion activity. This amendment pertains to Manitou Annexation Area Land Use and would modify the future land use designations and zoning districts established for the Manitou Potential Annexation Area, to be effective upon the area's annexation to the City of Tacoma. The annexation, anticipated to occur in late 2022, is considered a future expansion activity.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

In addition to this checklist for the 2022 Amendment, some environmental analyses have been conducted for Subject #1 (NewCold) (including a traffic impact analysis and a noise and light study) and Subject #2 (Christian Schools) (including a traffic assessment, an east-west connection feasibility analysis, and a habitat assessment).

Similar SEPA analyses have also been prepared for all past annual amendments. Listed below are those for the last three years, with the rest on file and available for review upon request:

- 2020 Annual Amendment, SEPA #LU20-0179
- 2019 Annual Amendment, SEPA #LU19-0068
- 2018 Annual Amendment, SEPA #LU18-0068

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Of noteworthy is the Bridge BNSF Warehouse Project (Land Use Permit #LU21-0125) that is going through the permit review process. Bridge Industrial has proposed the development of an approximately 150 acre site with a multi-building development (about 2.5 million square feet of

buildings) and associated site work improvements, utility extensions, access roadway improvements and franchise utilities. The site (primary address at 5024 S. Madison) is located in the South Tacoma Manufacturing/Industrial Overlay District and the South Tacoma Groundwater Protection District.

10. List any government approvals or permits that will be needed for your proposal, if known.

The proposed amendments are subject to the following governmental approvals:

- Adoption by Tacoma City Council
- Verification of GMA compliance by Washington State Department of Commerce
- Plan Certification by Puget Sound Regional Council

Future development applications will be subject to the One Tacoma Plan, regulations, and zoning classifications and be approved through issuance of various permits and approvals as required.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site.

The 2022 Amendment includes four subjects, as described below. The complete text of the proposed amendments and the associated staff analysis reports are available for review on the website at www.cityoftacoma.org/2022Amendment.

Proposal (Subject)	Description (Scope of Work and Intent)
(1) NewCold Land Use Designation Change	NewCold, LLC requests for changing the Comprehensive Plan Land Use Designation for a 3-acre parcel from Light Industrial to Heavy Industrial. The parcel is located directly to the east of the existing 140-foot tall cold storage building sitting on approximately 34 acres. If granted, the Heavy Industrial designation would enable NewCold to apply for a rezone to an M-2 Heavy Industrial Zoning District to allow for future expansion of the existing facility.
(2) South Sound Christian Schools Land Use Designation Change	The South Sound Christian Schools and the CenterPoint Christian Fellowship request changing the Comprehensive Plan Land Use Designation for a 16-acre area consisting of 8 parcels. The proposal is to change the designation from Low-Scale Residential to: (a) Mid-Scale Residential for the western 4 parcels to allow for future sale and/or multi-family development, and (b) General Commercial for the eastern 4 parcels to allow for a future site rezoning application with the intention of developing the site with a general commercial use.
(3) Work Plan for STGPD Code Amendments	The Work Plan for STGPD Code Amendments, as one of the applications (or subjects) of the 2022 Amendment, is part of the first-phase response to the South Tacoma Economic Green Zone application submitted by the South Tacoma Neighborhood Council. The original application seeks to (1) improve current regulations and standards applicable to the STGPD and the aquifer recharge areas, so they are more effective in addressing environmental and health risks; and (2) transform the South Tacoma Manufacturing/Industrial Center into an Economic Green Zone that fosters environmentally sustainable industry specifically within South Tacoma. Due to its complexity, the original application will be addressed with a two-phased approach, i.e., (1) STGPD Code Amendments, and (2) Economic Green Zone Designation. This Work Plan for STGPD Code Amendments provides an outline for how the first phase is to be carried out.

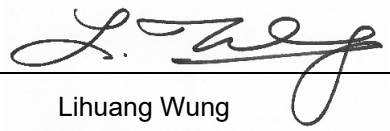
Proposal (Subject)	Description (Scope of Work and Intent)
(4) Minor Plan and Code Amendments	Proposed by the Planning and Development Services Department, this application compiles 15 minor and non-policy amendments to the One Tacoma Comprehensive Plan and the Land Use Regulatory Code, intended to update information, correct errors, address inconsistencies, improve clarity, and enhance applicability of the plan and the code.

12. Location of the Proposal: (Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any. If a proposal would occur over a range of area, provide the range or boundaries of the site(s).)

Proposal (Subject)	Location of the Proposal (Area of Applicability)
(1) NewCold Land Use Designation Change	4601 S. Orchard Street
(2) South Sound Christian Schools Land Use Designation Change	Tacoma Mall Boulevard and S. 64th Street
(3) Work Plan for South Tacoma Groundwater Protection District Code Amendments	South Tacoma Groundwater Protection District
(4) Minor Plan and Code Amendments	Citywide

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Name of signee: Lihuang Wung

Position and Agency/Organization: Senior Planner, City of Tacoma

Date Submitted: Mach 11, 2022

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent the proposal or the types of activities likely to result from the proposal that would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

All subjects of the 2022 Amendment are non-project actions and as such would not directly impact water and air quality, release hazardous substances, or produce noise.

Concerning Subject #1 (NewCold), the proposal could further facilitate the possible development of the subject site with the expansion of an industrial cold storage facility. If the site were to be developed with such a complex, vehicular traffic to and from the site could increase and there could be an increase in impervious service on the site. These could result in an increase in discharge to water and an increase in vehicle emissions to air. There is also potentially increase production of noise, however preliminary studies indicate that such impacts would be within allowable limitations and there are mitigations.

Development of an industrial cold storage facility at the site, or heavy industrial uses, could generate more vehicle trips to the site. Based on preliminary traffic studies conducted by a consultant, a net increase of approximately 386 vehicle trips per day to the site would likely be generated. (See Exhibit A)

A heavy industrial cold storage facility on the site would also potentially increase noise. The applicant, NewCold, LLC, engaged a consultant to evaluate potential noise impacts of such a project. That evaluation found that, preliminarily, there would be an increase in nose; however, noise levels would be within legal limits, compliant with all local, state and federal requirements. (See Exhibit B)

The potential for release of toxic or hazardous substance would be contingent upon proposed development, however, the applicant states that their intention is to expand the existing heavy cold storage facility. The storage, use, disposal of any hazardous material or toxic substance is subject to federal, state and local regulation and oversight. The current facility is at the time of this evaluation not known to be subject to any action or proceeding that would indicate that the facility is exceeding any law, rule or regulation relating to toxic or hazardous substances.

While not specifically required as part of this SEPA Checklist, the applicant, at the request of the Planning Commission, has engaged a consultant to conduct a preliminary lighting study. This study has found that light impact from the site could potentially increase; however, that with the use of best available LED, shielding and downward directed lighting that off sight impacts could be mitigated. (See Exhibit B)

As mentioned, there is not a specific development proposal at this time and such a proposal would almost certainly trigger further SEPA evaluation based on several possible SEPA thresholds and criteria. With a specific development proposal much more accurate estimates could be given of impacts and evaluated. SEPA will be required at the rezoning phase and at the development phase and the above-mentioned impacts, and any others that might be found given specifics of future applications, will be thoroughly evaluated as part of those future SEPA evaluations.

Concerning Subject #2 (Christian Schools), the proposal could lead to eventual development of 4 parcels with low scale multi-family development and a portion of the site with general commercial development. Subsequent rezoning approvals and development permits would be required, and SEPA evaluations would be required. There would be potentially a minor increase to

development density potential on these sites and therefore possible impacts to surrounding area in terms of increased traffic impact. At the request of the Planning Commission, the applicant conducted a preliminary traffic analysis. It was found that the existing street grid due to steep topography of the surrounding sites could not be viably extended and meet the City of Tacoma traffic design manual requirements. Also, it has been found that likely traffic increases would be on the order of 135-198 PM peak hour trips and that level of increase would not pose a significant impact to area roadways. An update to the traffic impact analysis will be performed as part of any subsequent rezoning action and future major development proposals. (See Exhibit C)

Proposed measures to avoid or reduce such increases are:

Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

Concerning Subject #1 (NewCold), as any future development project for the site undergo permitting evaluation, current development standards would be implemented through building and site development permits that would likewise mitigate the impacts of new impervious surfaces. These include the City's landscaping and tree canopy standards, design requirements, setback standards, as well as the implementation of updated stormwater standards in the City's Stormwater Management Manual. The site is also subject to all the requirements of the STGPD.

At the time of development, it is possible that other traffic mitigations would be imposed to enhance traffic safety and flow, and these could help reduce traffic impact and vehicle emissions, and even noise impacts. These will be a focus of SEPA at subsequent rezoning requests and again the time of an actual development proposal and permitting request.

Concerning Subject #2 (Christian Schools), after further evaluation at a subsequent rezoning request, which would also trigger further SEPA review, the subject sites would be required to undergo evaluation as part of permitting activities. The city has environmental codes, manuals and requirements, and development regulations that must be met to receive necessary permits to develop these sites. These include the City's landscaping and tree canopy standards, minimum parking reductions for projects located near transit facilities, yard space requirements and setback standards, as well as the implementation of updated stormwater standards in the City's Stormwater Management Manual. These sites are subject to the STGPD as well. Furthermore, the proposed rezones are generally located in areas that are already urbanized, with existing area roadway and sidewalk improvement, and are generally supported by transit and walkable urban amenities, reducing the footprint of new development and reducing dependence on single occupancy vehicles. In the long-term, it is anticipated that increased transit will be provided to the area.

Subject #3 (Work Plan) outlines the approach to amending the land use code pertaining to the STGPD. The intent of the code amendments is to increase the effectiveness of the enforcement/monitoring programs in addressing discharge to water, emissions to air, and production, storage or release of toxic or hazardous substances within the STGPD area.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

All subjects of the 2022 Amendment are non-project actions and as such would not directly impact plants, animals, fish, or marine life.

Concerning Subject #1 (NewCold), preliminarily, possible impact from light and sound have been identified and examined (see Exhibit B), however those impacts would likely be able to be mitigated. Outlining specific mitigations without a specific development proposal is not possible, but generally placement of lights, configuration, and placement of equipment, etc. may be required to help keep impacts to a minimum.

Concerning Subject #2 (Christian Schools), the Planning Commission also requested that the applicant conduct a preliminary environmental analysis of the site and that was completed. (See Exhibit D). The analysis found no presence of wetlands and did not make a finding that the site is a biodiversity corridor. However, the site has been found to contain Oregon White Oaks (Garry Oaks) which are protected under the City's Critical Area Ordinance (Tacoma Municipal Code 13.11). Guidance for their protection can be found in Washington State Department of Fish and Wildlife's "Management Recommendations for Washington's Priority Habitats – Oregon White Oak Woodlands". In addition, Garry Oak-Conifer habitat is a forest community habitat that provides contiguous aerial pathways for the state threatened western gray squirrel, and important roosting, nesting, and feeding habitat for birds and mammals found within the urban environment. It is also noted that conifers were included in the data sheets and additional information such as a tree survey is likely to be required to further assess habitat.

Priority Oregon White Oak (Quercus garryana) woodlands consist of stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is greater than or equal to 25%; or where total canopy coverage of the stand is greater than 25%, but oak accounts for at least 50% of the canopy coverage present. The latter is often referred to as an oak savanna. In urban or urbanizing areas, single oaks, or stands of oaks less than 1 acre may also be considered a priority when found to be particularly valuable to fish and wildlife (i.e., they contain many cavities, have a large diameter at breast height [dbh], are used by priority species, or have a large canopy).

A Critical Area Verification permit process will likely be required prior to any rezone process to determine the extent of protected areas on site. This will include verification of the non-wetland and no-Biodiversity Area/Corridor determinations in the report. At the time of any development proposal of the subject sites, further evaluation will also be required, and the sites are all subject to SEPA evaluation if trigger thresholds are exceeded.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

Regarding Subject #2 (Christian Schools), see above; critical area permitting will be required in advance of a rezoning application for the portions of the subject sites which have been shown to have critical area features.

3. How would the proposal be likely to deplete energy or natural resources?

All subjects of the 2022 Amendment are non-project actions and as such would not directly impact energy or natural resources.

Concerning Subject #1 (NewCold), the potential expansion to an existing heavy industrial cold storage facility would increase the use of power on the site. The applicant has high incentive to utilize the most efficient machinery and refrigeration technology as energy consumption is a key cost driver for their operation. Overall, the use is a critical link in supply chain, and an asset to the City of Tacoma's overall portfolio of industry and business, in that it allows food producers to place their product in storage near the Port of Tacoma and in an area that is proximate to the greater Puget Sound population center. Longer term, more efficient food preservation represents conservation of energy and resources as it encourages less food waste and thus helps build in efficiency to the food system.

Proposed measures to protect or conserve energy and natural resources are:

Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code as well as all Tacoma Power and utility requirements which encourage energy and resource conservation.

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

   All subjects of the 2022 Amendment are non-project actions and as such would not directly impact environmentally sensitive areas or areas designated for governmental protection.

   Concerning Subject #1 (NewCold), it is possible that more intense development of the subject site could have impacts on the designated open space site directly to the east, however, that site is the City of Tacoma landfill site and it does not presently contain any public open space, programed recreational space, or known critical area near the subject site. Further evaluation of possible impacts to that will be considered again at any subsequent rezoning action, and then likely at time of development as a large expansion of the existing heavy industrial cold storage facility. Such a proposal would be of a sufficient scale to trigger SEPA. That review will occur and if any changes have occurred on the City landfill site in the intervening time, then it will be considered under the subsequent evaluations. The site is also within the STGPD and subject to those additional requirements and regulations.

   Concerning Subject #2 (Christian Schools), no anticipated positive or negative impact is expected as a result of this proposal on 4 of the 8 subject parcels. On those parcels that are adjacent to or have been found to possibly contain/contain known critical area features, critical area permitting will be required in advance of a rezoning application for the portions of the subject sites which have been shown to have critical area features.

   Proposed measures to protect such resources or to avoid or reduce impacts are:

   Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

   All subjects of the 2022 Amendment are non-project actions and as such would not directly impact the compatibility of land or shoreline uses with the Comprehensive Plan.

   Proposed measures to avoid or reduce shoreline and land use impacts are:

   Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

   Relating to Subjects #1 (NewCold) and #2 (Christian Schools), future project-specific development proposals that may result in these impacts would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code, design manuals and regulations.

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

All subjects of the 2022 Amendment are non-project actions and as such would not directly impact the transportation system or public services and utilities.

Concerning Subject #1(NewCold), the applicant engaged a consultant who did preliminary traffic studies that indicated a net increase of approximately 382 vehicle trips per day to the site would likely be generated. This level of increase would be considered minor, however, added traffic mitigations may be necessary. This will continue to be evaluated at the subsequent rezoning request, and then again at the time of development.

There could be an increased impact to area utilities, sewer, power and water, however without a specific proposal, it is not possible to determine what level of impact that might be. Future project-specific development proposals that may result in these impacts would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

Concerning Subject #2 (Christian Schools), the applicant engaged a consultant who did preliminary traffic studies that indicated a net increase of approximately 135-198 vehicle trips per day to the site would likely be generated. This level of increase would be considered minor, however, added traffic mitigations may be necessary. This will continue to be evaluated at the subsequent rezoning request, and then again at the time of development.

Proposed measures to reduce or respond to such demand(s) are:

Impacts resulted from future project-specific development proposals would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code.

Concerning Subjects #1 (NewCold) and #2 (Christian Schools), without a specific proposal, measures and mitigations cannot be outlined. Future project-specific development proposals that may result in impacts would be reviewed, and properly mitigated, at the permitting level consistent with the applicable provisions of the Tacoma Municipal Code. Possible mitigations in the future may include specific requirements for equipment placement locations, traffic control additions including signals, installation of other traffic calming devices, additional tree canopy/landscape buffering, protection of known critical areas, etc. These will all be considered in greater detail under subsequent rezoning requests and then again at the time of request for developmental permits.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

No conflicts with local, state or federal laws for the protection of the environment are anticipated. The 2022 Amendment proposal package is also being reviewed for consistency with the State Growth Management Act, the Puget Sound Regional Council Vision 2050 and the Pierce County Countywide Planning Policies. If conflicts with local, state or federal laws for the protection of the environment are identified, they will be rectified prior to adoption.

Exhibits:

- Exhibit A: NewCold Preliminary Traffic Impact Analysis
- Exhibit B: NewCold Light/Noise Study
- Exhibit C: South Sound Christian Schools Preliminary Traffic Impact Analysis
- Exhibit D: South Sound Christian Schools Preliminary Environmental Analysis

Exhibit A

NEWCOLD TACOMA
TRAFFIC IMPACT ANALYSIS

City of Tacoma, WA

02/1/2022

Prepared for: Sarah Remington
NewCold Seattle, LLC
4601 S Orchard St
Tacoma, WA 98466

February 2022

NEWCOLD TACOMA
TRAFFIC IMPACT ANALYSIS

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NEWCOLD TACOMA
TRAFFIC IMPACT ANALYSIS

1. INTRODUCTION

The main goals of this study focus on the assessment of existing roadway conditions and forecasts of newly generated project traffic. The first task includes the review of general roadway information on the adjacent streets serving the subject site and gathering existing vehicular volumes within a defined study area. Forecasts of future traffic and dispersion patterns on the street system are then determined using established trip generation and distribution techniques. As a final step, appropriate conclusions and mitigation measures are defined, if needed.

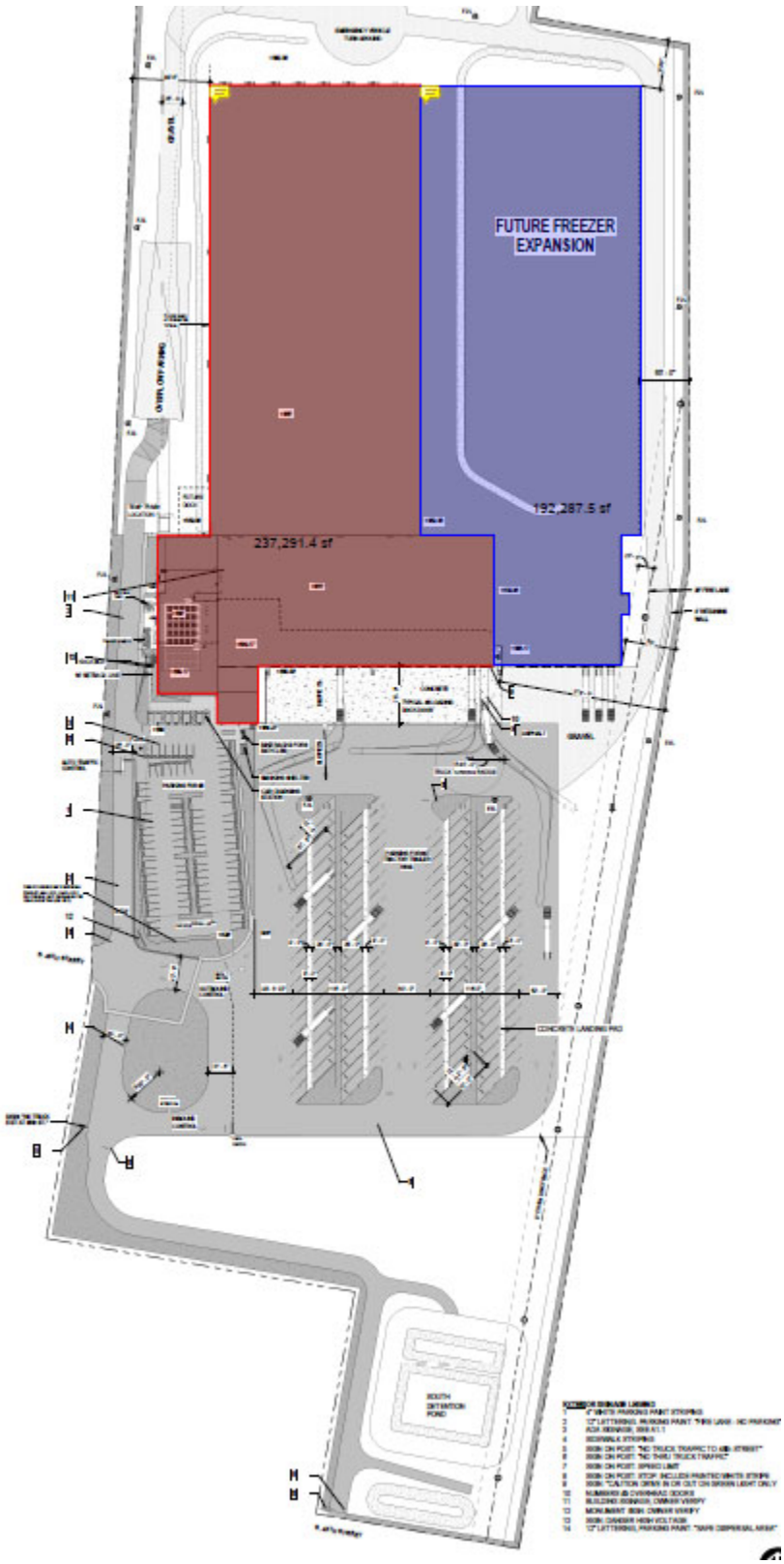
2. PROJECT DESCRIPTION

NewCold Tacoma proposes for a future expansion of an existing cold storage warehouse facility located in the city of Tacoma. The subject site is located within 33.79-acre tax parcel #: 0220133049 and is east of S Orchard Street and accessed primarily by way of S 46th Street. The existing building comprises approximately 237,291 square feet. An expansion, as predicated of a proposed rezone for the subject parcel from M1 to M2 could expand the building or construct a new building comprised of an estimated up to 200,000 square feet. This evaluation examines the existing activity occurring at the facility to derive future traffic estimates for a future project expansion. A vicinity map of the surrounding roadway network is provided below. Figure 2 illustrates a conceptual site plan with the area of expansion.

Figure 1: Vicinity Aerial

Figure 2: Conceptual Site Layout

Illustrated in red is the existing building footprint. In purple is the subject expansion area.



3. EXISTING CONDITIONS

3.1 Existing Street System

The street network serving the proposed project consists of a variety of roadways. The major roadways and arterials defined in the study area are listed and described below.

S Orchard Street: is a multi-lane, north-south, principal arterial west pf the subject site. Travel lanes are approximately 10-11 feet in width. The roadway cross-section consists of two travel lanes in either direction and a center two-way left-turn lane or left-turn lane. Sidewalk is generally provided along the east side of the roadway. The posted speed limit is 35-mph.

S 46th Street: is a two-way local roadway providing access to the subject property. As part of the NewCold Phase 1 development, the roadway at its intersection with S Orchard Street was constructed to include separate left- and right-turn lanes. No non-motorist facilities are present.

3.2 Transit Service

A review of Pierce Transit's service system indicates that transit is readily provided in the vicinity of the subject site. The nearest bus stops in relation to the subject site are provided at the intersection of S Orchard Street & S 46th Street Route 53 (~640' east of the subject parcel), serving Route 53. Route 53 – University Place provides service from the TCC Transit Center to the Tacoma Mall Transit Center. Weekday service is provided from 5:50 AM – 10:45 PM with approximately 30-minute headways. Saturday service is provided from 9:25 AM – 6:00 PM with approximately 60-minute headways. Sunday service is provided from 8:16 AM – 6:37 PM with approximately 120-minute headways. Refer to Pierce Transit's Routes & Schedules for more details.

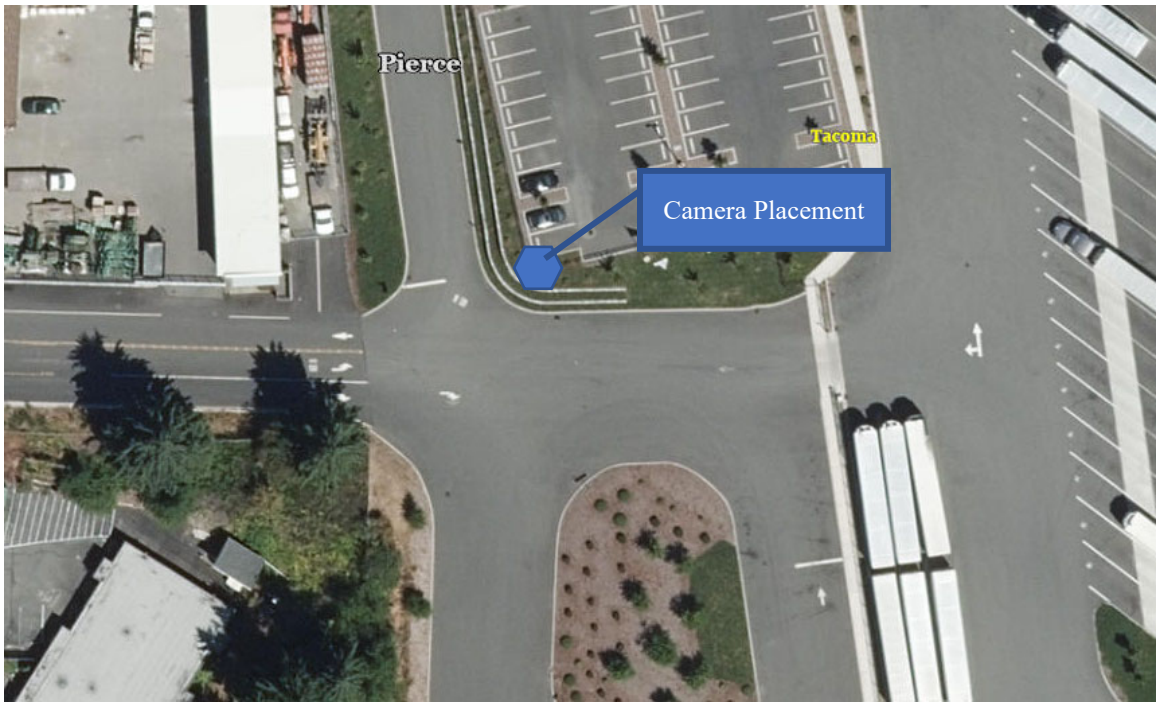
3.3 Roadway Improvements

A review of the City of Tacoma Six-Year (2022-2027) Transportation Improvement Program indicates no improvements are planned in the subject site's vicinity.

3.4 Existing Peak Hour Volumes and Travel Patterns

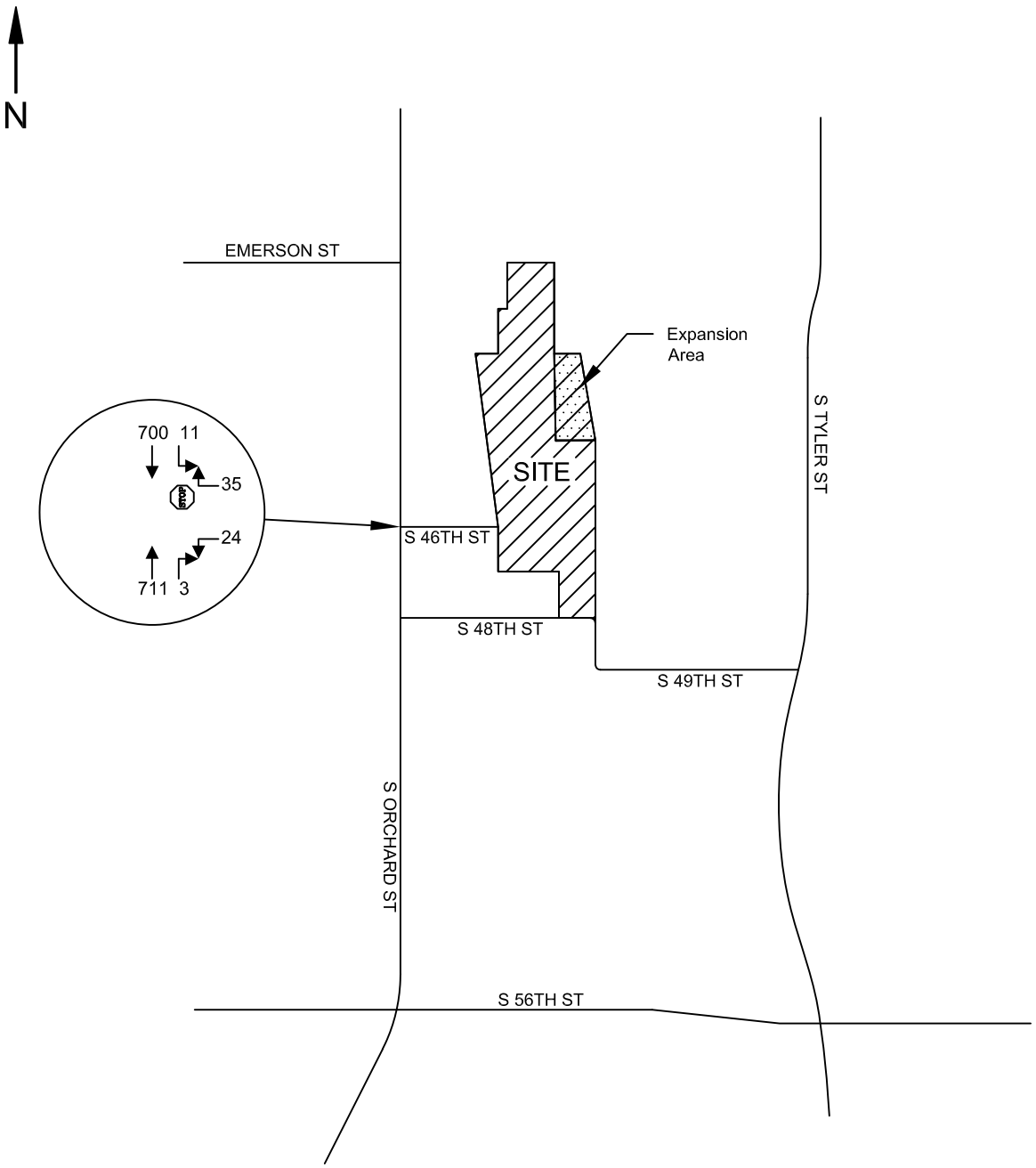
Field data for this study was obtained and collected in January of 2022. Traffic counts were performed at the study intersection of S Orchard Street & S 46th Street between the typical study period of 4:00-6:00 PM which generally represents peak conditions of the adjacent street. See Figure 3 on the following page for peak existing peak hour volumes.

In addition, a camera was placed at the location illustrated below so as to capture all arriving and departing traffic associated with NewCold operations. Counts were conducted over two 24-hour periods to obtain average daily trip and peak hour activity. Counts were administered on January 5th and 6th of 2022. More detailed data is provided in the following sections. Count sheets are provided in the appendix.



3.5 Non-Motorist Traffic

During field observations, only one bicycle was observed leaving/arriving on the site. Given the industrial nature of the development, most traffic is in the form of employees or trucks. No significant increase in non-motorist transport would be expected with a potential site expansion.



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NEWCOLD STORAGE

EXISTING PM PEAK HOUR VOLUMES
FIGURE 3

4. FORECAST TRAFFIC DEMAND AND ANALYSIS

4.1 Project Trip Generation

As previously mentioned, traffic counts were performed at the existing NewCold facility to observe existing travel patterns and demands. A trip rate could then be derived to apply against any future expansion for traffic volume estimates.

Data collection at the existing cold storage facility on-site analyzed by our firm was gathered via physical field counts and consisted of tracking each inbound/outbound movement. Cameras were deployed and captured peak period samples over two 24-hour weekdays. The peak period AM (7:00-9:00) midday (9:00 AM-4:00 PM) and PM (4:00-6:00) timeframes were then examined from each 24-hour count. From these peak timeframes, the one-hour reflecting the highest observed total inbound and outbound movements was then used for calculations and is considered the “peak hour.” Full-count sheets for each day and timeframe have been attached to the appendix for reference.

Table 1 below illustrates the calculated inbound and outbound trip generation rates for the average daily (ADT), AM, midday, and PM peak hours for either day. Rates are expressed in terms of vehicles per thousand square feet.

Table 1: Existing NewCold Storage Facility Trip Generation Rates

Size	Date	Vehicle Class	ADT	AM Peak Hour			Midday Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
237,291 Sq. Ft.	Wed. 1/5/2022	Passenger	233	9	3	12	11	5	16	2	8	10
		Truck	240	8	9	17	16	13	29	6	5	11
		Total	**473**	17	12	**29**	27	18	**45**	8	13	**21**
	Thurs. 1/6/2022	Passenger	229	13	1	14	10	13	23	4	12	16
		Truck	213	3	8	11	12	10	22	10	12	22
		Total	**442**	16	9	**25**	22	23	**45**	14	24	**38**
Average Trips			**458**	17	10	**27**	24	21	**45**	11	19	**30**
Average Trip Rate per 1,000 sq. ft.			**1.93**	**63%**	**37%**	**0.11**	**53%**	**47%**	**0.19**	**37%**	**63%**	**0.13**

The results indicate an average daily rate of 1.93 vehicle per 1,000 square feet, an AM peak hour rate of 0.11, midday peak hour rate of 0.19, and a PM peak hour rate of 0.13 trips per 1,000 square feet. These trip rates can then be applied to any future expansion of the similar type of use.

To further corroborate the observed trip rates, data were compared to the Institute of Transportation Engineer's *Trip Generation Manual,* 11th Edition. In review, the most comparable designation would be Land Use Code (LUC) of *157 – High-Cube Cold Storage.* See table below for trip rate comparison of the observed activity compared to ITE data.

Table 2: Trip Generation Rate Comparison

Building Size	ADT Trip Rate	AM Trip Rate	Midday Trip Rate	PM Trip Rate
NewCold	1.93	0.11	0.19	0.13
ITE	2.12	0.11	N/A	0.12

As shown in the table, NewCold trip rates are shown to have a strong correlation with respect to ITE data. The NewCold specific trip rates will be applied for trip forecasts as summarized in the below table.

Table 3: Project Trip Generation

Land Use	Size	ADT	AM Peak-Hour			Midday Peak-Hour			PM Peak-Hour		
			In (63%)	Out (37%)	Total	In (53%)	Out (47%)	Total	In (37%)	Out (63%)	Total
NewCold	~200,000 sq. ft.	**386**	14	8	**22**	20	18	**38**	10	16	**26**

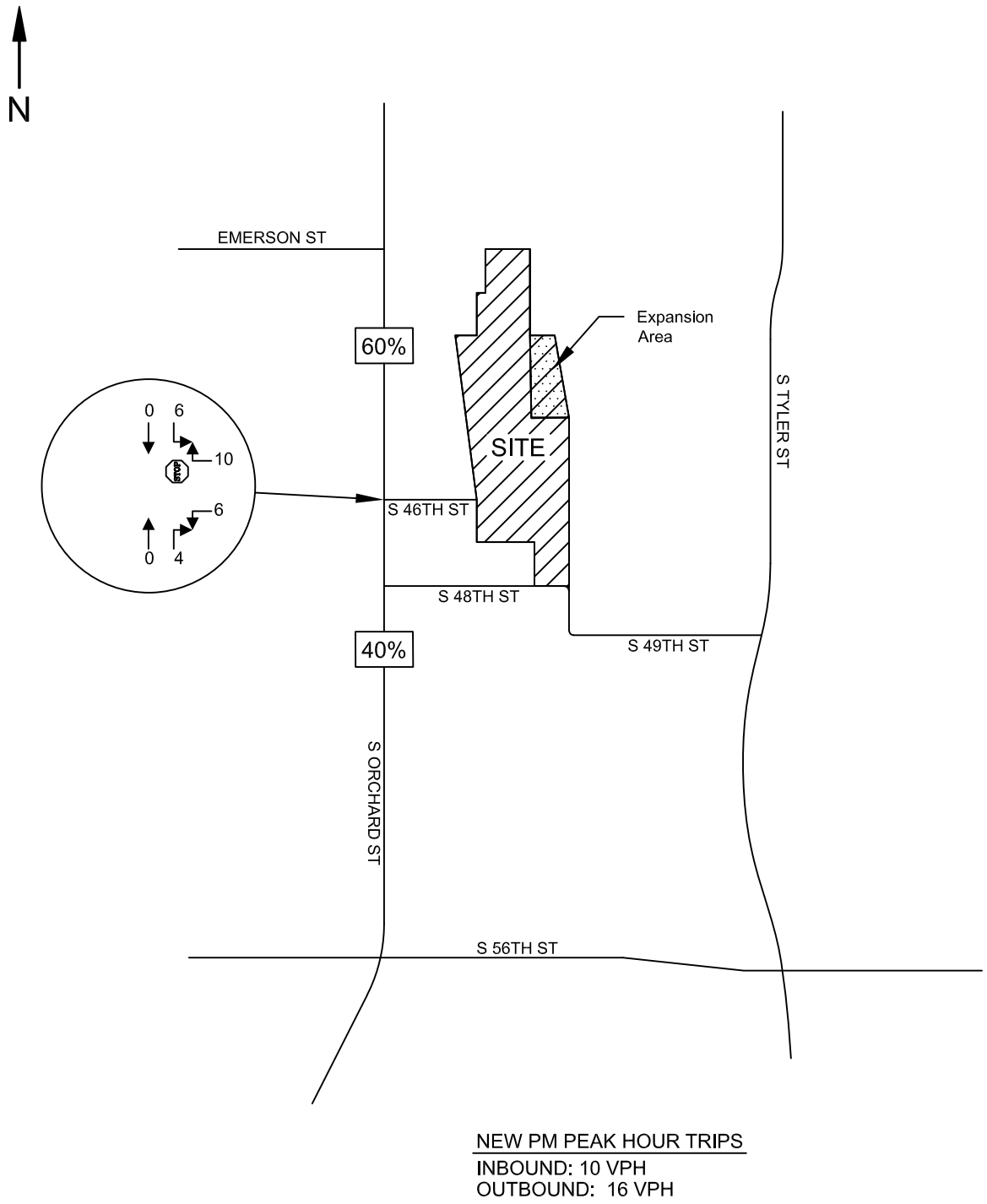
Based on the derived trip generation rates, the proposed expansion of up to 200,000 square feet of the existing use can be expected to generate 386 new average daily trips, 22 new AM peak hour trips, 38 midday peak hour trips, and 26 new PM peak hour trips. Approximately half of the traffic could be in the form of trucks based on existing observations of heavy vehicle composition.

4.2 Distribution & Assignment

Trip distribution describes the anticipated travel routes for inbound and outbound project traffic during the peak hour study period. Traffic to and from the subject site was assigned with a 60/40 north/south split on S Orchard Street based on existing travel patterns identified from the intersection. Figure 4 illustrates the PM peak hour trip distribution and assignment.

4.3 Future Peak Hour Volumes

A 6-year horizon of 2028 was used for future traffic delay analysis. Forecast 2028 background traffic volumes were derived by applying a 2.0 percent compound annual growth rate to the existing volumes shown in Figure 3. This growth rate is higher than the typical City growth rate of 1.2 percent to remain conservative. Forecast 2028 PM peak hour volumes without and with a future expansion are shown in Figure 5.



NEW PM PEAK HOUR TRIPS
INBOUND: 10 VPH
OUTBOUND: 16 VPH

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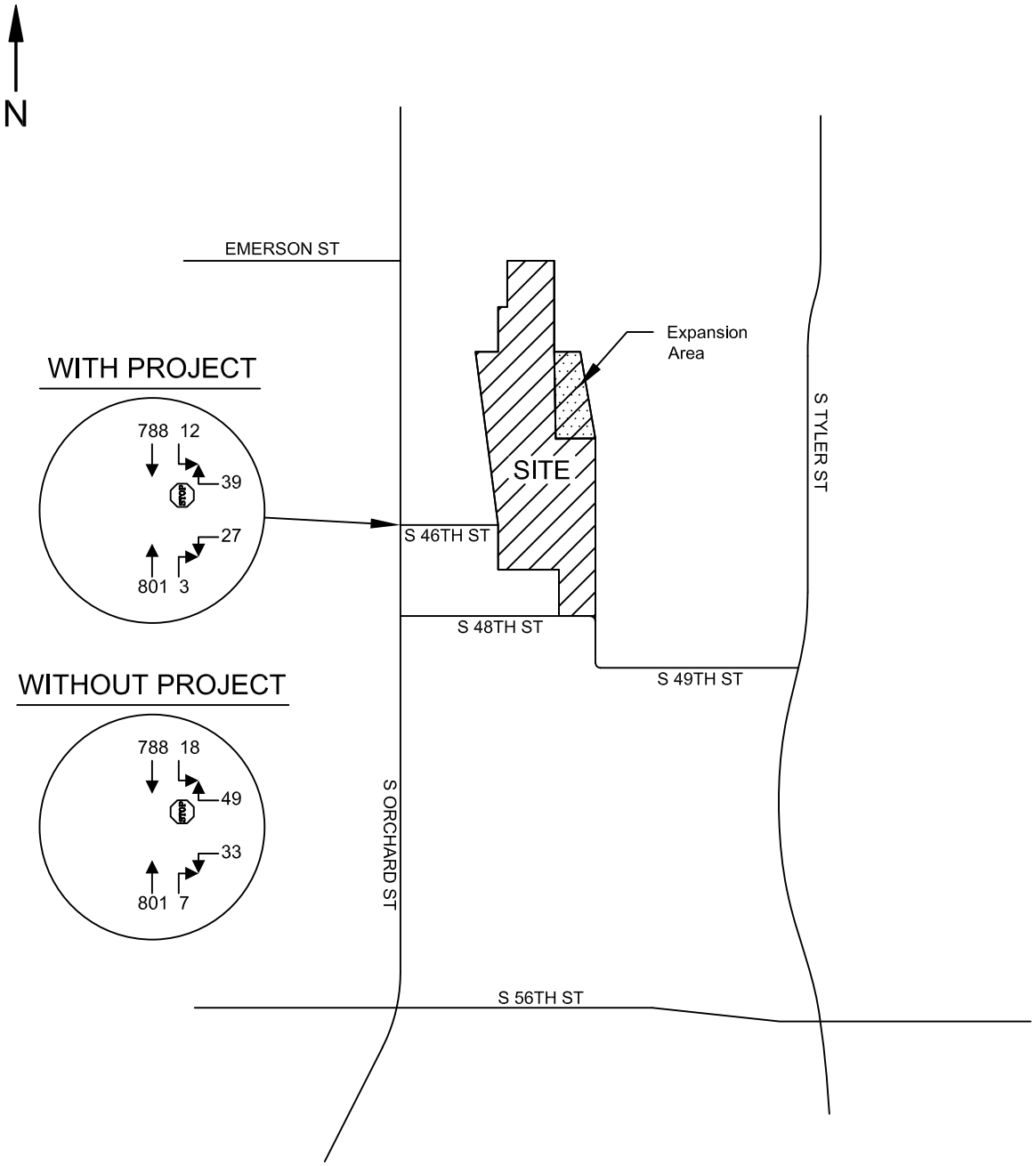
NEWCOLD STORAGE
TRIP DISTRIBUTION & ASSIGNMENT - PM PEAK HOUR
FIGURE 4



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NEWCOLD STORAGE

FORECAST 2028 PM PEAK HOUR VOLUMES
FIGURE 5

4.4 Future Level of Service

Peak hour delays were determined through the use of the *Highway Capacity Manual* 6th Edition. Capacity analysis is used to determine level of service (LOS) which is an established measure of congestion for transportation facilities. The range[1] for intersection level of service is LOS A to LOS F with the former indicating the best operating conditions with low control delays and the latter indicating the worst conditions with heavy control delays. Detailed descriptions of intersection LOS are given in the 2016 Highway Capacity Manual. Level of service calculations were made through the use of the *Synchro 11* analysis program. Table 4 summarizes existing and forecast 2028 PM peak hour delays without and with the proposed NewCold Tacoma development.

Table 4: Forecast 2028 PM Peak Hour Level of Service

Delays given in Seconds Per Vehicle

			Existing		*2028 Background*		*2028 w/ Expansion*	
Intersection	**Control**	**Approach**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
S Orchard Street & S 46th Street	Stop	Westbound	B	14.4	C	15.7	C	16.0

As summarized in the above table, the primary study intersection receiving project-generated traffic is shown to operate with acceptable LOS C conditions with or without the proposed expansion under the forecast 2028 PM peak hour. The project's additional traffic demands with a potential expansion are not shown to create a significant impact to the study area.

---

[1] *Signalized Intersections - Level of Service*

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤20
C	> 20 and ≤35
D	> 35 and ≤55
E	> 55 and ≤80
F	> 80

Stop Controlled Intersections – Level of Service

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤15
C	> 15 and ≤25
D	> 25 and ≤35
E	> 35 and ≤50
F	> 50

Highway Capacity Manual, 6th Edition

5. CONCLUSIONS AND MITIGATION MEASURES

The intent of this impact study was to examine the impacts from a potential expansion of up to 200,000 square feet of cold storage warehouse. Existing on-site is an approximate 237,291 square foot building occupied by NewCold. A portion of the site is proposed to be rezoned from M1 to M2 which could then allow a building expansion and/or new building. Traffic counts and observations were performed at the existing facility so as to develop a trip rate than can be applied to a future expansion for traffic estimates.

Based on the two 24-hour counts, an expansion of around 200,000 square feet could produce an additional 386 daily trips with 22 trips occurring in the AM peak hour, 38 trips in the midday peak hour, and 26 trips in the PM peak hour. These trip projections are also consistent with ITE data for cold storage warehouse. Approximately half of the traffic coming to and from NewCold were observed as truck traffic. Observations indicated the majority of site-generated traffic to enter through the study intersection of S Orchard Street & S 46th Street. Currently, the intersection was shown to operate with LOS B conditions in the PM peak hour. Under the six-year horizon of 2026, service levels were shown to operate at LOS C with or without a future NewCold expansion. Overall, no significant impact was identified as a result of a potential 200,000 square foot expansion.

Please feel free to contact should there be any questions.

NEW COLD TACOMA
TRAFFIC IMPACT ANALYSIS

APPENDIX

LEVEL OF SERVICE

The following are excerpts from the *2016 Highway Capacity Manual - Transportation Research Board Special Report 209.*

Six LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service represents a range of operating conditions and the driver's perception of those conditions.

Level-of-Service definitions

Level of service A represents primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delay at signalized intersections is minimal.

Level of service B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver in the traffic stream is only slightly restricted and delays are not bothersome.

Level of service C represents stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than in LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the average free-flow speed for the arterial classification.

Level of service D borders on a range in which small increases in flow may cause substantial increases in approach delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of free-flow speed.

Level of service E is characterized by significant delays and average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.

Level of service F characterizes arterial flow at extremely low speeds, from less than one-third to one-quarter of the free-flow speed. Intersection congestion is likely at critical signalized locations, with long delays and extensive queuing.

Heath & Associates

PO Box 397
Puyallup, WA 98371

File Name : 4807a
Site Code : 00004807
Start Date : 1/4/2022
Page No : 1

Groups Printed- Passenger + - Heavy

	S Orchard Street From North			S 46th St From East			S Orchard St From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
04:00 PM	192	4	196	10	6	16	0	153	153	365
04:15 PM	162	5	167	5	5	10	1	184	185	362
04:30 PM	155	2	157	16	16	32	2	170	172	361
04:45 PM	203	3	206	8	2	10	0	178	178	394
Total	712	14	726	39	29	68	3	685	688	1482
05:00 PM	180	1	181	6	1	7	0	179	179	367
05:15 PM	201	3	204	5	1	6	0	144	144	354
05:30 PM	188	1	189	8	3	11	0	153	153	353
05:45 PM	164	3	167	7	1	8	0	149	149	324
Total	733	8	741	26	6	32	0	625	625	1398
Grand Total	1445	22	1467	65	35	100	3	1310	1313	2880
Apprch %	98.5	1.5		65	35		0.2	99.8		
Total %	50.2	0.8	50.9	2.3	1.2	3.5	0.1	45.5	45.6	
Passenger +	1428	11	1439	52	32	84	3	1295	1298	2821
% Passenger +	98.8	50	98.1	80	91.4	84	100	98.9	98.9	98
Heavy	17	11	28	13	3	16	0	15	15	59
% Heavy	1.2	50	1.9	20	8.6	16	0	1.1	1.1	2

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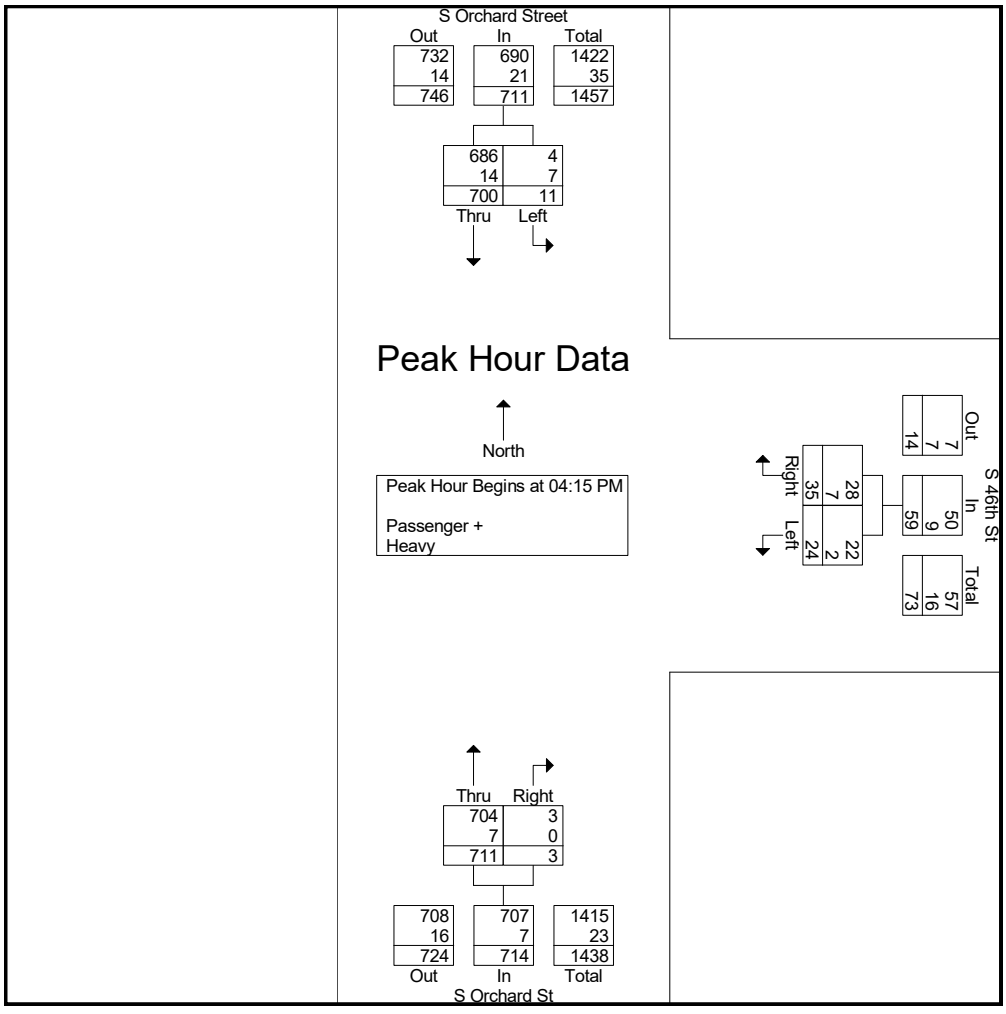
PO Box 397
Puyallup, WA 98371

File Name : 4807a
Site Code : 00004807
Start Date : 1/4/2022
Page No : 2

	S Orchard Street From North			S 46th St From East			S Orchard St From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	162	**5**	167	5	5	10	1	**184**	**185**	362
04:30 PM	155	2	157	**16**	**16**	**32**	**2**	170	172	361
04:45 PM	**203**	3	**206**	8	2	10	0	178	178	**394**
05:00 PM	180	1	181	6	1	7	0	179	179	367
Total Volume	700	11	711	35	24	59	3	711	714	1484
% App. Total	98.5	1.5		59.3	40.7		0.4	99.6		
PHF	.862	.550	.863	.547	.375	.461	.375	.966	.965	.942
Passenger +	686	4	690	28	22	50	3	704	707	1447
% Passenger +	98.0	36.4	97.0	80.0	91.7	84.7	100	99.0	99.0	97.5
Heavy	14	7	21	7	2	9	0	7	7	37
% Heavy	2.0	63.6	3.0	20.0	8.3	15.3	0	1.0	1.0	2.5



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Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
12:00 AM	0	0	0
12:15 AM	0	0	0
12:30 AM	0	0	0
12:45 AM	0	0	0
Total	0	0	0
01:00 AM	0	0	0
01:15 AM	0	0	0
01:30 AM	0	0	0
01:45 AM	0	0	0
Total	0	0	0
02:00 AM	0	0	0
02:15 AM	0	0	0
02:30 AM	0	0	0
02:45 AM	0	2	2
Total	0	2	2
03:00 AM	0	1	1
03:15 AM	1	0	1
03:30 AM	0	1	1
03:45 AM	0	1	1
Total	1	3	4
04:00 AM	0	1	1
04:15 AM	2	2	4
04:30 AM	2	5	7
04:45 AM	3	5	8
Total	7	13	20
05:00 AM	3	4	7
05:15 AM	1	7	8
05:30 AM	4	6	10
05:45 AM	3	11	14
Total	11	28	39
06:00 AM	1	4	5
06:15 AM	4	4	8
06:30 AM	7	2	9
06:45 AM	0	4	4
Total	12	14	26
07:00 AM	3	6	9
07:15 AM	3	2	5
07:30 AM	4	6	10
07:45 AM	0	3	3
Total	10	17	27

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Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
08:00 AM	6	3	9
08:15 AM	2	5	7
08:30 AM	0	1	1
08:45 AM	4	2	6
Total	12	11	23
09:00 AM	1	3	4
09:15 AM	2	8	10
09:30 AM	3	5	8
09:45 AM	2	5	7
Total	8	21	29
10:00 AM	8	2	10
10:15 AM	5	7	12
10:30 AM	4	5	9
10:45 AM	3	3	6
Total	20	17	37
11:00 AM	7	2	9
11:15 AM	5	8	13
11:30 AM	5	7	12
11:45 AM	3	4	7
Total	20	21	41
12:00 PM	5	8	13
12:15 PM	4	5	9
12:30 PM	4	1	5
12:45 PM	4	1	5
Total	17	15	32
01:00 PM	9	8	17
01:15 PM	6	2	8
01:30 PM	2	6	8
01:45 PM	4	3	7
Total	21	19	40
02:00 PM	5	0	5
02:15 PM	7	2	9
02:30 PM	3	4	7
02:45 PM	4	3	7
Total	19	9	28
03:00 PM	5	1	6
03:15 PM	3	5	8
03:30 PM	2	4	6
03:45 PM	5	0	5
Total	15	10	25
04:00 PM	7	1	8
04:15 PM	3	1	4

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Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
04:30 PM	2	2	4
04:45 PM	1	4	5
Total	13	8	21
05:00 PM	5	1	6
05:15 PM	4	1	5
05:30 PM	4	1	5
05:45 PM	0	1	1
Total	13	4	17
06:00 PM	4	2	6
06:15 PM	0	2	2
06:30 PM	4	1	5
06:45 PM	0	1	1
Total	8	6	14
07:00 PM	0	3	3
07:15 PM	0	0	0
07:30 PM	2	2	4
07:45 PM	1	0	1
Total	3	5	8
08:00 PM	2	0	2
08:15 PM	1	1	2
08:30 PM	1	2	3
08:45 PM	2	0	2
Total	6	3	9
09:00 PM	1	3	4
09:15 PM	1	0	1
09:30 PM	0	1	1
09:45 PM	1	2	3
Total	3	6	9
10:00 PM	2	0	2
10:15 PM	2	3	5
10:30 PM	4	1	5
10:45 PM	4	1	5
Total	12	5	17
11:00 PM	1	1	2
11:15 PM	1	1	2
11:30 PM	1	0	1
11:45 PM	0	0	0
Total	3	2	5
12:00 AM	0	0	0
Grand Total	234	239	473
Apprch %	100	100	
Total %	49.5	50.5	
Passenger +	115	118	233
% Passenger +	49.1	49.4	49.3
Heavy	119	121	240
% Heavy	50.9	50.6	50.7

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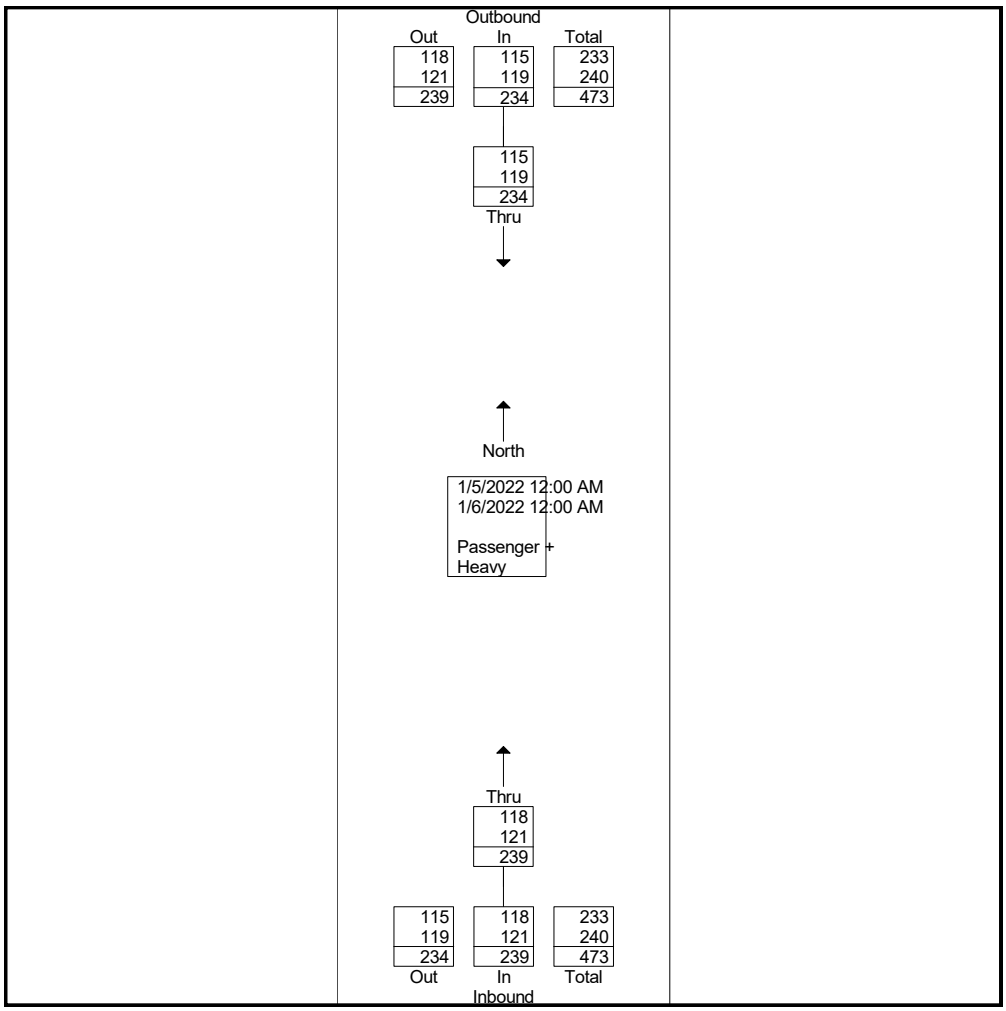

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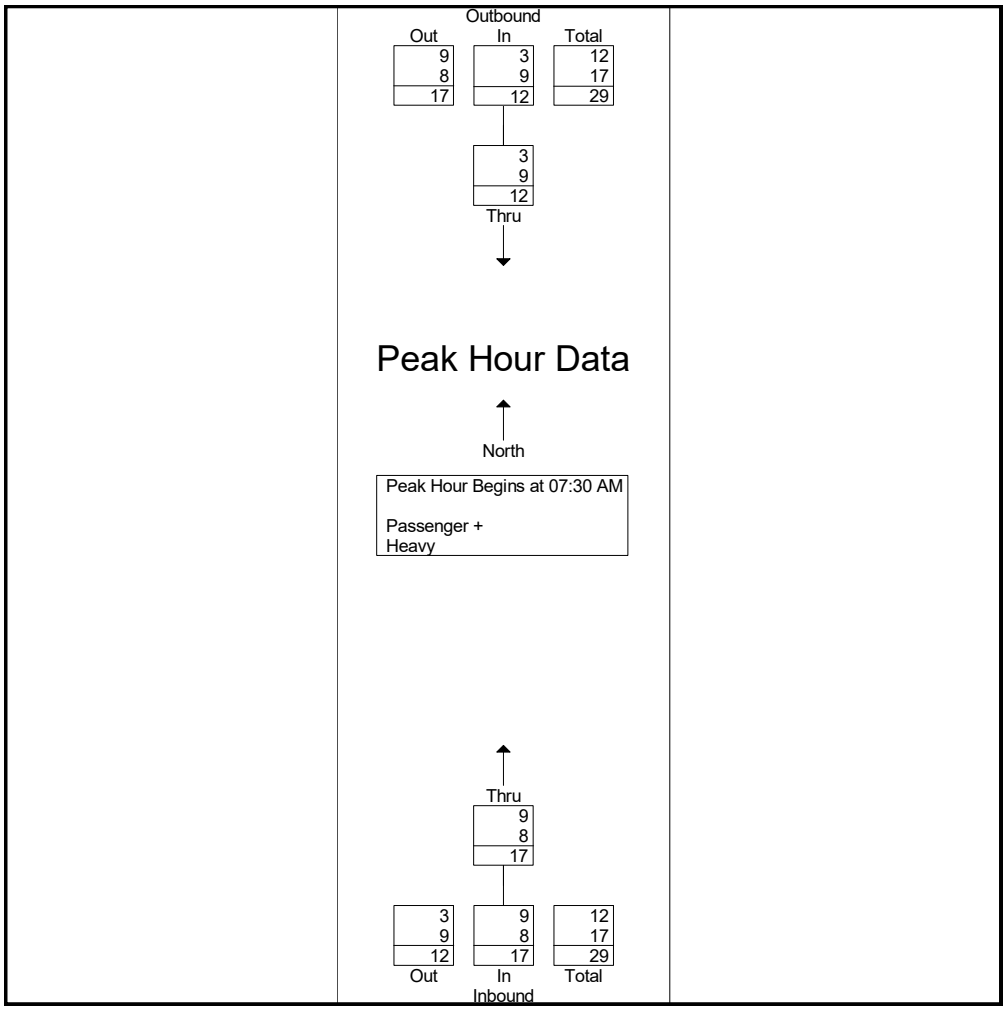
	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 07:30 AM					
07:30 AM	4	4	**6**	**6**	**10**
07:45 AM	0	0	3	3	3
08:00 AM	**6**	**6**	3	3	9
08:15 AM	2	2	5	5	7
Total Volume	12	12	17	17	29
% App. Total	100		100		
PHF	.500	.500	.708	.708	.725
Passenger +	3	3	9	9	12
% Passenger +	25.0	25.0	52.9	52.9	41.4
Heavy	9	9	8	8	17
% Heavy	75.0	75.0	47.1	47.1	58.6



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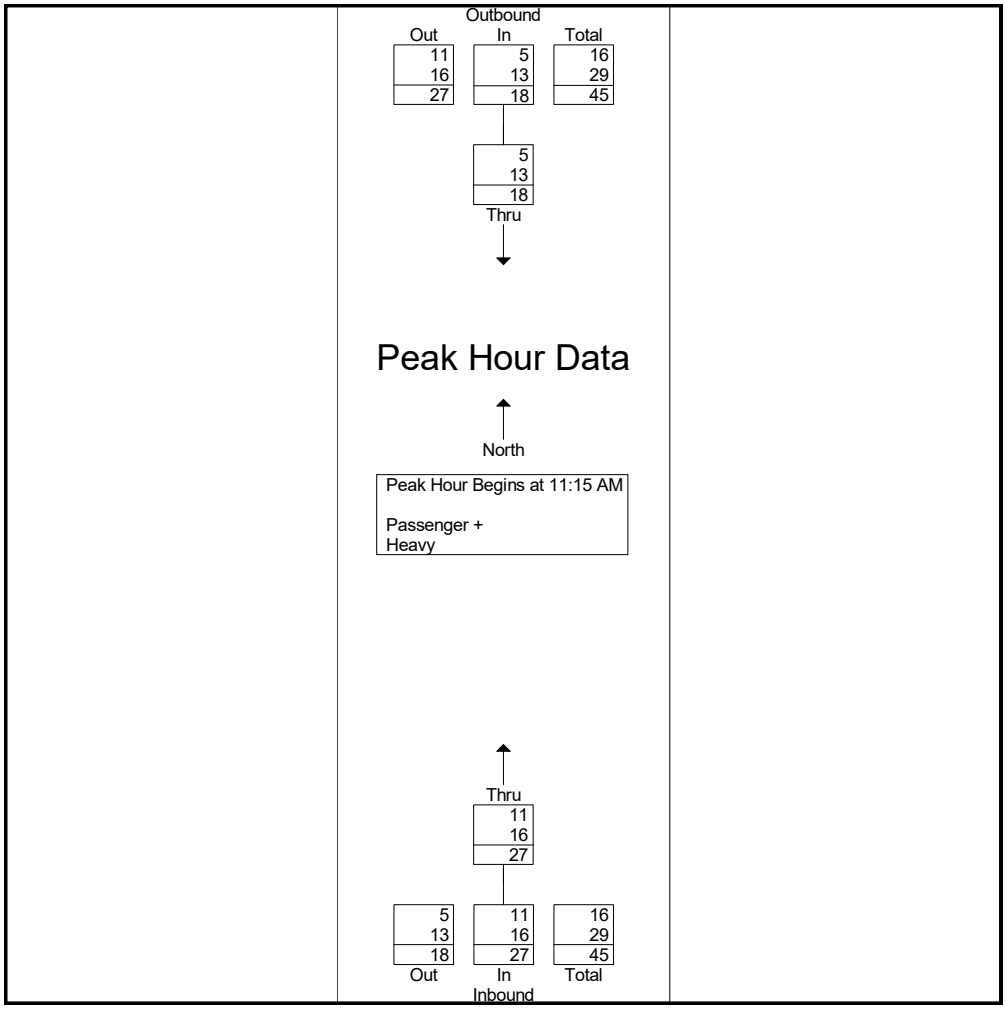
	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 09:00 AM to 03:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 11:15 AM					
11:15 AM	**5**	**5**	**8**	**8**	**13**
11:30 AM	5	5	7	7	12
11:45 AM	3	3	4	4	7
12:00 PM	5	5	8	8	13
Total Volume	18	18	27	27	45
% App. Total	100		100		
PHF	.900	.900	.844	.844	.865
Passenger +	5	5	11	11	16
% Passenger +	27.8	27.8	40.7	40.7	35.6
Heavy	13	13	16	16	29
% Heavy	72.2	72.2	59.3	59.3	64.4



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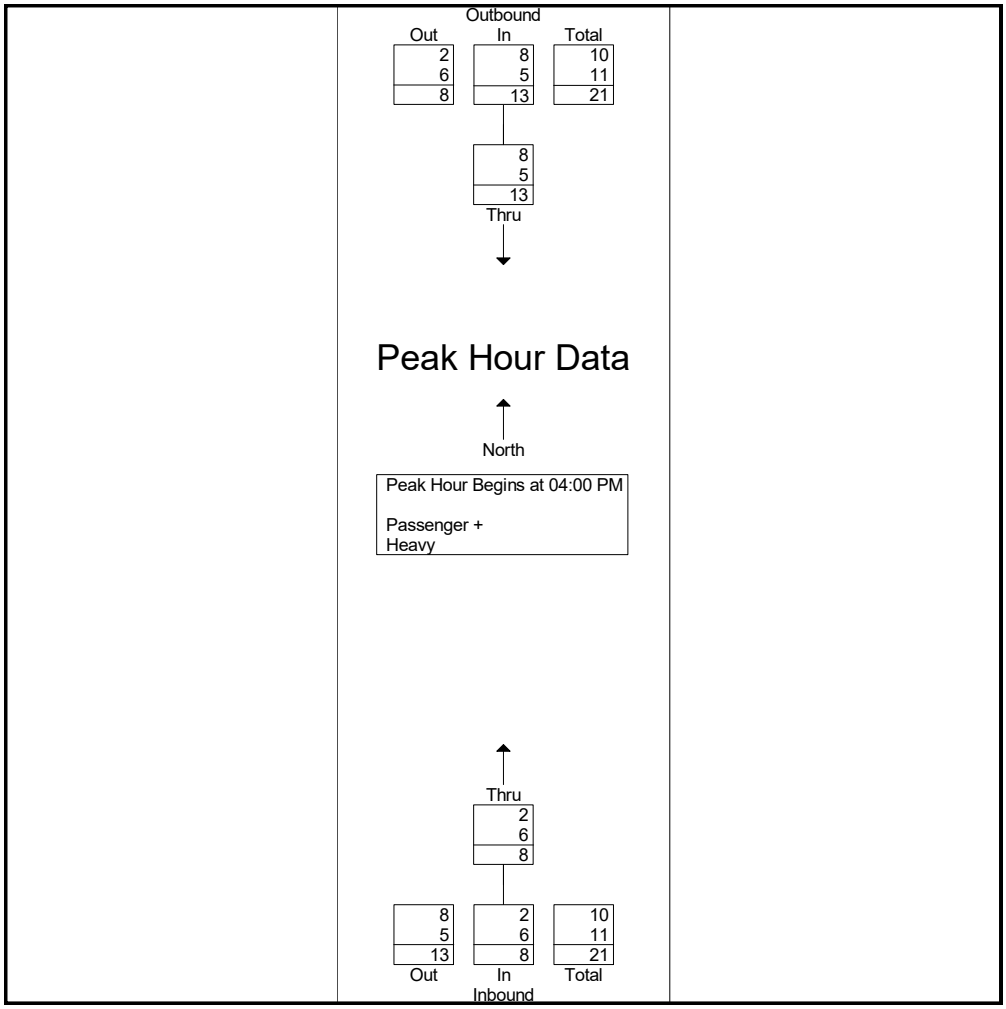
	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 04:00 PM					
04:00 PM	**7**	**7**	1	1	**8**
04:15 PM	3	3	1	1	4
04:30 PM	2	2	2	2	4
04:45 PM	1	1	**4**	**4**	5
Total Volume	13	13	8	8	21
% App. Total	100		100		
PHF	.464	.464	.500	.500	.656
Passenger +	8	8	2	2	10
% Passenger +	61.5	61.5	25.0	25.0	47.6
Heavy	5	5	6	6	11
% Heavy	38.5	38.5	75.0	75.0	52.4



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Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
12:00 AM	0	0	0
12:15 AM	0	0	0
12:30 AM	0	0	0
12:45 AM	0	0	0
Total	0	0	0
01:00 AM	0	0	0
01:15 AM	0	0	0
01:30 AM	0	0	0
01:45 AM	0	0	0
Total	0	0	0
02:00 AM	0	0	0
02:15 AM	0	0	0
02:30 AM	0	0	0
02:45 AM	0	0	0
Total	0	0	0
03:00 AM	0	0	0
03:15 AM	0	0	0
03:30 AM	0	0	0
03:45 AM	0	0	0
Total	0	0	0
04:00 AM	0	0	0
04:15 AM	0	0	0
04:30 AM	1	3	4
04:45 AM	3	4	7
Total	4	7	11
05:00 AM	1	6	7
05:15 AM	3	2	5
05:30 AM	0	11	11
05:45 AM	0	6	6
Total	4	25	29
06:00 AM	1	6	7
06:15 AM	3	0	3
06:30 AM	3	3	6
06:45 AM	4	4	8
Total	11	13	24
07:00 AM	5	2	7
07:15 AM	4	3	7
07:30 AM	1	6	7
07:45 AM	1	2	3
Total	11	13	24

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Start Date : 1/6/2022

Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
08:00 AM	3	5	8
08:15 AM	2	2	4
08:30 AM	1	2	3
08:45 AM	3	4	7
Total	9	13	22
09:00 AM	4	1	5
09:15 AM	2	2	4
09:30 AM	2	4	6
09:45 AM	4	1	5
Total	12	8	20
10:00 AM	0	3	3
10:15 AM	5	3	8
10:30 AM	1	2	3
10:45 AM	3	1	4
Total	9	9	18
11:00 AM	4	1	5
11:15 AM	5	4	9
11:30 AM	3	6	9
11:45 AM	5	7	12
Total	17	18	35
12:00 PM	5	3	8
12:15 PM	2	4	6
12:30 PM	3	5	8
12:45 PM	1	1	2
Total	11	13	24
01:00 PM	3	5	8
01:15 PM	3	1	4
01:30 PM	6	10	16
01:45 PM	6	7	13
Total	18	23	41
02:00 PM	6	2	8
02:15 PM	5	3	8
02:30 PM	7	5	12
02:45 PM	5	3	8
Total	23	13	36
03:00 PM	4	3	7
03:15 PM	7	5	12
03:30 PM	5	5	10
03:45 PM	5	3	8
Total	21	16	37
04:00 PM	6	3	9
04:15 PM	7	4	11

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Groups Printed- Passenger + - Heavy

	Outbound From North	Inbound From South	
Start Time	Thru	Thru	Int. Total
04:30 PM	5	3	8
04:45 PM	6	4	10
Total	24	14	38
05:00 PM	6	3	9
05:15 PM	5	3	8
05:30 PM	6	2	8
05:45 PM	6	4	10
Total	23	12	35
06:00 PM	3	4	7
06:15 PM	3	2	5
06:30 PM	2	1	3
06:45 PM	3	3	6
Total	11	10	21
07:00 PM	1	0	1
07:15 PM	1	0	1
07:30 PM	0	1	1
07:45 PM	1	2	3
Total	3	3	6
08:00 PM	1	2	3
08:15 PM	0	0	0
08:30 PM	1	0	1
08:45 PM	0	1	1
Total	2	3	5
09:00 PM	0	3	3
09:15 PM	0	1	1
09:30 PM	0	0	0
09:45 PM	1	4	5
Total	1	8	9
10:00 PM	0	0	0
10:15 PM	0	0	0
10:30 PM	6	1	7
10:45 PM	0	0	0
Total	6	1	7
11:00 PM	0	0	0
11:15 PM	0	0	0
11:30 PM	0	0	0
11:45 PM	0	0	0
Total	0	0	0
12:00 AM	0	0	0
Grand Total	220	222	442
Apprch %	100	100	
Total %	49.8	50.2	
Passenger +	112	117	229
% Passenger +	50.9	52.7	51.8
Heavy	108	105	213
% Heavy	49.1	47.3	48.2

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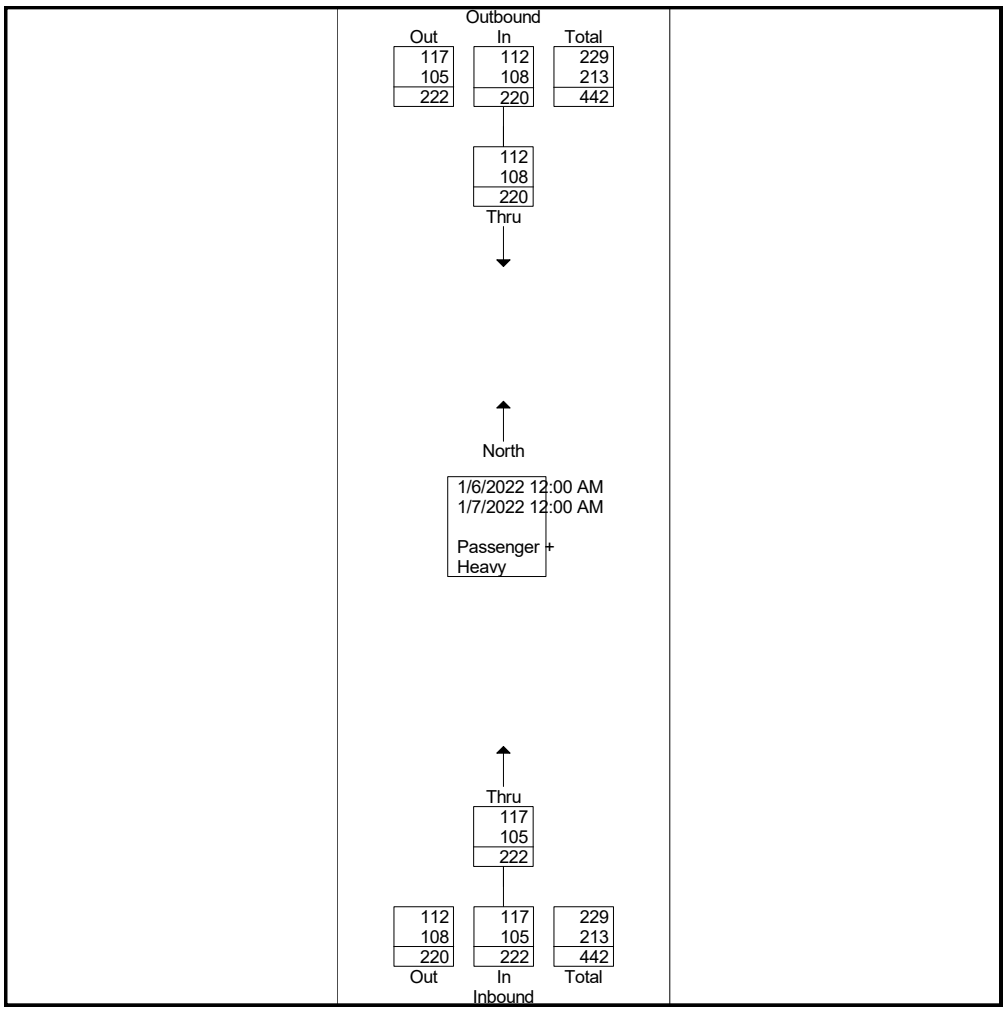

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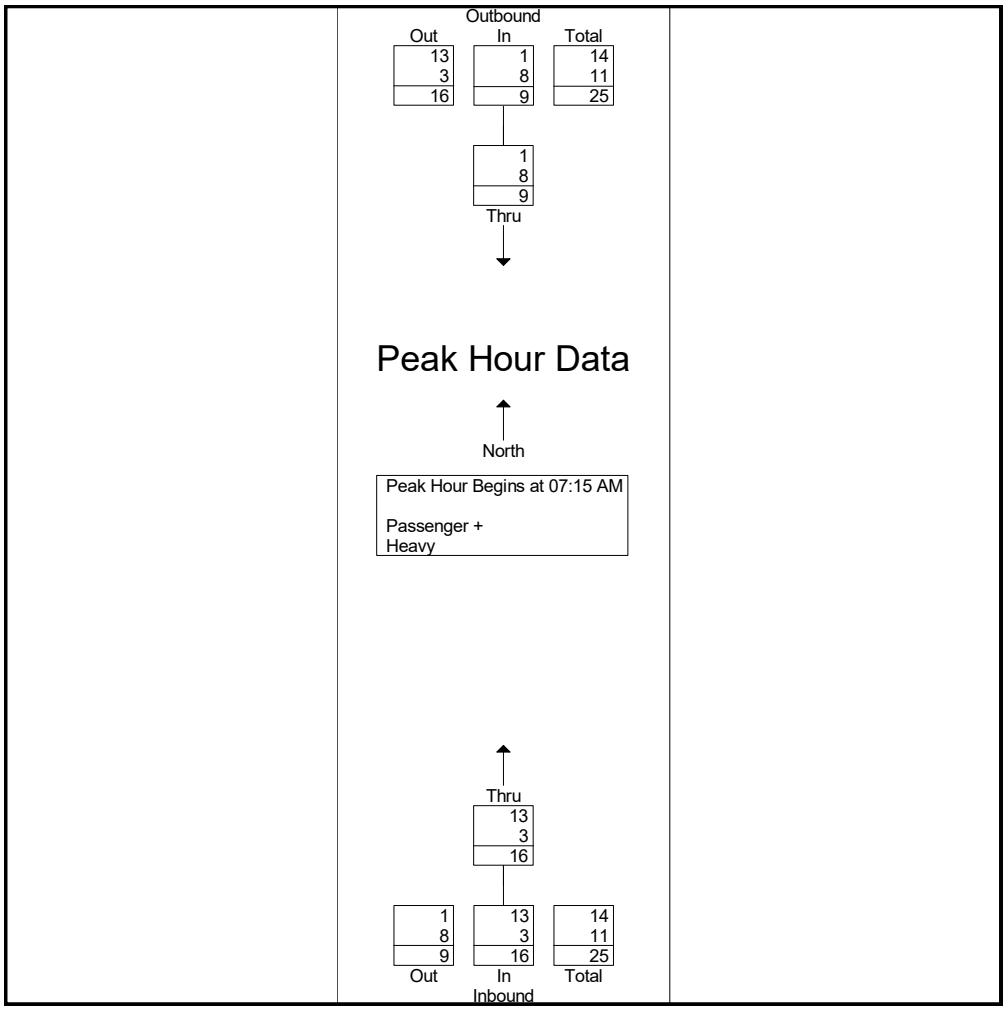
	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 07:15 AM					
07:15 AM	**4**	**4**	3	3	7
07:30 AM	1	1	**6**	**6**	7
07:45 AM	1	1	2	2	3
08:00 AM	3	3	5	5	**8**
Total Volume	9	9	16	16	25
% App. Total	100		100		
PHF	.563	.563	.667	.667	.781
Passenger +	1	1	13	13	14
% Passenger +	11.1	11.1	81.3	81.3	56.0
Heavy	8	8	3	3	11
% Heavy	88.9	88.9	18.8	18.8	44.0



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Site Code : 00004807
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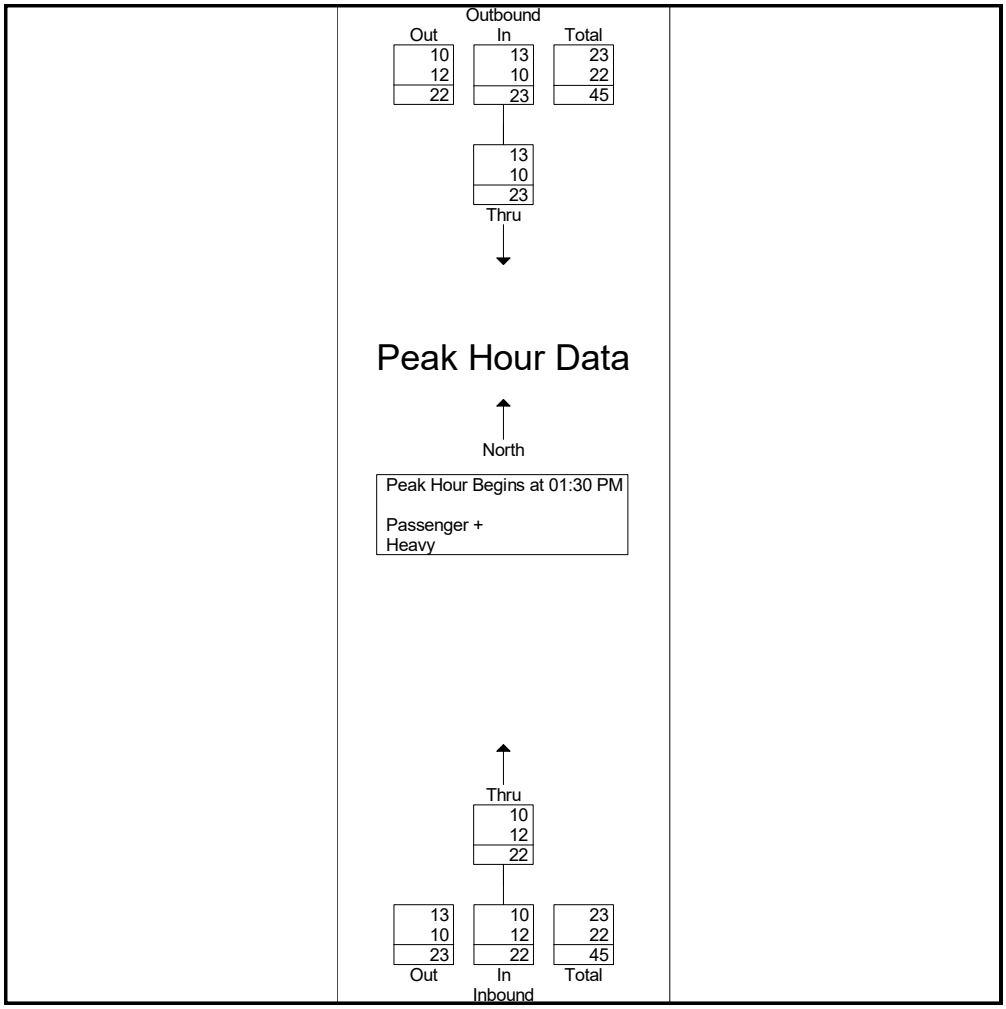
	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 09:00 AM to 03:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 01:30 PM					
01:30 PM	**6**	**6**	**10**	**10**	**16**
01:45 PM	6	6	7	7	13
02:00 PM	6	6	2	2	8
02:15 PM	5	5	3	3	8
Total Volume	23	23	22	22	45
% App. Total	100		100		
PHF	.958	.958	.550	.550	.703
Passenger +	13	13	10	10	23
% Passenger +	56.5	56.5	45.5	45.5	51.1
Heavy	10	10	12	12	22
% Heavy	43.5	43.5	54.5	54.5	48.9



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Site Code : 00004807
Start Date : 1/6/2022
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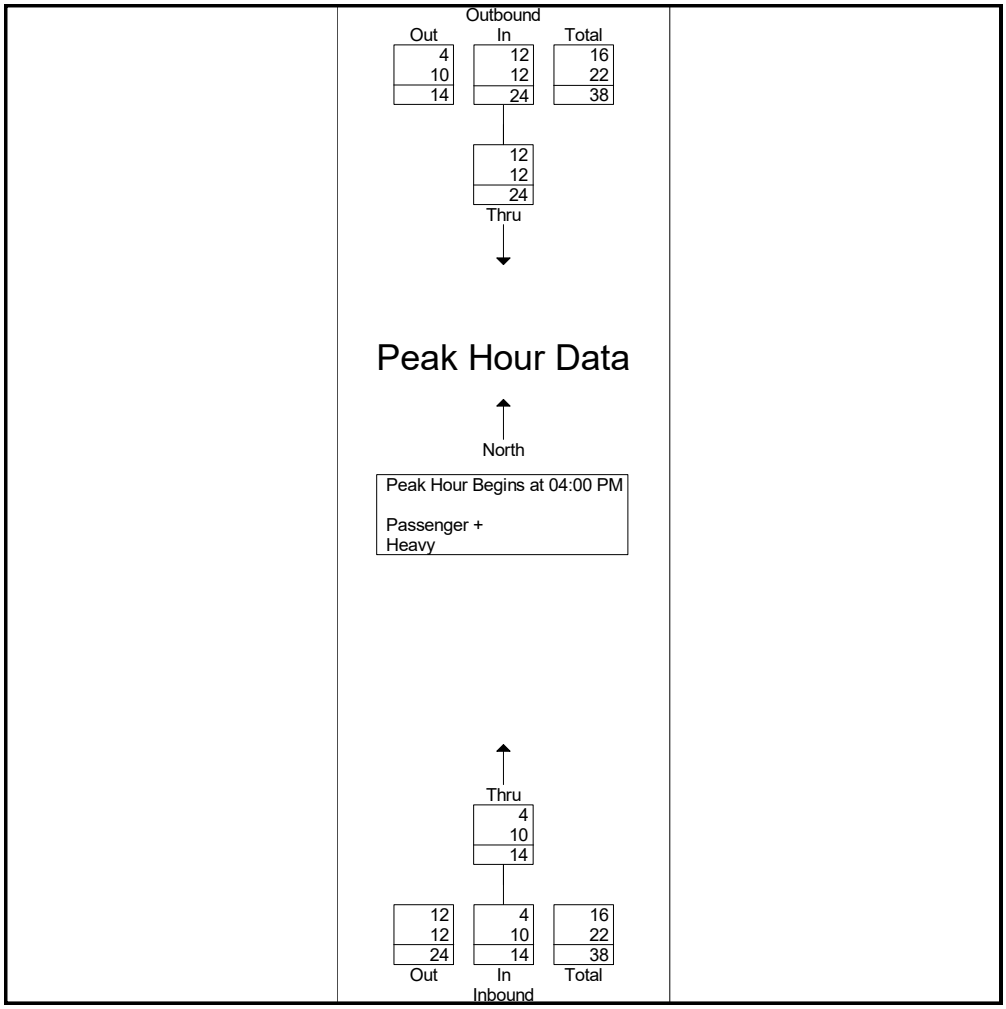
	Outbound From North		Inbound From South		
Start Time	Thru	App. Total	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1					
Peak Hour for Entire Intersection Begins at 04:00 PM					
04:00 PM	6	6	3	3	9
04:15 PM	**7**	**7**	**4**	**4**	**11**
04:30 PM	5	5	3	3	8
04:45 PM	6	6	4	4	10
Total Volume	24	24	14	14	38
% App. Total	100		100		
PHF	.857	.857	.875	.875	.864
Passenger +	12	12	4	4	16
% Passenger +	50.0	50.0	28.6	28.6	42.1
Heavy	12	12	10	10	22
% Heavy	50.0	50.0	71.4	71.4	57.9



Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	35	711	3	11	700
Future Vol, veh/h	24	35	711	3	11	700
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	20	1	1	64	2
Mvmt Flow	26	37	756	3	12	745

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1155	380	0	0	759	0
Stage 1	758	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.96	7.3	-	-	5.38	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.5	-	-	2.84	-
Pot Cap-1 Maneuver	181	569	-	-	542	-
Stage 1	408	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	177	569	-	-	542	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	408	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	300	569	542	-
HCM Lane V/C Ratio	-	-	0.085	0.065	0.022	-
HCM Control Delay (s)	-	-	18.1	11.8	11.8	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0.2	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	39	801	3	12	788
Future Vol, veh/h	27	39	801	3	12	788
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	20	1	1	64	2
Mvmt Flow	29	41	852	3	13	838

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1299	428	0	0	855	0
Stage 1	854	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.96	7.3	-	-	5.38	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.5	-	-	2.84	-
Pot Cap-1 Maneuver	145	528	-	-	486	-
Stage 1	363	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	141	528	-	-	486	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	363	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	263	528	486	-
HCM Lane V/C Ratio	-	-	0.109	0.079	0.026	-
HCM Control Delay (s)	-	-	20.4	12.4	12.6	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	0.4	0.3	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	49	801	7	18	788
Future Vol, veh/h	33	49	801	7	18	788
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	20	1	1	64	2
Mvmt Flow	35	52	852	7	19	838

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1313	430	0	0	859	0
Stage 1	856	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Critical Hdwy	6.96	7.3	-	-	5.38	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.5	-	-	2.84	-
Pot Cap-1 Maneuver	142	526	-	-	483	-
Stage 1	362	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	136	526	-	-	483	-
Mov Cap-2 Maneuver	259	-	-	-	-	-
Stage 1	362	-	-	-	-	-
Stage 2	564	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	259	526	483	-
HCM Lane V/C Ratio	-	-	0.136	0.099	0.04	-
HCM Control Delay (s)	-	-	21.1	12.6	12.8	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	0.1	-

Exhibit B

February 16, 2022

NewCold Seattle, LLC
4601 South Orchard Street
Tacoma, WA 98466

Attn: Sarah Remington

Transmitted via email to: ***sarah.remington@newcold.com***

Re: Results of Noise and Light/Glare Study
NewCold Facility
Tacoma, Washington
Landau Project No. 2042001.010

Dear Ms. Remington:

At the request of NewCold Seattle, LLC (NewCold) and the City of Tacoma (City), Landau Associates, Inc. (Landau) conducted a noise impacts study and light and glare evaluation to inform NewCold's application for a comprehensive plan land-use designation amendment. This report describes the existing regulatory environment, existing land-use designation and development of the property, and potential changes associated with the requested amendment. Additional details on the characteristics of sound and noise used to support this evaluation are provided in Attachment 1.

Background

NewCold currently owns an approximately 34-acre property located at 4601 South Orchard Street (Pierce County Parcel No. 0220133049), in Tacoma, Washington (NewCold Facility), which includes an existing cold-storage warehouse. The center of the parcel is designated heavy industrial (M-2) with the exception of an approximately 3-acre area east of the existing building, which is designated light industrial (M-1). NewCold is requesting a land-use designation change of this light industrial portion of the parcel (Site; see Figure 1) to heavy industrial to allow construction of a second high-cube refrigerated distribution warehouse building adjacent to the east of the existing building. The comprehensive plan land-use designation amendment is the first of several steps before approval would be granted to NewCold. Future steps include review of project-specific designs and consideration of project-specific impacts.

The City's Planning and Development Services has requested that NewCold provide a noise and light/glare study to document potential changes in noise or light impacts to surrounding properties.

Nearby Land Use

Land adjacent to the Site that is to the north, east, and southeast is currently part of the Tacoma Recovery and Transfer Center (landfill, designated "parks and open space"). NewCold owns the

adjacent property to the northwest, west, southwest, and south, which is designated M-2 and developed with NewCold's existing cold storage facility.

The nearest properties with residential land-use designations are located as follows (see Figure 1):

- Orchard Park Health and Rehabilitation Center, designated neighborhood commercial and developed with a nursing home, is located approximately 800 feet to the southwest of the Site. The existing NewCold Facility blocks the line-of-site between the Orchard Park property and the Site.
- Forest Hill Village Apartments, designated low-density multi-family, is located approximately 800 feet east of the Site, on the opposite side of the landfill.
- Orchard Terrace, designated low-density multi-family, is located approximately 1,000 feet northwest of the Site, opposite property designated light-industrial and developed with a stormwater pond, storage and towing facilities.
- A neighborhood designated single-family residential is located approximately 1,400 feet south of the Site (see Figure 1), separated from the Site by the existing NewCold Facility, light industrial property, the landfill, and undeveloped land designated as parks and open space. The northern boundary of the neighborhood is approximately 550 feet south of the existing truck trailer staging area.

Topography

Land on the west side of the NewCold Facility slopes steeply downward to the adjacent properties to the west. The elevation difference between the NewCold Facility and the adjacent properties to the west is approximately 20 feet, so that the roofs of the adjacent buildings are approximately at ground level compared to the operational areas at NewCold. As shown in Attachment 1, this creates a partial barrier, reducing noise and light impacts at the adjacent properties to the west.

To the north and east of the NewCold Facility, the ground surface of the landfill is approximately 20 feet higher than the ground surface of the NewCold Facility, creating a natural barrier to light and noise for adjacent properties to the north and west.

Land Use Regulatory Code

The proposed land-use designation change would apply to any potential future use of the Site, including but not limited to NewCold's proposed expansion. The Tacoma Land Use Regulatory Code, Title 13 of the Tacoma Municipal Code (TMC), establishes the requirements for an M-1 Light Industrial District and an M-2 Heavy Industrial District. Table 1 outlines the difference between light and heavy industrial land use as applicable to potential noise and light/glare impacts.

Table 1: Comparison of Light Industrial and Heavy Industrial Land Use

Characteristic	Light Industrial (M-1)	Heavy Industrial (M-2)
Intended use types	Light manufacturing, warehousing, commercial or civic uses.	Heavy industrial and manufacturing uses that can reasonably be accommodated without adverse impacts on the public's health, welfare, or safety.
Potential impacts on surrounding properties	Complementary and not detrimental to existing or proposed neighboring industrial, commercial, or residential uses. Transition between industrial operations and existing activities and character of the community in which the district is located.	Potential for extended operating hours, heavy truck traffic, and higher levels of outdoor noise.
Development Standards	No difference in lot area or setbacks. Height limit of 75 feet in M-1 and 100 feet in M-2 (with exceptions).	

As shown in the table above and addressed in the Noise and Light/Glare sections below, Title 13 of the TMC does not provide quantitative regulatory differences between M-1 and M-2 for noise or light impacts. All future development would be required to comply with City and Washington State noise limits (described below). Changing the land-use designation of the Site would not change the applicable noise limits.

Noise

The following subsections address potential noise impacts to surrounding properties based on the proposed change in land-use designation.

Tacoma Municipal Code

Chapter 8.122 of the TMC governs noise impacts within the city limits. The TMC does not provide absolute maximum permissible sound levels, rather TMC 8.122.060 specifies maximum permissible sound levels in excess of the ambient sound level (Table 1), applicable to continuous sound measured within a receiving property. These sound levels are not dependent on the land use or zoning of the property; therefore, the proposed change in land-use designation of the Site would not change the maximum permissible sound levels, as shown in Table 2.

Table 2: Maximum Permissible Sound Levels in Excess of Ambient Sound Level

	Outdoors	Indoors
7:00 a.m. to 10:00 p.m. (daytime)	10 dBA	6 dBC
10:00 p.m. to 7:00 a.m. (nighttime)	5 dBA	3 dBC

dBA – A-weighted decibels

dBC – C-weighted decibels

dBA and dBC are sound level weighting systems based on human sensitivity to sound. A-weighting discriminates against low frequencies (similar to human hearing) while C-weighting measures uniformly over the frequency range audible to humans.

Impulsive sounds[1] may increase the total sound level by less than 15 dBA above the ambient sound level when there are fewer than 10 impulses within 1 hour during daytime hours or fewer than 4 impulses within 1 hour during nighttime hours. If the number of impulses exceeds the allowable number, the maximum permissible sound levels shown in Table 2 apply.

Washington Administrative Code

Chapter 173-60-040 of the Washington Administrative Code provides maximum permissible environmental noise levels by the environmental designation for noise abatement (EDNA) of the noise source and receiver, as defined below.

- Class A EDNAs are lands where human beings reside and sleep, generally including residences (single- and multi-family) and other living facilities.
- Class B EDNAs are lands involving uses requiring protection against noise interference with speech such as commercial services and recreational facilities not intended for human habitation (parks and open space, for example).
- Class C EDNAs are lands involving economic activities of such a nature that higher noise levels may be anticipated, such as industrial or agricultural lands.

Heavy industry and light industrial properties both fall under EDNA Class C; therefore, the proposed change in land-use designation would not change the maximum permissible environmental noise levels, as shown in Table 3.

Table 3: Maximum Permissible Environmental Noise Levels

EDNA of Noise Source	EDNA of Receiving Property		
	Class A	Class B	Class C
Class A (Residential)	55 dBA	57 dBA	60 dBA
Class B (Commercial)	57 dBA	60 dBA	65 dBA
Class C (Industrial)	60 dBA	65 dBA	70 dBA

Between the hours of 10 p.m. and 7 a.m., the noise limitations described in Table 2 are reduced by 10 dBA for receiving properties within Class A EDNAs. At any hour of the day or night the applicable noise limitations may be exceeded for any receiving property by no more than:

- 5 dBA for a total of 15 minutes in any 1-hour period; or
- 10 dBA for a total of 5 minutes in any 1-hour period; or
- 15 dBA for a total of 1.5 minutes in any 1-hour period.

[1] "Impulsive sound" is sound that is of short duration where each peak of sound lasts 1 second or less. The sound is characterized by abrupt onset and rapid decay (TMC 8.122.010).

Existing Noise Environment

Existing noise sources within the NewCold Facility include operation of rooftop compressors and oxygen reduction systems associated with the refrigeration system (southwestern portion of the existing NewCold building), truck traffic entering and leaving the NewCold Facility, noise associated with unloading of materials in the loading bays (primarily inside the loading bays), and operation of refrigeration equipment on truck trailers parked in the staging area. Trucks do not use air brakes while in the NewCold Facility. The staging area is equipped with hookups allowing refrigerated trucks to operate without the need for trucks to idle.

Landau conducted baseline noise monitoring at the existing NewCold Facility to establish existing conditions for the Site. Prior to arriving on Site, Landau requested information regarding the timing of operations at the NewCold and adjacent facilities from a NewCold representative. The noise study was planned for mid-day (11:00 a.m. through 2:30 p.m.) on Tuesday, February 1 to measure noise levels at full operational load.

Each measurement included a recorded 15-minute L_{eq} (equivalent continuous sound level) and L_{max} (maximum sound level) in A-weighted decibels using a Norsonic Model 118 noise meter, set on "fast" mode. Landau personnel also observed ambient noise during each measurement in order to note noises (e.g., passing vehicles, alarms, etc.) that contribute to overall noise measurements. Weather conditions were ideal for noise monitoring, overcast to clear with no precipitation and little to no wind.

Measurements 1 and 2 (the same physical location) were taken at the property line closest to the rooftop compressors and oxygen reduction systems located in the southwestern portion of the existing building. NewCold personnel informed Landau staff that during especially warm weather, noise associated with rooftop compressors and oxygen reduction systems is louder than observed during the Site visit. NewCold briefly activated the compressors to operate at higher load to allow Landau to conduct a brief measurement; however, due to the low ambient temperature, operating for an extended time and at a higher load was not possible without risking damage to the equipment. Measurement 1 represents this brief period of compressor operation.

Measurements were taken near property lines to approximate existing noise levels at neighboring properties, with the exception of the following:

- Location 6: The measurement was taken as close as safely possible to the loading dock activities to capture the highest noise levels on Site.
- Location 7: The measurement was taken between the truck trailer staging area and the vegetated area to the south of the NewCold Facility. This location was selected to measure noise associated with the NewCold Facility without excessive contribution from vehicles driving on South 48th Street.

Measurement locations are shown on Figure 1. Equivalent continuous sound level (L_{eq}), maximum sound level (L_{max}), and a description of observed noise sources for each location are shown in Table 4.

Table 4: Baseline Noise Levels

#	Measurement Location (Adjacent Property Type)	Time and Predominant Observed Noise Sources	15-minute Continuous Sound Level (L_{eq})	Maximum Sound Level (L_{max})
1	West of rooftop cooling equipment, with compressors[a] (light industrial)	11:48 a.m. Compressors starting up, operating and shutting down. Background traffic noise, and adjacent business operations.	57.5	77.1
2	West of rooftop cooling equipment without compressors (light industrial)	11:53 a.m. Noise from inside NewCold building, vehicle traffic on South Orchard Street and other nearby roads, backup alarms from offsite, other adjacent business operations.	55.3	66.4
3	Northwest corner of NewCold Facility (light industrial)	12:15 p.m. Vehicle traffic on nearby roads, generator engine running at adjacent business to the west, other adjacent business operations.	56.1	62.1
4	Northern NewCold boundary near communications tower (parks and open space)	12:39 p.m. Maintenance work and vehicle operating at landfill, traffic on nearby roads, equipment associated with communications tower, airplanes.	47.3	64.8
5	Eastern Site boundary near landfill (parks and open space)	1:00 p.m. Truck engines and truck trailer refrigeration equipment in NewCold loading area, noise associated with unloading trucks.	45.8	64.7
6	East side of loading dock area between dock and staged trucks (interior of NewCold Facility)	1:19 p.m. Idling trucks, trucks entering loading area, truck trailer refrigeration equipment.	73.2	90.4
7	Southeast of truck trailer staging area (interior of NewCold Facility)	1:39 p.m. Trucks moving within loading area, truck trailer refrigeration equipment.	54.2	69.3
8	Southwest corner of NewCold Facility (residential)	2:00 p.m. Trucks entering NewCold Facility on South 46th Street, truck trailer refrigeration equipment.	54.3	68.7

a. Measurement 1 was 3 minutes 11 seconds in duration, corresponding with the amount of time the compressors were able to be operated. All other measurements were conducted for 15 minutes.

With the exception of the brief period of compressor operation, observed predominant noise sources along the northwestern and northern portions of the property consisted of operations at adjacent properties, traffic on surrounding roadways, and airplanes. In the southern and central-eastern portions of the property, truck traffic and trailer refrigeration equipment were the primary observed

noise sources. Continuous noise levels at all property line locations were well below Washington's maximum permissible continuous noise levels for industrial operations when compared to the limit for residential receiving properties (60 dBA). As described in Attachment 1, noise attenuates at a rate of approximately 6 to 7.5 dBA per doubling of distance; therefore, noise levels at the nearest residential receiving properties would be well below typical residential background noise levels (50 to 60 dBA) without accounting for intervening topography and vegetation, which would further attenuate noise. No impulse noises were noted from NewCold operations.

Proposed Future Use

NewCold plans to expand the existing refrigerated storage facility to the east, adding a second high-cube warehouse adjacent to the existing structure. The design of the new structure has not been finalized, but current plans include incorporating more energy-efficient and quieter compressor equipment than the equipment used to cool the existing warehouse.

Noise from increased truck and employee traffic serving the expanded facility would also contribute to the local noise environment. However, traffic volume associated with light industrial use of the Site (current designation, which includes warehouses or light manufacturing) would not differ from NewCold's proposed expansion. Traffic impacts associated with the proposed amendment are addressed in the traffic impacts analysis completed by others.

Although NewCold does not intend to sell the property, changing the land-use designation of the Site from M-1 to M-2 could allow for more intensive use of the Site in the future, potentially allowing for more intensive manufacturing processes. Any future development would be required to comply with City and Washington State noise limits for all adjacent and nearby properties. As described above, nearby properties include industrial properties to the northwest, west and south, park or open space to the north and east (currently landfill), and non-adjacent residential properties described above and shown on Figure 1. Changing the land-use designation of the Site would not change the applicable noise limits.

Light and Glare

The following subsections address potential light and glare impacts to surrounding properties based on the proposed change in comprehensive plan land-use designation.

Regulations and Standards

The City does not have lighting regulations specific to industrial operations; however, anyone developing the Site would be required to obtain land-use and building permits prior to development and would be required to comply with all relevant design standards.

The City's Land Use Regulatory Code, Title 13 of the TMC, contains outdoor lighting regulations for off-street parking areas and for transitional areas between non-residential and residential uses.

Standards include use of indirect illumination or floodlighting directed away from adjacent properties to minimize spillover light on surrounding properties.

Joint Base Lewis-McChord Lighting Study Report

In 2019, the Joint Base Lewis-McChord (JBLM) Lighting Study Report[2] was published to assess and improve regional lighting equipment and practices within and in the regions surrounding JBLM (including Tacoma). The report addresses light pollution prevention and mitigation measures and suggests that communities adopt lighting standards to improve aesthetics; minimize glare and light trespass; improve safety for drivers, cyclists, and pedestrians; and improve visibility of the night sky.

The basic principles of light pollution prevention include shielding light so that it is directed only to the intended area, use only the amount of light necessary to the task, and employ light sources with warm-toned light.

The Lighting Study Report makes the following recommendations applicable to the NewCold facility:

- Street lights should be fully shielded to direct light downward with no opaque or reflective elements facing upward. The light source (bulb) should not extend below the shielding. Lights should not be angled, but should be directed directly toward the ground. Modern light-emitting diode (LED) lighting should be the appropriate brightness for the application and should use a warm white light (2,700 Kelvin [K] to 3,000K color temperature).
- Like street lights, wall-mounted lights should be fully shielded to direct light downward toward the area to be illuminated. The light source should not extend below the shielding. Modern LED lighting should be the appropriate brightness for the application and should use a warm white light.

Existing Lighting

Fixtures currently installed at the NewCold Facility consist of highly energy-efficient directional LED lighting. Exterior lighting includes fully shielded street lamp-type lighting in the passenger vehicle and truck parking areas in the southern portion of the property and along an access roadway following the perimeter of the NewCold Facility, including the eastern portion of the Site. Wall-mounted, fully shielded directional LED light fixtures are mounted on the south side of the building to illuminate the employee entrances and above the large loading bay doors. Additional wall-mounted directional light fixtures are present above each human-scale door on the north side of the building. All existing light fixtures are downward-directional with opaque, non-reflective housings that extend below the light source and reduce spillover to adjacent areas. Lighting is located at an appropriate height for the application. See Attachment 2 for photographs of existing light fixtures.

[2] MEI. 2019. Draft: Joint Base Lewis-McChord Lighting Study Report. Monrad Engineering, Inc. April 5.

Proposed Future Lighting

NewCold intends to expand into the Site through construction of a second high-cube refrigerated warehouse building adjacent to the existing building. The proposed building is expected to be the same height and dimensions as the existing high-cube building. No additional street lighting is currently planned as part of the proposed expansion. Lighting would include wall-mounted fixtures over any human-scale doors along the north and east sides of the new building. No new loading bays are currently planned, but if additional loading bays are added in the future, they would be equipped with shielded directional lighting similar to the existing lighting.

The specific light fixtures to be used in the proposed expansion have not been identified, but NewCold is committed to using lighting fixtures and placement that minimize light pollution and light encroachment into surrounding properties. This includes, but is not limited to, use of the newest available LED-type light fixtures allowing precise control of lighting color and brightness compared to legacy light sources, and use of external shielding on all fixtures to prevent light trespass.

While little to no light encroachment is expected due to the use of appropriate lighting, the existing NewCold structure would provide an additional barrier to the west and south. The uphill slope to the landfill would obscure light and glare to the north and east of the Site. The nearest properties designated for residential use are located a minimum of 800 feet from the Site; therefore, no light impacts to nearby residences would be expected due to NewCold's planned use of the Site.

While NewCold has no intention of selling the Site, the proposed designation change would apply to any future development. However, as described under Land Use Regulatory Code above, a change from M-1 to M-2 would not allow for more intrinsically light-intensive uses or result in any changes to regulations regarding lighting on the Site.

LANDAU ASSOCIATES, INC.

Amy Maule
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AEM/MWB/RAS/ccy
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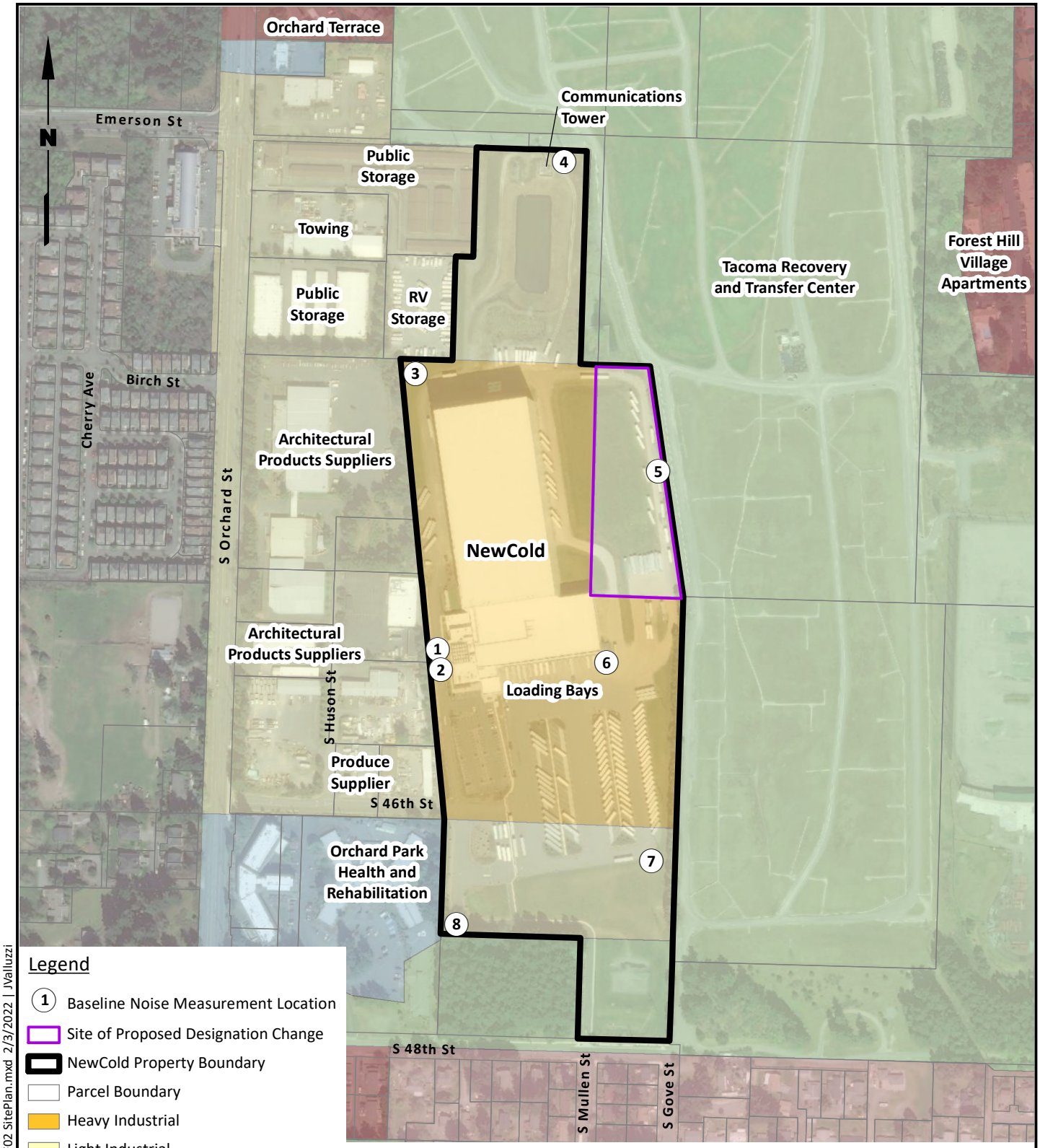
Attachments

Figure 1: Site Plan
Attachment 1: Characteristics of Sound and Noise
Attachment 2: Photographs of Existing Lighting at NewCold Facility



Legend

- (1) Baseline Noise Measurement Location
- Site of Proposed Designation Change
- NewCold Property Boundary
- Parcel Boundary
- Heavy Industrial
- Light Industrial
- Multi-Family (Low Density)
- Single Family Residential
- Neighborhood Commercial
- Parks and Open Space

0 400 800

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Source: ESRI World Imagery; Pierce County GIS

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LANDAU ASSOCIATES

NewCold Noise and Light/Glare Study Tacoma, Washington	**Site Plan**	Figure 1

ATTACHMENT 1

Characteristics of Sound and Noise

Attachment 1
Characteristics of Sound and Noise

Definition of Sound

Sound is created when objects vibrate, resulting in a minute variation in surrounding atmospheric pressure, called sound pressure. The human response to sound depends on the magnitude of a sound as a function of its frequency and time pattern (EPA 1974). Magnitude is a measure of the physical sound energy in the air. The range of magnitude the ear can hear, from the faintest to the loudest sound, is so large that sound pressure is expressed on a logarithmic scale in units called decibels (dB). Loudness refers to how people subjectively judge a sound and varies between people.

Sound is measured using the logarithmic decibel scale, so doubling the number of noise sources, such as the number of cars on a roadway, increases noise levels by 3 A-weighted decibels (dBA). A-weighted decibels are noise level measurements that account for relative loudness perceived by human hearing because humans are less sensitive to very low-pitch or high-pitch noises. Therefore, when you combine two noise sources emitting 60 dBA, the combined noise level is 63 dBA, not 120 dBA. The human ear can barely perceive a 3 dBA increase, while a 5 dBA increase is about one and one-half times as loud. A 10 dBA increase appears to be a doubling in noise level to most listeners. A tenfold increase in the number of noise sources will add 10 dBA.

In addition to magnitude, humans also respond to a sound's frequency or pitch. The human ear is very effective at perceiving frequencies between 1,000 and 5,000 hertz (Hz), with less efficiency outside this range. Environmental noise is composed of many frequencies. A-weighting (dBA) of sound levels is applied electronically by a sound level meter and combines the many frequencies into one sound level that simulates how an average person hears sounds of low to moderate magnitude.

Definition of Noise

Noise is unwanted or unpleasant sound. Noise is a subjective term because, as described above, sound levels are perceived differently by different people. Magnitudes of typical noise levels are shown in Table 1.1.

Table 1.1: Typical Noise Levels

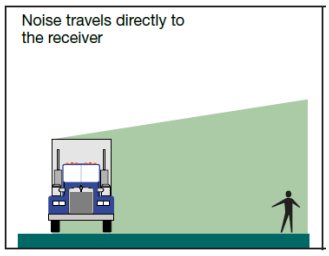
Noise Source	Decibel Level	Effect/Perception	Relative Loudness (human judgement of sound levels)
Jet aircraft takeoff from carrier (50 feet)	140 dBA	Threshold of pain	64 times as loud
Loud rock concert near stage	120 dBA	Uncomfortably loud	16 times as loud
Power lawn mower, motorcycle, garbage truck	100 dBA	Very loud; serious damage possible in 8-hr exposure	4 times as loud
Motorcycle or heavy truck at 25 ft	90 dBA	Likely damage in 8-hr exposure	2 times as loud
Garbage disposal, dishwasher	80 dBA	Moderately loud; possible damage in 8-hr exposure.	Reference loudness
Radio or TV-audio, vacuum cleaner	70 dBA	Upper 70s are annoyingly loud to some people.	½ as loud
Conversation in restaurant, office, background music	60 dBA	Fairly quiet	¼ as loud
Quiet suburb, conversation at home	50 dBA		⅛ as loud
Library, bird calls, lowest limit of urban ambient sound	40 dBA		
Quiet rural area	30 dBA	Very Quiet	
Whisper, rustling leaves	20 dBA		
Breathing	10 dBA	Barely audible	

Sources: Beranek (1988) and EPA (1974).

Sound Propagation

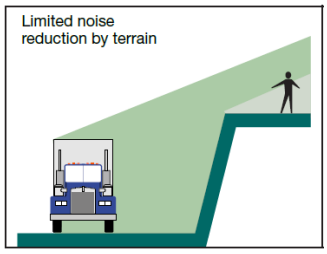
Sound propagation, or how far the sound travels, is affected by the terrain and the elevation of the receiver relative to the noise source. Noise levels can be reduced by breaking the line of sight between the receiver and the noise source.

- Level ground: noise travels in a straight path between the source and receiver.



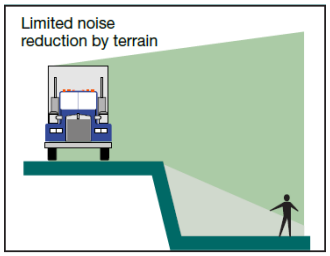
Level Ground

- Depressed source/elevated receiver: terrain may act like a partial noise barrier and reduce noise levels if it crests between the source and receiver.



Depressed source/elevated receiver

- Elevated source/depressed receiver: the edge of the roadway acts as a partial noise barrier. Even a short barrier, like a concrete safety barrier, can reduce noise levels at the subgrade receiver.



Elevated source/depressed receiver

Line and Point Sources

Noise levels decrease with distance from the noise source. For a line source, like a highway, noise levels decrease 3 dBA for every doubling of distance, e.g., from 50 feet to 100 feet, between the source and the receiver over hard ground (concrete, pavement) or 4.5 dBA over soft ground (grass). For point source, like most construction noise, the levels decrease between 6 and 7.5 dBA for every doubling of distance.

Effects of Noise

The Federal Highway Administration noise abatement criteria are based on speech interference, which is a well-documented impact that is relatively reproducible in human response studies. Environmental noise indirectly affects human welfare by interfering with sleep, thought, and conversation. Prolonged exposure to very high levels of environmental noise can cause hearing loss and the US Environmental Protection Agency (EPA) has established a protective level 70 dBA $L_{eq}(24)$ for hearing loss (EPA 1974). Noise also can affect some types of wildlife during certain activities.

Noise Level Descriptors

The equivalent sound level (L_{eq}) is a measure of the average noise level during a specified period of time. A 1-hour period, or hourly L_{eq} [$L_{eq}(h)$], is used to measure highway noise. L_{eq} is a measure of total noise during a time period that places more emphasis on occasional high noise levels that accompany

general background noise levels. For example, if you have two different sounds, and one contains twice as much energy, but lasts only half as long as the other, the two would have the same L_{eq} noise levels.

Either the total noise energy or the highest instantaneous noise level can describe short-term noise levels, such as those from a single truck passing by. The sound exposure level is a measure of total sound energy from an event and is useful in determining what the L_{eq} would be over a period when several noise events occur. L_{max} is the maximum sound level that occurs during a single event and is related to impacts on speech interference and sleep disruption. L_{min} is the minimum sound level during a period of time.

With L_n, "n" is the percent of time that a sound level is exceeded and is used to describe the range of sound levels recorded during the measurement period. For example, the $L_{8.3}$ is the noise level that is exceeded 8.3 percent of the time, or 5 minutes in any hour, and the $L_{2.5}$ is the noise level that is exceeded 2.5 percent of the time, or 1.5 minutes in any hour. Sound varies in the environment and people will generally find a higher, but constant, sound level more tolerable than a quiet background level interrupted by higher sound level events. For example, steady traffic noise from a highway is normally less bothersome than loud alarms or occasional impact noises in an otherwise quiet area.

References

Beranek, Leo L., ed. 1988. Noise and Vibration Control, rev ed. Washington, DC: Institute of Noise Control Engineering.

EPA. 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Publication No. 550/9-74-004. US Environmental Protection Agency. March.

Photographs of Existing Lighting at NewCold Facility

1. Street lamp-style light fixture.

2. Street lamp-style light fixture.

LANDAU ASSOCIATES

NewCold
Noise and Light/Glare Study
Tacoma, Washington

Photographs of Existing Lighting at NewCold Facility

Figure
2-1

3. Light fixture over human-scale door.

4. Light fixture over human-scale door.

LANDAU ASSOCIATES	NewCold Noise and Light/Glare Study Tacoma, Washington	**Photographs of Existing Lighting at NewCold Facility**

Figure
2-2

5. Light fixture over loading bays.

LANDAU ASSOCIATES	NewCold Noise and Light/Glare Study Tacoma, Washington	**Photographs of Existing Lighting at NewCold Facility**	Figure 2-3

02/08/22 P:\2042\001\R\Attachment 2\NewCold Air and Light_att2-3.docx

Exhibit C

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT
TRAFFIC ASSESSMENT

City of Tacoma, WA

Prepared for: Ron Nelson
c/o: Bill Herried
South Sound Christian Schools
2052 S 64th Street
Tacoma, WA 98409

January 2022

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT
TRAFFIC IMPACT ANALYSIS

1. INTRODUCTION

The main goals of this study focus on the assessment of roadway/non-motorist conditions and forecasts of newly generated project traffic in relation to a proposed comprehensive plan zoning amendment for the tax parcel #'s: 032030-1024; -1189; -1073; -1075; -1193; -1194; & -1159. The first task includes the review of existing parcel characteristics, permissible land use development and general roadway information on the adjacent street system. Forecasts of future traffic and dispersion patterns on the street system are then determined using established trip generation and distribution techniques for two alternatives. The first includes a forecast analysis encompassing site trip generation under existing zoning ordinances. The second alternative accounts for a zoning amendment, permitting the development of multi-family and commercial uses. As a final step, appropriate conclusions and mitigation measures are defined.

2. PROJECT DESCRIPTION

This report summarizes anticipated traffic impacts related to a comprehensive plan amendment request for tax parcel #'s: 032030-1024; -1189; -1073; -1075; -1193; -1194; & -1159 in the city of Tacoma. The subject site is located south of S 64th Street, east of S Wapato Street and west of S Tacoma Boulevard on a cumulative 15.96-acres. The subject site is currently designated as Single-Family Residential (R2) zoning. The primary aspect of this proposal is to seek a comprehensive plan amendment from the above designation to permit the development of multi-family (western 4 parcels) and commercial (eastern 4 parcels) uses. Surrounding roadway descriptions and additional subject site parcel characteristics are provided in the following section. Figure 1 below shows the vicinity map of the area.

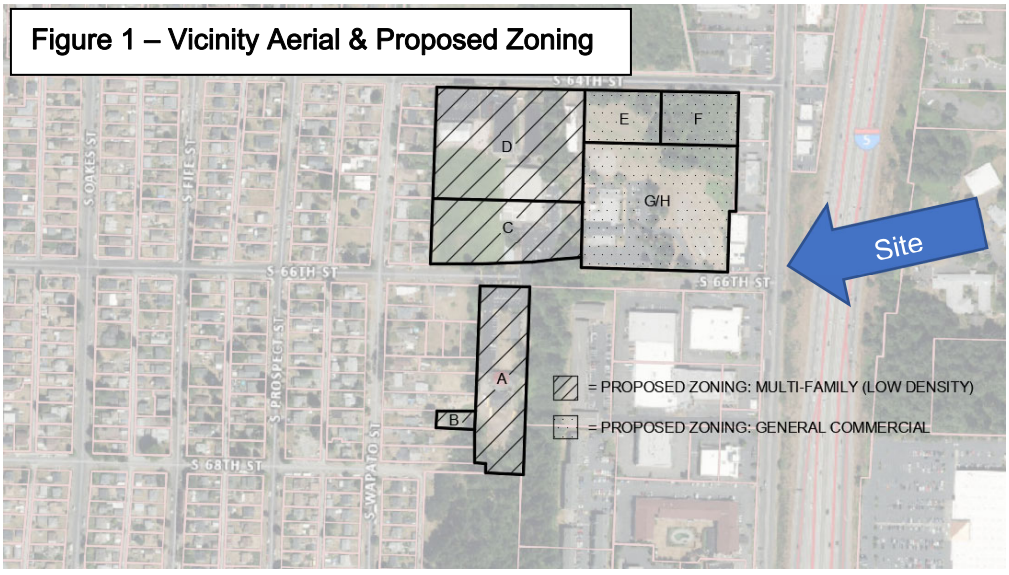


Figure 1 – Vicinity Aerial & Proposed Zoning

3. EXISTING CONDITIONS

3.1 Existing Street System

The street network serving the proposed project consists of a variety of roadways. The major roadways and arterials defined in the study area are listed and described below.

Table 1: Roadway Network

Functional Classification	Roadway	Speed Limit	Lanes	Street Parking	Sidewalk	Bike Facilities
Collector	Tacoma Mall Blvd	35 mph	2-3	Yes	Yes	No
Local	S 64th St	25 mph*	2	Yes	Some	No
	S 66th St	25 mph*	2	Yes	Some	No
	S Wapato St	25 mph*	2	Yes	Some	No

* No posted speed limit observed so the City standard 25 mph applies.

3.2 Roadway Improvement Projects

A review of the current City of Tacoma Six-Year Transportation Improvement Program (2022-2027) indicates projects are planned in the study area. Capacity-related projects and improvements affecting the study intersections are included below:

LID 8668: S 66th St & Wapato (WBS: $LID--8668R): This project includes alley and street asphalt paving and new curb and gutter. The project has a total estimated cost of $923,300.

South 74th Street: Tacoma Mall Blvd to West City Limits (WBS: $PWKS-00005): The project will construct grind and overlay improvements and install ADA compliant curb ramps where needed. Total project cost is estimated at $4,400,000.

56th Street South and Cirque Drive Corridor Improvements: S Washington St to Tacoma Mall Blvd (WBS: PWK-G0006): This project will replace pavement along the corridor, upgrade curb ramps and sidewalks to meet ADA requirements, install traffic signal upgrades and install bike facilities on a parallel route connecting the South Tacoma Sounder Station with the Tacoma Mall Transit Center. Total project cost is estimated at $11,637,651.

3.3 Active Transport

Non-Motorist Facilities:

School-aged children residing in the subject site would attend either Arlington Elementary (0.70-miles walking distance southwest of the subject site) or Gray Middle School (1.30-miles walking distance west). Tacoma Mall Boulevard and the north side of S 66th Street provide curb and sidewalk. Elsewhere, non-motorist infrastructure is discontinuous. It should be noted that Sound Christian Academy, a private pre-k through 12th grade school, is located on-site. Signage alerting drivers of pedestrian crossings associated with the school is available on S 66th Street and S 64th Street in the vicinity of the subject site. Mini-traffic circles are provided at S 66th Street's nearby intersections with S Wapato Street and S Fife Street. Moreover, speed humps reducing driver speed are provided are provided along S Wapato Street in the subject site vicinity.

Transit Service

A review of the Pierce Transit service schedule indicates Route 53 – University Place provides transit service in close proximity to the subject site. The nearest stops are provided at S Oakes Street's intersections with S 64th Street and S 66th Street (~0.30-miles walking distance west of the subject site). The route provides connections between the TCC Transit Center and Tacoma Mall Transit Center with stops provided in University Place along 27th Street W/40th Street W/Grandview Drive W and in South Tacoma. Weekday service is provided from 5:50 AM – 10:45 PM with approximately 30-minute headways during peak travel hours. Saturday service is provided from approximately 8:25 AM – 6:00 PM with approximately 60-minute headways. Sunday service is provided from approximately 8:16 AM – 6:37 PM with approximately 120-minute headways.

Moreover, Route 202 – S 72nd Street provides bus stops 0.60-miles walking distance south of the subject site at S 74th Street & S Wapato Street. The route services the 72nd Street corridor providing connection between the Lakewood Transit Center and the 72nd Street Transit Center. Weekday service is provided from 6:00 AM – 10:18 PM with approximately 30-minute headways during peak travel hours. Saturday service is provided from approximately 8:45 AM – 9:58 PM with approximately 30-minute headways. Sunday service is provided from approximately 9:20 AM – 9:18 PM with approximately 30-minute headways.

Refer to Pierce Transit's routes & schedules for further details.

4. ZONING & DEVELOPMENT POTENTIAL

Under existing zoning regulations, the subject site could be developed via single-family land use. To calculate approximately how many structures could be constructed in accordance with City standards, the total area of each parcel was measured (acreage/feet^2). Values were derived from the Pierce County Assessor. It should be noted that by taking the total site area, assumptions include all existing structures to be demolished and the site redeveloped to maximum single-family potential. While this scenario is not anticipated to occur, it presents a conservative trip generation analysis.

Per Tacoma Municipal Code 13-191, single-family structures within R-2 zoning require a standard minimum lot size of 5,000 square feet. Multi-family development within the proposed Comprehensive Plan Amendment scenario requires a minimum lot size of 6,000 square feet plus 1,500 square feet/unit in excess of 4 units. Lastly, approximately 70% of the total land area was assumed to be developable for the proposed commercial space (C2 zoning). This 30% reduction accounts for building setbacks, parking and more. Table 2 summarizes the permissible number of developable units within each parcel under existing zoning and proposed comprehensive plan amendment conditions.

Table 2: Permissible Development Estimates

Existing Zoning	Parcel	Available Developable Area	Existing Zoning Dev. Estimate (Single-Family)	Proposed Comp. Plan Amend. Dev. Estimate (Multi-Family: A-D / Commercial: E-H)
Single-Family (R-2)	A	2.38-acres / ~103,455 SF	20 S-F DU's	69 M-F DU's
	B	0.18-acres / ~7,840 SF	1 S-F DU's	5 M-F DU's
	C	2.58-acres / ~112,500 SF	22 S-F DU's	75 M-F DU's
	D	4.76-acres / ~207,346 SF	41 S-F DU's	138 M-F DU's
	E	1.00-acres / ~43,560 SF	8 S-F DU's	~215,300 SF of commercial space
	F	1.06-acres / ~46,211 SF	9 S-F DU's	
	G/H	5.00-acres / ~217,800 SF	43 S-F DU's	
Total Subject Site Development Potential			144 S-F DU's	287 M-F DU's; ~215,300 SF Comm.

As illustrated in Table 2, approximately 144 single-family dwelling units may be constructed on-site should the entire site be redeveloped with single-family land use. Under the proposed comprehensive plan amendment estimates, approximately 287 multi-family dwelling units and ~215,300 square feet of commercial space may be constructed should the entire subject site be redeveloped under the proposed comprehensive plan amendment. This estimate assumes a maximum redevelopment of the subject parcels currently occupied by CenterPoint Christian Fellowship church. Therefore, these are conservative estimates as redevelopment of the entire subject site is not planned.

5. FUTURE TRAFFIC CONDITIONS

5.1 Project Trip Generation

Trip generation is defined as the number of vehicle movements that enter or exit a site during a designated time period such as a specific peak hour or an entire day. Data presented in this analysis was derived from the Institute of Transportation Engineer's (ITE) publication *Trip Generation,* 11th Edition. If development were to occur under existing zoning regulations, the designated land use would be classified as Single-Family Detached Housing (LUC 210). Should the comprehensive plan amendment be approved, proposed development could consist of multi-family and commercial development. It should be noted that a tenant is identified should the C2 comprehensive plan amendment become enacted. One development option for parcels E, F G and H could comprise a warehouse use by Bargreen Ellingson, a restaurant supply company. As such, the designated land uses would be classified as Multi-Family Housing Mid-Rise (LUC 220) and Warehousing (LUC 150) under the proposed comprehensive plan amendment development scenario.

ITE average rates were used to determine trip ends with dwelling units used as the input variable for the existing and comprehensive plan amendment residential land uses. Equations and square footage, which comprise more conservative trip estimates when compared with rates, were used for LUC 150. Table 3 below summarizes anticipated vehicular movements for the average weekday daily trips (AWDT), AM peak hour and PM peak hour. ITE Trip Generation sheets have been attached to the appendix for reference.

Table 3: Project Trip Generation

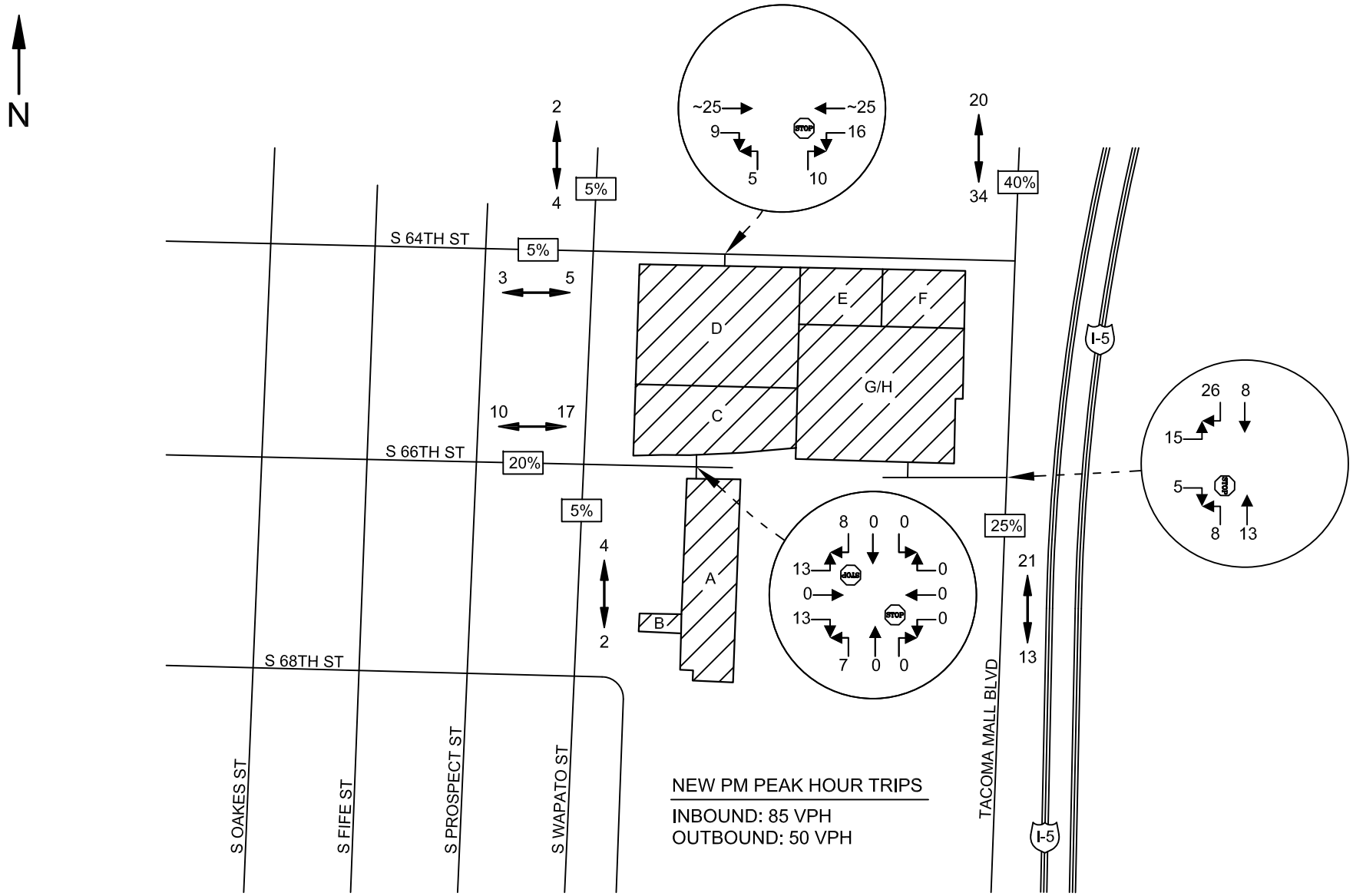
Land Use	Units	AWDT	AM Peak-Hour Trips			PM Peak-Hour Trips		
			In	Out	Total	In	Out	Total
Existing Zoning:								
Single-Family Detached – LUC 210	144 DU's	1358	26	75	**101**	85	50	**135**
Proposed Comp. Plan Amendment:								
Multi-Family (Low-Rise) – LUC 220	287 DU's	1934	28	87	**115**	92	54	**146**
Warehousing – LUC 150	215.3 KSF	378	38	11	**49**	14	38	**52**
Proposed Comp. Plan Amendment Total		2312	66	98	**164**	106	92	**198**

Based on the data presented in Table 3, site redevelopment under existing single-family zoning conditions is anticipated to generate approximately 1358 average weekday trips with 101 trips (26 in/75 out) occurring during the AM peak hour and 135 trips (85 in/50 out) occurring during the PM peak hour.

Proposed comprehensive plan amendment site redevelopment is anticipated to generate 2312 average weekday trips with 164 trips (66 in/98 out) occurring during the AM peak hour and 198 trips (106 in/92 out) occurring during the PM peak hour.

5.2 Trip Distribution and Assignment

Trip distribution describes the process by which project generated trips are dispersed on the street network surrounding the site. Figure 2 illustrates PM peak hour trip distribution & assignment under Scenario 1: forecast site redevelopment under existing single-family zoning conditions. Figure 3 illustrates PM peak hour trip generation and distribution under Scenario 2: forecast site redevelopment given proposed comprehensive plan amendment conditions. Percentages and assignments of project-generated traffic are based on proximity to major arterial routes and destinations. Subject parcels A-C are anticipated to access the site via S 66th Street from the west. Parcel D is anticipated to continue access via S 64th Street and parcels E-H are anticipated to be accessed via S 66th Street by way of Tacoma Mall Boulevard.

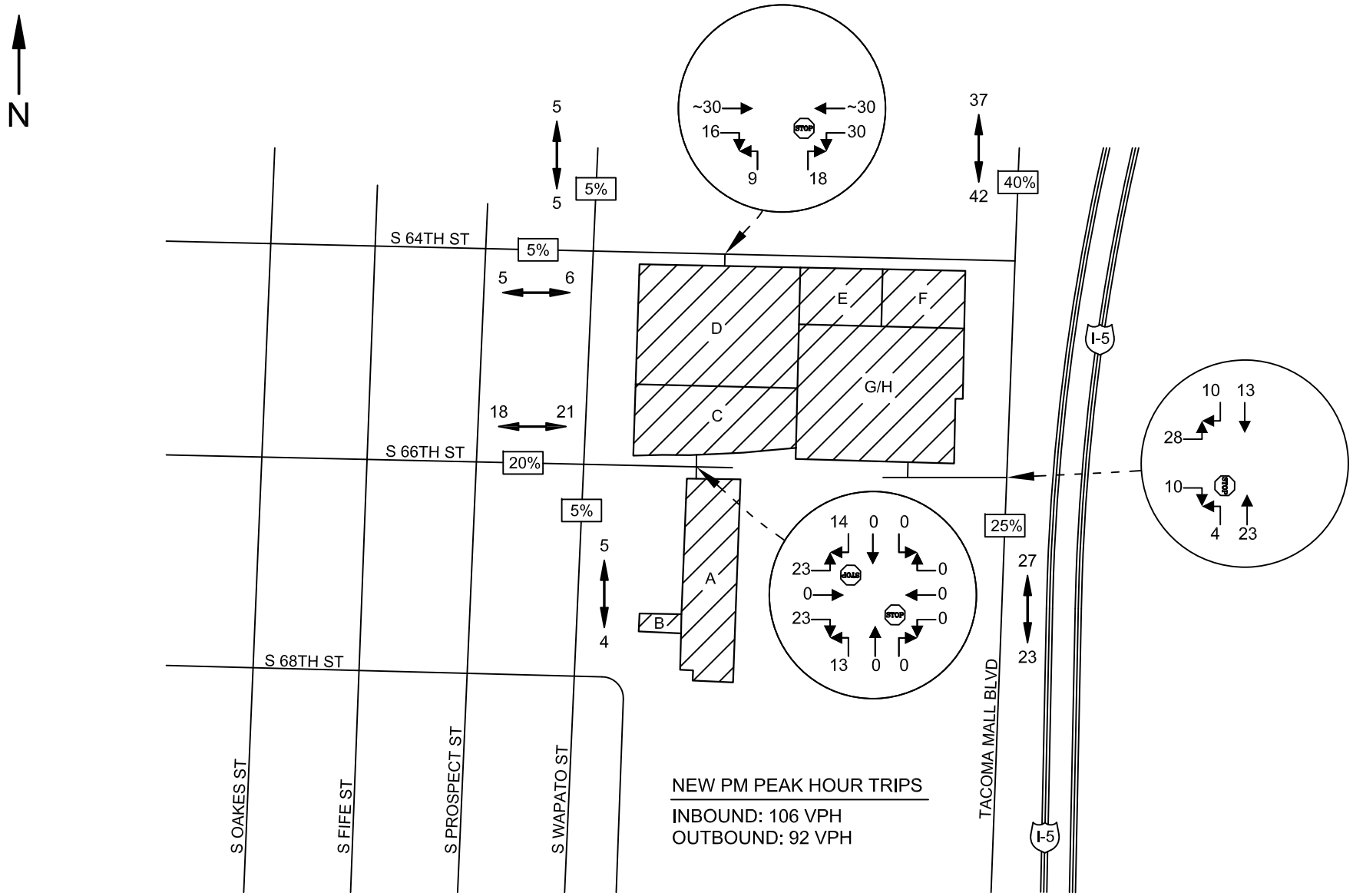


HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
SCENARIO 1: SITE REDEVELOPMENT UNDER EXISTING ZONING (SINGLE-FAMILY)
FIGURE 2



HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

SOUTH SOUND COMPREHENSIVE PLAN AMENDMENT

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
SCENARIO 2: SITE REDEVELOPMENT UNDER PROPOSED REZONE (MULTI-FAMILY/COMMERCIAL)
FIGURE 3

6. SUMMARY

The South Sound Comprehensive Plan Amendment project proposes a future amendment to existing zoning. The comprehensive plan amendment request encompasses tax parcel #'s: 032030-1024; -1189; -1073; -1075; -1193; -1194; & -1159 (15.96-acres), located in the city of Tacoma. The subject site is currently zoned as Single-Family Residential (R2) zoning. The proposed comprehensive plan amendment and future associated rezone would permit the development of multi-family in the western 4 parcels and a commercial use in the eastern 4 parcels.

Future buildout assumptions encompassed two trip generation and distribution scenarios. Scenario 1 assumes the entire subject site be redeveloped under existing single-family zoning. Scenario 2 assumed the entire subject site to be redeveloped under the proposed comprehensive plan amendment, permitting multi-family and commercial development. Based on trip generation estimates derived from approximate development potential, Scenario 1 is anticipated to generate approximately 135 PM peak hour trips (85 in / 50 out). Moreover, Scenario 2 is anticipated to generate approximately 198 PM peak hour trips (106 in / 92 out). Approximate PM peak hour trip distribution and assignment for each development scenario are outlined in Figures 2 and 3. It should again be noted that these are conservative estimates as the future assumptions encompassed complete redevelopment of every subject site parcel.

The majority of trips would be traveling to/from Tacoma Mall Boulevard. Under either analysis scenario, less than 100 PM peak hour trips would be traveling along any local roadway segment in the vicinity of the subject site. Therefore, the proposed comprehensive plan amendment and future associated rezone is not found to have a significant impact to surrounding local roadway operations. Should the proposal differ from the land use assumptions evaluated herein, an additional study may be required at such time. It should be noted that speed reduction strategies such as speed humps and neighborhood traffic circles are provided on the surrounding roadway system. To mitigate potential impacts as a result of the proposed comprehensive plan amendment and future associated rezone, additional infrastructure may be required as a part of site development.

Please feel free to contact should you require additional information.

Single-Family Detached Housing
(210)

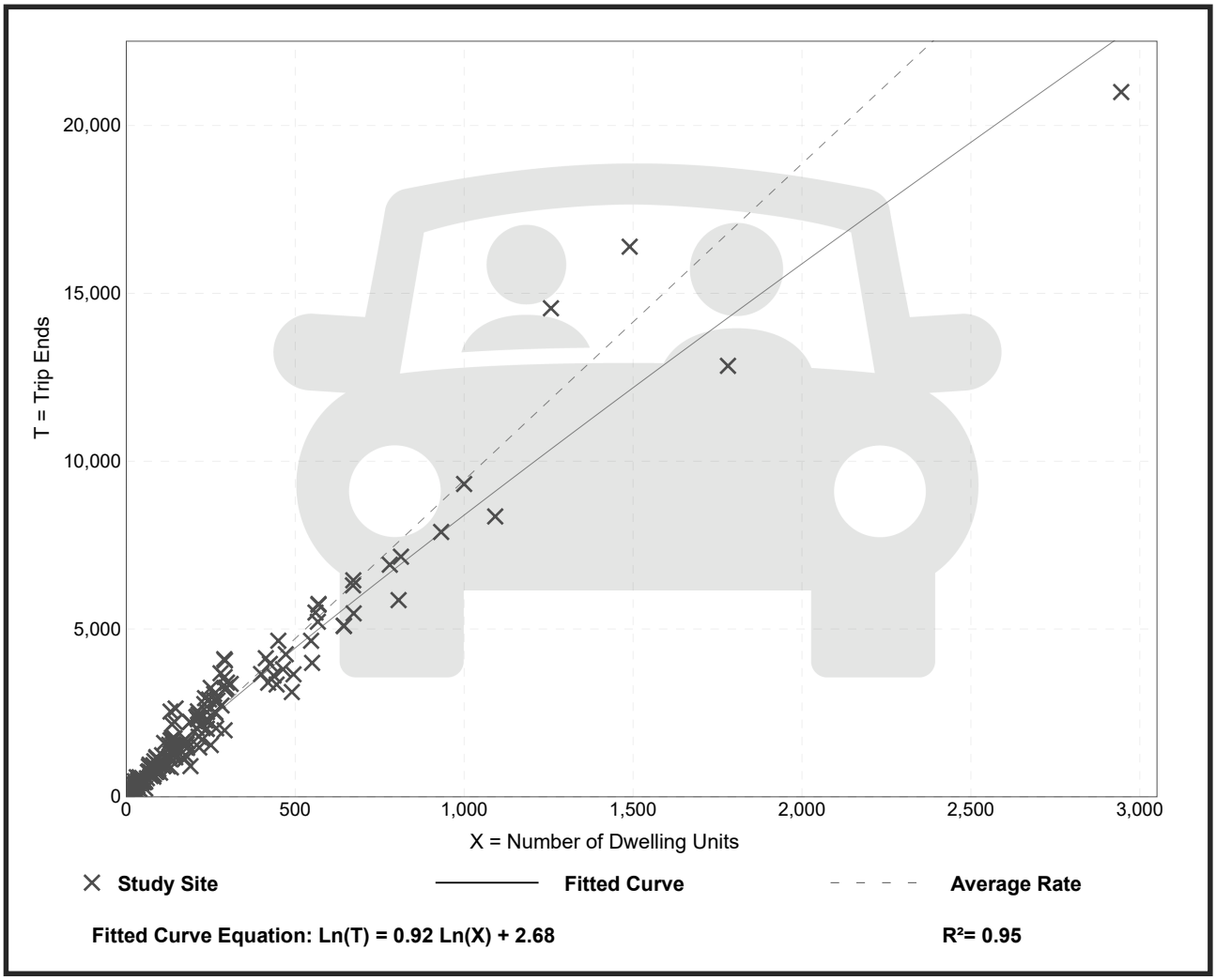
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

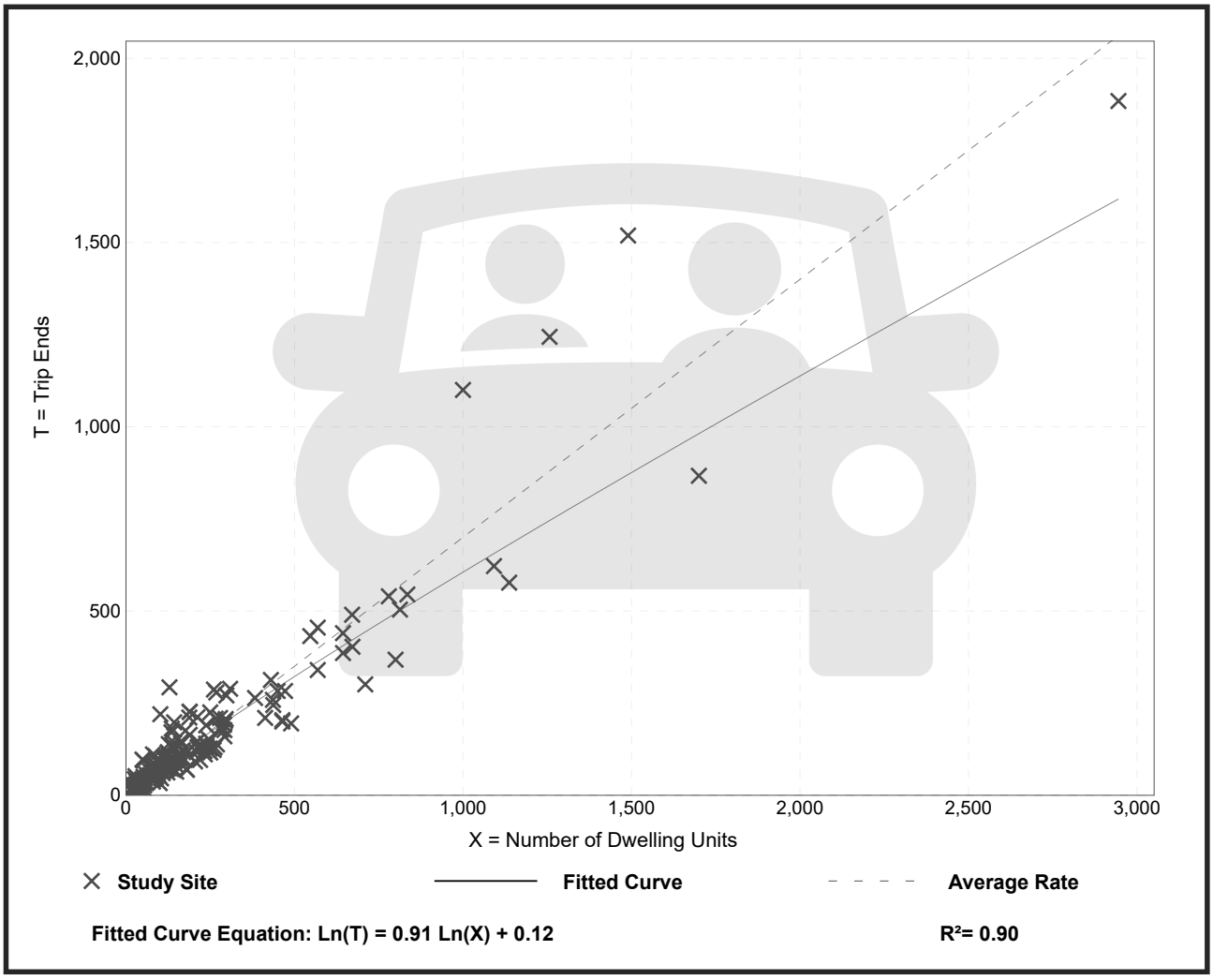
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



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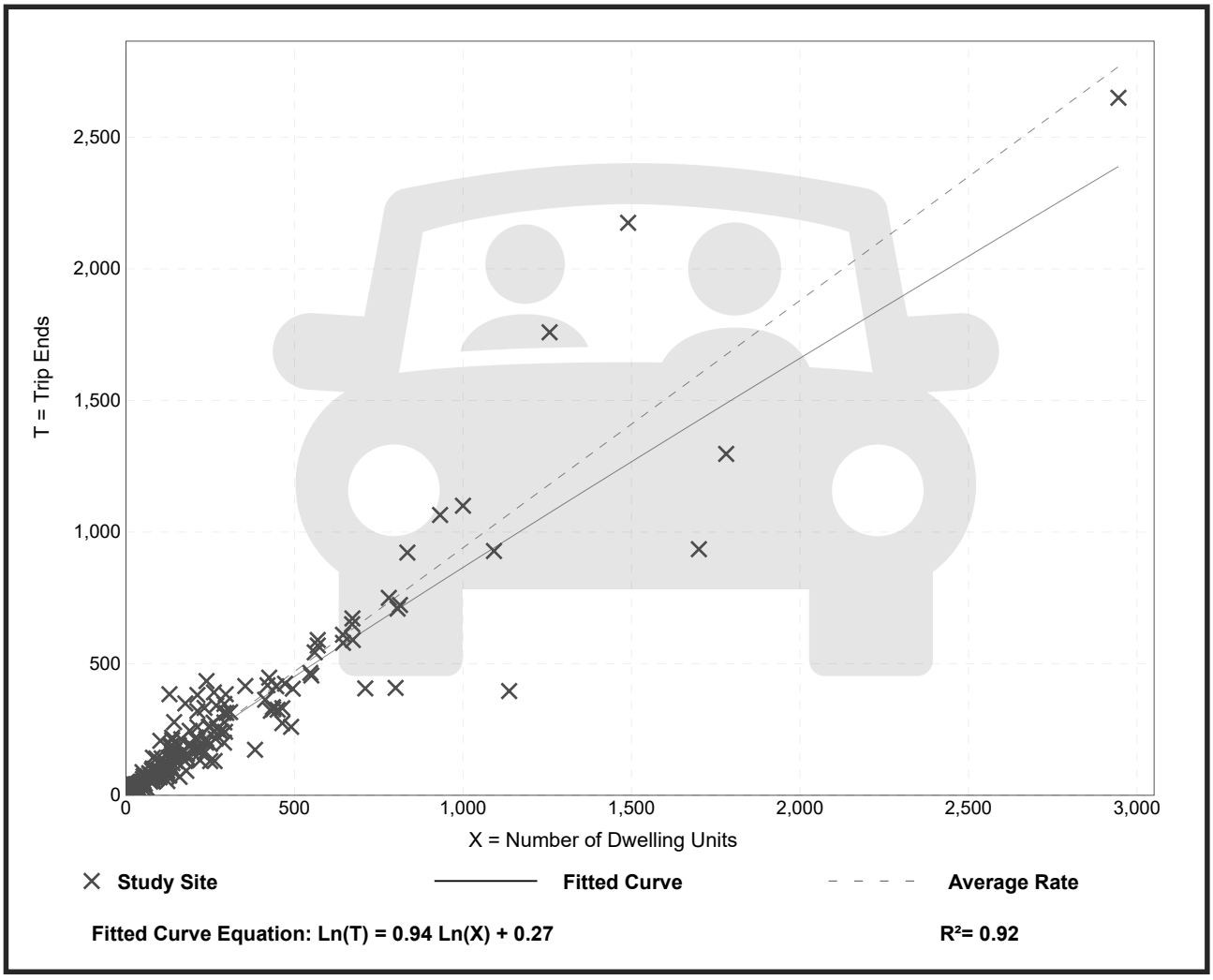
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



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Warehousing
(150)

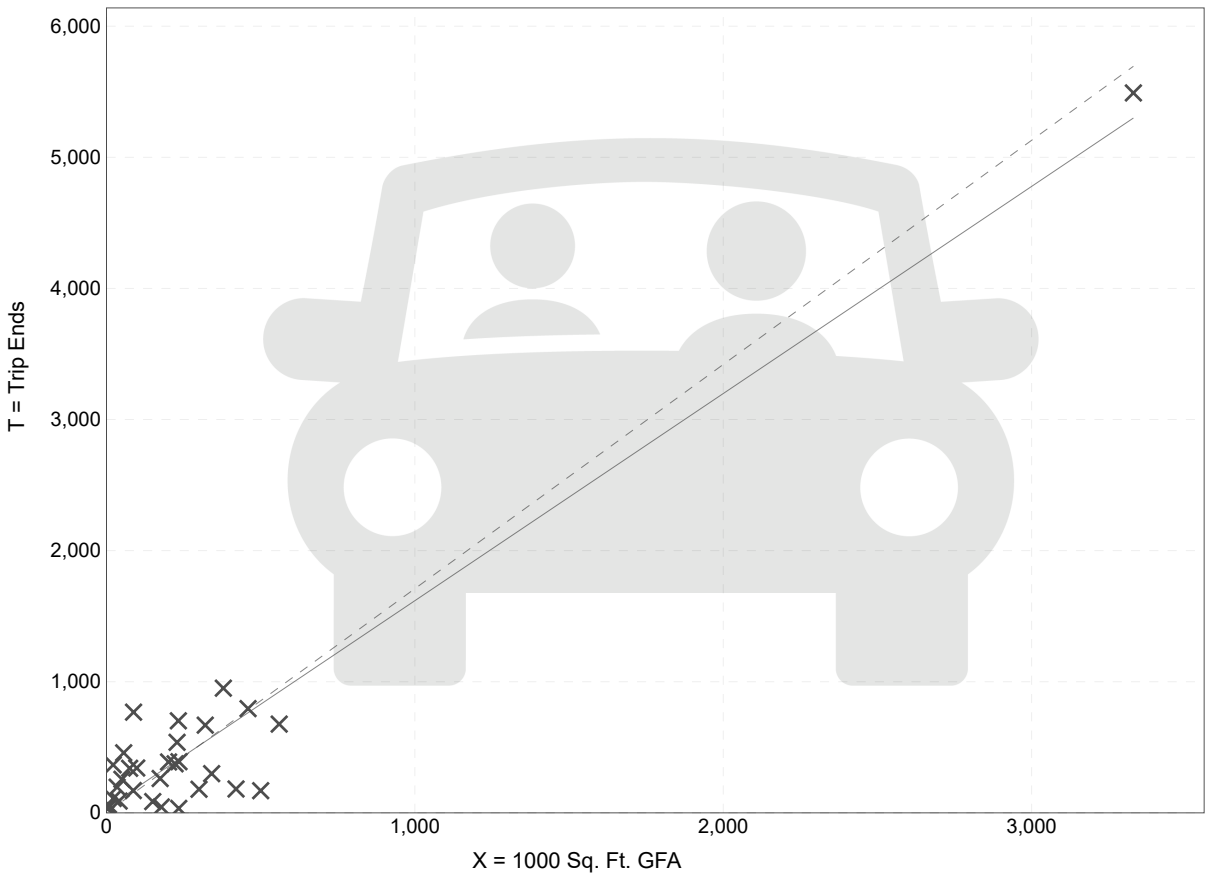
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. 1000 Sq. Ft. GFA: 292
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.71	0.15 - 16.93	1.48

Data Plot and Equation



Fitted Curve Equation: T = 1.58(X) + 38.29 **R^2= 0.92**

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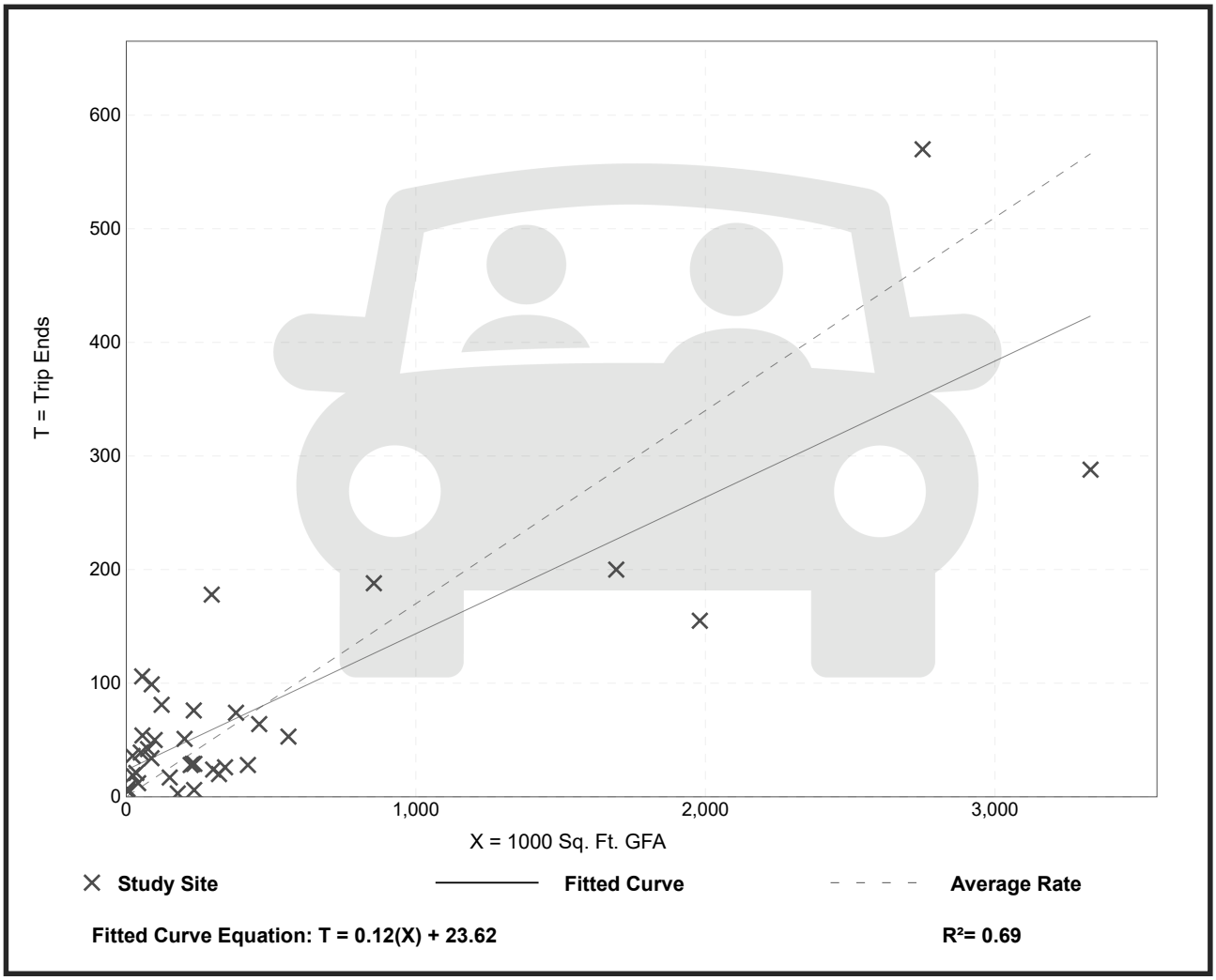
Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 36
Avg. 1000 Sq. Ft. GFA: 448
Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.19

Data Plot and Equation



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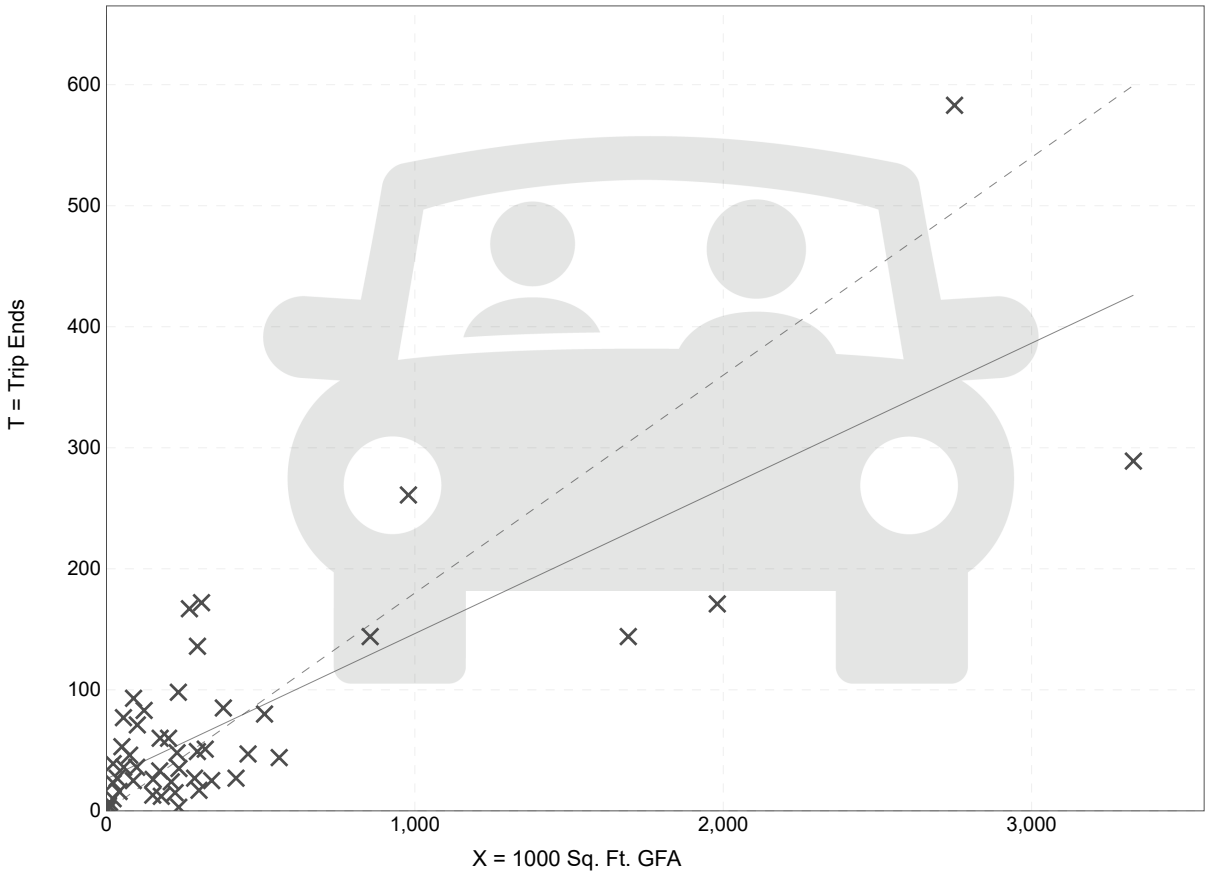
Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 49
Avg. 1000 Sq. Ft. GFA: 400
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.01 - 1.80	0.18

Data Plot and Equation



Fitted Curve Equation: T = 0.12(X) + 26.48 **R^2= 0.65**

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Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

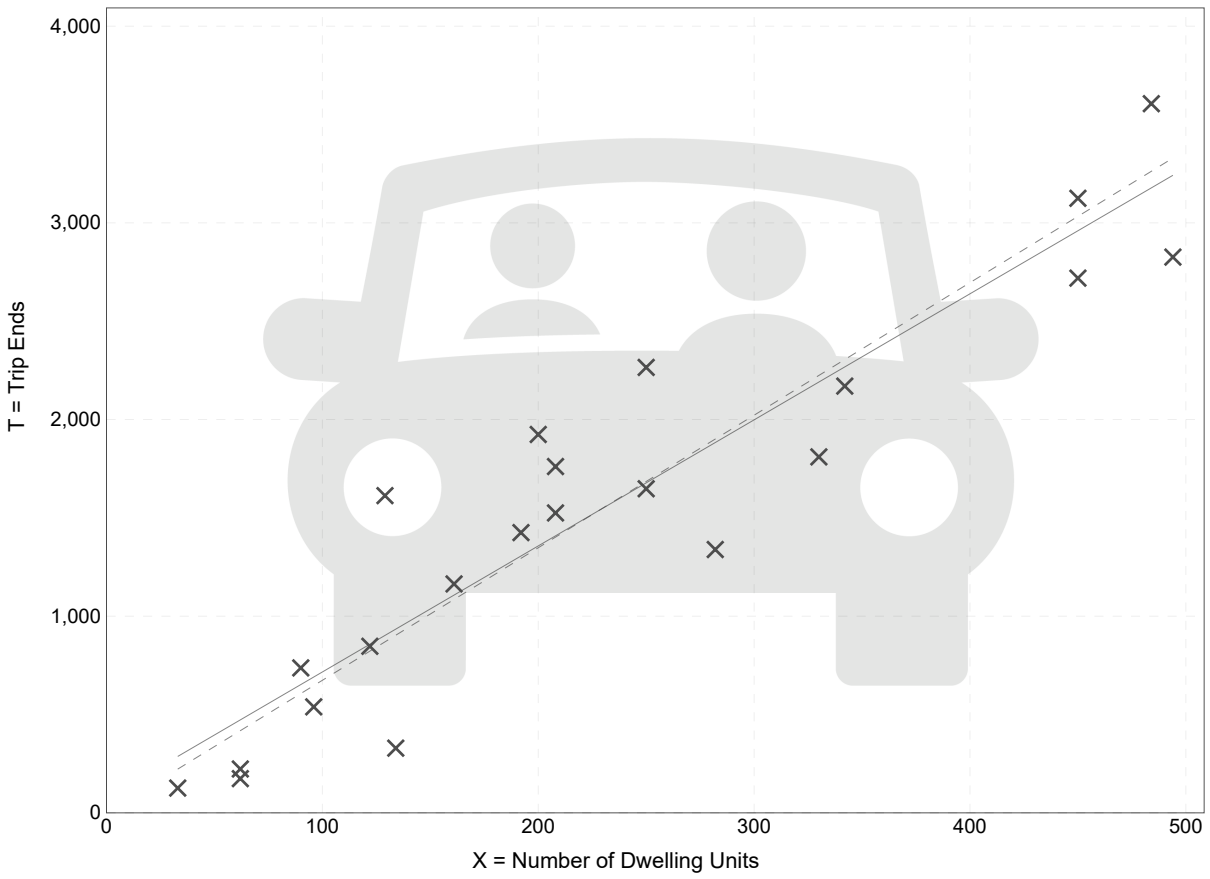
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Fitted Curve Equation: T = 6.41(X) + 75.31

R^2= 0.86

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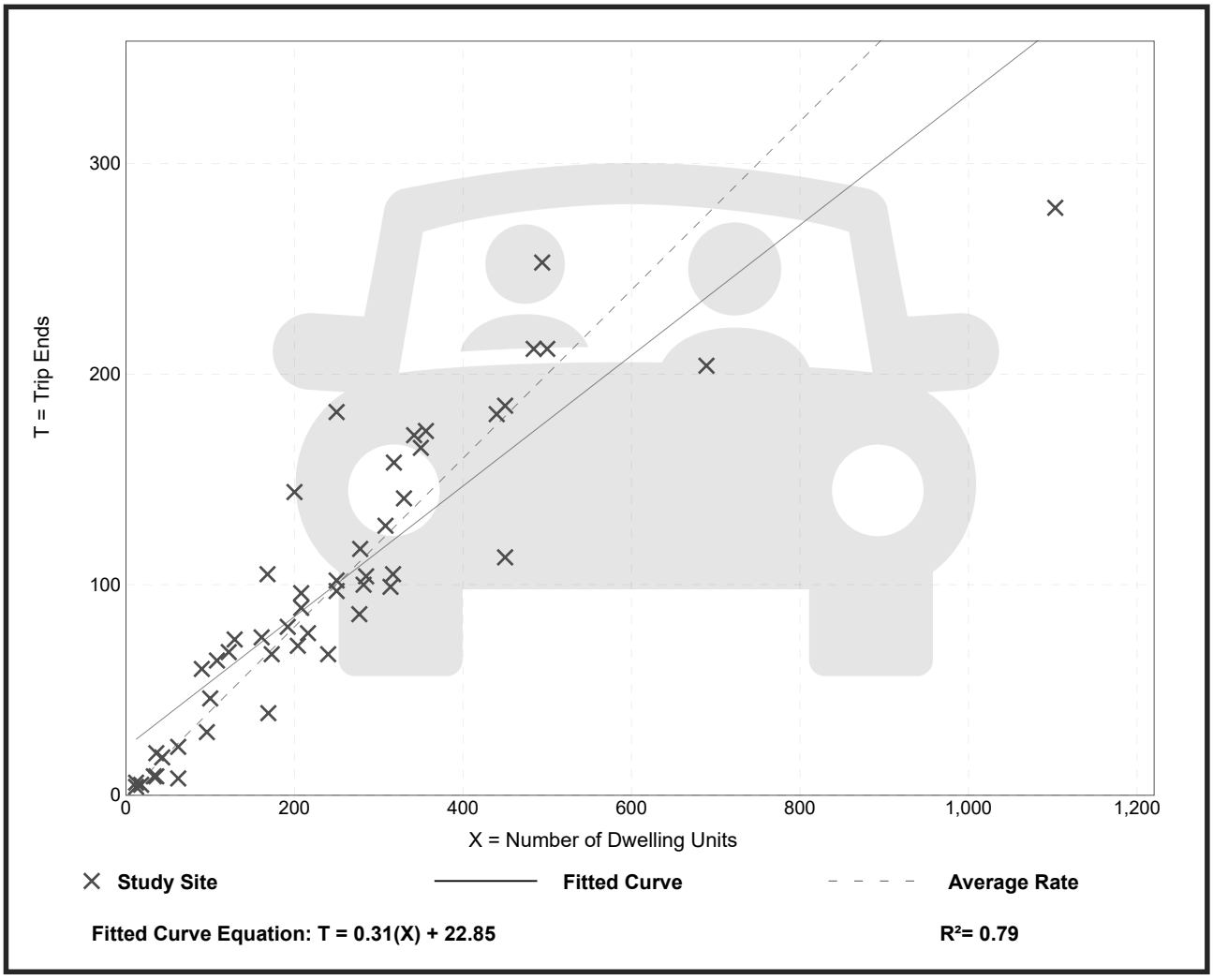
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



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Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation

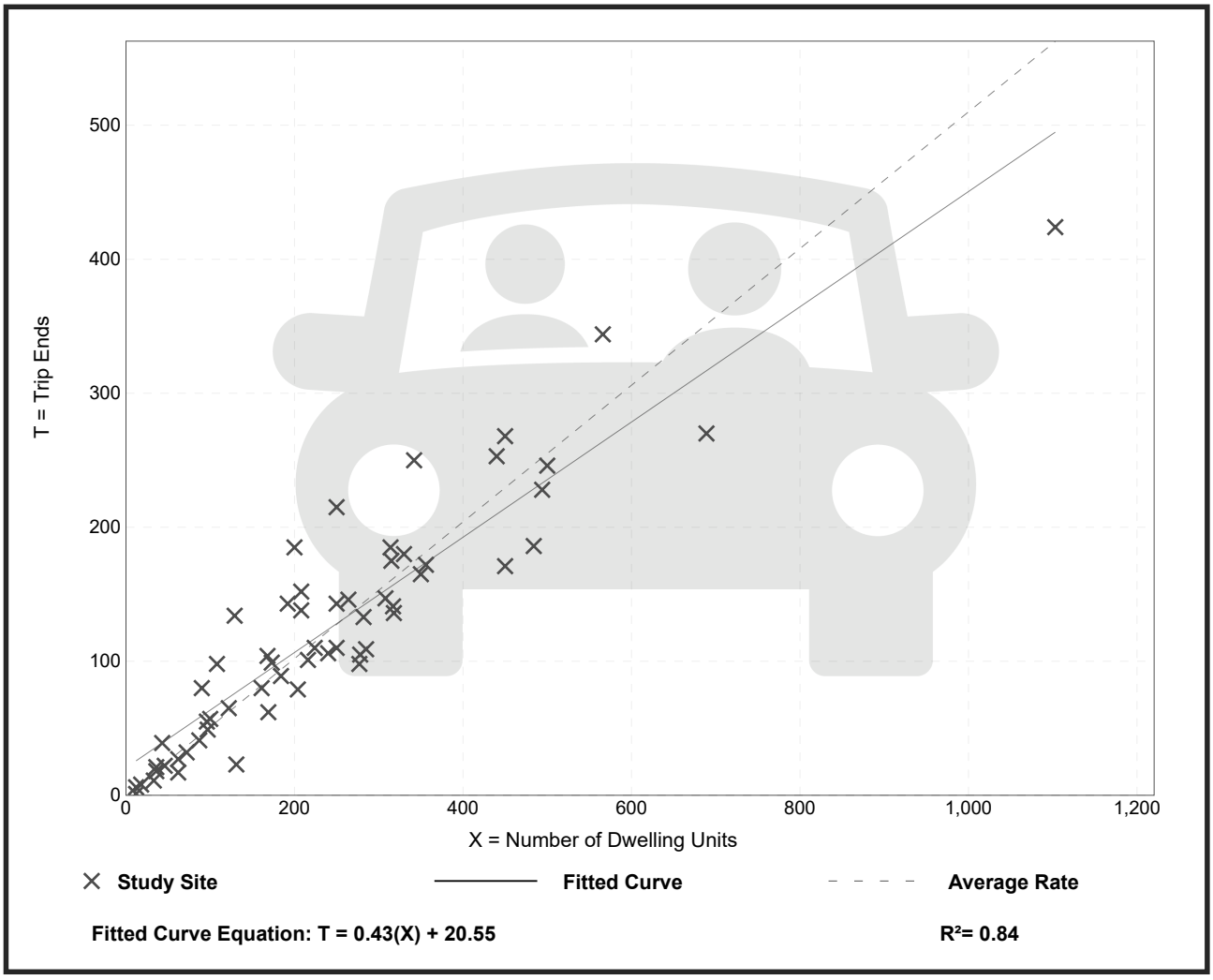

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Exhibit D

CENTERPOINT CHRISTIAN SCHOOL/SOUTH SOUND CHRISTIAN SCHOOLS

HABITAT ASSESSMENT

PREPARED BY:

GRETTE ASSOCIATESLLC
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TACOMA, WASHINGTON 98403
(253) 573-9300

JANUARY 2022

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS

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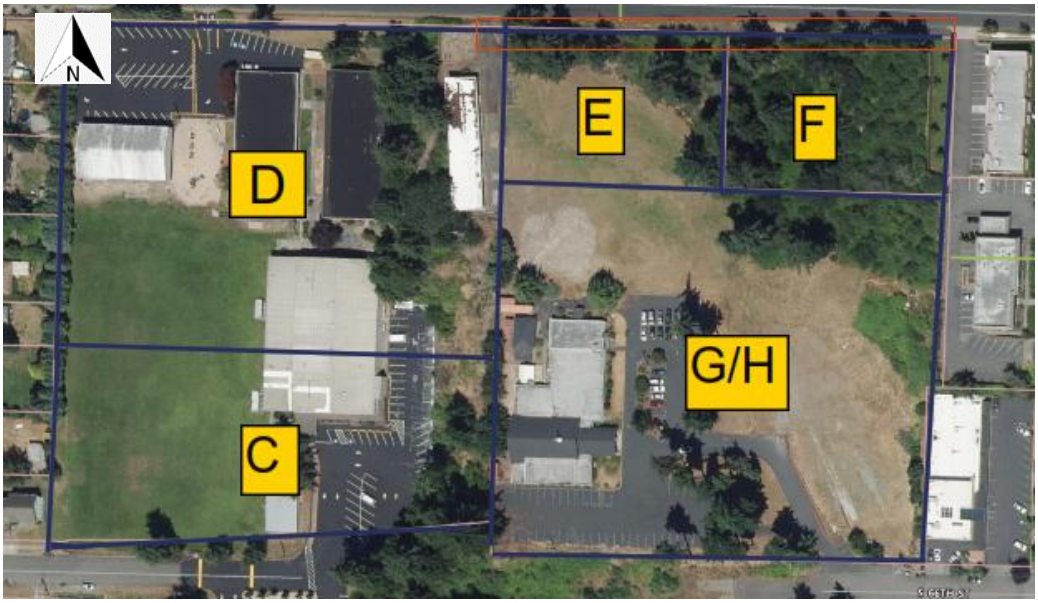
LIST OF APPENDICES

1.1 INTRODUCTION

Grette Associates is under contract with CenterPoint Christian Fellowship and South Sound Christian Schools to visit the site located at 2041 S. 66th St. (Pierce County parcels 0320301073, 0320301075, 3020301193, 0320301194, 0320301159, and 0320301158) in Tacoma, WA, and perform reconnaissance for the presence of wetlands, natural water features and fish and wildlife habitat conservation areas (FWHCAs) situated on and within 300 feet of the properties. The Pierce County tax parcels previously described will be further referred to in this report as the "subject parcels" and are individually described as sites C, D, E, F, and G/H (Figure 1). The subject parcels encompass a total area of 13.4 acres and are situated between S.66th St and S64th St in the City of Tacoma, Washington (Attachment A). This report is intended to satisfy the City of Tacoma's request for a habitat assessment on the subject parcels and is prepared using Chapter 13.11 of the City of Tacoma Municipal Code (TMC) guidance. The following report does not include the assessment of slopes or geologically hazardous areas.

Figure 1. Subject Parcels



2.1 DATABASE REVIEW

Critical Areas are regulated by agencies at the local, state, and federal levels. The appropriate jurisdictional databases were queried to ascertain if any critical areas or their buffers exist on or within 300 feet of the subject parcels.

2.1.1 Local Critical Area Inventory

A review of the City of Tacoma's GIS DART Map was conducted to identify any known critical areas located within the subject parcels (COT, 2022). According to DART, there are no wetlands, streams, floodways, flood hazard areas, or FWHCAs on or within 300 feet of the subject parcels. The City of Tacoma does map the entire area and subject parcels as being in an aquifer recharge

area. North of the subject parcels, approximately 71' across South 64th Street, Tacoma DART GIS maps a Biodiversity Area/Corridor (BAC) known as the Wapato Hills Urban Wildlife Habitat.

2.1.2 National Wetlands Inventory

The U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI) was queried to determine if any aquatic features have been previously identified within the subject parcels. The search of the USFWS GIS database shows no wetlands or other aquatic features mapped on or within 300 feet of the subject parcels.

2.2 WDFW Priority Species and habitat

The WDFW Priority Species and Habitat Mapper was queried to determine if any known locations of priority habitat and species exist on the subject parcels. The PHS data mapper on the web shows that the Western Pond Turtle and Little Brown Bat have the potential to exist on the subject parcels.

2.2.1 Western Pond Turtle - *Actinemys marmorata*

The PHS on the Web mapper designates the general area of the subject parcels to be a potential area of occurrence of Western Pond Turtle. The Western Pond Turtle is listed as endangered in the State of Washington but is not listed federally. The closest aquatic habitat and listed occurrence of the Western Pond Turtle is over 1200 feet away across Interstate 5 at Wapato Park.

2.2.2 Big Brown Bat - *Eptesicus fuscus*

The species is present throughout Washington and roosting primarily occurs in dilapidated buildings or large live or dead trees in the early stages of decay. The Big Brown Bat is listed by PHS on the web to potentially occur near the subject parcels but has no listed occurrence on the subject parcels.

3.1 METHODS and Results

Grette Associates completed a site visit on January 13, 2022, to identify any wetlands, streams, or FWHCAs within the subject parcels. The subject parcels were traversed, and data was collected and assessed according to the wetland criteria defined in the U.S. Army Corps of Engineers (USACE) *Federal Wetland Delineation Manual* (1987) and the Corps' *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (2010). The subject parcels were also evaluated to identify any natural water feature that would be classified as a stream according to WAC 222-16-030 and Chapter 13.11 of the Tacoma Municipal Code (TMC). Potential Biodiversity Areas/Corridor within the subject parcels were evaluated based on the requirements defined in TMC 13.11.510

3.1.1 Wetland Results

No wetland features were identified on the subject parcels during Grette Associates' site assessment. Parcel C is developed and consists of a school classroom building and the southern portion of a soccer field with an approximate 70 stall parking lot. Parcel D is developed with the northern portion of the soccer field and contains school administrative buildings as well as an approximately 40 stall parking facility and two school classroom buildings. Parcels E and F are vacant lots containing a field and forested areas covered in Himalayan Blackberry (*Rubus armeniacus*) and native trees. Parcels G/H consists of the CenterPoint Christian School building facility with an approximately 70 stall parking lot and vacant field to the east of the buildings. The parcels contain infrastructure generally associated with school facilities (driveways, walkways, outside seating, etc.). During the site assessment, Grette Associates did not observe any indication of seasonal hydrology that would meet wetland hydrology indicators defined in the USACE's *Regional Supplement* (2010). More specifically, surface water, surface saturation, water-stained leaves, watermarks, or algal mats were not observed. Furthermore, no vegetation that would suggest a potential wetland feature was observed.

Figure 2. Vacant Field on Parcel G/H

Figure 3. Facing North from Parcel G/H to Parcel F

Figure 4. Vacant Field Parcel E

During the site visit, Grette Biologists assessed areas to evaluate soils and hydrology on each parcel. No hydric soil indicators were identified in the assessed areas (Figures 5 and 6). Datasheets are provided at the end of the report in Attachment B.

Figure 5. Soil Test Pit Locations

Figure 6. Soil Test Pit Photos

Test Pit C

Test Pit D

Test Pit F

Test Pit G/H

3.1.2 Stream Results

No streams were identified on the subject parcels. These findings are further backed up by the data gathered from queried databases summarized above.

3.1.3 Biodiversity Areas/Corridors Results

Per TMC 13.11.510, BACs are those areas that provide quality functions and habitat for wildlife access and/or movement across the landscape. In general, BACs are undeveloped areas with a vertically diverse assemblage of ***native*** vegetation containing multiply canopy layers and/or areas that are horizontally diverse with a mosaic of habitats and microhabitats (TMC 13.11.510).

North of the subject parcels is an undeveloped forested area that is mapped as a BAC from data gathered from Tacoma DART GIS data. The area is labeled as Wapato Hills Urban Wildlife Habitat and is separated from the subject parcels by South 64th Street. The parcels to the south, east, and west of the subject parcels are largely developed. Parcels E and F are largely comprised of a vegetative community consisting of a mix of native and nonnative vegetation dominated by Himalayan blackberry, English ivy (*Hedera helix*), and sword fern (*Polystichum munitum*).

Based on a rapid coverage assessment utilizing the guidance defined in the USACE's Regional Supplement (2010), coverage of nonnative species is approximately 60-65 percent of the total sub-canopy. Given the dominance of nonnative vegetation within the sub-canopy and parcel size, the parcels do not meet the definition of a Biodiversity Area due to the lack of a vertically diverse assemblage of native vegetation. Furthermore, given the existing development and lack connectivity to adjacent undeveloped forested areas, the subject parcels do not provide suitable habitat to be considered a corridor.

Figure 7. Vegetation Community in Parcels E and F

4.1 SUMMARY

In summary, Grette Associates did not identify any wetlands, streams, or FWHCAs, per TMC 13.01.110, within 300 feet of the subject parcels. The results summarized in this technical memorandum have fulfilled the critical areas evaluation requirements requested by the city.

If you have any questions on this wetland reconnaissance, please contact me at (253) 573-9300 or by email at donnyn@gretteassociates.com.

Regards,

Donny Neel

Donny Neel
Biologist

References

City of Tacoma DART GIS. (COT). 2022. https://dart.cityoftacoma.org/#20210121 Queried on January 18, 2022.

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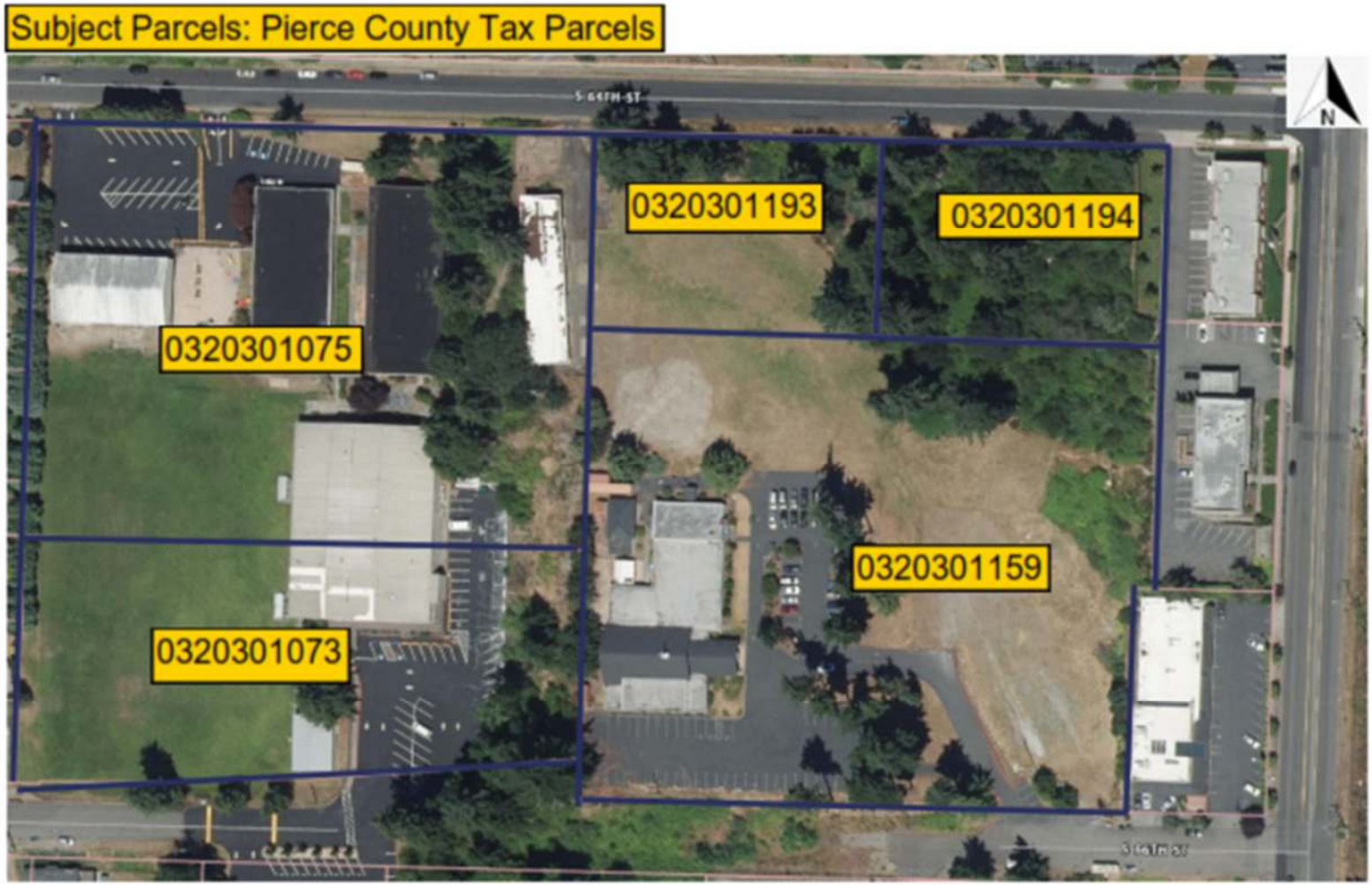
HABITAT ASSESSMENT

APPENDIX A: SITE MAP


Subject Parcels: Pierce County Tax Parcels
0320301193
0320301194
0320301075
0320301159
0320301073
N

CENTERPOINT CHRISTIAN SCHOOL/SOUTH SOUND CHRISTIAN SCHOOLS

HABITAT ASSESSMENT

APPENDIX B: DATA SHEETS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Center Point GM City/County: Tacoma / Pierce Sampling Date: 1/13/22
Applicant/Owner: State: WA Sampling Point: SP1
Investigator(s): DD, DW Section, Township, Range:
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): Lat: Long: Datum:
Soil Map Unit Name: NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:
The site has been developed and a large portion has been leveled with gravel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhododendron	5		FACU
2. Black Berry	10	Y	FAC
3. Eastern Red cedar	15	Y	FACU
4. Scotch Broom	5		UPL
5.			
	35 = Total Cover		

50: 17.5
20: 7

Herb Stratum (Plot size: 5')			
1. Plantain	25		FACU
2. Field grass	75	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		

50: 50
20: 20

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

SOIL

Sampling Point: SP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	90	2.5YR 4/6	5%	C	M	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock Layer

Depth (inches): 8"

Hydric Soil Present? Yes ✓ No ___

Remarks:

Consistant

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No ND Depth (inches): ___

Water Table Present? Yes ___ No ND Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ND Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Consistant rain within the last week

Did not reach water table Did

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Center Point F City/County: Tacoma / Pierce Sampling Date: 1/13/22

Applicant/Owner: State: WA Sampling Point: SP 2

Investigator(s): DN, JLD Section, Township, Range:

Landform (hillslope, terrace, etc.): hilltop Local relief (concave, convex, none): Convex Slope (%): 10%

Subregion (LRR): Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ____	

Remarks:
Majority of the property is up on a hill
Largely undisturbed

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Madrone	50	Y	FACU
2. Oak, Oregon white	50		UPL
3. Red Alder	10		FAC
4.			
	110	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Evergreen Blackberry	15		FACU
2. Himalayan blackberry	45	Y	FACU
3. Beaked hazelnut	25	Y	FACU
4. Salal	40	Y	FACU
5.			
	125	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Salal	40		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____	= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

SOIL

Sampling Point: SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Silt loam	
7-18	10YR 4/2	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

No redox observed

Soil were not observed to be saturated

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No indicators seen

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Center Point E City/County: Tacoma / Pierce Sampling Date: 1/13/22

Applicant/Owner: State: WA Sampling Point: SP 3

Investigator(s): JLD, DN Section, Township, Range:

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Done Slope (%): 0

Subregion (LRR): Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Regularly mowed field

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Hemlock WR	30	Y	FACU
2. Madrone	5		UPL
3.			
4.			
	30 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		

Herb Stratum (Plot size: 3')			
1. Plantain English	45%	Y	FACU
2. Grass Field (Poa Annua)	75%	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

12

30. 60
20. 24

SOIL

Sampling Point: SP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	2.5Y 3/2	100					Silt Loam	
3-11+	10YR 3/2	100					Sandy loam	Restrictive by rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Cobbel Rock

Depth (inches): 11"

Hydric Soil Present? Yes ____ No ✓

Remarks:

No Redox observed Soils were not observed as Saturated

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No Field Indicators observed

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Tacoma Baptist School D/C City/County: Tacoma / Pierce Sampling Date: 1/13/22
Applicant/Owner: _____ State: WA Sampling Point: SP4
Investigator(s): SID, DN Section, Township, Range: _____
Landform (hillslope, terrace, etc.): minor SLOPE Local relief (concave, convex, none): Convex Slope (%): 3 ±
Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: _____ NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation ✓, Soil ✓, or Hydrology — significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
The SP was taken in a maintained sports field across form western Red cedare hedge low present + Maintained 10 yr +

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. W. R. Cedar	65	Y	FAC
2.			
3.			
4.			
	65 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. N/A	Ø		
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. Ryegrass Field Grass	100	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ✗

Remarks:

SOIL

Sampling Point: SP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	100	Ø					

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): 7"

Hydric Soil Present? Yes ____ No ✓

Remarks:

No Redox observed

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): _____

Water Table Present? Yes ____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No field indicators observed.