

EXHIBIT LIST

HEARING DATE: October 27, 2016 – 9:00 a.m.

FILE NUMBER & NAME: LU16-0194
LPI Holdings, LLC – Norpoint Landing

EXHIBIT NUMBER	EXHIBIT DESCRIPTION	SUBMITTED BY	A	E	W	COMMENT
EXH. 1	Staff report	PDS	X			
EXH. 2	Vicinity Map	PDS	X			
EXH. 3	Site Plan and Concept Elevations	PDS	X			
EXH. 4	Zoning Map	PDS	X			
EXH. 5	Land Use Intensity Map	PDS	X			
EXH. 6	Historic Zoning Map	PDS	X			
EXH. 7	SEPA Record: Final DNS, Checklist, and public/agency comments	PDS	X			
EXH. 8	Comments, COT Staff	PDS	X			
EXH. 9	Site Development Group Comments	PDS	X			
EXH. 10	Traffic Impact Analysis	PDS	X			
EXH. 11	Preliminary Geotechnical Analysis	PDS	X			
EXH. 12	Applicant's Rezone Criteria	PDS	X			
EXH. 13	Comprehensive Plan, Applicable Goals and Policies	PDS	X			
EXH. 14	Additional Comment, NETNC	PDS	X			
EXH. 15	Power Point Presentation (Hard Copy)	Applicant	X			
EXH. 16						
EXH. 17						
EXH. 18						
EXH. 19						
EXH. 20						

KEY

A = Admitted

E = Excluded

W = Withdrawn

ORIGINAL

**CITY OF TACOMA
PLANNING AND DEVELOPMENT SERVICES
PRELIMINARY REPORT**

HEARINGS EXAMINER HEARING

**City Council Chambers
October 27, 2016 – 9:00 a.m.**

LPI Holdings, LLC, Nick Parodi
File No: LU16-0194

A. SUMMARY OF REQUEST

Rezone of approximately 1.5 acres from “R2” Single-Family Dwelling District to “C-1” Neighborhood Commercial District to allow construction of 47 apartments and associated parking for 60 cars. Grading activity would be in excess of 500 cubic yards.

B. GENERAL INFORMATION

1. Applicant: LPI Holdings LLC, Nick Parodi, 2715 64th Ave NE Tacoma, WA 98422
2. Property Owner: LPI Holdings LLC
3. Location: The primary address is 6016 29th St NE
parcels 6350000880, 6350000940, 6350000890, 6350000920,
6350000900, 6350000930, 6350000910
4. Project Size: Approximately 62,275 square feet (235 feet by 265 feet)

C. PROJECT DESCRIPTION

The applicant is proposing a rezone of seven parcels, totaling approximately 1.5 acres, from an “R2” Single-Family Dwelling District to a “C-1” Neighborhood Commercial District. The applicant has provided additional information about the proposal, including a site plan and proposed building elevations, is included as Exhibit 3.¹

The site is comprised of seven tax parcels, is rectangular in shape, and occupies approximately 1.5 acres of land. The site is currently undeveloped and vegetated mostly with invasive species. The site has a gradual slope with a roughly 5 percent grade change rising from west to east. Along the western side of the property, the site is above the grade of Norpoint Way NE by amounts of up to 10 feet and is steeply sloped up from the road cut.

The site would be redeveloped with multiple residential buildings totaling up to 47 residential units with up to 60 parking stalls.

¹ The current site plan is a conceptual drawing and does not fully incorporate all development requirements (e.g. landscaping and ADA accessibility), but does account for landscaping buffers and circulation. A comprehensive review will be done at the time of development permitting to ensure that all applicable requirements are met. The result may be a different site plan and/or number of units.

D. ADDITIONAL EXHIBITS

1. Staff report
2. Vicinity Map
3. Site Plan and Concept Elevations
4. Zoning Map
5. Land Use Intensity Map
6. Historic Zoning Map
7. SEPA Record: Final DNS, Checklist, and public/agency comments
8. Comments, COT Staff
9. Site Development Group Comments
10. Traffic Impact Analysis
11. Preliminary Geotechnical Analysis
12. Applicant's Rezone Criteria
13. Comprehensive Plan, Applicable Goals and Policies
14. Additional Comment Letter, NE Tacoma Neighborhood Council

E. ADDITIONAL INFORMATION

Application History:

The project application was determined complete on August 10, 2016. The applicant provided additional information about the proposal, including a site plan, photos, and justification for the rezone request.²

General Zoning and Surrounding Conditions:

The site's current zoning map shows the site to be zoned "R2" Single-Family Dwelling District. See Exhibit 4 for current zoning of the area.

Adjacent properties are a mix of vacant properties and low-density multifamily, with some single family houses. The uses across Norpoint Way NE (both north and south of 29th Street NE) are commercial.

	Zoning Designation	Land Use Designation	Current Land Use
<i>North</i>	T	Neighborhood Commercial/Low-Density Multifamily	Vacant and Single-Family Dwelling
<i>East</i>	R3	Low-Density Multifamily	One- and Two-Family Dwellings
<i>South</i>	R2	Single Family/Open Space	Vacant
<i>West</i>	R2 and R4L	Neighborhood Commercial/Low-Density Multifamily	Commercial (smoke shop, daycare) and multifamily

The non-residential properties in the area have been rezoned over the years, ranging from R3 zoning to the east in 1973 to the Transitional zoning to the north in 2002. The area is near a small commercial area in Federal Way, a few blocks to the east of the subject site.

² The applicant bears the burden of proof to demonstrate that the proposal is consistent with the criteria for the approval of multifamily residential development found in Chapter 13.06 - Zoning, of the *TMC* and the criteria for the approval of rezone applications found in Section 13.06.650 of the *TMC*. The proponent of a rezone has the burden of showing that the reclassification bears a substantial relationship to the public health, safety, morals, or general welfare. See *Bassani v. County Commissioners*, 70 Wn. App. 389, 394, 853 P.2d 945 (1993) citing *Parkridge v. Seattle*, 89 Wn.2d 454, 153, P.2d 359 (1978); *Woodcrest Invs. Corp v. Skagit Cy.*, 39 Wn. App. 622, 694, P.2d 705 (1985). Under Washington law, a "strong showing" of change is not required and the rule is intended to be flexible and allow consideration of each case on its own facts. See *Bassani* at 394. A showing of changed circumstances is not required when a rezone is intended to implement an amendment to a comprehensive plan. See *SORE v. Snohomish Cy.*, 99 Wn.2d 363, 370, 662 P.2d 816 (1983).

Regulatory History:

The subject site has been zoned "R2" Single-Family Dwelling district since it became part of the City of Tacoma. The area was designated for Neighborhood Commercial uses when the City's *Comprehensive Plan* was updated in 2015. See the Land Use Intensity Map for the area, which is included in Exhibit 5. Further, Goals and Policies for Design and Development are included in Exhibit 13.

Notification and Public Comments:

In accordance with the requirements of TMC 13.05.020 regarding notice of rezone applications, written notice of the application was mailed to all owners of property within 400 feet of the site, the appropriate neighborhood council and qualified neighborhood groups on September 6, 2016. In addition, a public notice sign was posted on the property.

Two public comment letters were received during the SEPA comment period. See Exhibit 7 and "Environmental Evaluation", below.

The content of the letters can be summarized as follows:

- Concern over public notice practice;
- Concern over traffic congestion at the intersection of Norpoint Way NE and 29th Street NE;
- Concern about visual impacts, crime from additional housing;
- Concern over the timing of public hearings (i.e., during the daytime); and
- Lack of traffic infrastructure capacity in case of an evacuation.

An additional letter was received from the Northeast Tacoma Neighborhood Council on October 19. (Exhibit 14) The letter states the Council's objection to the Determination of Nonsignificance, reiterating original concerns about traffic and additionally noting the danger of U-turns from the restricted traffic movements for the residents of the development.

As part of the project review process, Planning and Development Services has provided notification of this project to various City, outside governmental, and non-governmental agencies. Departmental comments and requirements regarding this proposal are included as Exhibits 8 and 9, and where appropriate, incorporated as recommended conditions of approval.

F. ENVIRONMENTAL EVALUATION

Pursuant to the State's SEPA Rules (WAC 197-11) and the City of Tacoma's Environmental Code (TMC 13.12), the Director of Planning & Development Services issued a Determination of Environmental Non-Significance for the proposed project on October 3, 2016. This determination was based on a review of the applicant's Environmental Checklist and other supporting information on file with Planning & Development Services. No appeals of this Determination have been filed. The SEPA record is included as Exhibit 7; public comments are addressed below.

G. APPLICABLE SECTIONS OF THE TACOMA MUNICIPAL CODE

13.06.650 Application for rezone of property

B. Criteria for rezone of property. An applicant seeking a change in zoning classification must demonstrate consistency with all of the following criteria:

1. That the change of zoning classification is generally consistent with the applicable land use intensity designation of the property, policies, and other pertinent provisions of the Comprehensive Plan.
 2. That substantial changes in conditions have occurred affecting the use and development of the property that would indicate the requested change of zoning is appropriate. If it is established that a rezone is required to directly implement an express provision or recommendation set forth in the comprehensive plan, it is unnecessary to demonstrate changed conditions supporting the requested rezone.
 3. That the change of the zoning classification is consistent with the district establishment statement for the zoning classification being requested, as set forth in this chapter.
 4. That the change of the zoning classification will not result in a substantial change to an area-wide rezone action taken by the City Council in the two years preceding the filing of the rezone application. Any application for rezone that was pending, and for which the Hearing Examiner's hearing was held prior to the adoption date of an area-wide rezone, is vested as of the date the application was filed and is exempt from meeting this criteria.
 5. That the change of zoning classification bears a substantial relationship to the public health, safety, morals, or general welfare.
- H. Affordable housing – privately initiated upzones. Privately initiated residential upzones shall be conditioned to provide for inclusion of affordable housing. For development proposals meeting the thresholds and criteria of TMC 1.39, a certain number of the dwelling units shall be entered by the project proponent into the City's Affordable Housing Incentives Program. That number may be designated at the time of the upzone, or alternatively the upzone shall be conditioned to provide that designated percentage of affordable units at such time as a specific residential development proposal is submitted to the City.

13.06.200 Commercial Districts

- A. District purposes. The specific purposes of the Commercial Districts are to:
1. Implement goals and policies of the City's Comprehensive Plan.
 2. Implement Growth Management Act goals, county-wide, and multi-county planning policies.
 3. Create a variety of commercial settings matching scale and intensity of use to location.
 4. Attract private investment in commercial and residential development.
 5. Provide for predictability in the expectations for development projects.
 6. Allow for creative designs while ensuring desired community design objectives.
- B. Districts established.
2. C-1 General Neighborhood Commercial District. This district is intended to contain low intensity land uses of smaller scale, including office, retail, and service uses. It is characterized by less activity than a community commercial district. Building sizes are limited for compatibility with surrounding residential scale. Residential uses are appropriate. Land uses involving vehicle service or alcohol carry greater restriction. This classification is not appropriate inside a plan designated mixed-use center or single-family intensity area.
- C. Land use requirements.

2. Use requirements. The following use table designates all permitted, limited, and prohibited uses in the districts listed. Use classifications not listed in this section or provided for in Section 13.06.500 are prohibited, unless permitted via Section 13.05.030.E. Certain street level use restrictions may apply; see Section 13.06.200.C.4 below.
3. Use table abbreviations.

P =	Permitted use in this district.
TU =	Temporary Uses allowed in this district subject to specified provisions and consistent with the criteria and procedures of Section 13.06.635.
CU =	Conditional use in this district. Requires conditional use permit, consistent with the criteria and procedures of Section 13.06.640.
N =	Prohibited use in this district.

4. District use table. (Uses proposed for under this reclassification application.)

	T	C-1	C-2	HM	PDB
Dwelling, multiple-family	P	P	P	P	P

- H. Common requirements. To streamline the Zoning Code, certain requirements common to all districts are consolidated under Section 13.06.500 and 13.06.600. These requirements apply to Section 13.06.100 by reference:

- 13.06.501 Building design standards
- 13.06.502 Landscaping and/or buffering standards
- 13.06.503 Residential compatibility standards
- 13.06.510 Off-street parking
- 13.06.511 Transit support facilities
- 13.06.512 Pedestrian and bicycle support standards
- 13.06.520 Signs
- 13.06.602 General restrictions
- 13.06.700 Definitions

H. Applicable Policies of the Comprehensive Plan

1. Land Use Designation

The subject site is located within a “Neighborhood Commercial” area of the city, per the Comprehensive Plan Land Use Map. (Excerpts of the City’s Comprehensive Plan are included as Exhibit 13.) The Plan states:

This designation is characterized primarily by small-scale neighborhood businesses with some residential and institutional uses. Uses within these areas have low to moderate traffic generation, shorter operating hours, smaller buildings and sites, and less signage than general commercial or mixed-use areas. There is a greater emphasis on small businesses and development that is compatible with nearby, lower intensity residential areas.

The following chart depicts the relationship between intensity designations and zoning classifications.

Comprehensive Plan Designation	Typical Zoning Classifications
Neighborhood Commercial	C-1 General Neighborhood Commercial District, T Transitional District

Further, the Comprehensive Plan identifies typical residential densities appropriate in the land use designations. For this area, an overall residential density would be 14–36 dwelling units/net acre.

The Comprehensive Plan contains policies for Urban Form, Design and Development, and Housing. It sets forth the goals and policies specific to the siting and design of all types of residential in all zoning districts. Relevant excerpts from the Plan are included as Exhibit 13.

2. Urban Form

Medium intensity residential development typically consists of medium-rise clustered apartments or large garden court apartment complexes or town homes in outlying areas, and walkup or elevator apartments and condominiums in the central inlying areas. Medium intensity residential developments may be located in concentrations along major transportation corridors, near or within mixed-use centers, in areas of similar character and intensity, and between areas of high and low intensity as buffer uses.

The following policies are intended to guide development in Neighborhood Commercial areas, and are pertinent to this request:

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. See Figure 2, Comprehensive Plan Future Land Use Map.

Policy UF–1.2 Implement Comprehensive Plan land use designations through zoning designations and target densities shown in Table 3, Comprehensive Plan Land Use Designations and Corresponding Zoning.

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.

Policy UF–13.10: Maintain and enhance the existing commercial areas while preserving the unique features of these neighborhoods.

3. Design and Development

The following policies are intended to guide the design and development of multifamily residential, and are pertinent to this request:

Policy DD–1.7 Encourage development that responds to and enhances the positive qualities of site and context—the block, the public realm, and natural features.

Policy DD–1.8 Enhance the pedestrian experience throughout Tacoma, through public and private development that creates accessible and attractive places for all those who walk and/or use wheelchairs or other mobility devices.

Policy DD–4.2 Encourage more housing choices to accommodate a wider diversity of family sizes, incomes, and ages. Allow adaptive reuse of existing buildings and the creation of accessory dwelling units to serve the changing needs of a household over time.

Policy DD–4.3 Encourage residential infill development that complements the general scale, character, 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.

Policy DD–4.5 Provide sufficient rights-of-way, street improvements, access control, circulation routes, off-street parking and safe bicycle paths and pedestrian walkways for residential developments.

Policy DD–4.6 Promote the site layout of residential development where residential buildings face the street and parking and vehicular access is provided to the rear or side of buildings. Where multifamily developments are allowed in established neighborhoods, the layout of such developments should respect the established pattern of development, except where a change in context is desired per the goals and policies of the Comprehensive Plan.

4. Housing

Finally, the Plan establishes the City’s policies for housing provision. Pertinent policies are as follows.

Policy H–1.1 Maintain sufficient residential development capacity to accommodate Tacoma’s housing targets.

Policy H–1.5 Apply zoning in and around centers that allows for and supports a diversity of housing types.

Policy H–1.6 Allow and support a robust and diverse supply of affordable, accessible housing to meet the needs of older adults and people with disabilities, especially in centers and other places which are in close proximity to services and transit.

Policy H–3.2 Locate higher density housing, including units that are affordable and accessible, in and around designated centers to take advantage of the access to transportation, jobs, open spaces, schools, and various services and amenities.

Policy H–3.6 Locate new affordable housing in areas that are opportunity rich in terms of access to active transportation, jobs, open spaces, high- quality schools, and supportive services and amenities.

Policy H–4.4 Facilitate the expansion of a variety of types and sizes of affordable housing units, and do so in locations that provide low-income households with greater access to convenient transit and transportation, education and training opportunities, Downtown Tacoma, manufacturing/ industrial centers, and other employment areas.

Policy H–4.14 Pursue incentives and mechanisms to enlist the private market as a partner in the provision of affordable housing units.

I. Project Analysis

1. Consistency with TMC 13.06.100 – C-1 District Zoning Regulations:

Multifamily development, provided it meets development standards, is a permitted use in the C-1 District. The project will be designed to meet or exceed all of the parking, design and landscaping requirements for a multifamily development.

2. Consistency with TMC 13.06.650.B – Reclassification Criteria:

As detailed in TMC 13.06.650, applications for reclassifications may be approved if the proposal is found to be consistent with the stated decision criteria. Staff has reviewed this project against these criteria.

- *That the change of zoning classification is generally consistent with the applicable land use intensity designation of the property, policies, and other pertinent provisions of the Comprehensive Plan.*

The applicable land use designation is “Neighborhood Commercial”, for which the intended residential density is 14-36 units per acre. Multifamily development is appropriate in the Neighborhood Commercial designation as well as the “C-1” zoning district. In this case, the proposal would increase residential density from a potential of about 14 homes (based on an average lot size of 4,500 square feet) to 47 homes on about 1.5 acres. This development is within the target density.

The proposal is generally within the goals and policies of both the Urban Form and Design and Development chapters of the Comprehensive Plan. The development would be constructed as a buffer between a single-family neighborhood and a high-traffic corridor, in an area of mixed multifamily and commercial development that is in close proximity to a commercial center. The buildings will be oriented toward the street and parking would be to the rear/interior of the site.

Consistency with residential design goals and policies of the Comprehensive Plan will be fully assessed during the permit plan review, ensuring compliance with all applicable regulations for design, pedestrian access to the public way, and open space availability.

- *That substantial changes in conditions have occurred affecting the use and development of the property that would indicate the requested change of zoning is appropriate. If it is established that a rezone is required to directly implement an express provision or recommendation set forth in the Comprehensive Plan, it is unnecessary to demonstrate changed conditions supporting the requested rezone.*

The rezone will implement a provision or recommendation set forth in the Plan, in making the zoning designation more consistent with the site’s designated land use. Further, the intent stated in the Comprehensive Plan is that city-initiated rezones will take place in coming years to make the rest of the area zoning consistent with the Comprehensive Plan; this site will therefore be consistently zoned with the surrounding area.

- *That the change of the zoning classification is consistent with the district establishment statement for the zoning classification being requested, as set forth in this chapter.*

The district establishment statement for the C-1 District specifically indicates that the district is appropriate for residential uses.

- *That the change of the zoning classification will not result in a substantial change to an area-wide rezone action taken by the City Council in the two years preceding the filing of the rezone application. Any application for rezone that was pending, and for which the Hearing Examiner’s hearing was held prior to the adoption date of an area-wide rezone, is vested as of the date the application was filed and is exempt from meeting this criteria.*

Records indicate that there have not been any area-wide rezone actions taken by the City Council in the past two years affecting this property.

- *That the change of zoning classification bears a substantial relationship to the public health, safety, morals, or general welfare.*

The TMC and the Comprehensive Plan set forth policies and requirements aimed at regulating growth to ensure consistency with the public health, safety, morals and

general welfare. In order to further ensure that projects in these areas are compatible with the intended character of the district and do not have significant negative impacts on surrounding uses, the TMC also includes development regulations for projects in the C-1 District, including landscaping, design, and parking standards.

In this instance, the applicant has provided information and plans showing that all applicable regulations can be met. If approved, the applicant will ensure that all development standards will be met as the project is further refined and as development permits are obtained. The proposal and the conditions recommended by staff in this report include provisions that address required improvements, adequate parking, and normal utility services.

Regarding the neighborhood comments about Norpoint Way and 29th Street NE, City's Engineering Division is aware of the neighborhood concerns about the existing conditions at the intersection. Staff would note that the applicant cannot be required to address existing infrastructure deficiencies, but can be held responsible for avoiding or mitigating the impacts that are a result of the development proposal.

The applicant provided a Traffic Impact Analysis (TIA) for 47 apartment units at the site. The City uses Level-of-Service (LOS) standards throughout the city to measure the performance of intersections and corridors in the road system. The LOS includes measures for road capacity and delays at intersections. At the signalized intersection like the one at Norpoint and 29th, an LOS "D" would be a delay between 35 and 55 seconds. A proposal is analyzed based upon whether or not it makes the performance of an intersection or road segment significantly worse – this is the measure used for SEPA mitigation as well as for right-of-way improvements.

In the case of the Norpoint Way and 29th Street NE intersection, the current LOS is "C" with a typical delay of about 26 seconds. The westbound left turn lane off of 29th onto Norpoint operates at a level "D", with a longer delay. The TIA analyzed trip projections five years into the future – a scenario without the development, a scenario with the development but no changes to the intersection, and a scenario with the development and adjustments to the signal phasing at the intersection. For nearly all analyzed intersections and road segments, the scenario with the development and signal timing performs equal to or better than the scenario with no development. The only movement that would experience an increased delay would be turning onto 61st Avenue NE from 29th Street NE, with a minimal change in delay from a "no-build" scenario.

Staff have reviewed the proposal and the analysis and, provided the recommended conditions are included with the site development permits, impacts on traffic flow as a result of the development have been avoided.

- 1) Site access - Site access shall conform to Tacoma Municipal Code 10.14 Driveways. In addition, due to topography, speed, and volumes, vehicular site access cannot be located on Norpoint Way or 29th St NE.
- 2) Signal phasing - As indicated in the TIA, existing westbound left turn queues will block access to 61st Ave NE. A revision to the signal at Norpoint Way and 29th Street NE will improve turning movements adjacent to the development. In addition to providing a permitted and protected left turn phase to westbound and eastbound traffic, permitted and protected left turn phases are required for northbound and southbound traffic. The permitted left turn shall include a flashing yellow arrow and sign, as well as associated signal revision signage. The improvements to the signal phasing and timing may require upgrades to the

signal cabinet and wiring.

- 3) Sight distance - Sight lines at 61st Ave NE and 29th St NE shall be improved and maintained for the appropriate traffic speeds, specifically eastbound traffic. A sight line evaluation should be completed as part of the Building Permit to ensure that structures, landscaping, and/or signage do not block visibility.
- 4) Off-site improvements - Pedestrian access shall be provided to the nearest transit stop, as well as along 61st Ave NE and the portion of 28th St NE improved for a turnaround. Parking restrictions may be required on 61st Ave NE to improve sight lines, which can be completed with signage.

Further, the City's Traffic Engineering division has recommended that the developer consider improving 28th St NE between 61st Ave NE and 62nd Ave NE to improve access to the City's arterial street system. A connection to 62nd Ave NE would provide access to the traffic signal at 21st Ave SW, which would in turn provide for safe and unimpeded access to 29th St NE. In addition, the new connection would provide westbound development traffic with an alternative in the PM and AM peak when queues at Norpoint Way and 29th St NE block access to 61st Ave NE. This would avoid the U-Turn concern for traffic exiting the development. However, this is a recommendation and not a requirement, given the expense of developing the right-of-way in comparison to the effect the development will have on traffic.

- *Affordable housing – privately initiated upzones. Privately initiated residential upzones shall be conditioned to provide for inclusion of affordable housing. For development proposals meeting the thresholds and criteria of TMC 1.39, a certain number of the dwelling units shall be entered by the project proponent into the City's Affordable Housing Incentives Program. That number may be designated at the time of the upzone, or alternatively the upzone shall be conditioned to provide that designated percentage of affordable units at such time as a specific residential development proposal is submitted to the City.*

The site could currently be developed with 14 housing units; the applicant is proposing 47 units. Therefore the applicant is required to provide a portion of the increased number of units in affordable housing, or the applicant is required to pay a fee in lieu toward the City's Housing Trust Fund. At this time the applicant has had the required pre-application meeting with the City's housing division but has not yet determined the method by which this provision will be met (depending on financing). Therefore conditions will be added to the rezone to require participation in the Affordable Housing Incentives Program as set forth in TMC 1.39.

J. RECOMMENDED CONDITIONS OF APPROVAL

Should this request be approved, Planning and Development Services recommends that the comments below be made conditions of approval for the application:

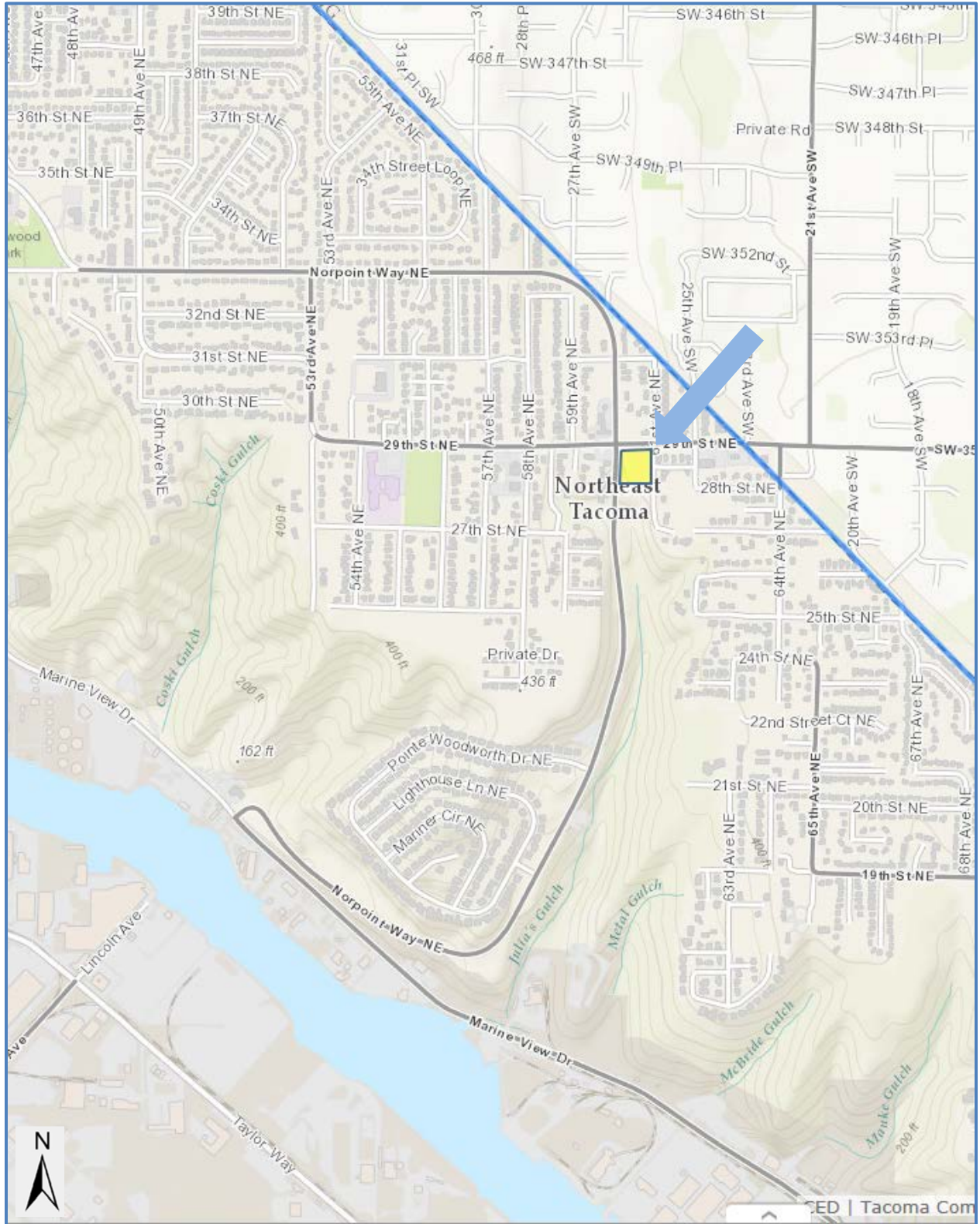
1. The site shall be developed in substantially the same manner as the proposal: uses shall be limited to residential. The intent of this condition is to maintain the integrity of the associated environmental (SEPA) review and findings thereof.
2. The final design of the multifamily development shall include private and public usable open space for the development in compliance with the *Tacoma Municipal Code*. This can include a mix of private balconies or patios, as well as shared porches, courtyards, and green spaces. Each unit shall have direct access to at least

one such space. Outdoor covered spaces (e.g., picnic pavilion or play area) can be counted toward this space. The intent of this condition is to fulfill the goals and policies of the Comprehensive Plan, which points out that usable open space is critical to the livability of residential uses.

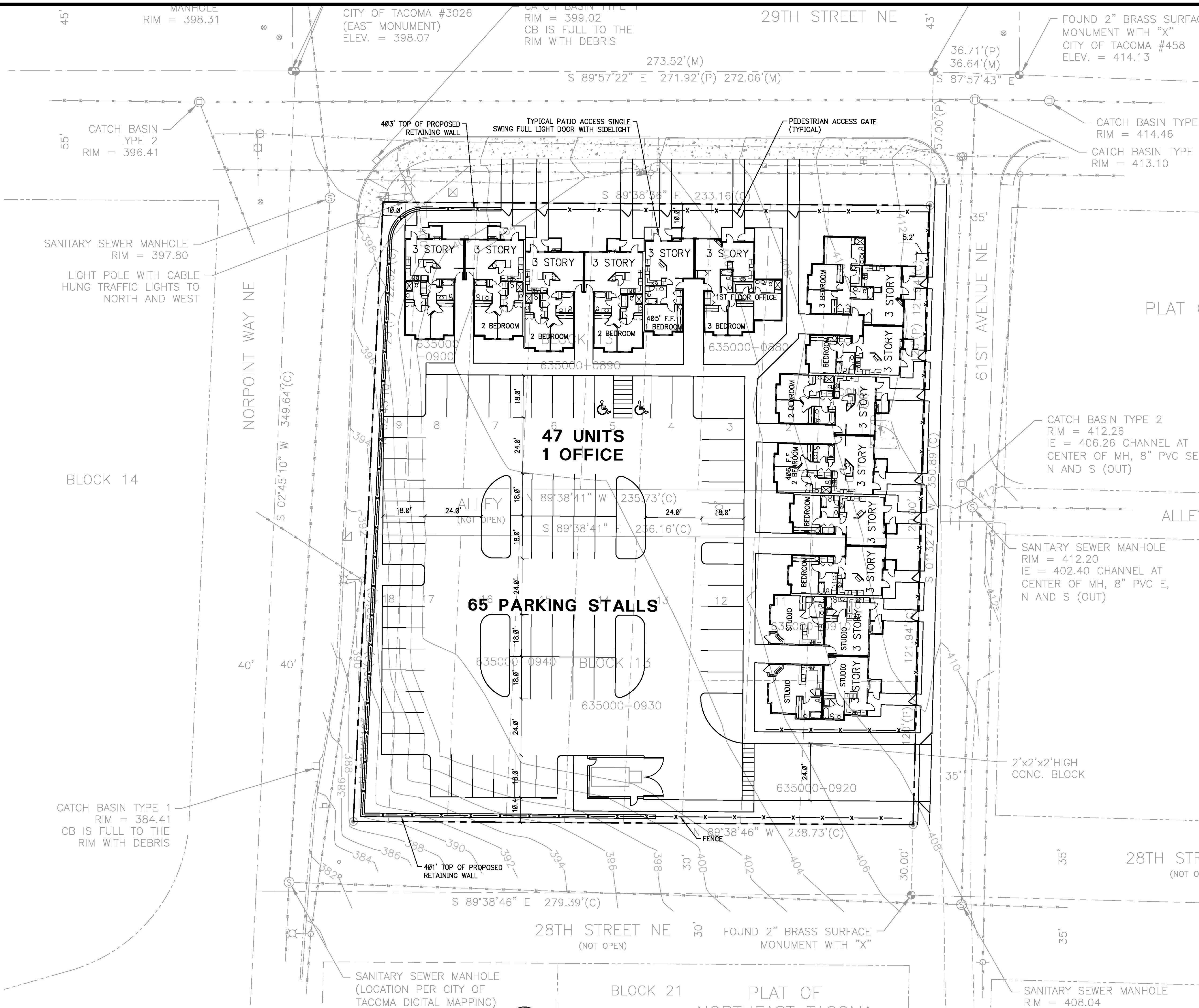
3. The final design of the development shall include accessible pedestrian access from each building, through the development, to the adjacent public sidewalk on 61st Ave NE or 29th Street NE. The intent of this condition is to insure the development meets the TMC for pedestrian access, as well as to respond to Comprehensive Plan policies and to support transit use.
4. The final design of the development shall comply with all landscaping and parking standards, as well as all applicable building and site development code requirements.
5. Site access - Site access shall conform to Tacoma Municipal Code 10.14 Driveways. In addition, due to topography, speed, and volumes, vehicular site access cannot be located on Norpoint Way or 29th St NE.
6. Signal phasing - As indicated in the TIA, existing westbound left turn queues will block access to 61st Ave NE. A revision to the signal at Norpoint Way and 29th Street NE will improve turning movements adjacent to the development. In addition to providing a permitted and protected left turn phase to westbound and eastbound traffic, permitted and protected left turn phases are required for northbound and southbound traffic. The permitted left turn shall include a flashing yellow arrow and sign, as well as associated signal revision signage. The improvements to the signal phasing and timing may require upgrades to the signal cabinet and wiring.
7. Sight distance - Sight lines at 61st Ave NE and 29th St NE shall be improved and maintained for the appropriate traffic speeds, specifically eastbound traffic. A sight line evaluation should be completed as part of the Building Permit to ensure that structures, landscaping, and/or signage do not block visibility.
8. Off-site improvements - Pedestrian access shall be provided to the nearest transit stop, as well as along 61st Ave NE and the portion of 28th St NE improved for a turnaround. Parking restrictions may be required on 61st Ave NE to improve sight lines, which can be completed with signage.
9. Prior to approval of the required building permits, the applicant shall provide documentation to Planning and Development Services that the requirements of Tacoma Municipal Code 1.39 - Affordable Housing Incentives and Bonuses Administrative Code – have been met through one of the two following methods:
 - 1) Incorporation of 25% of the units resulting from increased density (with a base density of 14) into the City's affordable housing inventory per the requirements of TMC 1.39; or
 - 2) Payment of a fee-in-lieu at the rate of \$5,000 per unit resulting from increased density (with a base density of 14) into the City of Tacoma Housing Trust Fund. This is predicated on payment prior to Certificate of Occupancy, and prior to price adjustment in July of 2017. Payment at a later date or at a later stage of development will result in a different amount.

In addition, several reviewers made advisory comments that will apply to the development permits for the site. Those comments are included for reference as Exhibits 8 and 9.

LU16-0194
Exhibit 2: Vicinity Map



W:\Commercial\Clients\Fulcrum Real Estate Services\151132 - Norpoint Way NE Tacoma Project\151132 - XREF-SITE.dwg, 6/29/2016 12:30:17 PM, TODD JACKSON Drafting Services (360) 956-0885



SITE PLAN
SCALE: 1"=20'

Revisions:

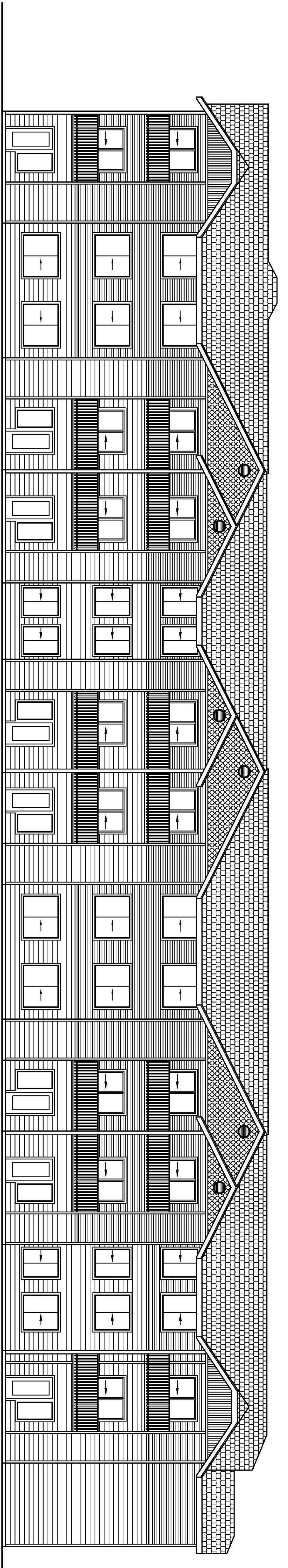
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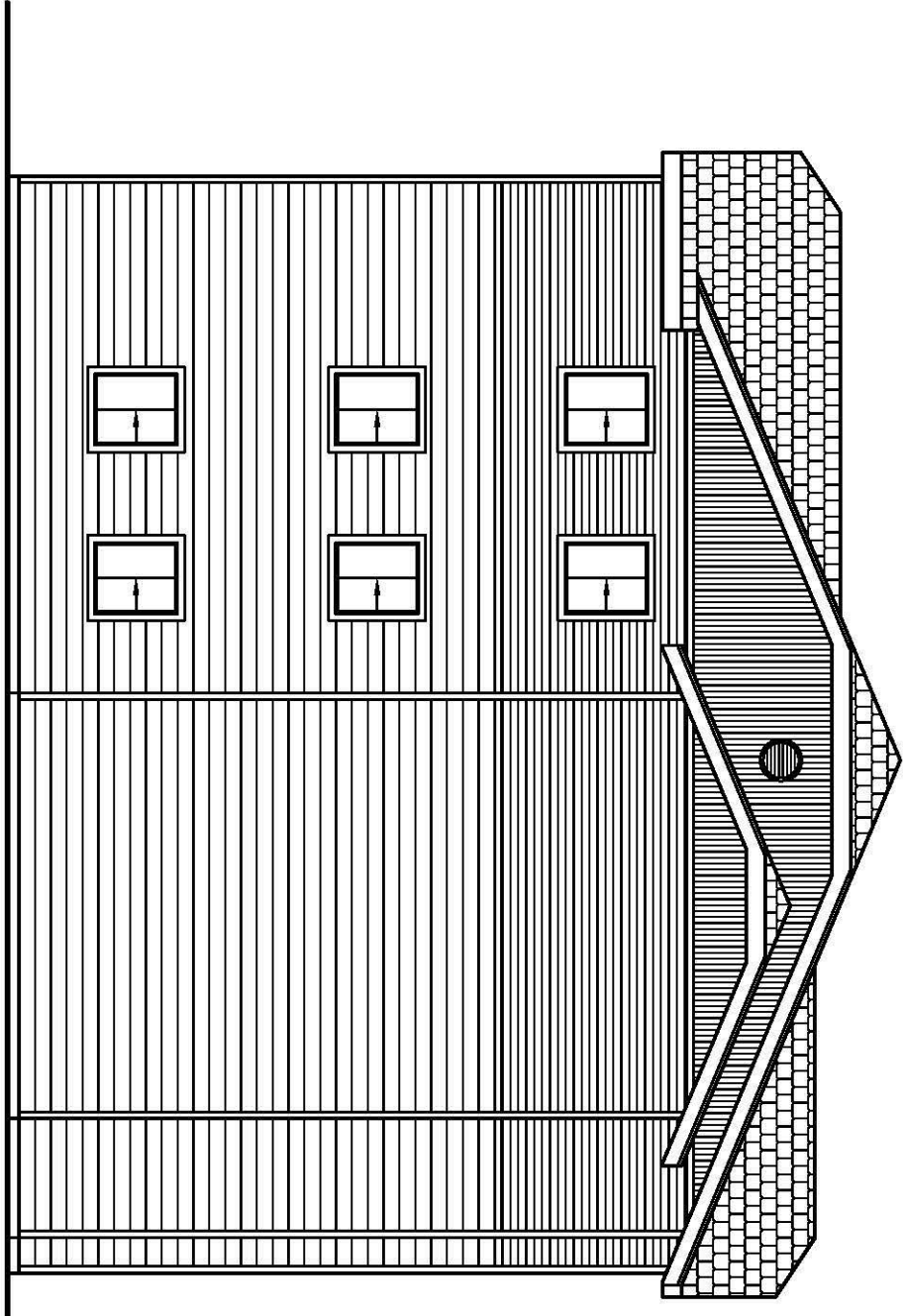
Sheet Contents: **SITE PLAN**
Project Title: **NORPOINT LANDING TACOMA, WA**

Drawn: R.C.T.
Designed: R.C.T.
Date: 11-04-15
CAD File: 151132

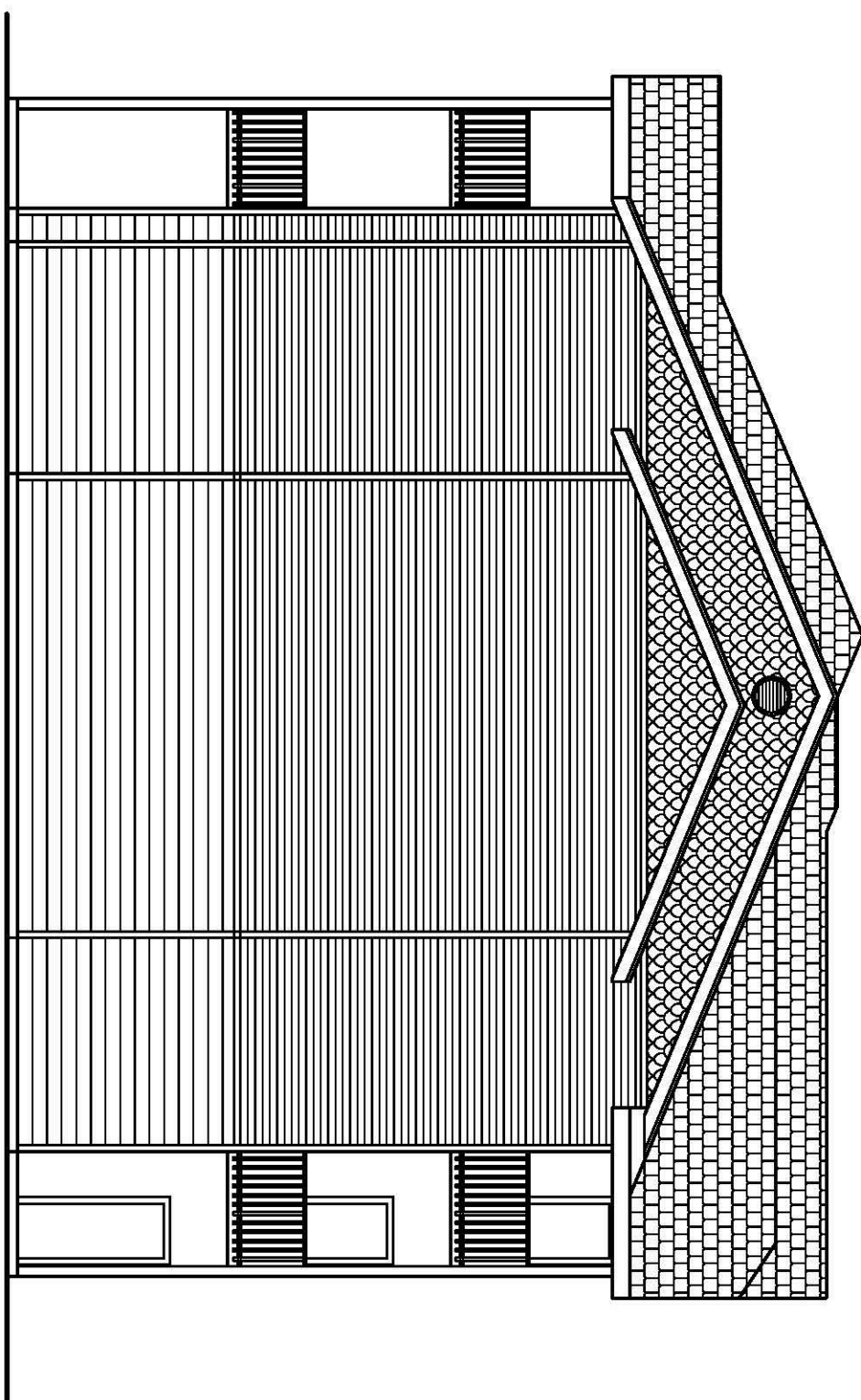
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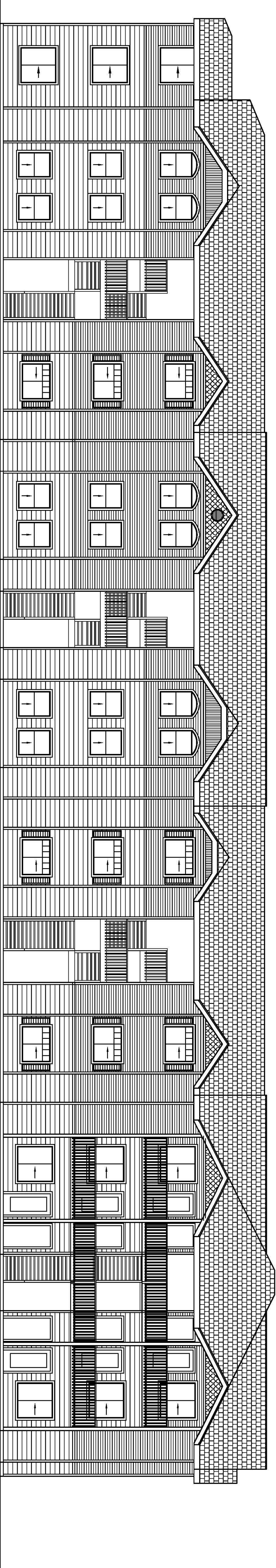
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NORTH ELEVATION
SCALE: 1/8"=1'-0"



SOUTH ELEVATION
SCALE: 1/8"=1'-0"



WEST ELEVATION
SCALE: 1/8"=1'-0"

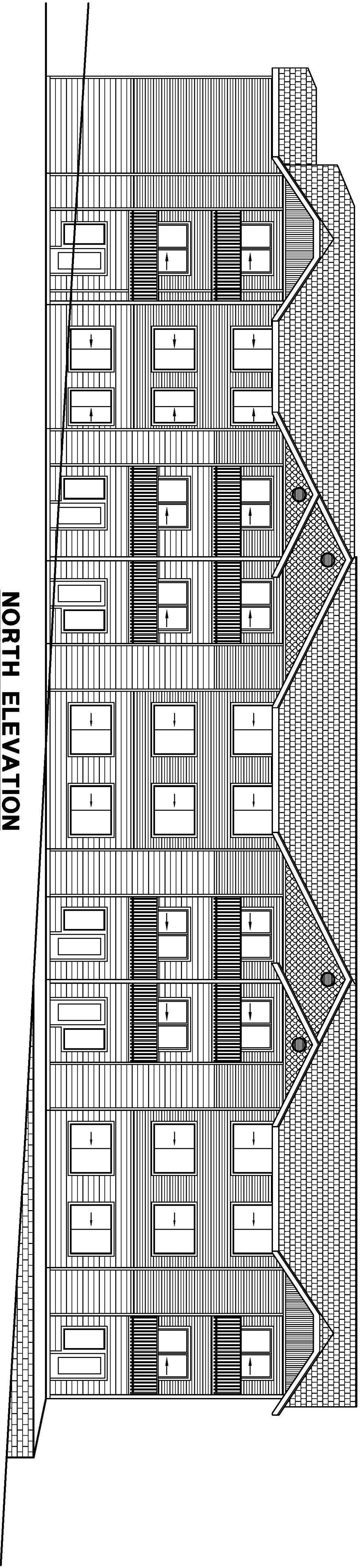
Revisions:

Client:	NORPOINT LANDING LLC
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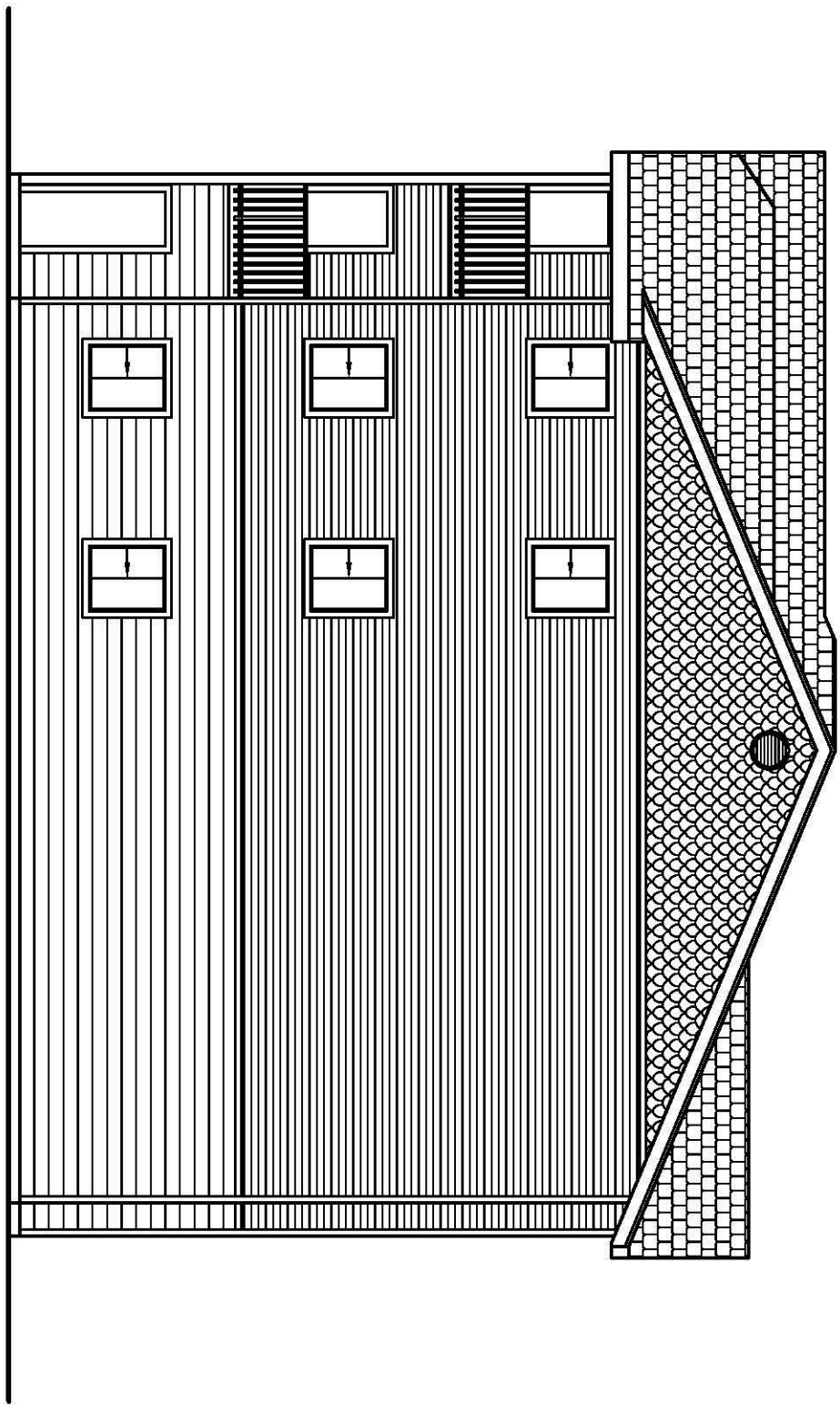
Prepared By:	TODD JACKSON DRAFTING SERVICES, LLC 1235 4th Ave. East, Suite 100, Olympia, WA 98506 Phone: 360-956-0885 Fax: 360-956-0221 Email: TJDS@ToddJacksonDrafting.com
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Sheet Contents:	ELEVATIONS
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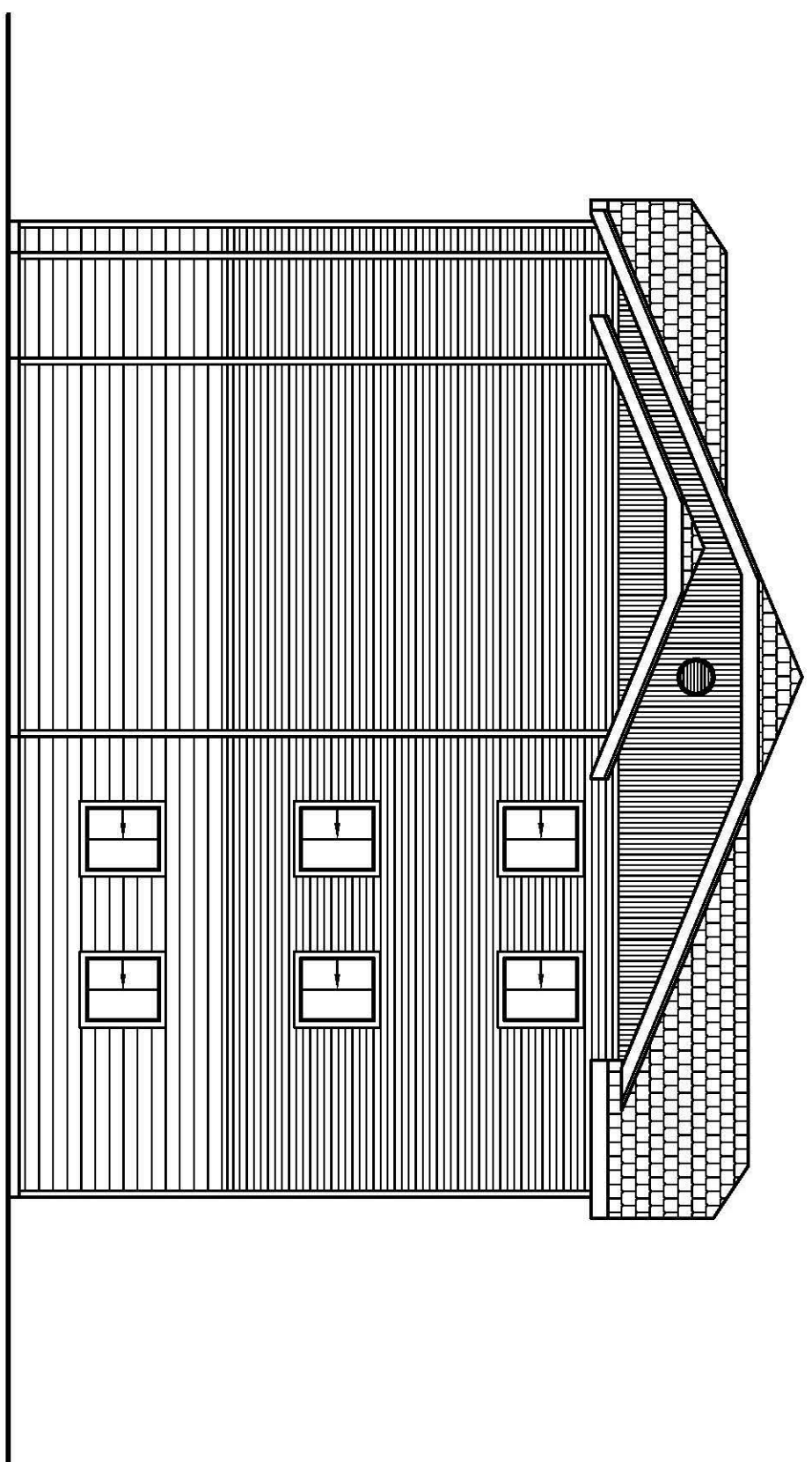
Drawn:	TJDS
Designed:	R.C.T.
Date:	11-04-15
CAD File:	151132
Sheet:	A4.5



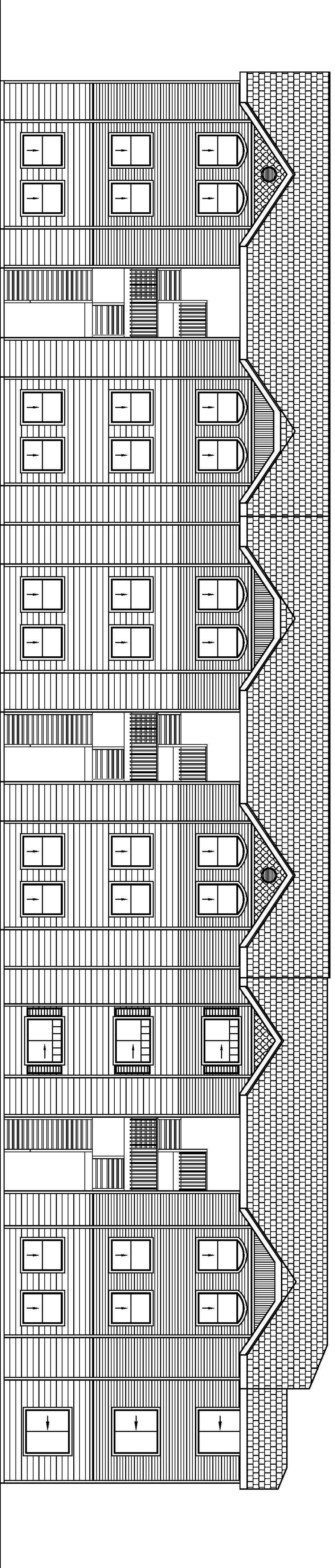
NORTH ELEVATION
SCALE: 1/8"=1'-0"



WEST ELEVATION
SCALE: 1/8"=1'-0"



EAST ELEVATION
SCALE: 1/8"=1'-0"



SOUTH ELEVATION
SCALE: 1/8"=1'-0"

Revisions:

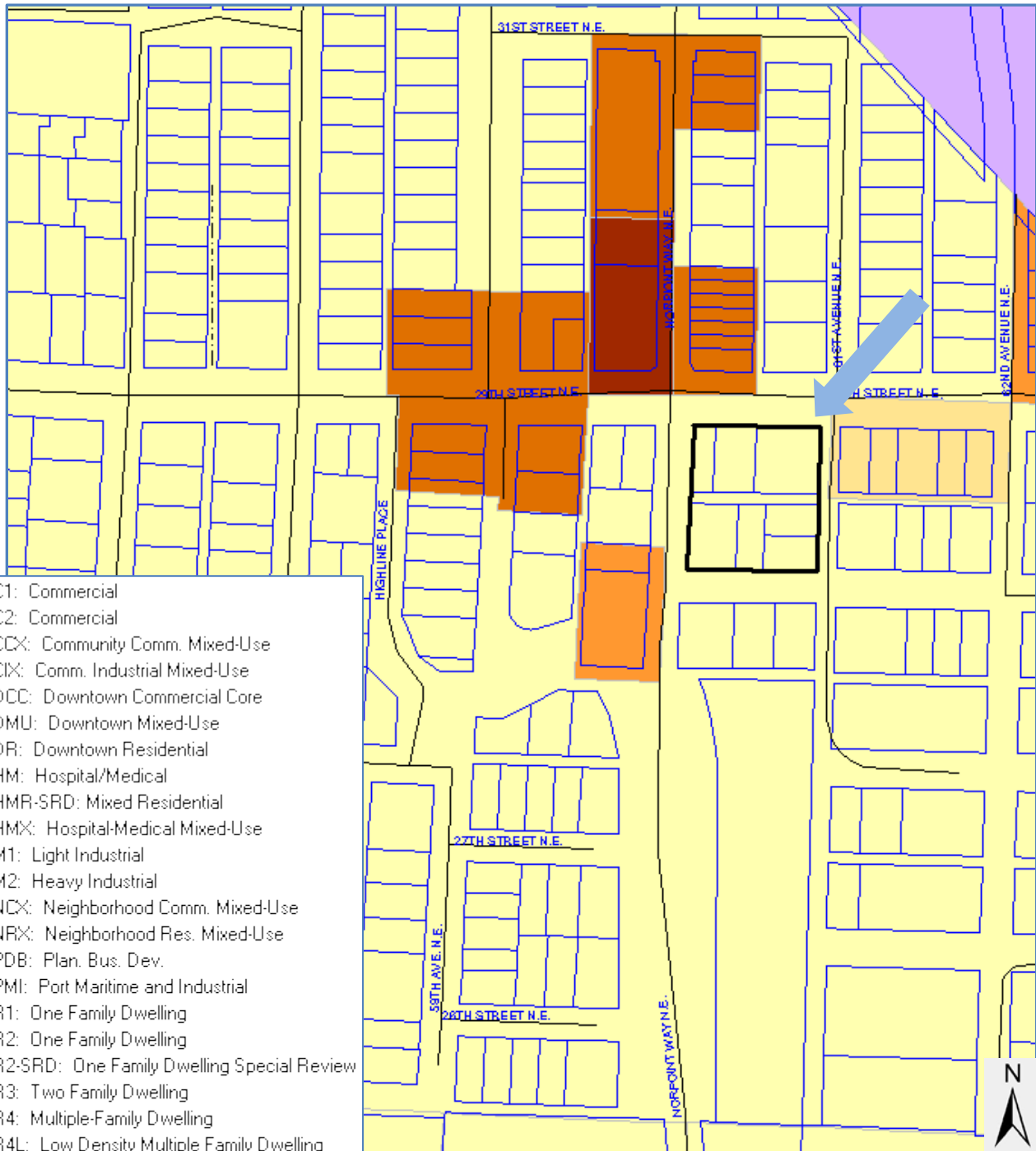
Client:
NORPOINT LANDING LLC

Prepared By:
TODD JACKSON
DRAFTING SERVICES, LLC
1235 4th Ave. East, Suite 100, Olympia, WA 98506
Phone: 360-956-0885 Fax: 360-956-0221
Email: TJDS@ToddJacksonDrafting.com

Sheet Contents:
ELEVATIONS
Project Title:
NORPOINT LANDING
TACOMA, WA

Drawn: **TJDS**
Designed: **R.C.T.**
Date: **11-04-15**
CAD File: **151132**
Sheet:
A4.6

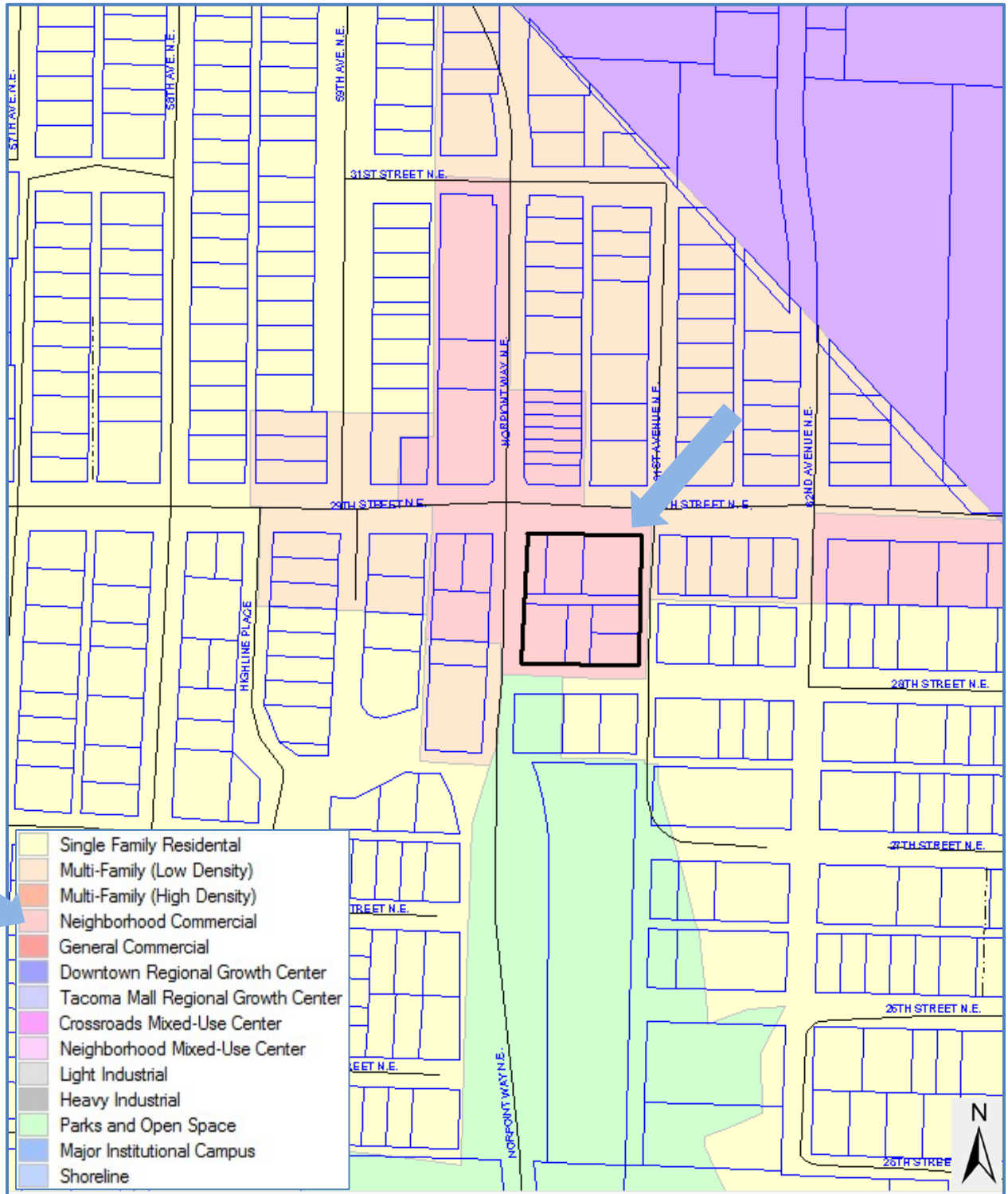
LU16-0194
Exhibit 4: Current Zoning Map



- C1: Commercial
- C2: Commercial
- CCX: Community Comm. Mixed-Use
- CIX: Comm. Industrial Mixed-Use
- DCC: Downtown Commercial Core
- DMU: Downtown Mixed-Use
- DR: Downtown Residential
- HM: Hospital/Medical
- HMR-SRD: Mixed Residential
- HMX: Hospital-Medical Mixed-Use
- M1: Light Industrial
- M2: Heavy Industrial
- NCX: Neighborhood Comm. Mixed-Use
- NRX: Neighborhood Res. Mixed-Use
- PDB: Plan. Bus. Dev.
- PMI: Port Maritime and Industrial
- R1: One Family Dwelling
- R2: One Family Dwelling
- R2-SRD: One Family Dwelling Special Review
- R3: Two Family Dwelling
- R4: Multiple-Family Dwelling
- R4L: Low Density Multiple Family Dwelling
- R5: Multiple-Family Dwelling Dist.
- RCX: Residential Comm. Mixed-Use
- S1-S14: Shoreline
- T: Transitional
- UCX: Urban Center Mixed-Use
- UCX-TD: Urban Center Mixed-Use
- URX: Urban Residential Mixed-Use
- WR: Warehouse Residential

LU16-0194

Exhibit 5: Land Use Intensity Map



LU16-0194
Exhibit 6: Historic Zoning Map





City of Tacoma
Planning and Development Services

Determination of Environmental Nonsignificance (DNS)

File Number: LU16-0194

To: All Departments and Agencies with Jurisdiction

Subject: Determination of Environmental Nonsignificance

In accordance with Washington Administrative Code (WAC) 197-11-340, a copy of the Determination of Nonsignificance (DNS) for the project described below is transmitted.

Applicant: LPI Holdings LLC, Nick Parodi

Proposal: The applicant proposes to rezone 1.6 acres (7 parcels) from "R2" Single-Family Dwelling District to "C1" Neighborhood Commercial District to allow construction of 47 apartments and associated parking for 60 cars. Grading activity would be in excess of 500 cubic yards.

Location: The primary address is 6016 29th St NE
parcels 6350000880, 6350000940, 6350000890, 6350000920,
6350000900, 6350000930, 6350000910

Lead Agency: City of Tacoma

City Contact: Shirley Schultz
Principal Planner
Planning and Development Services
747 Market Street, Room 345
Tacoma, WA 98402
253-591-5121 | shirley.schultz@cityoftacoma.org

The Responsible Official for the City of Tacoma hereby makes the following findings and conclusions based upon a review of the environmental checklist and attachments, other information on file with the City of Tacoma, and the policies, plans, and regulations designated by the City of Tacoma as a basis for the exercise of substantive authority under the Washington State Environmental Policy Act (SEPA) pursuant to RCW 43.21C.

Findings of Fact:

General:

1. The applicant proposes to rezone 1.6 acres (7 parcels) from “R2” Single-Family Dwelling District to “C1” Neighborhood Commercial District to allow construction of 47 apartments and associated parking for 60 cars. Grading activity would be in excess of 500 cubic yards.

An environmental review is required for the proposal in accordance with the State Environmental Policy Act (SEPA), RCW 43.21C, Washington Administrative Code (WAC) 197-11, and Tacoma Municipal Code (TMC) 13.12 Environmental Code. Zoning reclassifications are not exempted from the environmental review process.

Earth:

2. The project proposes to comply with all regulations including the International Building Code (IBC) Appendix J (Grading) as adopted and amended by the City of Tacoma, as well as TMC Chapter 13.06 Zoning and Chapter 13.11 Critical Areas Ordinance.
3. A preliminary geotechnical assessment was prepared by N.L. Olson and Associates and dated June, 2016 (Exhibit A). The report was submitted to and reviewed by Planning and Development Services (PDS) in association with this project. The results of the review confirmed the absence of any geologically hazardous areas on the project site as defined and regulated by TMC Chapter 13.11 Critical Areas Ordinance. A final, stamped geotechnical assessment will be required in conjunction with development permitting.
4. Soil contamination issues associated with the Asarco Plume are addressed in the Environmental Health subsection of this document.

Air:

5. Watering of exposed soil during construction to suppress dust will ensure that no impacts to ambient air quality will result from the project.

Water:

6. The project will meet all requirements of the current and any future revisions to the Stormwater Management Manual, the Critical Areas Ordinance and other City regulatory requirements related to stormwater.
7. No regulated wetlands, streams, or associated buffers have been identified on the project site pursuant to TMC 13.11 Critical Areas Ordinance.
8. The site is not located within a flood hazard and/or coastal high hazard area as regulated by TMC 13.11.600, 13.11.610 and 13.11.620 and Sections 2.12.040 and 2.12.050.

Plants:

9. The proposed project will meet TMC 13.06.502 Landscaping/Buffering Standards.

Aesthetics:

10. The proposed project will meet TMC 13.06.501 Building Design Standards, TMC 13.06.502 Landscaping/Buffering Standards, and TMC 13.06.503 Residential Compatibility Standards.

Animals:

11. No state or federal candidate, threatened or endangered plant or animal species, or habitat has been identified on the project site.

Energy and Natural Resources:

12. The proposed project will comply with the City's Energy Code.

Environmental Health:

13. According to the Department of Ecology (Ecology) Facility/Site Atlas, the site is located within the Tacoma Smelter Plume with an arsenic concentration range of "Non-Detect to 20.0 ppm". Due to the facility atlas indicating that arsenic concentration is below the Model Toxics Control Act standards, no further review of the site relative to Asarco contamination is required at this time.

14. All requirements of the Tacoma-Pierce County Health Department (TPCHD) and Ecology will be met. See Exhibit B for Ecology's preliminary comments.

Noise:

15. All WAC noise levels shall be met.

16. Activities at the site shall comply with all applicable provisions of TMC 8.122 Noise Enforcement.

Land Use:

17. The project is not a permitted use within the "R-2" Single-Family Dwelling District; the applicant has applied for a zoning reclassification to the "C-1" Neighborhood Commercial District, which allows multifamily housing outright, subject to design and development standards.

18. The Comprehensive Plan designation for the site is Neighborhood Commercial.

Housing:

19. The project will provide 47 units of housing. No adverse impacts to housing will result from the proposal.

20. The applicant will be participating in the City's affordable housing program either through provision of affordable units or through payment of a fee-in-lieu to the City for the provision of affordable housing.

Recreation:

21. The project will not be developed on property designated as open space or public recreation area. No adverse impacts to recreation will result from the proposal.

22. The project will meet all open space and amenity standards for multi-family housing.

Historical and cultural preservation:

23. The project is not located within or adjacent to any property listed on the Tacoma, Washington State or National Registers of Historic Places, and is not within proximity to any known archaeological site or archaeological site that is inventoried by the State of Washington Department of Archaeology and Historic Preservation.

However, the site is located within the Usual and Accustomed area of the Puyallup Tribe of Indians. While it is unlikely that historic or archaeological resources will be encountered, historic sites may be exposed when the project is undertaken. The applicant will be required to prepare an Unanticipated Discovery Plan prior to development permit issuance. Should there be unanticipated discovery of an archaeological find during construction the Unanticipated Discovery Plan shall be implemented immediately. Further, additional review

of impacts to cultural resources may be required for projects under the jurisdiction of federal agencies under Section 106 of the National Historic Preservation Act (36 CFR 800).

Transportation:

24. The project will comply with TMC 13.06.510 Off-street parking and storage areas.
25. The City received public SEPA comments made during the public notice period (Attachment “D”).¹
26. Review by the Public Works Engineering Division indicates that the traffic volumes generated by the project may result in significant adverse impacts to the City’s street system. A traffic impact analysis for the project was prepared by Jake Traffic Engineering, Inc. and dated June, 2016 (revised August, 2016). See Exhibit “C”². The analysis has been submitted to, reviewed, and approved by the Engineering Division. The Division has determined that implementation of the conditions recommended in the report will adequately mitigate any potential significant adverse impacts associated with the development:
 - a) Site access - Site access shall conform to Tacoma Municipal Code 10.14 Driveways. In addition, due to topography, speed, and volumes, vehicular site access cannot be located on Norpoint Way or 29th St NE.
 - b) Signal phasing - As indicated in the report, existing westbound left turn queues will block access to 61st Ave NE. A revision to the signal at Norpoint Way and 29th Street NE will improve turning movements adjacent to the development. In addition to providing a permitted and protected left turn phase to westbound and eastbound traffic, permitted and protected left turn phases are required for northbound and southbound traffic. The permitted left turn shall include a flashing yellow arrow and sign, as well as associated signal revision signage. The improvements to the signal phasing and timing may require upgrades to the signal cabinet and wiring.
 - c) Sight distance - Sight lines at 61st Ave NE and 29th St NE shall be improved and maintained for the appropriate traffic speeds, specifically eastbound traffic. A sight line evaluation should be completed as part of the Building Permit to ensure that structures, landscaping, and/or signage do not block visibility.
 - d) Off-site improvements - Pedestrian access shall be provided to the nearest transit stop, as well as along 61st Ave NE and the portion of 28th St NE improved for a turnaround. Parking restrictions may be required on 61st Ave NE to improve sight lines, which can be completed with signage.

Public Services/Public Utilities:

27. Project concurrency certification or an appropriate mitigation will be completed at the building permit review stage.
28. The project will comply with emergency vehicle circulation requirements.
29. Fire protection must be provided in accordance with the requirements of TMC 3.02 Fire Code.

¹ Additional comments were incorporated related to public process, timing, and opposition to the rezone. These items will be addressed at the public hearing on the rezone and are not integral to the SEPA determination.

² Exhibits referenced herein are contained in the project file LU16-0194 and are available upon request. Further, they are available at www.tacomapermits.org under “public notices”.

30. The City of Tacoma staff have reviewed the proposal and have provided comments pertaining to off-site improvements including sidewalk, curb, street improvements and other miscellaneous infrastructure. Staff comments are shown in Attachment "C".

CONCLUSION OF THE RESPONSIBLE OFFICIAL:

The City of Tacoma, the lead agency for this proposal, has determined that the requirements for environmental analysis, protection, and mitigation measures have been adequately addressed in the development regulations and comprehensive plan adopted under Chapter 36.70A RCW, and in other applicable local, state, or federal laws or rules, as provided by RCW 43.21C.240 and WAC 197-11-158. The City will not require any additional mitigation measures under SEPA.

Additionally, the City of Tacoma has determined that this project does not have a probable significant adverse impact on the environment. The proposal will have no significant adverse environmental impacts to fish and wildlife, water, noise, transportation, air quality, environmental health, public services and utilities, or land and shoreline use. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

As noted previously, the applicants have also filed for a Zoning Reclassification. In order to receive approval of this permit the applicant will be required to demonstrate that the project will meet the applicable requirements of the TMC. If approved, the City's decision regarding the requested Rezone will likely include conditions of approval that may address necessary utility upgrades, street and sidewalk improvements, street lighting, grading and erosion control measures, and stormwater controls.

You may appeal this final determination. Appeals may be filed at the SEPA Public Information Center, Tacoma Municipal Building, 3rd Floor, 747 Market Street, Tacoma, Washington 98402, by filing a notice of appeal; the contents of the appeal as outlined in Tacoma Municipal Code 13.12.820; and a **\$325.26** filing fee, within 14 days after the issue date of this determination. Appeals of this MDNS will be heard concurrently with the Rezone public hearing, to be held at 9:00 a.m. on October, 27, 2016. The hearing will be held at Tacoma Municipal Building, Council Chambers (first floor), 747 Market Street, Tacoma, WA 98402.

Responsible Official: Peter Huffman

Position/Title: Director, Planning and Development Services

Signature: 

SEPA Officer Signature: 

Issue Date: October 3, 2016

Last Day to Appeal: October 17, 2016

NOTE: The issuance of this SEPA Determination does not constitute final project approval. The applicant must comply with all other applicable requirements of the City of Tacoma Departments and other agencies with jurisdiction prior to receiving construction permits.

cc: Applicant

Northeast Neighborhood Council, Chairperson

Puyallup Tribe of Indians, 3009 Portland Avenue, Tacoma, WA 98404: Andrew Strobel,
Brandon Reynon, Lisa Anderson, Carol Ann Hawks, Russ Ladley

cc via email:

Washington Department of Ecology, sepaunit@ecy.wa.gov

Tacoma-Pierce County Health Department, SEPA, SEPA@tpchd.org

Planning and Development Services, Reuben McKnight, Peter Huffman, Ian Munce

Washington State Office of Archaeology & Historic Preservation, Gretchen Kaehler,
gretchen.kaehler@dahp.wa.gov

Pierce Transit - Bus Stop Program, Tina Vaslet, tvaset@piercetransit.org

Pierce County Assessor Treasurer, Darci Brandvold, dbrandv@co.pierce.wa.us

Northeast Neighborhood Council Members

Community and Economic Development, Carol Wolfe

City Council Office, Jennifer Garner



**Public Works Department
Building and Land Use Services Division
747 Market Street, Room 345
Tacoma, WA 98402-3769
(253) 591-5363**

Environmental Checklist

Submit checklist to the Public Works Department, Building and Land Use Services Division

To avoid delay in processing, be sure to complete the following:

- Answer all questions on the checklist.
If a question does not apply to your project, write "does not apply."
- Attach a vicinity map and an 8 ½ x 11 site plan.
These plans are in *addition* to any plans submitted for other permits.
- Indicate name and phone number of contact person (page 1).
- Sign checklist (page 12).
- Include appropriate filing fee.

Purpose of the Checklist

The State Environmental Policy Act (SEPA), RCW Chapter 43.21C, requires all governmental agencies to consider the environmental impacts of a proposal before the proposal is decided upon. This checklist will help City staff and you determine if the environmental impacts of your proposal are significant. If the impacts are determined to be significant, you will be required by SEPA to prepare an environmental impact statement (EIS) for your proposal. If the impacts are determined not to be significant, a Determination of Non-Significance will be issued for your proposal and you will not be required to perform anymore environmental assessment.

Instructions

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately, carefully and to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, City staff can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help you describe your proposal or its environmental effects.

Environmental Review Process

Environmental review is conducted by a land use planner. For projects requiring a land use permit, the environmental review is conducted concurrently with the land use permit process. For projects which do not require a land use permit, the review typically takes less than 6 weeks. Below are the major steps involved for projects not requiring a land use permit.

Step 1: Pre-Application Meeting

Before you submit your application, you must meet with staff from the Building and Land use Services Division to discuss your project, the regulations and policies the project will be subject to, the permit requirements and the pertinent filing fees. Call 591-5363 to make an appointment with a land use planner.

Step 2: Submit Application

Submit your environmental checklist to a land use planner in the Building and Land Use Services Division.

Step 3: Issuance of Preliminary Environmental Determination and Public Comment

Within 1-week of the date your environmental checklist is submitted, a preliminary environmental determination will be made concerning your project. This preliminary determination will be published in the Tacoma News Tribune and will be subject to a 2-week comment period. The City will reconsider this determination based on timely comments and may retain, modify, or if significant adverse impacts are likely, withdraw the determination.

Step 4: Issuance of Final Environmental Determination

Unless modified by the City, the preliminary determination noted above will become a final determination following the comment period. This final determination will be published in the Tacoma News Tribune and will be subject to a 3-week appeal period.

Step 5: Appeal

Final determination may be appealed. Appeals may be filed at the Superior Court of the State of Washington for Pierce County. Appeals to the Superior Court shall be taken in accordance with procedures and limitations. Set forth in RCW 43.21C.075.

Step 6: Begin Work

If no appeal is filed, you may begin work immediately following the appeal period - *provided that you have obtained a building permit and any other necessary permits*. If an appeal is filed, you must wait until the appeal is decided before you begin work.

A. BACKGROUND

1. Name of proposed project, if applicable: Norpoint Landing Apartments
2. **Proponent/applicant**--Name and phone number: LPI Holdings, LLC -253.315.0087
Proponent/applicant--Address: 2715 64th Ave NE Tacoma, WA 98422
3. **Contact Person**--Name and phone number: Nick Parodi - 253.315.0087
Contact Person--Address: 2715 64th Ave NE Tacoma, WA 98422
4. Date checklist prepared: 08/09/2016
5. Agency requesting checklist: **City of Tacoma**
6. Proposed timing or schedule (including phasing, if applicable): Rezone to be completed in early 2017 with concurrent construction permitting allowing for 2017 construction.
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. No
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. Traffic Impact Study, Geological Study
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. N/A
10. List any government approvals or permits that will be needed for your proposal, if known. Zoning change to C-1 zoning, site and construction
11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. A 47-unit apartment project consisting of Studio, 1-bedroom, 2-bedroom and 3-bedroom apartments. 2-3 Story Garden Style. with an estimated 1.5 parking stalls per unit.
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). SE Corner of 29th Ave NE and Norpoint Way NE in Tacoma 98422
13. Assessor Parcel Number: 6350000900, 6350000890, 6350000880, 6350000940, 6350000930, 6350000910, 6350000920

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other: Flat 5% average across site
- b. What is the steepest slope on the site (approximate percent slope)?
30% as it falls toward the west border of property.
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.
Glacial till with some uncontrolled fill increasing from 0 on the East side of the site to the West.
- d. Are there surface indications or history of unstable soils in the immediate vicinity? No
- e. Describe the purpose, type and approximate quantities of filling or grading proposed. Indicate source of fill.
Unknown specifically at this time. Minimum required to facilitate use.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. No
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Estimated 70%

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: Best Management Practices

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.
Construction vehicles, after completion, resident vehicles.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. No
- c. Proposed measures to reduce or control emissions or other impacts to air, if any. No mitigation necessary.

3. Water

- a. Surface
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. No
- 2) Will the project require any work in or adjacent to (within 200 feet) of the described waters? If yes, please describe and attach available plans. N/A

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. N/A
 - 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known. No
 - 5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan. No
 - 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. No
- b. Ground:
- 1) Will the ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities, if known. No
 - 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. For example: domestic sewage, industrial, containing the following chemicals . . . agricultural; etc. Describe the general size of the system, the number of such systems, the number of houses to be served, if applicable, or the number of animals or humans the system(s) are expected to serve. N/A

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Gutters and downspouts, parking lot guided to collection vault(s) with direct discharge to adjacent city storm line which discharges directly to puget sound
- 2) Could waste materials enter ground or surface waters?
No

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any.

All civil engineer recommendations

4. Plants

a. Check or circle types of vegetation found on the site.

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

b. What kind and amount of vegetation will be removed or altered?
Ground will be cleared with new vegetation installed.

c. List threatened or endangered species known to be on or near the site.
None

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
Irrigated grass lawns in front and behind buildings and in landscape islands with appropriate shrubs and trees as required.

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

5. Animals

- a. Underline any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other: Some songbirds

mammals: deer, bear, elk, beaver, other: None observed

fish: bass, salmon, trout, herring, shellfish, other: N/A

- b. List any threatened or endangered species known to be on or near the site. N/A

- c. Is the site part of a migration route? If so, explain. No

- d. Proposed measures to preserve or enhance wildlife, if any. None

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs:

Electricity

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

All lighting will be LED with common lighting attached to photocell.

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. No

1) Describe special emergency services that might be required. N/A

2) Proposed measures to reduce or control environmental health hazards, if any: N/A

b. Noise

1) What types of noise exist in the area which may affect your project, (for example: traffic, equipment, operation, other)? Mild traffic noise

2) What types of levels would be created by or associated with the project on a short-term or long-term basis (i.e., traffic, construction, operation, other)? Indicate what hours noise would come from the site.
Site development and construction will have noise. Hours will be limited to what is allowed by ordinance.

3) Proposed measures to reduce or control noise impacts, if any.
Limit work time to hours allowed by ordinance.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

Site is undeveloped land with single family and 2-unit dwellings adjacent

b. Has the site been used for agriculture? If so, describe. No

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

- c. Describe any structures on the site.
None
- d. Will any structures be demolished? If so, what?
N/A
- e. What is the current zoning classification of the site?
R2
- f. What is the current comprehensive plan designation of the site?
Neighborhood Commercial
- g. If applicable, what is the current shoreline master program designation of the site? N/A
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. N/A
- i. Approximately how many people would reside or work in the completed project? 60-75
- j. Approximately how many people would the completed project displace?
0
- k. Proposed measures to avoid or reduce displacement impacts, if any. N/A
- l. Proposed measures to ensure the proposal is compatible with existing and projected land use and plans, if any. City reviews of site and building plans

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. 47 units middle income level

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. 0

- c. Proposed measures to reduce or control housing impacts, if any. N/A

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? 38'

- b. What views in the immediate vicinity would be altered or obstructed? None

- c. Proposed measures to reduce or control aesthetic impacts, if any.
Building to include staggered, connected stacks of apartment homes varying in siding treatments. Roof lines will vary with gable ends. Color scheme will have multiple colors.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? Common lighting in parking lots and on buildings may extend beyond site borders.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? No

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

- c. What existing off-site sources of light or glare may affect your proposal?
None

- d. Proposed measures to reduce or control light and glare impacts, if any.
N/A

12. Recreation

- a. What designation and informal recreational opportunities are in the immediate vicinity?
Kobetich Library, BPA trail and park, NE Tacoma Community Center, Restaurants, Shopping, Martial Arts School

- b. Would the proposed project displace any existing recreational uses? If so, describe. No

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any. Development will include a Resident Common Lounge / workout facility

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? No

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. N/A

- c. Proposed measures to reduce or control impacts, if any.
N/A - no known archaeological, scientific or cultural landmarks noted.

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any. Norpoint Way NE, 29th Ave NE, 61st Ave NE
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? Yes
- c. How many parking spaces would the completed project have? How many would the project eliminate? 60
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
Expected improvements to 61st Ave NE.
Any other required by city.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. No
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
133 enter, 133 exit with 25 in peak volume per TIA
- g. Proposed measures to reduce or control transportation impacts, if any.
Landscape considerations to preserve site lines per TIA.
Controlled parking permits on site limiting non-resident guest car trips.
Balanced unit mix including studio and 1-bedroom apartments
reducing the total resident vehicles vs concentrations in
larger unit types.

TO BE COMPLETED BY APPLICANT

**EVALUATION FOR
AGENCY USE ONLY**

15. Public Services

- a. Would the project result in an increased need for public services (i.e., fire protection, police protection, health care, schools, other)? If so, generally describe. Not expected.

- b. Proposed measures to reduce or control direct impacts on public services, if any. Fully monitored fire system. Full screening of residents. Annual inspection of smoke /CO detectors

16. Utilities

- a. Underline utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other. All are available

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

 Water, sewer, electricity provided by City of Tacoma.
 This project will involve the site development to facilitate and construction of 40 apartment units with parking.

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 of Proponent/Applicant: _____

Date: 08/09/2016

Received, Buildings and Land Use Services Division: _____
Date Submitted: _____
Receipt # _____ Filing Fee \$ _____



Northeast Tacoma Neighborhood Council

www.netacoma.org
6716 Eastside Dr. NE, Ste. 1, PMB 222
Tacoma, WA 98422

September 25, 2016

Re: LU16-0194 Application for Property Re-
Zone on 29th St. NE

Shirley Schultz
Principal Planner
Planning and Development Services
City of Tacoma

By e-mail

Dear Ms. Schultz:

The Northeast Tacoma Neighborhood Council's Executive Committee has strong concerns with the proposed development of 47 apartments located on 29th St. NE between Norpoint Way NE and 61st Ave. NE. Most importantly, traffic conditions on 29th St. NE and in the intersection with Norpoint Way NE are already much worse than acceptable and would be exacerbated. Secondly, the addition of more dense housing on the bluff-tops when there is no evacuation plan in case of a disaster in the nearby Tideflats is not appropriate.

It is not clear from the material available that the traffic study mentioned in the notice would deal with the fundamental problems of the intersection. Potentially significant construction would be necessary to effectively deal with the current and potentially worsened traffic congestion.

Your e-mail message to Yvonne McCarty et al. of September 21st, 2016 mentions a SEPA process, which is not specified in the notice. We believe a SEPA process, with due opportunity for public review and input, is a requirement for any further action on this application. Accordingly, we protest any Determination of Non-Significance at this point.

Sincerely,

/s/ Carolyn Edmonds

/s/ John Thurlow

Co-Chairs, Northeast Tacoma Neighborhood Council

cc: NETNC Board
Robert Thoms

From: [Yvonne McCarty](#)
To: [Schultz, Shirley](#)
Cc: [Ann Locsin](#); [Pt. Woodworth](#); [Russ McCarty](#); [Thoms, Robert](#); johnthurlow@harbornet.com; carolyn.edmonds@comcast.net
Subject: Proposed Apartment Complex at Norpoint Way and 29th St. NE
Date: Tuesday, September 20, 2016 6:21:53 PM

Hello Ms. Schultz,

I'm very concerned that I had to learn about another sizable project affecting my community through Facebook. Please see the attached public notice, which is a picture that a resident of NE Tacoma posted on Facebook wondering who else received it. I was able to quickly reply that only people that live within 400 feet of the proposed project site would receive something from the City of Tacoma in the mail.

From what I can read, your office plans to issue a Determination of Non-significance, which I assume means that this project will get a fast pass through City approval without having to go through an EIS.

I have a couple of points to make.

1) Regarding this specific project: The builder plans to build a 47 unit apartment complex on the busiest intersection in NE Tacoma. I find it unacceptable to allow the zoning of this land to change from single family residential, without a major overhaul of this intersection and the main arterials that feed it. As you may or may not know, due to the rise of popular cellular applications like Waze, southbound I-5 traffic headed to Tacoma is being routed off of I-5 at S. 348th in Federal Way. Then routed down S. 356th in Federal Way (which becomes 29th St. NE), and finally they turn left down Norpoint Way and then onto SR509 to continue heading south. As it is, the single turn lane from 29th St. onto the single lane on Norpoint Way is inadequate, and is constantly backed up way down 356th. It is near impossible to get out from our neighborhood (Pt. Woodworth) onto Norpoint Way during commute hours. Adding additional traffic, thus making it harder for us to get safely out of our neighborhood, is a burden we should not be subjected to. There needs to be some major re-engineering and reconstruction of these roads before this property is rezoned to allow a large apartment complex. I serve on the board for the NE Tacoma Neighborhood Council, and I've repeatedly brought the issue with this intersection and Norpoint Way up with the Tacoma leaders and elected officials over the last 2 1/2 years, and to my knowledge, no one has ever followed up on it. Besides traffic, there are also other adverse impacts that should be studied - school space, crime statistics, visual blight, lack of green space, etc.

2) Regarding the notification process: Having to find out about this randomly on Facebook is unacceptable. I thought that the City was going to make changes to its notification procedures in the aftermath of the Methanol debacle? I urge you to make some progress

towards improved communication ASAP. In the meantime, I would like to request to be added to all communication of public notices that affect the NE Tacoma community. I have learned that you do send these notices to some of the board members of the NE Tacoma Neighborhood Council, but I am on the board and am not receiving them.

3) Regarding the only opportunity for public input: The only public hearing of this proposed change is at 9am on a workday. How do you expect to have adequate community input when you've designed the process to make it near impossible for the working public to participate? I urge you to address this through (at the very least) adding a public hearing in our community on an evening, so people can participate.

Just so I make it very clear, I strongly oppose the zoning change and the proposed apartment complex.

Sincerely,
Yvonne McCarty
NET NC Board Member
Yvonne.mccarty@Comcast.net



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

September 27, 2016

Shirley Schultz, Principal Planner
City of Tacoma
Planning and Development Services
747 Market Street, Room 345
Tacoma, WA 98402

Dear Ms. Schultz:

Thank you for the opportunity to comment on the optional determination of nonsignificance/notice of application for the Norpoint Landing Apartments Project (LU16-0194) located at 6016 29th Street Northeast as proposed by Nick Parodi, LPI Holdings, LLC. The Department of Ecology (Ecology) reviewed the environmental checklist and has the following comment(s):

WATER QUALITY: Chris Montague-Breakwell (360) 407-6364

Erosion control measures must be in place prior to any clearing, grading, or construction. These control measures must be effective to prevent stormwater runoff from carrying soil and other pollutants into surface water or stormdrains that lead to waters of the state. Sand, silt, clay particles, and soil will damage aquatic habitat and are considered to be pollutants.

The following construction activities require coverage under the Construction Stormwater General Permit:

1. Clearing, grading and/or excavation that results in the disturbance of one or more acres **and** discharges stormwater to surface waters of the State; and
2. Clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more **and** discharge stormwater to surface waters of the State.
 - a) This includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, **and** discharge to surface waters of the State; and
3. Any size construction activity discharging stormwater to waters of the State that Ecology:

Shirley Schultz, Principal Planner

September 27, 2016

Page 2

- a) Determines to be a significant contributor of pollutants to waters of the State of Washington.
- b) Reasonably expects to cause a violation of any water quality standard.

If there are known soil/ground water contaminants present on-site, additional information (including, but not limited to: temporary erosion and sediment control plans; stormwater pollution prevention plan; list of known contaminants with concentrations and depths found; a site map depicting the sample location(s); and additional studies/reports regarding contaminant(s)) will be required to be submitted.

You may apply online or obtain an application from Ecology's website at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/> - [Application](#). Construction site operators must apply for a permit at least 60 days prior to discharging stormwater from construction activities and must submit it on or before the date of the first public notice.

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.

Department of Ecology
Southwest Regional Office

(SM:16-4881)

cc: Chris Montague-Breakwell, WQ
Nick Parodi, LPI Holdings, LLC (Applicant)

LU16-0198

Exhibit 8: Staff Comments

Jennifer Kammerzell

COT Public Works
747 Market Street Rm. 644
Tacoma, WA 98402

253-591-5511
jkammerzell@cityoftacoma.org

August 28, 2016

Traffic Engineering has reviewed the request to construct 47 apartment units for Norpoint Landing, located on the southeast corner of Norpoint Way and 29th St NE. The site is bounded by 29th St NE, Norpoint Way, unimproved 61st Ave NE, and unimproved 28th St NE.

The traffic study completed by Jake Traffic Engineering, Inc appears to include a reasonable analysis of the trip generation and future conditions. The City agrees with the proposed traffic impact mitigation measures outlined in the study. The following conditions/comments are provided as part of the rezone and SEPA review:

- 1) Site access - Site access shall conform to Tacoma Municipal Code 10.14 Driveways. In addition, due to topography, speed, and volumes, vehicular site access cannot be located on Norpoint Way or 29th St NE.
- 2) Signal phasing - As indicated in the report, existing westbound left turn queues will block access to 61st Ave NE. A revision to the signal at Norpoint Way and 29th Street NE will improve turning movements adjacent to the development. In addition to providing a permitted and protected left turn phase to westbound and eastbound traffic, permitted and protected left turn phases are required for northbound and southbound traffic. The permitted left turn shall include a flashing yellow arrow and sign, as well as associated signal revision signage. The improvements to the signal phasing and timing may require upgrades to the signal cabinet and wiring.
- 3) Sight distance - Sight lines at 61st Ave NE and 29th St NE shall be improved and maintained for the appropriate traffic speeds, specifically eastbound traffic. A sight line evaluation should be completed as part of the Building Permit to ensure that structures, landscaping, and/or signage do not block visibility.
- 4) Off-site improvements - Pedestrian access shall be provided to the nearest transit stop, as well as along 61st Ave NE and the portion of 28th St NE improved for a turnaround. Parking restrictions may be required on 61st Ave NE to improve sight lines, which can be completed with signage.

The City's Traffic Engineering recommends consideration of improving 28th St NE between 61st Ave NE and 62nd Ave NE to improve access to the City's arterial street system. A connection to 62nd Ave NE provides access to the traffic signal at 21st Ave SW, which provides for safe and unimpeded access to 29th St NE. In addition, the new connection would provide westbound development traffic with an alternative in the PM and AM peak when queues at Norpoint Way and 29th St NE block access to 61st Ave NE.

If the scope of work is modified, a revised traffic study may be required.

Jesse Angel	Tacoma Water 3628 S 35 th St Tacoma, WA 98409	253.502.8280 jangel@cityoftacoma.org
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City ordinance 12.10.045 requires a separate water service and meter for each parcel.

An existing water meters serve the proposed parcel.

Existing water meter to subject parcels may be utilized by the owner provided size requirements for intended use are adequate, as approved by Tacoma Water. Tacoma Water shall review proposed plans prior to final approval. Contact the Tacoma Water Permit Counter at (253) 502-8247 with any questions. If the existing water service is not able to be used it shall be retired by Tacoma Water crews on a T&M basis at the developers cost.

If fire sprinklering, contact the Tacoma Water Permit Counter at (253) 502-8247 for policies related to combination fire/domestic water service connections.

New water services will be installed by Tacoma Water after payment of the Service Construction Charge and the Water Main Charge. New meters will be installed by Tacoma Water after payment of the System Development Charge.

If a new fire hydrant is required at a location with an existing water main, the hydrant will be installed by Tacoma Water after payment of an installation charge.

If existing water facilities need to be relocated or adjusted due to street improvements for this proposal they will be relocated by Tacoma Water at the owners' expense.

Sanitary sewer mains and sidesewers shall maintain a minimum horizontal separation of ten feet from all water mains and water services. When extraordinary circumstances dictate the minimum horizontal separation is not achievable, the methods of protecting water facilities shall be in accordance with the most current State of Washington, Department of Ecology "Criteria For Sewage Works Design".

Dan Reed	Tacoma Power T&D 3628 S 35 th St Tacoma, WA 98409	253.502.8292 dlreed@cityoftacoma.org
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General Notes:

Any construction, relocation or adjustment costs shall be at the applicant's expense.

All new electrical services will be installed underground unless otherwise approved by Tacoma Power Engineering; additional utility easements may be required.

Submittal Requirements:

Electric Service Application to Tacoma Power New Services Engineering Department. Review the Commercial Project Development Process online to determine additional submittal requirements.

Application for Electrical Permit to Tacoma Power Electrical Inspection Department.

For services over 400 amps, a set of electrical plans must be submitted to the Electrical Inspection Office for review.

Fees:

Fees for new electrical service or upgrading the existing electrical service will be determined when the power requirements are submitted to Tacoma Power New Services Engineering Department.

Fees for the electrical permit are based on the electrical contractors bid amount and have not been determined.

Forms and information are available online at <http://www.mytpu.org/tacomapower/permitting>

General language for OH clearance issues and or existing easements, can be added to general comments section:

- The [builder, developer, and/or owner] must observe the appropriate clearances to Tacoma Power's facilities during construction.
- Appropriate clearances must be maintained between all structures and Tacoma Power's facilities. No building shall be constructed under a primary power line. Buildings in the vicinity of the overhead lines must meet WAC, NEC, NESC and Tacoma Power requirements for clearance. Alternatively, the [builder, developer, and/or owner] shall incur all costs associated with relocating Tacoma Power's facilities in order to obtain the appropriate clearances. Costs of relocation include demolition of existing facilities, construction of new facilities, restoration of property as necessary, and relocation of other utilities as necessary.
- Tacoma Power requests to retain all existing easements and facilities in the subject area(s). Alternatively, the [builder, developer, and/or owner] shall incur all costs associated with relocating Tacoma Power's facilities. Costs of relocation include demolition of existing facilities, construction of new facilities, restoration of property as necessary, and relocation of other utilities as necessary. The [owner, developer, and/or builder] shall assist Tacoma Power and other affected utilities in obtaining all necessary easements for said relocated facilities.
- The [builder, developer, and/or owner] shall provide Tacoma Power and other affected utilities with all necessary easements.

Reviewed by John Hilotin 8/16/2016

Craig Kuntz

Planning & Devpt Svcs
747 Market St Rm 620
Tacoma, WA 98402

253.594.7820
ckuntz@cityoftacoma.org

The geotechnical report indicates it is preliminary. Please provide completed report. The report and associated addendum must be signed and stamped by the qualified professional licensed in the State of Washington.

Chris Seaman

Tacoma Fire
747 Market St Rm 345
Tacoma, WA 98402

253.591.5503
cseaman@cityoftacoma.org

Fire Comments:

1. The applicant is advised that drawings included with the land use permit are not reviewed in their entirety for compliance with the Fire Code. Future construction shall comply with the adopted Fire Code at the time of building permit submittal. Any required improvements to adjoining roads for fire department vehicle access and any required fire hydrants will be specified at the time of building permit submittal.

TO: Shirley Schultz, Planning and Development Services

FROM: Karina Stone, Environmental Services, Site Development Group

SUBJECT: Rezone LU16-0194
6016 29th St. NE

DATE: October 17, 2016

These comments and conditions are based on the following information provided for review:

- Site Plan, Dated 11/04/15
- Preliminary Geotechnical Report, Dated June 2016

Additional comments and conditions may be forthcoming upon changes to the submitted information.

If you have questions regarding these comments and conditions, please contact Karina Stone at kstone@cityoftacoma.org or 253-502-2286.

1. Storm and Sanitary Sewers

- a. The proposal shall comply with all applicable requirements contained in the City of Tacoma Stormwater Management Manual, Side Sewer and Sanitary Sewer Availability Manual, Tacoma Municipal Code 12.08, Tacoma Municipal Code 2.19, Tacoma Municipal Code 10.14, Tacoma Municipal Code 10.22 and the Right-of-Way Design Manual in effect at time of vesting land use actions, building or construction permitting.
- b. Any utility construction, relocation, or adjustment costs shall be at the applicant's expense.
- c. Portions of the site, including offsite improvements, are not presently served by the City stormwater drainage system. The City stormwater drainage system shall be extended to serve the project site and/or the required street improvements through the City's work order process, or another method of stormwater management meeting all requirements of the City of Tacoma Stormwater Management Manual shall be provided. To start the work order, apply online at <https://aca.accela.com/tacoma/>. If the public storm system is extended, it shall be extended in such a manner as to allow for further extension in the future to serve neighboring properties. Public and private stormwater shall be managed in separate water quality and flow control facilities.
- d. Each lot/building shall be independently connected to the City sanitary sewer at the building construction stage. Permits for this work shall be obtained. Multiple units and buildings that are under single ownership and located on a single parcel may use shared private side sewers that connect to the public sanitary sewer. In the

event that this development is divided into more than one parcel in the future (whether from platting, boundary line adjustments, lot segregations, or any other land use actions), each new parcel shall have an individual side sewer connection to the public sanitary sewer. This may require re-routing any existing shared side sewers, or constructing new side sewers in order to individually connect each parcel to the public sanitary sewer. A public sanitary sewer extension may also be required in order to individually connect each parcel.

The following conditions are applicable to building/development permits associated with this proposal:

- e. Per Minimum Requirement #5, projects that meet or exceed the SWMM thresholds shall employ, where feasible and appropriate, On-Site Stormwater Management BMPs to infiltrate, disperse, and retain stormwater runoff onsite to the maximum extent feasible. On-Site Stormwater Management BMPs include: Roof Downspout Control BMPs, Dispersion of all impervious surfaces and Soil Quality BMPs. If drainage cannot be managed on-site, it shall be conveyed to the City storm system in accordance with the Stormwater Management Manual and Public Works Design Manual.
- f. Water quality shall be provided for all projects that meet or exceed the thresholds for Minimum Requirement #6 as outlined in the City of Tacoma Stormwater Management Manual. Pollution-generating hard surfaces created and/or replaced offsite as a result of this project shall count toward the pollution-generating hard surface total.
- g. Flow control or other mitigation in accordance with the City of Tacoma Stormwater Management Manual shall be provided for all projects that meet or exceed the thresholds for Minimum Requirement #7 as outlined in the City of Tacoma Stormwater Management Manual. Hard surfaces created and/or replaced offsite as a result of this project shall count toward the hard surface total.
- h. All projects shall comply with Minimum Requirement #10: Off-Site Analysis and Mitigation.
- i. All public stormwater facilities shall be located in right of way, a tract dedicated to the City of Tacoma, or easement per City of Tacoma Stormwater Management Manual Volume 3 Chapter 13 and as approved in writing by Environmental Services.
- j. This project is located in the natural drainage course of abutting properties. Adequate provisions shall be made to collect drainage that naturally flows across the project site.
- k. Coverage under the NPDES Construction General Permit is required for any clearing, grading, or excavating that will disturb one or more acres of land area. Contact Ecology's Office of Regulatory Assistance at 1-800-917-0043 to determine if any additional requirements are necessary. Additional information is also available online at <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>. City approval does not release the applicant from state or other permitting requirements.

2. Streets, Driveways, and Sidewalks

- a. 61st Avenue NE fronting the property shall be improved to a width of 26 feet and shall include necessary drainage. The minimum roadway section shall meet City Design Standards at time of submittal. Any additional unsuitable foundation excavation material must be removed as directed by the City Engineer.
- b. Cement concrete curb and gutter shall be constructed along the western edge of 61st Avenue NE, fronting the property, at an alignment to be determined by and to the approval of the City Engineer.
- c. An asphalt wedge curb shall be constructed on the eastern edge of the required improvement to 61st Avenue NE.
- d. Cement concrete sidewalk shall be constructed along the western side of 61st Avenue NE, fronting the property, meeting Public Right Of Way Accessible Guidelines (PROWAG) and Americans with Disabilities Act (ADA) requirements, and be installed to the approval of the City Engineer.
- e. All broken, damaged, or hazardous sidewalk, curb and gutter along 29th Street NE abutting the site shall be removed, and new cement concrete sidewalk, curb and gutter constructed in its place to the approval of the City Engineer.
- f. 29th Street NE fronting the property shall be restored in accordance with the Right-of-Way Restoration Policy.
- g. The curb ramps on the south side of the intersection of 29th Street NE and 61st Avenue NE shall be removed and replaced to current Public Works standards. The crossing shall be constructed to facilitate pedestrian crossing in the east-west direction only.
- h. The type, width, and location of all driveway approaches serving the site shall be approved by the City Engineer.
- i. A Work Order is required. A licensed professional civil engineer must submit the street plans for review and approval following the City's work order process. To initiate a work order, contact the Public Works Private Development at (253) 591-5760. A performance bond is required for all work orders per TMC 10.22.070.F.

Additional Information

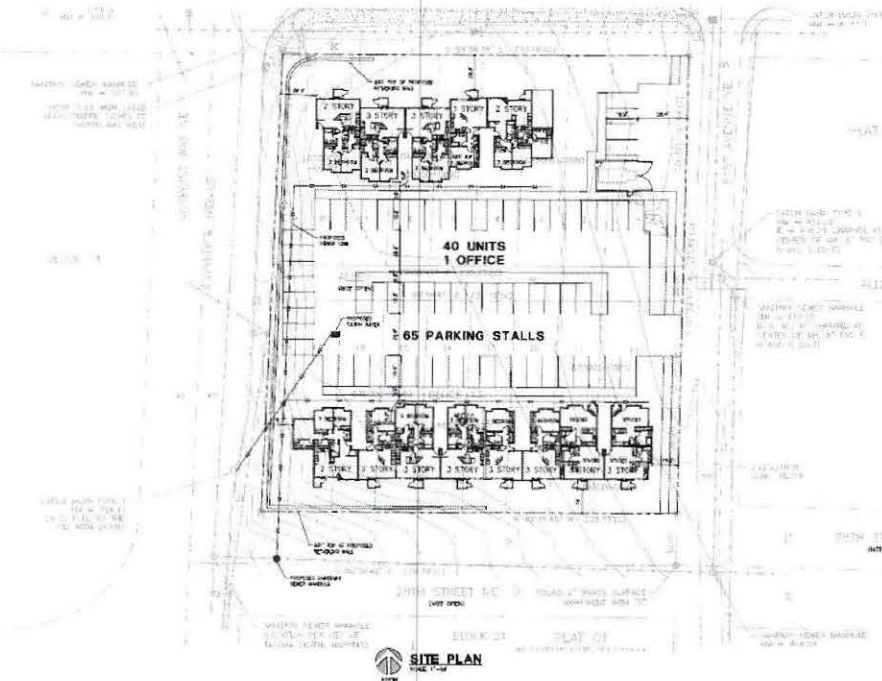
City documents are available online at the following locations:

- City of Tacoma Stormwater Management Manual:
<https://www.cityoftacoma.org/cms/one.aspx?objectId=3092>
- City of Tacoma Side Sewer and Sanitary Sewer Availability Manual:
<http://www.cityoftacoma.org/cms/one.aspx?objectId=15675>
- Right-of-Way Design Manual:
<http://www.cityoftacoma.org/cms/One.aspx?portalId=169&pageId=95081>

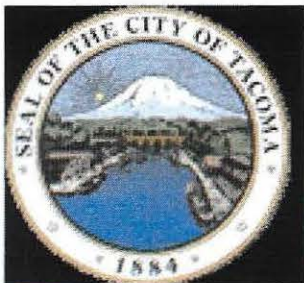
- City of Tacoma Right-of-Way Restoration Manual:
<http://www.govme.org/download/PDF/PublicWorks-Right-of-Way-RestorationPolicy.pdf>



Tacoma
NORPOINT LANDING
TRAFFIC IMPACT ANALYSIS
May 18, 2016



JTE . Jake Traffic Engineering, Inc.
 Mark J. Jacobs, PE (OR and WA), PTOE, President
 2614 39th Ave SW - Seattle, WA 98116 - 2503
 Tel. 206.762.1978 - Cell 206.799.5692
 E-mail jaketraffic@comcast.net





May 18, 2016

LPI HOLDINGS, LLC
Attn: Nick Parodi, President
6009 Capitol Blvd SW Ste: 103
Tumwater, WA 98501

Re: Norpoint Landing Tacoma
Traffic Impact Analysis

Dear Mr. Parodi,

I am pleased to present this Traffic Impact Analysis for a 40 unit apartment building in the SEC of the Norpoint Way NE/29th St. NE intersection in Tacoma. Access to the site would be via a driveway on 61st Avenue Northeast.

Correspondence with the City of Tacoma staff identified that the westbound to southbound left turn queue associated with the Norpoint Way NE/29th St. NE signal operation be reviewed regarding its effect at the 29th St. NE/61st Ave. NE intersection.

I have reviewed the site and surrounding street system. The general format of this report is to describe the proposed project, identify existing traffic conditions (baseline), project future traffic conditions and identify Agency street/road improvements (future baseline), calculate the traffic that would be generated by the project and then add it to the future baseline traffic volumes. Operational analyses are used to determine the specific project traffic impact and appropriate traffic mitigation measures to reduce the impact.

The summary, conclusions and recommendations begin on page 11 of this report.

PROJECT INFORMATION

Figure 1 is a vicinity map which shows the location of the site and the surrounding street system.

Figure 2 shows the preliminary site plan provided to me prepared by Todd Jackson Drafting Services, LLC dated November 4, 2015. The site plan shows the 40 units apartment project including a small rental office, parking for 65 vehicles (61 in the main lot and 4 for the rental office), circulation and access driveway on 61st Avenue Northeast.

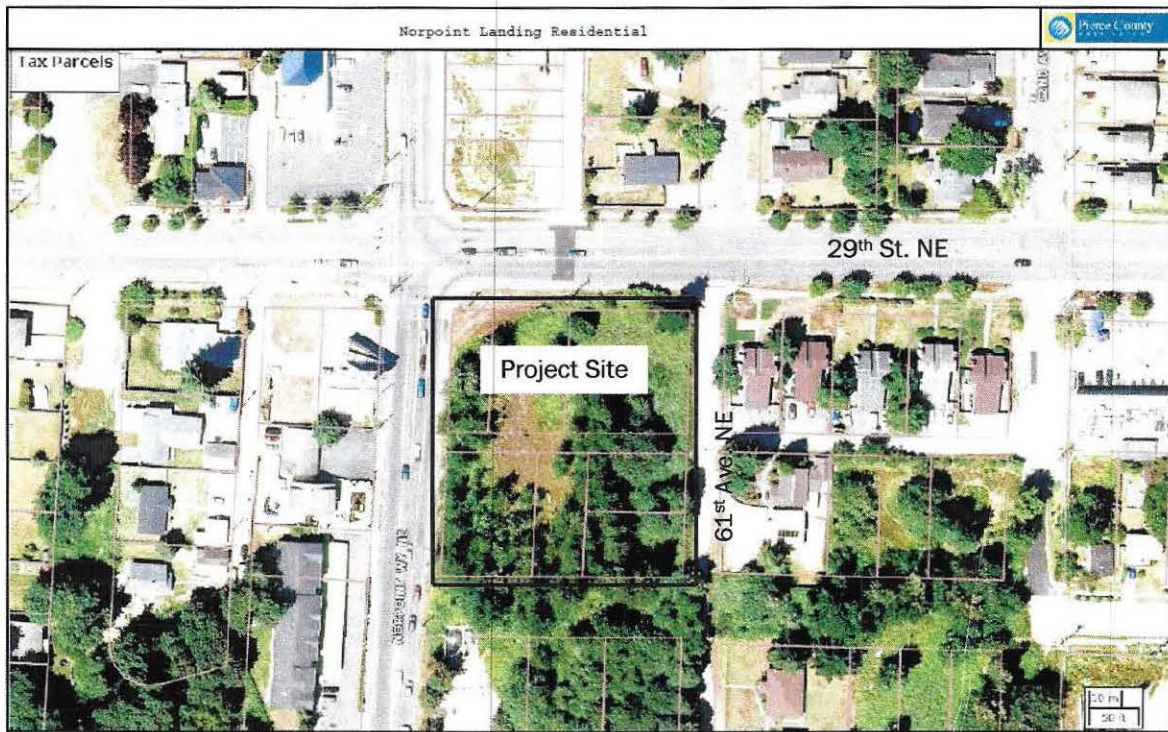
LPI HOLDINGS, LLC
Attn: Nick Parodi, President
May 18, 2016
Page -2-

Full development and occupancy of the proposed Norpoint Landing project is anticipated to occur by 2017 presuming the permits are issued in a timely manner. However, to ensure a conservative analysis 2022 has been used as the horizon year.

EXISTING ENVIRONMENT

Project Site

An aerial image of the project site obtained from Pierce County Public GIS is depicted below.

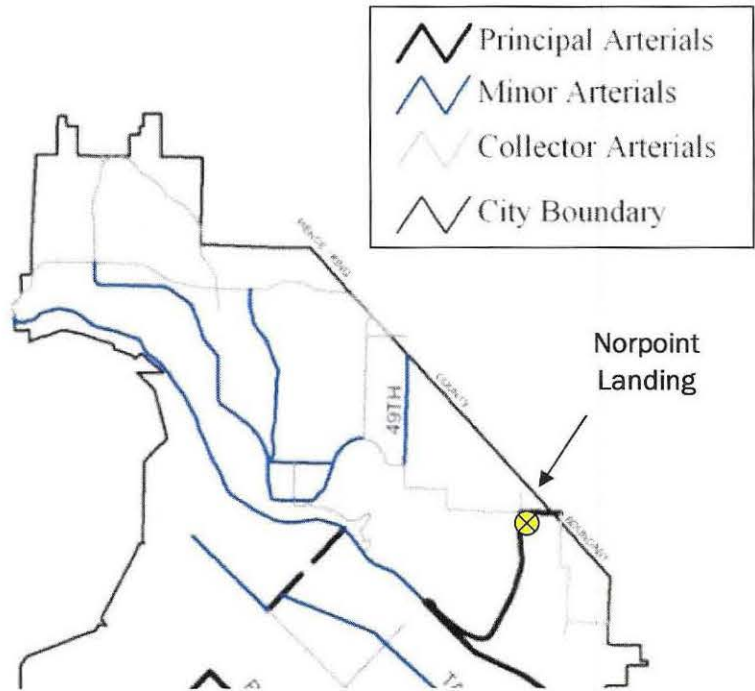


Street System

Figure 3 shows the existing traffic control, number of lanes, number of approach lanes at the intersections affected by site traffic and or near the site and other pertinent information.

A portion of Figure 1 Classification of Arterials from Transportation Element – City of Tacoma Comprehensive Plan Adopted 11/16/04, Ordinance #27295 last Amended 06/25/13 Ordinance #28158 is depicted below:

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Northeast 29th St. and Norpoint Way NE are Principal Arterials adjacent to the site. To the west and north these streets are designated as Collector Arterials.

Section 4.040 Street Section B. Lane Widths of the Tacoma Design Manual dated 04/01/04 identifies the City's standard lane widths as follows:

Street Width:	Curb Lane:	Inside Lane:	Turn Lane:
56 Foot Street	12 Feet	11 Feet	10 Feet
44 Foot Street	11.5 Feet	10.5 Feet	N/A
40 Foot Street	15 Feet	N/A	10 Feet
28/32 Foot Street	14/16 Feet	N/A	N/A

Northeast 29th Street is a fully developed 56' wide 5 – lane street with curb gutter and sidewalk on both sides adjacent to the site. Norpoint Way NE adjacent to the site generally provides 44' of paved width adjacent to the site. Currently no sidewalk exists along the site's frontage to Norpoint Way Northeast.

Alternative Transportation

The site is located in the NE Tacoma/SW Federal Way area that is served by multiple transit agencies. I have reviewed the Pierce County Transit and Metro Transit websites for bus services in the vicinity of the proposed development. The site is served by several routes; more information on the available service is available at the Pierce Transit website; <http://www.piercetransit.org/> and Metro Transit website: <http://metro.kingcounty.gov/>

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Pierce Transit



Metro Transit



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Pedestrian Facilities

Pedestrian facilities in the site vicinity are sidewalks on both sides of 29th St. NE and on Norpoint Way NE north of 29th St. Northeast. Limited facilities exist on Norpoint Way NE south of 29th St. NE., with site development sidewalk would be added to the east side of the street.

Pedestrian activated signalized crossing exist on the north, south and west leg of the Norpoint Way NE/29th St. NE signal.

Schools

Students living in the Norpoint Landing facility would attend schools in the Tacoma School District. Per the school district web data they would attend the following schools:

School Name	School Code	School Web Site	Eligible for Transportation	Grades
NE TACOMA ELEMENTARY	157	sch web site	Eligible	01, 02, 03, 04, 05, AM, EA, EP, HA, K, K2, K3, PM, PS, SA, SD, SP, TA, TD, TP
MEEKER MIDDLE SCHOOL	216	sch web site	Eligible	06, 07, 08
STADIUM SH	230	sch web site	Eligible	09, 10, 11, 12

Traffic Volumes

Figure 4 shows the existing PM peak hour traffic volumes at the analysis street intersection. The City provided the PM peak period turning movement counts at the study intersection. The count data sheets are attached in the appendix.

Intersection Operations

Traffic engineers have developed criteria for intersection operations called level of service (LOS). The LOS's are A to F with A and B being very good and E and F being more congested. LOS C and D correlate to busy traffic conditions with some restrictions to the ability to choose travel speed, change lanes and the general convenience comfort and safety.

The procedures in the Transportation Research Board Highway Capacity Manual, 2010 were used to calculate the level of service at the study intersections. The following table depicts the LOS and corresponding average delay in seconds at signalized and stop control intersections:

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Intersection Type	Level of Service					
	A	B	C	D	E	F
Signalized	<10	>10 and <20	>20 and <35	>35 and <55	>55 and <80	>80
Stop Control	<10	>10 and <15	>15 and <25	>25 and <35	>35 and <50	>50

LOS Criteria

The Transportation Element – City of Tacoma Comprehensive Plan Level of Service Standard and Concurrency Management identify the City’s operational standards. Generally speaking the City Standard is LOS standard is ‘D’ except as specifically noted otherwise.

- **All Other Arterials and Collectors:** 85% of the arterial lane-miles within the aggregate of facilities included in this designation must exhibit a **LOS "D" or better** (volume to capacity ratio of 0.89 or below).

The LOS standard for the study intersection and street is LOS ‘D’.

LOS Analysis Software/Results

The LOS of the study intersections were calculated using the Synchro software program. Table 1 shows the existing LOS operations of the study intersections. The study intersections are operating at LOS ‘C’ and better that meet City criteria.

Accident History

Accident data was provided by WSDOT staff electronically (electronic file available upon request; refn. #2016.021 jaketraffic@comcast.net) for a three year time period (01.01.13 to -12.31.15 for 29th St. NE and Norpoint Way NE in the site vicinity, see attached WSDOT cover letter.

Review of the data at the Norpoint Way NE/29th St. NE intersection incurred 16 recoded incidents in the 3-year time period reviewed; no evident injury or death incidents occurred. Eight incidents involved left turning traffic. The accident rate at the intersection is about 0.5 per million entering vehicle. The rate was determined per million entering vehicles using a “k” factor of 10 that is that about 10% of the daily traffic occurs during the PM peak hour.

The WSDOT data indicates one injury incident occurring at the 61st Ave. NE/29th St. NE intersection in the three year time period reviewed.

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Accident rates of less than 1 per million entering vehicles at intersections typically indicate that the intersection is operating satisfactorily. Two of the study intersections experience accident rates of more than one. The study intersections have accident rates of less than one per million entering vehicles.

STREET IMPROVEMENT PROJECTS

I have reviewed the City of Tacoma's website for street improvement projects in the site vicinity. No City street project is noted in the immediate site vicinity.

HORIZON YEAR CONDITIONS "WITHOUT" THE PROJECT

Figure 5 shows the projected 2021 PM peak hour traffic volumes "without" the project. These volumes include the existing traffic volume counts plus background growth. The actual traffic growth per historical City of Tacoma traffic data indicates that traffic volumes are relatively stable in the site vicinity that is consistent with a mature developed area. I used a 2% per year growth factor that ensures a conservative analysis.

TRIP GENERATION AND DISTRIBUTION

Definitions

A vehicle trip is defined as a single or one direction vehicle movement with either the origin or destination (exiting or entering) inside the proposed development.

Traffic generated by development projects consists of the following types:

- | | |
|----------------------|---|
| Pass-By Trips: | Trips made as intermediate stops on the way from an origin to a primary trip destination. |
| Diverted Link Trips: | Trips attracted from the traffic volume on a roadway within the vicinity of the generator but which require a diversion from that roadway to another roadway in order to gain access to the site. |
| Captured Trips: | Site trips shared by more than one land use in a multi-use development. |
| Primary (New) Trips: | Trips made for the specific purpose of using the services of the project. |

Trip Generation

The proposed Norpoint Landing project is expected to generate, the vehicular trips during the average weekday, street traffic AM and PM street peak hours daily and site peak hour as shown in Table 2. The trip generation for the project is calculated using trip rates from the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition, for Apartment (ITE

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Land Use Codes 220). All site trips made by all vehicles for all purposes, including commuter, visitor, and service and delivery vehicle trips are included in the trip generation values.

TABLE 2 - VEHICULAR TRIP GENERATION NORPOINT LANDING - TACOMA TRAFFIC IMPACT ANALYSIS							
Time Period	Size	TG Rate	Enter %	Enter Trips	Exit %	Exit Trips	Total
Apartments (ITE LUC 220: 40 - units)							
Weekday	40	6.65	50%	133.0	50%	133.0	266.0
AM peak hour	40	0.51	20%	4.1	80%	16.3	20.4
PM peak hour	40	0.62	65%	16.1	35%	8.7	24.8

T = trips, X = number of units

The project is projected to generate 25 net new PM peak hour trips

Trip Distribution

Figure 6 shows the project generated trips assigned to the adjacent street system based on the characteristics of the street network, existing traffic volume patterns, the location of likely trip origins and destinations (residential, schools, employment, shopping, social and recreational opportunities).

HORIZON YEAR CONDITIONS “WITH” THE PROJECT

Traffic Volumes

Figure 7 shows the projected 2021 PM peak hour traffic volumes “with” the proposed project at the analysis intersection. The site generated PM peak hour traffic volumes shown on Figure 6 were added to the projected background traffic volumes shown on Figure 5 to obtain the Figure 7 volumes.

Level of Service

Table 1 shows the calculated LOS for the horizon year (2021) “with” and “without” project conditions at the analysis intersections. Based on my operational analysis the study intersections would continue to operate at LOS ‘D’ or better for both “with” and “without” project conditions that that meets the City’s operational requirements..

Site Access Review

The proposed project would have access on 61st Ave. NE an existing low volume dead end public street. This street provides access to 29th St. NE and has access to a public alley that connects to 62nd Avenue Northeast.

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Site Access Sight Visibility

The site access sight lines were reviewed at the existing 61st Ave. NE/29th St. NE intersection. Section 4.040 Street Section B. Lane Widths of the Tacoma Design Manual provides the City's criteria.

4.010 Basis for Geometric Design

Geometric design of roadways shall generally conform to the requirements of the AASHTO *Policy*. AASHTO contains various recommendations, tables and figures. AASHTO *Policy* is mainly geared toward high speed freeway applications rather than the local, collector or arterial urban streets. As a result, many of the recommendations contained within AASHTO apply to specific roadway conditions. It is essential that the engineer carefully research the AASHTO *Policy* to ensure that the recommendations are applicable to the project conditions.

A. Design Speed

The City considers the design speed of a facility to generally be determined as 5 mph above the "85th Percentile" speed of the prevailing traffic on the subject roadway. However, on new construction or reconstruction, which significantly alters the characteristics of the roadway, the design speed shall be considered as the posted, designated, or proposed speed limit plus five (5) mph.

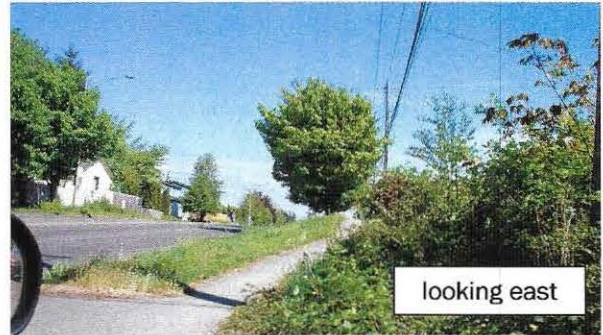
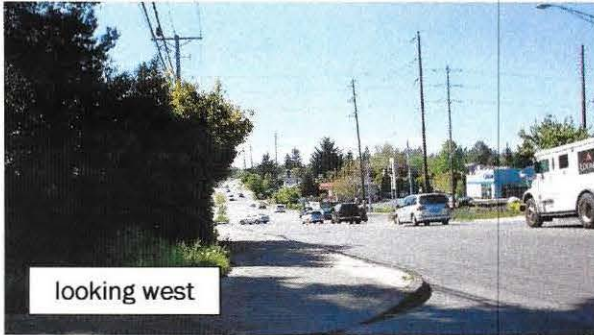
The designated speed limit for Tacoma residential streets is 25 mph which corresponds to a 30 mph design speed. Alleys shall be designed using a 20 mph design speed. The designated speed for arterials in Tacoma varies. The engineer should contact the Traffic Engineering Section of the Engineering Division at 591-5500 for determination of the design speed when the project scope of work includes significantly altering the design of a designated arterial. For non-arterials, in locations where conditions warrant, a reduced design speed may be considered on a case by case basis. Documentation must be provided justifying any and all deviations from the standard design speed.

B. Stopping Sight Distance

Stopping Sight Distance is the sum of two distances: the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the distance when the brakes are applied; and the distance required to stop the vehicle from the instant brake application begins. These are referred to as brake reaction distance and braking distance, respectively. The height of the driver's eye is considered to be 3.5 feet. The minimum height of the object is considered to be twenty-four (24) inches. AASHTO *Policy* has tabulated design values for Stopping Sight Distance and has summarized these recommendations in Exhibit 3-1 *Stopping sight distance (wet pavements)*. As stated in AASHTO, the upper design values shall be used wherever conditions permit.

Photographs at the existing 61st Ave. NE/29th St. NE intersection are shown below:

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I field inspected, using a measuring wheel, the available stopping sight distance (SSD) and entering sight distance (ESD) at the existing 61st Ave. NE/29th St. NE intersection. Very good sight lines exist to and from the west. Looking to and from the east there is a crest vertical curve in the street way affecting the SSD and ESD and embankment/vegetation affecting the ESD.

The SSD approaching 61st Ave. NE from the east on 29th St. NE is about 320 feet. The ESD for an egress motorist on 61st Ave. NE looking to their right (east) is about 350 feet. Twenty ninth Street Northeast has a posted 30 MPH speed limit that correlates into a 35 MPH design speed per City criteria.

The stopping and entering sight distance per the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets, 2001 Fourth Edition "Exhibit 3-1. Stopping sight distance wet pavement" and "Exhibit 9-55. Design Intersection Sight Distance - Case B1 - Left Turn from stop" are 250 and 390', respectively for a 35 MPH speed. The ESD for a 30 MPH speed is 335 feet.

The existing 61st Ave. NE/29th St. NE intersection meets City SSD criterion and has sufficient ESD to a 30 MPH speed, the posted limit. The existing two way left turn lane mitigates the ESD sight line. Vegetation growth to the east must be maintained diligently to the east to maintain the sight line. Also modest embankment work could be considered to enhance the sight line. Vegetation to the west likely will be removed as a part of the development. Providing for an appropriate sight triangle to the west is recommended.

Other: During my field research vegetation was encroaching into the SE corner of the 61st Ave. NE/Alley intersection that should be pruned appropriately. See photograph to the right:



Channelization/Operational Review

The City indicated concerns with regards

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to westbound queues associated with the 29th St. NE/Norpoint Way NE intersection signal operation extending past the 61st Ave. NE intersection. The Norpoint Landing residents are projected to use the 61st Ave. NE south leg to access 29th St. NE; the south leg left turning traffic is concurrent with the left turns occurring at Norpoint Way Northeast. The centerline to centerline spacing between Norpoint Way NE and 61st Ave. NE is about 300 feet.

During my site investigation on April 21, 2016 in the afternoon around 1530 I found it easy to turn left to and from 29th St NE on and off of the south leg of 61st Ave. NE, concurrent flow left turning.. Maintenance of vegetation in the sight line is critical, as noted earlier. The WB to SB left turn queues did extend past 61st a few times during my review, but quickly disappeared (and per my traffic operational analysis occur more frequently during the PM peak hour). Turning left is facilitated by the signal operation to the west, aka very good gapping in EB traffic and the two way left turn lane on 29th Street Northeast.

The Norpoint Way NE/29th St. NE signal operation has protected/permitted NB and SB left turns. The existing phasing for the WB and EB left turns is protected only. Revising the WB and EB left turn phasing to protected/permitted operation would reduce the WB left turn queues and reduce the average delay at the intersection.

AGENCY TRAFFIC IMPACT MITIGATION REQUIREMENTS

The City will require that the project site access and circulation be constructed in conformance to City requirements.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This revised report further analyzed the traffic impact of the proposed Norpoint Landing project. The analysis is for a 40 units apartment complex to be located in the southeast corner of the Norpoint Way NE/29th St. NE intersection.

Existing traffic data was obtained at the street intersections identified for analysis. Future horizon year traffic volumes were derived using a growth factor of 2 percent per year. Level of service analyses were performed for existing and projected future horizon traffic volumes during the weekday PM peak hour. The evaluation of the traffic impact of the proposed project included adding project generated traffic (very conservative data used) to the future traffic volume projections and calculating the level of service. The “with” project traffic operations were then compared to the “without” project operations. The comparison of traffic operations “with” and “without” the project identified that the project would not cause a significant adverse affect on the operation of the study intersections. In addition, sight lines and safety inspection were conducted at the study intersection/driveway and no apparent deficiencies were noted.

Based on my analysis I recommend that Norpoint Landing be allowed with the following traffic impact mitigation measures.

- Construct site in accordance with applicable City requirements.

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- Install site driveways on 61st Ave. NE to City requirements.
- Construct street frontage improvements to Norpoint Way NE to City requirements.
- Maintenance of vegetation at the existing 61st Ave. NE/NE 29th St. NE intersection is important to maintain sight lines.
- Review the potential to conduct modest embankment work in the southeast corner of the 61st Ave. NE/NE 29th St. NE to enhance the ESD sight line.
- Prune vegetation in the southeast corner of the 61st Ave. NE/alley intersection.
- Revising the existing signal phasing at the Norpoint Way NE/61st Ave. NE to provide protected/permitted WB and EB left turn phasing should be considered.

If you have any questions you can contact me at 206.762.1978 or email me at jaketraffic@comcast.com.



MJJ: mjj

EXPIRES 4/3/2018

Very truly yours,

Mark J. Jacobs, PE, PTOE, President
JAKE TRAFFIC ENGINEERING, INC.

05.18.2016

PM PEAK HOUR LEVEL OF SERVICE

TABLE 1

NORPOINT LANDING – TACOMA
TRAFFIC IMPACT ANALYSIS

INTERSECTION	APPROACH	EXISTING	2021 W/O PROJECT	2021 W/ PROJECT	2021 W/ PROJECT and PP LT PHASING
1. Norpoint Way NE at 29 th St. NE	Overall	C (25.8)	C (31.3)	C (31.6)	C (27.0)
	WBLT 50% queue	D (45.9) 417'	D (53.0) 514'	D (53.1) 519'	D (40.5) 416'
2. 29 th St. NE at 61 st Ave. NE	Overall	A (0.2)	A (0.2)	A (0.3)	A (0.3)
	EBLT	B (11.7)	B (12.7)	B (12.7)	B (12.7)
	WBLT	B (10.2)	B (10.7)	B (10.8)	B (10.8)
	NB	C (22.9)	D (26.4)	C (23.1)*	C (23.1)*
	SB	C (24.3)	D (28.6)	D (29.4)	D (29.4)

* site traffic is added to the low delay right turn movement

Number shown in parenthesis is the average control delay in seconds per vehicle for the intersection as a whole or approach movement, which determines the LOS per the Highway Capacity Manual.

TABLE 2 - TRIP GENERATION
 RODY CHIROPRACTIC - PIERCE COUNTY
 TRAFFIC IMPACT ANALYSIS

Time Period	Size (1,000 sf)	TG Rate	Enter %	Enter Trips	Exit %	Exit Trips	Total	Pass-by %*	Pass-by Trips	Net Total
Phase 1: Rody Chiropractic Medical Office (ITE LUC 720; 4,800 sf)										
Weekday	4.8	36.13	50%	86.7	50%	86.7	173.4	15%	26.0	147.4
AM peak hour	4.8	2.39	79%	9.1	21%	2.4	11.5	15%	1.7	9.8
PM peak hour	4.8	3.57	28%	4.8	72%	12.3	17.1	15%	2.6	14.6
Phase 2: Rody Chiropractic Professional Office (ITE LUC 710; 11,848 sf)										
Weekday	11.848	11.03	50%	65.3	50%	65.3	130.7	10%	13.1	117.6
AM peak hour	11.848	1.56	88%	16.3	12%	2.2	18.5	10%	1.8	16.6
PM peak hour	11.848	1.49	50%	8.8	50%	8.8	17.7	10%	1.8	15.9
Total										
Weekday	-	-	-	152.1	-	152.1	304.1	-	-	265.0
AM peak hour	-	-	-	25.3	-	4.6	30.0	-	-	26.4
PM peak hour	-	-	-	13.6	-	21.2	34.8	-	-	30.5

* - Pass-by rate per Pierce County Traffic Impact Fee Rate Study, September 30, 2005 Amended October 3, 2006

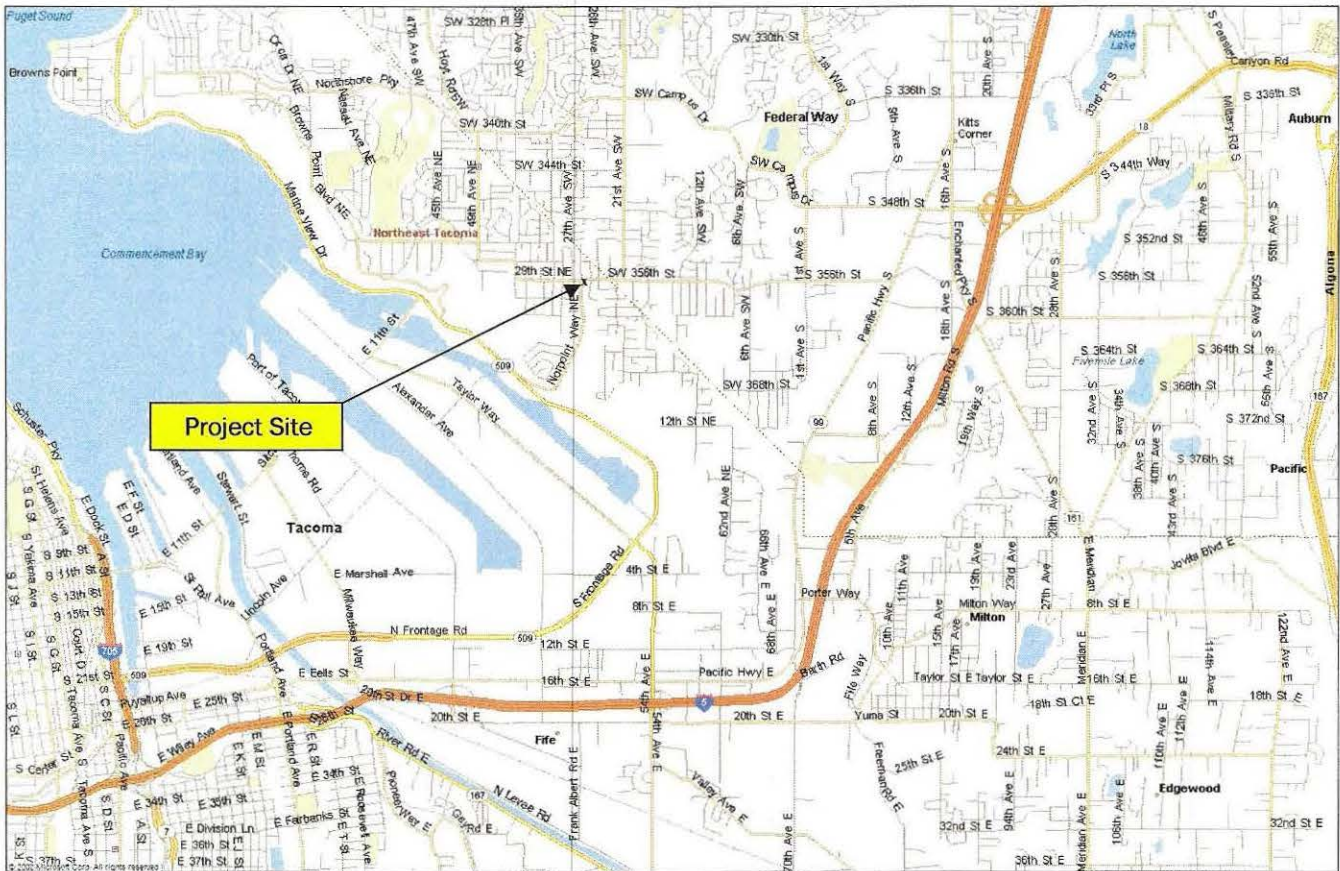
T = trips, X = 1,000 sq. ft.

A vehicle trip is defined as a single or one direction vehicle movement with either the origin or destination (exiting or entering) inside the study site. The above trip generation values account for all the site trips made by all vehicles for all purposes, including commuter, visitor, recreation, and service and delivery vehicle trips.

Project: Norpoint Landing – Tacoma
 Location: Southeast corner Norpoint Way NE/29th St. NE intersection



NORTH



JTE, Inc.
 FIGURE 1

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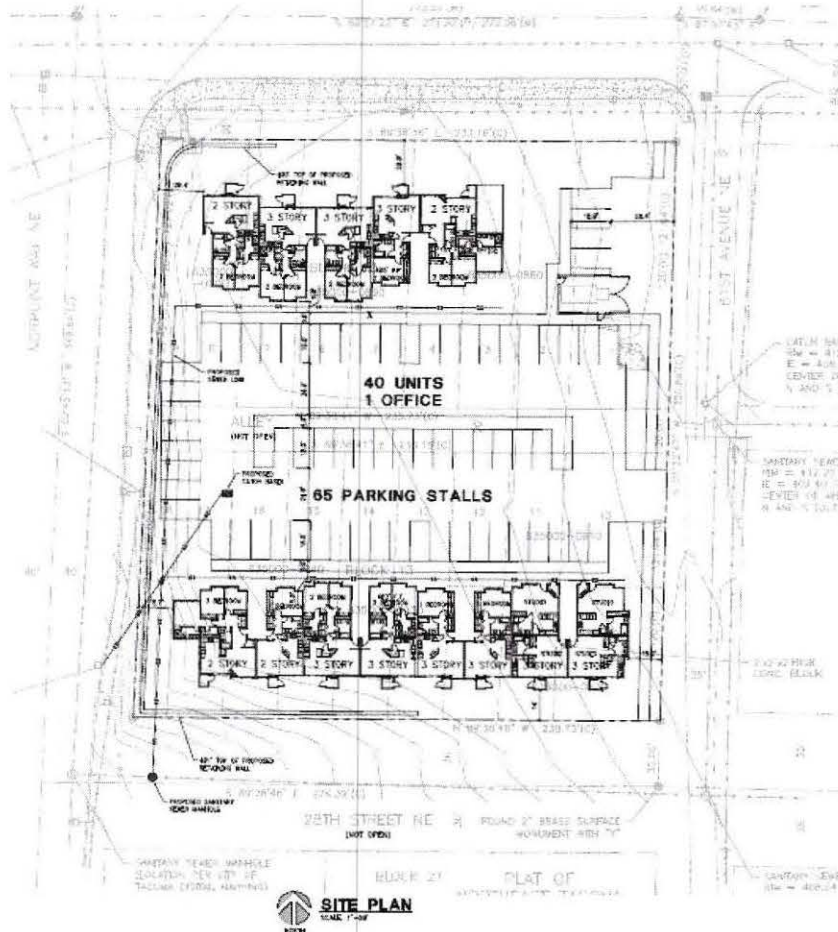
**NORPOINT LANDING - TACOMA
 TRAFFIC IMPACT ANALYSIS**

VICINITY MAP

Project: Norpoint Landing – Tacoma
 Location: Southeast corner Norpoint Way NE/29th St. NE intersection



NORTH



Note: An 8.5 x 11" copy of the Site Plan is included with this report

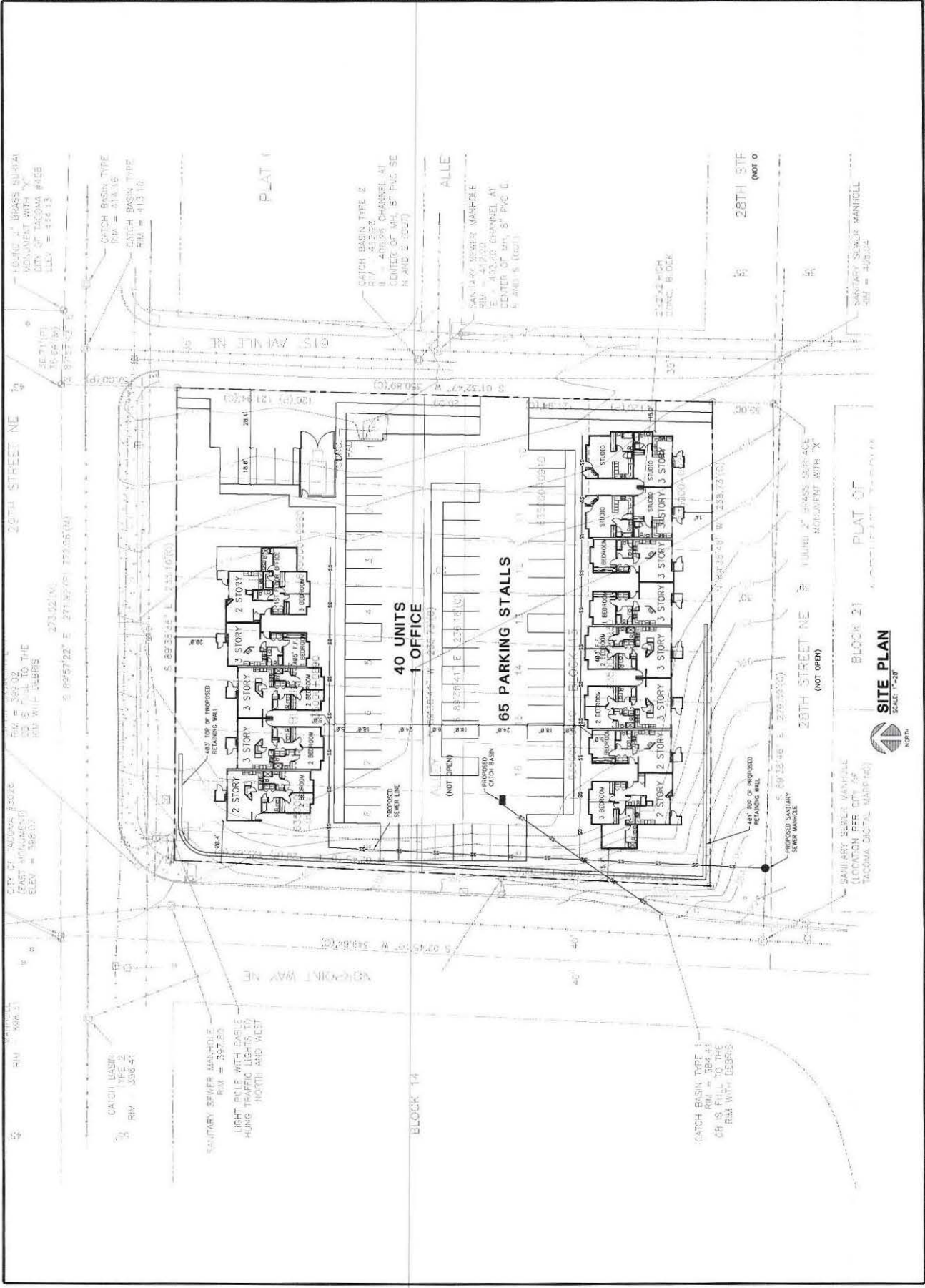
<p>JTE, Inc. FIGURE 2</p>	<p>NORPOINT LANDING - TACOMA TRAFFIC IMPACT ANALYSIS</p>
<p>Reprint in Color Only</p>	<p>PRELIMINARY SITE PLAN</p>

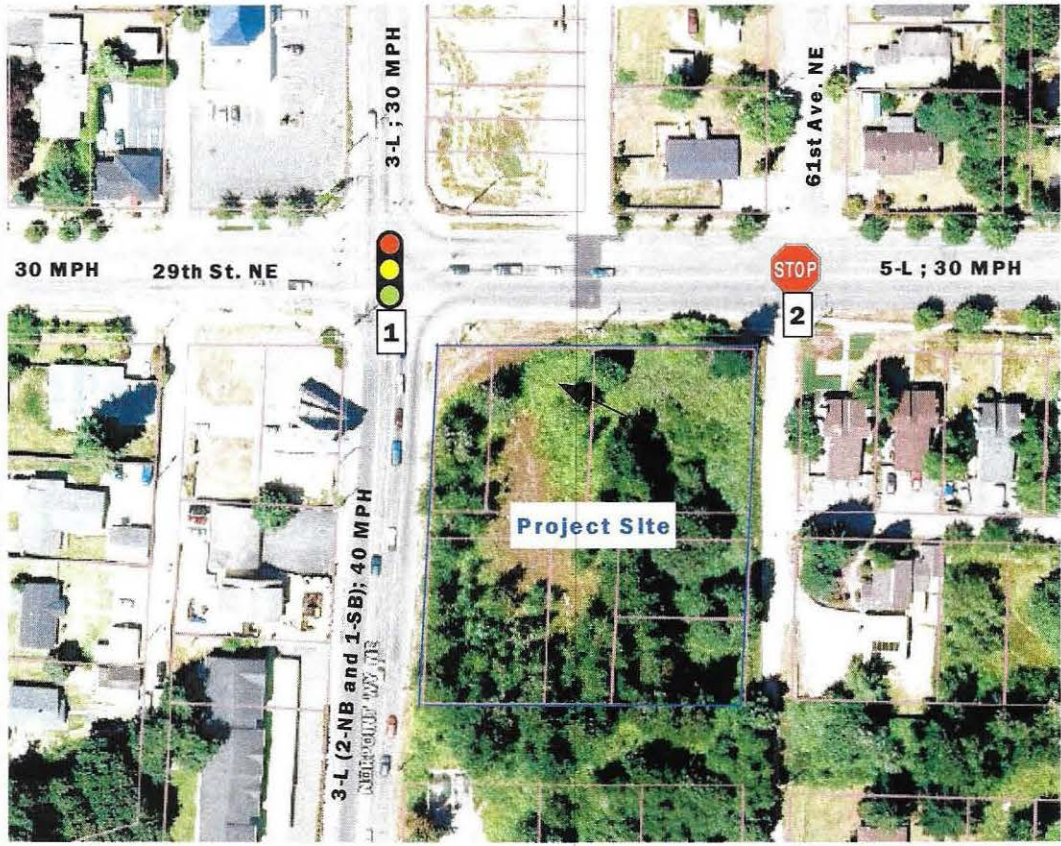
NORPOINT LANDING LLC

Prepared By
TODD JACKSON
DRAFTING SERVICES, LLC
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Phone: 360-882-2000 Fax: 360-882-0221
Email: info@toddjacksondrafting.com

Project Name
NORPOINT LANDING
TACOMA, WA

Date:	R.C.T.
Revised:	R.C.T.
Date:	11-04-15
CAO No:	150132
Sheet:	SP1.0





NORTH

LEGEND

- Approach Lane & Direction
- STOP Stop Sign
- Traffic Signal
- [x] Analysis I/S #
- X-L's # of Travel Lanes
- XX MPH Posted Speed Limit

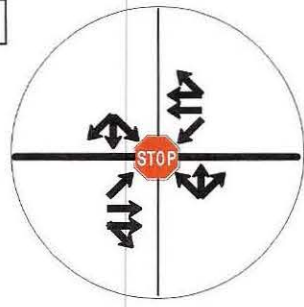
Image obtained from
Pierce County Public GIS

1



29th St. NE at
Norpoint Way NE

2



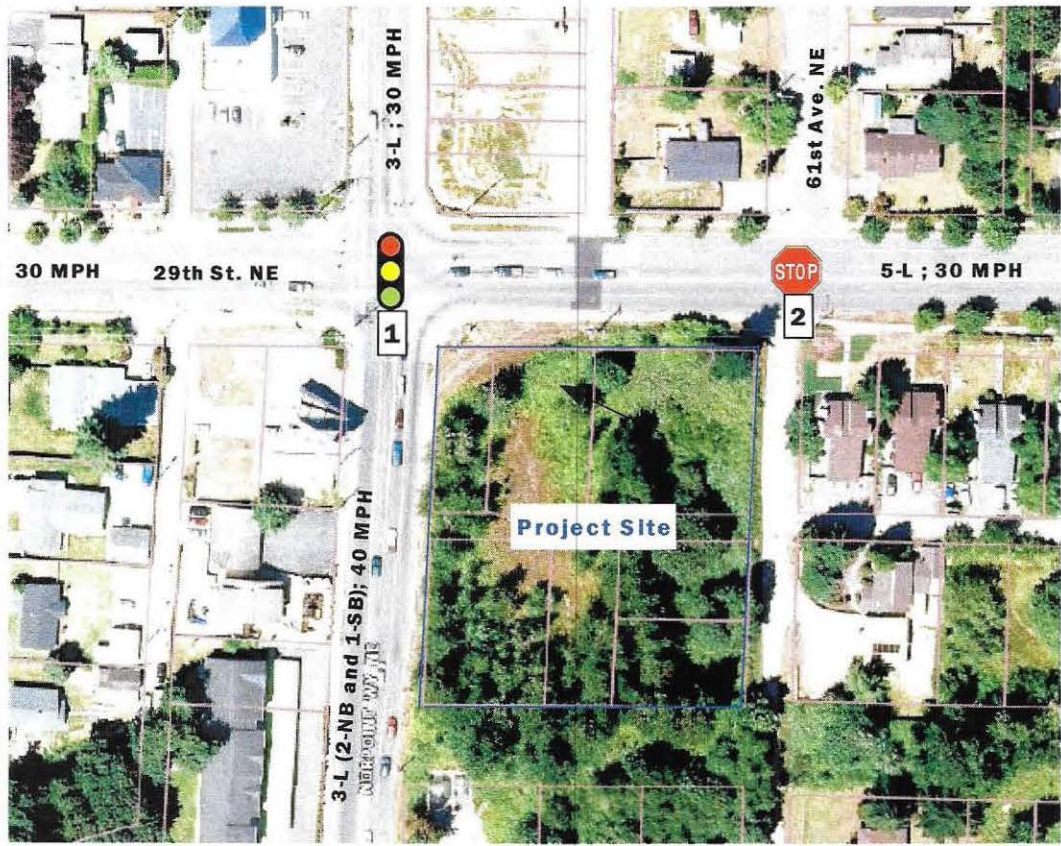
29th St. NE at
61st Ave. NE

JTE, Inc.
FIGURE 3

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**NORPOINT LANDING - TACOMA
TRAFFIC IMPACT ANALYSIS**

EXISTING STREET LANES AND TRAFFIC CONTROL

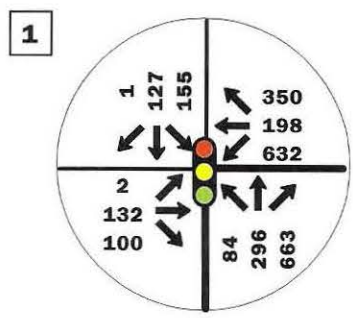


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NORTH

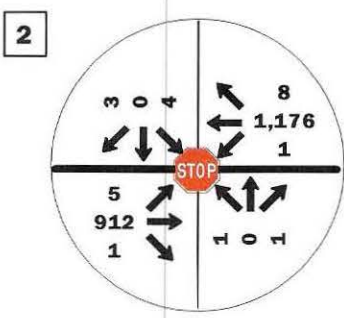
LEGEND

- PMPH Traffic Volume and Direction
- STOP Stop Sign
- Traffic Signal
- X Analysis I/S #
- X-L's # of Travel Lanes
- XX MPH Posted Speed Limit

Image obtained from
Pierce County Public GIS



29th St. NE at
Norpoint Way NE
Thursday 10.29.2015
1700 - 1800



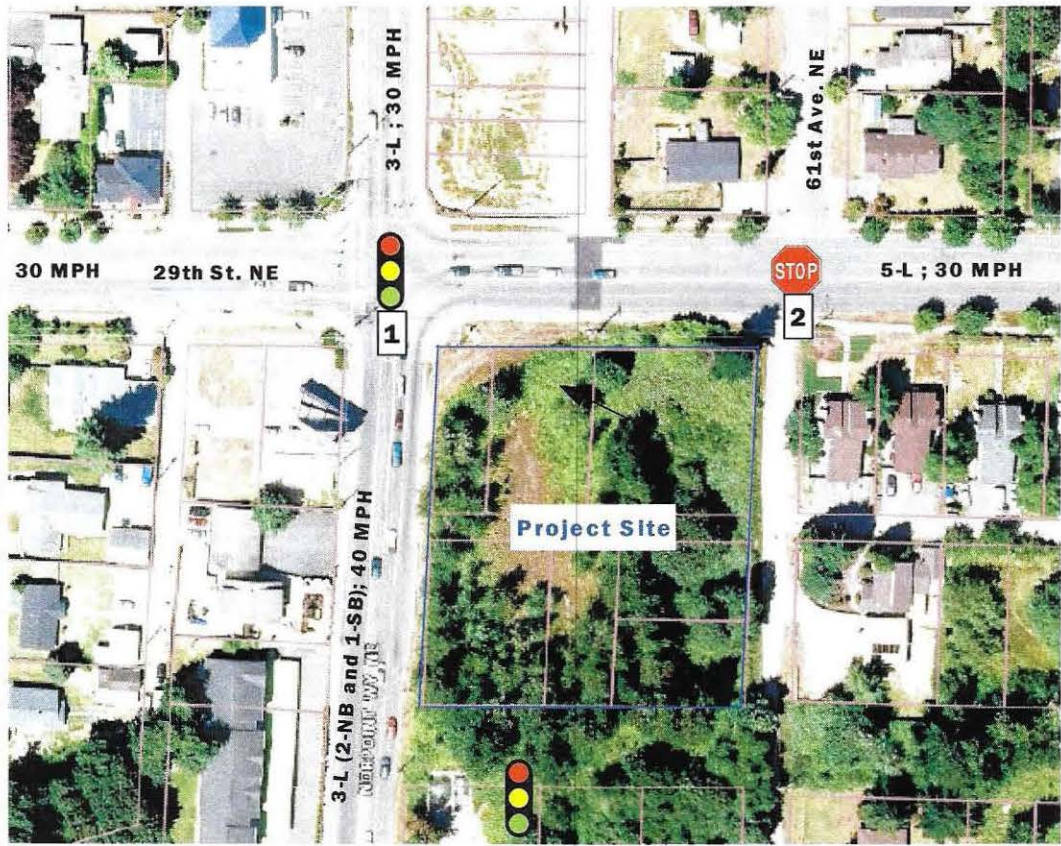
29th St. NE at
61st Ave. NE
Traffic Engineering
Experience

JTE, Inc.
FIGURE 4

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**NORPOINT LANDING - TACOMA
TRAFFIC IMPACT ANALYSIS**

EXISTING PM PEAK HOUR TRAFFIC VOLUMES

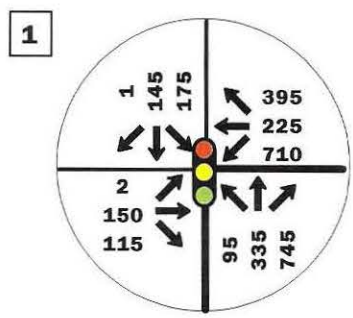


NORTH

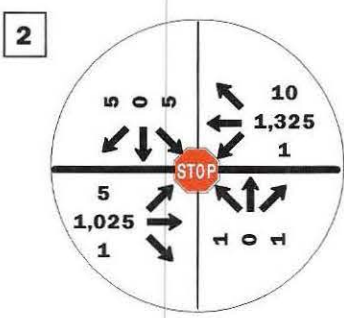
LEGEND

- PMPH Traffic Volume and Direction
- STOP Stop Sign
- Traffic Signal
- x Analysis I/S #
- X-L's # of Travel Lanes
- XX MPH Posted Speed Limit

Image obtained from Pierce County Public GIS



29th St. NE at Norpoint Way NE



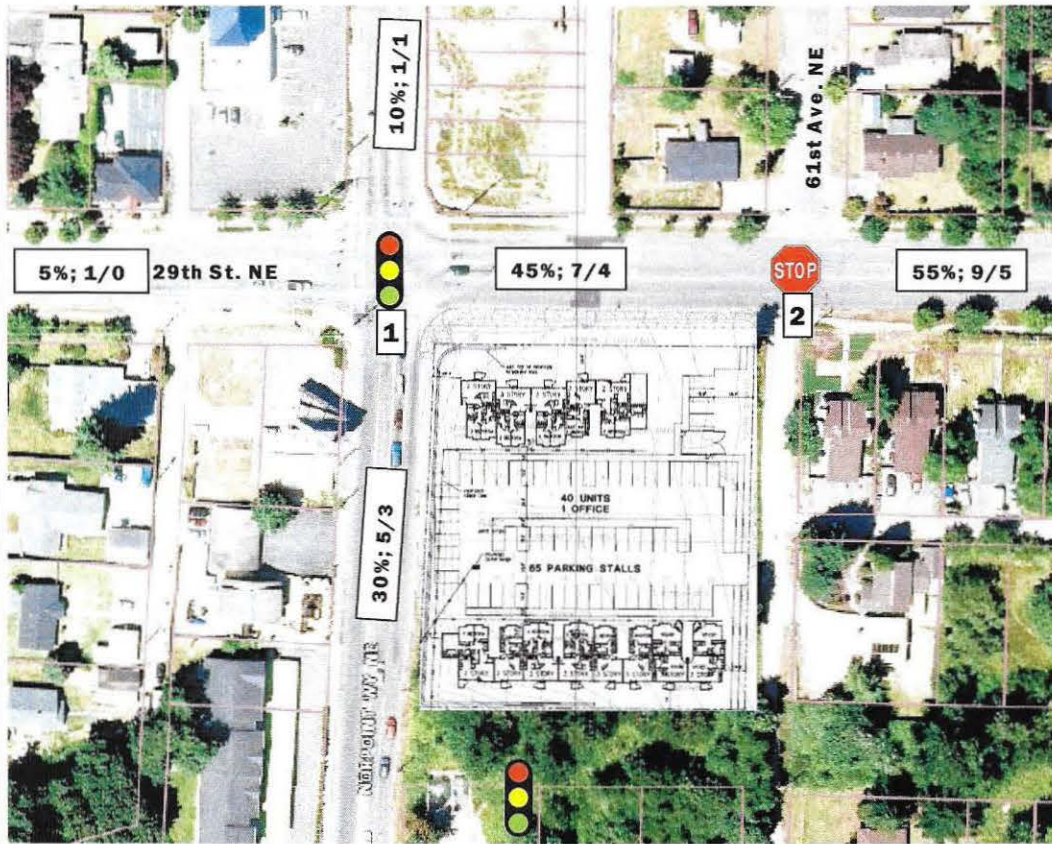
29th St. NE at 61st Ave. NE

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FIGURE 5

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NORPOINT LANDING - TACOMA
TRAFFIC IMPACT ANALYSIS

PROJECTED 2021 PM PEAK HOUR TRAFFIC VOLUMES
WITHOUT THE PROJECT

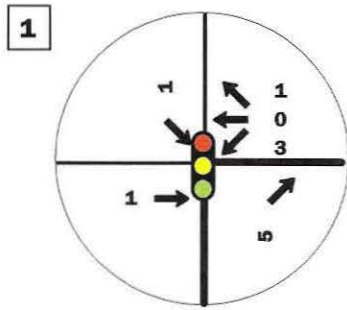


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NORTH

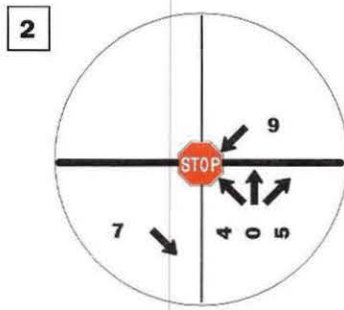
LEGEND

- PMPH Traffic Volume and Direction
- STOP Stop Sign
- Traffic Signal
- x Analysis I/S #

Image obtained from
Pierce County Public GIS



**29th St. NE at
Norpoint Way NE**



**29th St. NE at
61st Ave. NE**

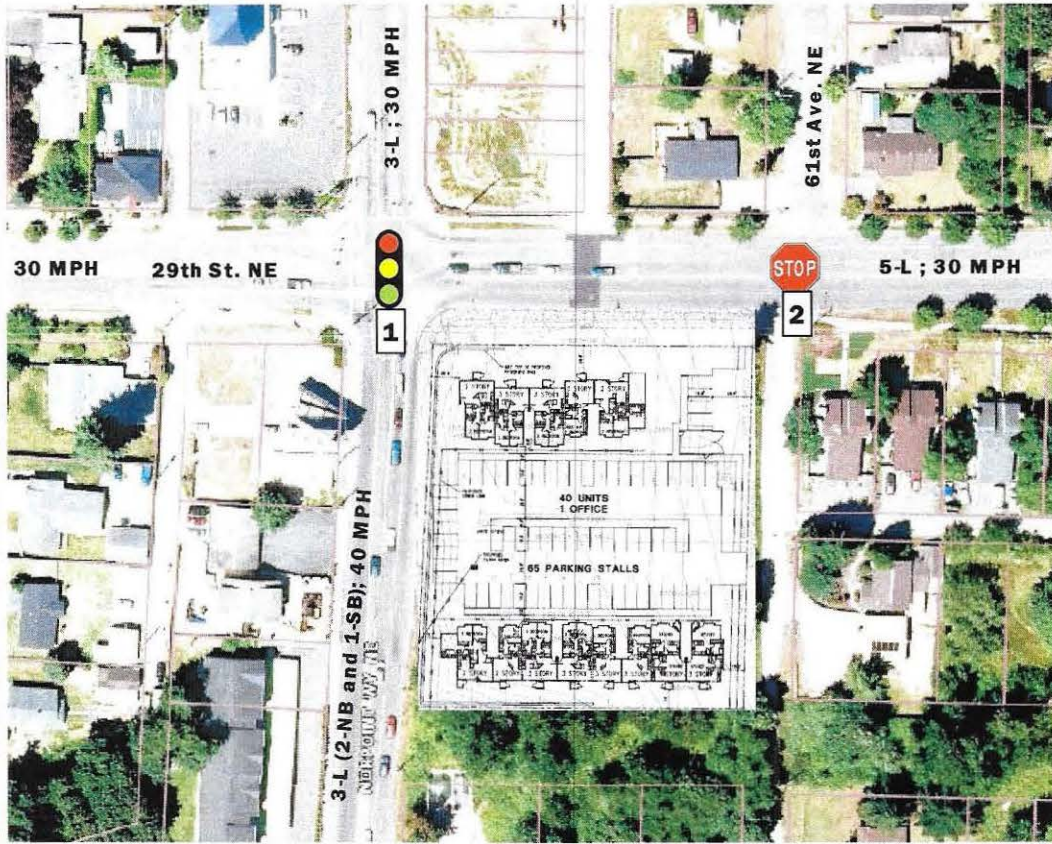
PM Peak Hour Trips: 25
Entering: 16
Exiting: 9

distribution %; enter/exit

JTE, Inc.
FIGURE 6

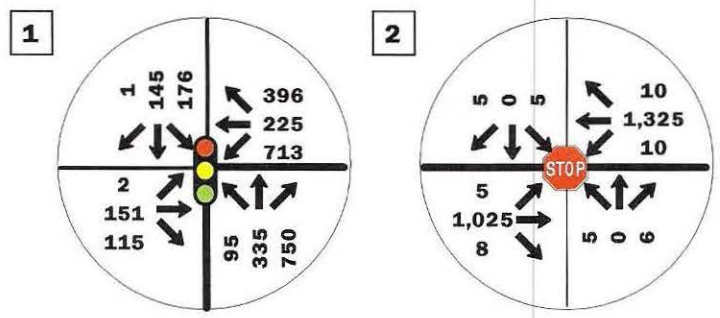
Reprint in Color Only

**NORPOINT LANDING - TACOMA
 TRAFFIC IMPACT ANALYSIS
 SITE GENERATED PM PEAK HOUR TRAFFIC VOLUMES
 AND DISTRIBUTION**



- LEGEND**
- PMPH Traffic Volume and Direction
 - STOP Stop Sign
 - Traffic Signal
 - x Analysis I/S #
 - X-L's # of Travel Lanes
 - XX MPH Posted Speed Limit

Image obtained from Plerce County Public GIS



29th St. NE at Norpoint Way NE

29th St. NE at 61st Ave. NE

JTE, Inc.
FIGURE 7

Reprint in Color Only

**NORPOINT LANDING - TACOMA
TRAFFIC IMPACT ANALYSIS
PROJECTED 2021 PM PEAK HOUR TRAFFIC VOLUMES
WITH THE PROJECT**

APPENDIX

From: Mark J Jacobs, PE, PTO [mailto:JakeTraffic@comcast.net]
Sent: Thursday, March 17, 2016 9:27 AM
To: 'Kammerzell, Jennifer'; 'Kinlow, Charla'
Cc: 'Nick Parodi'
Subject: RE: 2016.01x - New Project in Tacoma

Jennifer

Thank you for the feedback.

Site access is via 61st that is about 300' e/o Norpoint centerline to centerline. LT's off and onto 29th from 61st (south leg) are concurrent with the LT traffic at the signal and TWLTL chaneelization, thus maintaining LT at the existing City I/S (in particular the south leg) appears appropriate. Good sight lines exist at this location and no alternative access exists at this time for the existing residents on 61st and future residents.

Does the City have a TMC at the 29th/Norpoint Way? I can obtain accident data from WSDOT for a 3-year time period.

Thank you

Mark
206.762.1978
206.799.5692 c

From: Kammerzell, Jennifer [mailto:jkammerzell@ci.tacoma.wa.us]
Sent: Wednesday, March 16, 2016 5:07 PM
To: Mark J Jacobs, PE, PTO; Kinlow, Charla
Cc: 'Nick Parodi'
Subject: RE: 2016.01x - New Project in Tacoma

Mark,

That is correct. Trip Distribution, generation, and site access (sight distance, etc). The concern is queuing at 29th St NE. I would anticipate left turns restricted.

Jennifer Kammerzell

Senior Engineer
City of Tacoma Public Works Engineering

From: Mark J Jacobs, PE, PTO [mailto:JakeTraffic@comcast.net]
Sent: Wednesday, March 16, 2016 9:27 AM
To: Kinlow, Charla; Kammerzell, Jennifer
Cc: 'Nick Parodi'
Subject: RE: 2016.01x - New Project in Tacoma

Thank you

①

From: Kinlow, Charla [<mailto:CKinlow@ci.tacoma.wa.us>]
Sent: Wednesday, March 16, 2016 9:10 AM
To: Kammerzell, Jennifer
Cc: 'Nick Parodi'; Mark J Jacobs, PE, PTO
Subject: RE: 2016.01x - New Project in Tacoma

Hi Mark,

I am forwarding this directly to Jennifer, our Traffic Engineer who attended the pre-application meeting for this site. She will have more insight as to the information you've provided.

-Charla

From: Mark J Jacobs, PE, PTO [<mailto:JakeTraffic@comcast.net>]
Sent: Tuesday, March 15, 2016 12:00 PM
To: Kinlow, Charla
Cc: 'Nick Parodi'
Subject: 2016.01x - New Project in Tacoma

Charla

I have been requested to provide Traffic Work for a 40 units Apartment project in the SEC of Norpoint Way NE/29th St. NE. Recent JTE, Inc. work on similar sized projects my work scope included Trip Generation, Distribution and Site Access Review. Is this consistent with what the City is looking for on this project?

Please advise?

Contact me with any questions/comments.

Mark

Mark J Jacobs, PE, PTOE
JAKE TRAFFIC ENGINEERING, INC
2614 39th Ave. SW
Seattle, WA 98116
206.762.1978
206.799.5692 c

From: Nick Parodi [<mailto:nick@fulcrumre.com>]
Sent: Tuesday, March 15, 2016 10:52 AM
To: JakeTraffic@comcast.net
Subject: New Project in Tacoma

Hi Mark-

I was referred to you by David Litowitz regarding a project I am working on. We are in the early stages of preparing for a rezone for the attached site in NE Tacoma. Would you be willing to provide a proposal for a traffic study for this?

(2)

Our contact with the City of Tacoma is Charla Kinlow.

The ownership entity is LPI Holdings, LLC.

Please let me know if you need any more information to provide a proposal.

Best,

Nick Parodi
President | Fulcrum Real Estate Services, Inc.
6009 Capitol Blvd SW Ste: 103
Tumwater, WA 98501
www.fulcrumre.com
360.464.1031 Office | 253.315.0087 Mobile

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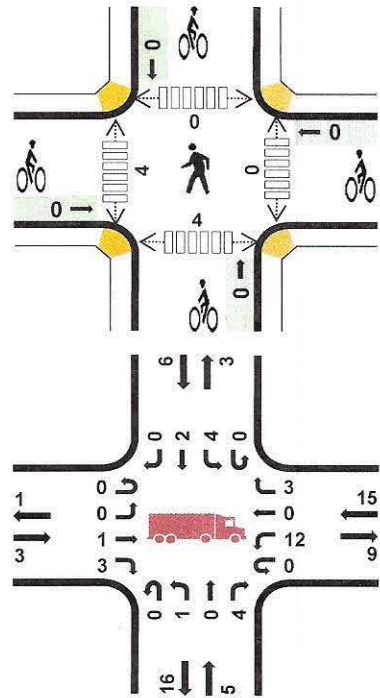
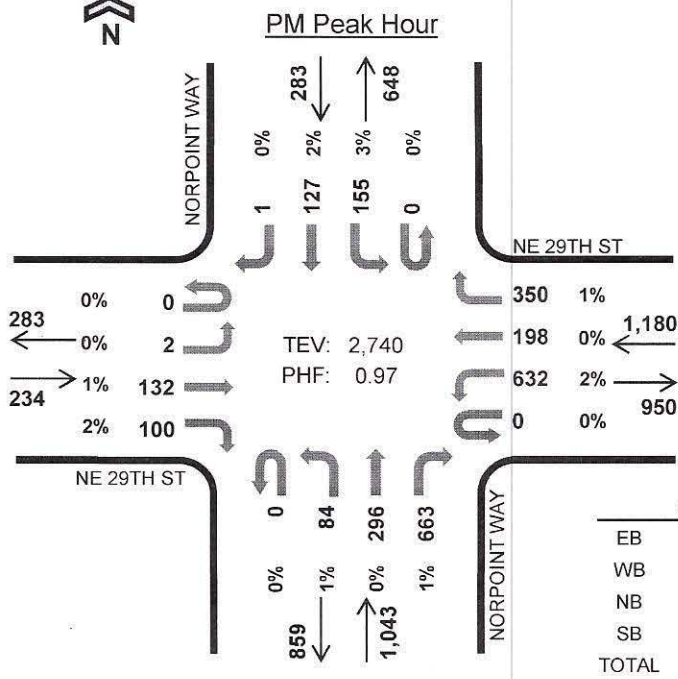
134 - NE 29th & Norpoint Way

**NORPOINT WAY
NE 29TH ST**

Date: Thu, Oct 29, 2015

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 5:00 PM to 6:00 PM



Two-Hour Count Summaries

Interval Start	NE 29TH ST Eastbound				NE 29TH ST Westbound				NORPOINT WAY Northbound				NORPOINT WAY Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
	4:00 PM	0	1	35	28	0	170	55	75	0	20	63	127	0	42	38			0
4:15 PM	0	0	22	33	0	166	42	70	0	22	67	117	0	40	37	1	617	0	
4:30 PM	0	1	29	30	0	162	48	73	0	23	70	137	0	39	24	0	636	0	
4:45 PM	0	0	22	29	0	188	55	89	0	16	57	130	0	46	21	1	654	2,561	
5:00 PM	0	0	23	19	0	177	37	79	0	26	79	157	0	45	25	0	667	2,574	
5:15 PM	0	1	34	36	0	172	64	90	0	13	60	146	0	32	32	0	680	2,637	
5:30 PM	0	1	36	22	0	148	55	100	0	21	74	173	0	33	46	0	709	2,710	
5:45 PM	0	0	39	23	0	135	42	81	0	24	83	187	0	45	24	1	684	2,740	
Count Total	0	4	240	220	0	1,318	398	657	0	165	553	1,174	0	322	247	3	5,301	0	
Peak Hour	All	0	2	132	100	0	632	198	350	0	84	296	663	0	155	127	1	2,740	0
	HV	0	0	1	2	0	12	0	3	0	1	0	4	0	4	2	0	29	0
	HV%	0%	0%	1%	2%	0%	2%	0%	1%	0%	1%	0%	1%	0%	3%	2%	0%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	6	4	3	15	0	0	0	0	0	0	0	0	0	0
4:15 PM	2	3	2	3	10	0	0	0	0	0	0	0	2	0	2
4:30 PM	7	0	2	3	12	0	0	0	0	0	0	0	1	0	1
4:45 PM	3	3	3	1	10	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	3	2	1	6	0	0	0	0	0	0	2	0	2	4
5:15 PM	1	3	0	1	5	0	0	0	0	0	0	2	0	2	4
5:30 PM	1	5	1	3	10	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	4	2	1	8	0	0	0	0	0	0	0	0	0	0
Count Total	17	27	16	16	76	0	0	0	0	0	0	4	4	4	12
Peak Hour	3	15	5	6	29	0	0	0	0	0	0	4	0	4	8

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	NE 29TH ST				NE 29TH ST				NORPOINT WAY				NORPOINT WAY				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	1	0	2	0	4	0	2	2	0	0	0	3	0	15	0
4:15 PM	0	0	0	2	0	1	1	1	0	1	1	0	0	2	1	0	10	0
4:30 PM	0	1	1	5	0	0	0	0	0	1	0	1	0	2	1	0	12	0
4:45 PM	0	0	1	2	0	3	0	0	0	0	2	1	0	1	0	0	10	47
5:00 PM	0	0	0	0	0	2	0	1	0	0	0	2	0	1	0	0	6	38
5:15 PM	0	0	0	1	0	2	0	1	0	0	0	0	0	0	1	0	5	33
5:30 PM	0	0	1	0	0	5	0	0	0	0	0	1	0	2	1	0	10	31
5:45 PM	0	0	0	1	0	3	0	1	0	1	0	1	0	1	0	0	8	29
Count Total	0	1	4	12	0	18	1	8	0	5	5	6	0	9	7	0	76	0
Peak Hour	0	0	1	2	0	12	0	3	0	1	0	4	0	4	2	0	29	0

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Traffic Count History

NE 29th St & NE Norpoint Way

Intersection 220 Comments

No general comments

Date	Leg	Enter Volume	Exit Volume	Total Volume
Thursday, October 11, 2007	East	9,763	8,602	18,365
	North	4,353	4,727	9,080
	South	7,315	7,578	14,893
	West	2,777	2,563	5,340
Wednesday, October 10, 2007	East	9,769	8,815	18,584
	North	4,229	4,683	8,912
	South	7,488	7,385	14,873
	West	3,022	2,778	5,800
Tuesday, October 9, 2007	East	9,690	8,593	18,283
	North	4,308	4,687	8,995
	South	7,325	7,396	14,721
	West	2,876	2,694	5,570
Thursday, October 28, 2004	East	8,912	8,708	17,620
	North	2,476	3,109	5,585
	South	7,024	6,820	13,844
	West	4,183	3,783	7,966
Wednesday, October 27, 2004	East	9,019	8,904	17,923
	North	2,585	3,079	5,664
	South	7,170	6,843	14,013
	West	4,197	3,883	8,080
Tuesday, October 26, 2004	East	8,888	8,684	17,572
	North	2,682	3,208	5,890
	South	7,100	6,820	13,920
	West	4,183	3,857	8,040
Tuesday, February 10, 1998	West	6,045	6,228	12,273
Thursday, May 22, 1997	South	5,061	4,888	9,949
Tuesday, May 6, 1997	East	7,652	5,860	13,512

If you need older count information, call 591-5500

Or email: Kurtis.Kingsolver

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 Deaf, hard of hearing or speech disabled persons may contact us through Washington Relay Services
 1-800-833-6388 (TTY or ASCII) 1-800-833-6386 (VCO) or 1-877-833-6341 (STS)

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[Contacts](#) [Comments](#) [City Site](#)

Average Daily Traffic Counts - 24 Hour Period

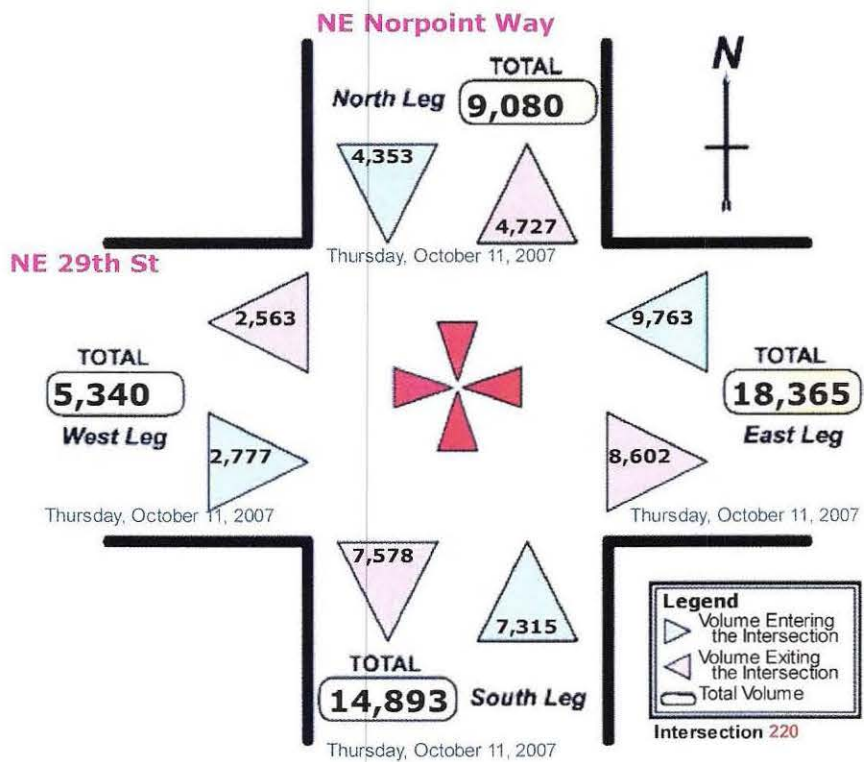
NE 29th St & NE Norpoint Way

Select an Intersection:

Select Intersection

[View Large \(8.5 x 11\) Layout](#)

[View Historical Counts](#)



Comments: N/A

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Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2016 EX
5/5/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	132	100	632	198	350	84	296	663	155	127	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	225		0	150		0	200		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.98		0.97		0.94	0.97		0.97		1.00	
Fr _t		0.935				0.850			0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3228	0	1770	1863	1583	1770	1863	1583	1770	1860	0
Flt Permitted	0.950			0.950			0.671			0.293		
Satd. Flow (perm)	1720	3228	0	1722	1863	1493	1213	1863	1529	546	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		105				360			210			
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		167			310			644			413	
Travel Time (s)		3.8			7.0			11.0			9.4	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	139	105	665	208	368	88	312	698	163	134	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	244	0	665	208	368	88	312	698	163	135	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	



Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2016 EX
5/5/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						8	2		2	6		
Detector Phase	7	4		3	8	8	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0	
Total Split (s)	10.0	20.0		56.0	66.0	66.0	9.0	33.0	56.0	11.0	35.0	
Total Split (%)	8.3%	16.7%		46.7%	55.0%	55.0%	7.5%	27.5%	46.7%	9.2%	29.2%	
Maximum Green (s)	6.0	16.0		52.0	62.0	62.0	5.0	29.0	52.0	7.0	31.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max	None	None	Max	
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	5.7	10.2		45.1	57.5	57.5	34.3	29.3	74.4	38.9	33.5	
Actuated g/C Ratio	0.05	0.09		0.42	0.53	0.53	0.32	0.27	0.69	0.36	0.31	
v/c Ratio	0.02	0.61		0.90	0.21	0.38	0.21	0.62	0.61	0.59	0.23	
Control Delay	53.5	33.9		45.9	14.0	2.8	27.5	42.8	7.6	37.0	33.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	53.5	33.9		45.9	14.0	2.8	27.5	42.8	7.6	37.0	33.0	
LOS	D	C		D	B	A	C	D	A	D	C	
Approach Delay		34.1			27.8			19.2			35.2	
Approach LOS		C			C			B			D	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 107.8
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 25.8
 Intersection Capacity Utilization 81.5%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 1: Norpoint Way NE & NE 29th St.

p1	p2	p3	p4
11 s	33 s	56 s	20 s
p5	p6	p7	p8
9 s	35 s	10 s	66 s



Queues
1: Norpoint Way NE & NE 29th St.

2016 EX
5/5/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	2	244	665	208	368	88	312	698	163	135
v/c Ratio	0.02	0.61	0.90	0.21	0.38	0.21	0.62	0.61	0.59	0.23
Control Delay	53.5	33.9	45.9	14.0	2.8	27.5	42.8	7.6	37.0	33.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	33.9	45.9	14.0	2.8	27.5	42.8	7.6	37.0	33.0
Queue Length 50th (ft)	1	51	417	68	2	43	201	127	83	76
Queue Length 95th (ft)	10	94	#672	132	51	86	320	242	#151	139
Internal Link Dist (ft)		87		230			564			333
Turn Bay Length (ft)	100		225			150			200	
Base Capacity (vph)	99	573	862	1108	1034	412	506	1237	277	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.43	0.77	0.19	0.36	0.21	0.62	0.56	0.59	0.23

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

(10)

Intersection												
Int Delay, s/veh	0.2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	912	1	1	1176	8	1	1	1	5	1	5
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	960	1	1	1238	8	1	1	1	5	1	5

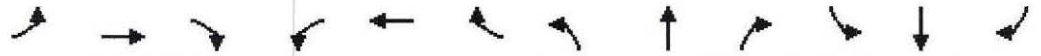
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1256	0	0	971	0	0	1613	2239	501	1755	2236	643
Stage 1	-	-	-	-	-	-	981	981	-	1254	1254	-
Stage 2	-	-	-	-	-	-	632	1258	-	501	982	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	550	-	-	706	-	-	69	42	515	54	42	416
Stage 1	-	-	-	-	-	-	268	326	-	182	242	-
Stage 2	-	-	-	-	-	-	435	241	-	521	325	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	545	-	-	700	-	-	66	41	506	52	41	409
Mov Cap-2 Maneuver	-	-	-	-	-	-	176	142	-	138	143	-
Stage 1	-	-	-	-	-	-	263	320	-	179	240	-
Stage 2	-	-	-	-	-	-	423	239	-	509	319	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	22.9	24.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	204	545	-	-	700	-	-	198
HCM Lane V/C Ratio	0.015	0.01	-	-	0.002	-	-	0.058
HCM Control Delay (s)	22.9	11.7	-	-	10.2	-	-	24.3
HCM Lane LOS	C	B	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↕		↙	↕	↗	↙	↕	↗	↙	↗	
Volume (vph)	2	150	115	710	225	395	95	335	745	175	145	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	225		0	150		0	200		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.98		0.97		0.94	0.97		0.97		1.00	
Frts		0.935				0.850			0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3228	0	1770	1863	1583	1770	1863	1583	1770	1860	0
Flt Permitted	0.950			0.950			0.612			0.204		
Satd. Flow (perm)	1722	3228	0	1725	1863	1493	1108	1863	1529	380	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		121				333			163			
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		167			310			644			413	
Travel Time (s)		3.8			7.0			11.0			9.4	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	158	121	747	237	416	100	353	784	184	153	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	279	0	747	237	416	100	353	784	184	154	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

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Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

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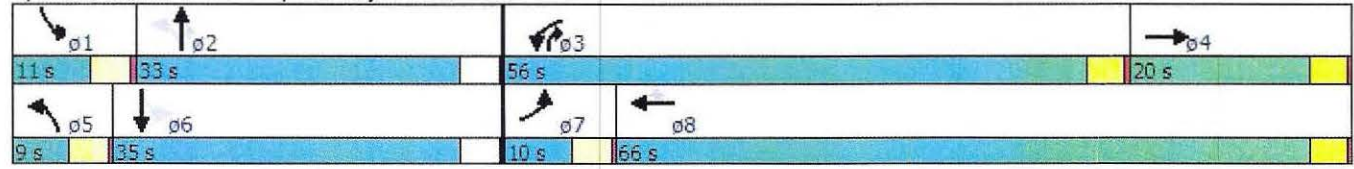
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						8	2		2	6		
Detector Phase	7	4		3	8	8	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0	
Total Split (s)	10.0	20.0		56.0	66.0	66.0	9.0	33.0	56.0	11.0	35.0	
Total Split (%)	8.3%	16.7%		46.7%	55.0%	55.0%	7.5%	27.5%	46.7%	9.2%	29.2%	
Maximum Green (s)	6.0	16.0		52.0	62.0	62.0	5.0	29.0	52.0	7.0	31.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max	None	None	Max	
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	5.7	11.2		50.9	64.2	64.2	34.1	29.1	80.0	38.1	31.1	
Actuated g/C Ratio	0.05	0.10		0.45	0.56	0.56	0.30	0.25	0.70	0.33	0.27	
v/c Ratio	0.02	0.66		0.95	0.23	0.42	0.28	0.75	0.69	0.87	0.30	
Control Delay	54.0	35.6		53.0	13.7	4.5	30.2	51.0	10.4	68.1	36.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	54.0	35.6		53.0	13.7	4.5	30.2	51.0	10.4	68.1	36.1	
LOS	D	D		D	B	A	C	D	B	E	D	
Approach Delay		35.7			31.9			23.6			53.5	
Approach LOS		D			C			C			D	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 114.2
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.95
 Intersection Signal Delay: 31.3
 Intersection Capacity Utilization 89.7%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 1: Norpoint Way NE & NE 29th St.



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Queues
1: Norpoint Way NE & NE 29th St.

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Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	2	279	747	237	416	100	353	784	184	154
v/c Ratio	0.02	0.66	0.95	0.23	0.42	0.28	0.75	0.69	0.87	0.30
Control Delay	54.0	35.6	53.0	13.7	4.5	30.2	51.0	10.4	68.1	36.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	35.6	53.0	13.7	4.5	30.2	51.0	10.4	68.1	36.1
Queue Length 50th (ft)	1	59	514	79	26	51	243	194	99	91
Queue Length 95th (ft)	11	105	#820	149	96	97	#393	358	#198	158
Internal Link Dist (ft)		87		230			564			333
Turn Bay Length (ft)	100		225			150			200	
Base Capacity (vph)	93	557	807	1063	995	359	473	1158	212	505
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.50	0.93	0.22	0.42	0.28	0.75	0.68	0.87	0.30

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Intersection												
Int Delay, s/veh	0.2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	1025	1	1	1325	10	1	1	1	5	1	5
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1079	1	1	1395	11	1	1	1	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1415	0	0	1090	0	0	1810	2517	560	1973	2513	723
Stage 1	-	-	-	-	-	-	1100	1100	-	1412	1412	-
Stage 2	-	-	-	-	-	-	710	1417	-	561	1101	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	478	-	-	636	-	-	49	28	472	37	28	369
Stage 1	-	-	-	-	-	-	226	286	-	145	203	-
Stage 2	-	-	-	-	-	-	391	201	-	480	286	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	474	-	-	631	-	-	47	27	464	36	27	363
Mov Cap-2 Maneuver	-	-	-	-	-	-	147	117	-	111	119	-
Stage 1	-	-	-	-	-	-	222	281	-	142	201	-
Stage 2	-	-	-	-	-	-	380	199	-	468	281	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	26.4	28.6
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	171	474	-	-	631	-	-	164
HCM Lane V/C Ratio	0.018	0.011	-	-	0.002	-	-	0.071
HCM Control Delay (s)	26.4	12.7	-	-	10.7	-	-	28.6
HCM Lane LOS	D	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

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Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2021 WP
5/5/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	151	115	713	225	396	95	335	750	176	145	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	225		0	150		0	200		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.98		0.97		0.94	0.97		0.97		1.00	
Fr _t		0.935				0.850			0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3228	0	1770	1863	1583	1770	1863	1583	1770	1860	0
Flt Permitted	0.950			0.950			0.611			0.201		
Satd. Flow (perm)	1722	3228	0	1725	1863	1493	1106	1863	1529	374	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		121				333			161			
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		167			310			644			413	
Travel Time (s)		3.8			7.0			11.0			9.4	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	159	121	751	237	417	100	353	789	185	153	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	280	0	751	237	417	100	353	789	185	154	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	



Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						8	2		2	6		
Detector Phase	7	4		3	8	8	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0	
Total Split (s)	10.0	20.0		56.0	66.0	66.0	9.0	33.0	56.0	11.0	35.0	
Total Split (%)	8.3%	16.7%		46.7%	55.0%	55.0%	7.5%	27.5%	46.7%	9.2%	29.2%	
Maximum Green (s)	6.0	16.0		52.0	62.0	62.0	5.0	29.0	52.0	7.0	31.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max	None	None	Max	
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	5.7	11.2		51.3	64.6	64.6	34.1	29.0	80.4	38.1	31.0	
Actuated g/C Ratio	0.05	0.10		0.45	0.56	0.56	0.30	0.25	0.70	0.33	0.27	
v/c Ratio	0.02	0.66		0.95	0.23	0.42	0.28	0.75	0.69	0.89	0.31	
Control Delay	54.0	35.8		53.1	13.6	4.6	30.2	51.3	10.6	71.0	36.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	54.0	35.8		53.1	13.6	4.6	30.2	51.3	10.6	71.0	36.2	
LOS	D	D		D	B	A	C	D	B	E	D	
Approach Delay		36.0			32.1			23.7			55.2	
Approach LOS		D			C			C			E	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 114.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 31.6

Intersection Capacity Utilization 90.0%

Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service E

Splits and Phases: 1: Norpoint Way NE & NE 29th St.

φ1	φ2	φ3	φ4
11 s	33 s	56 s	20 s
φ5	φ6	φ7	φ8
9 s	35 s	10 s	66 s

(17)

Queues
1: Norpoint Way NE & NE 29th St.

2021 WP
5/5/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	2	280	751	237	417	100	353	789	185	154
v/c Ratio	0.02	0.66	0.95	0.23	0.42	0.28	0.75	0.69	0.89	0.31
Control Delay	54.0	35.8	53.1	13.6	4.6	30.2	51.3	10.6	71.0	36.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	35.8	53.1	13.6	4.6	30.2	51.3	10.6	71.0	36.2
Queue Length 50th (ft)	1	60	519	79	26	51	243	197	99	91
Queue Length 95th (ft)	11	105	#827	149	96	97	#393	366	#204	158
Internal Link Dist (ft)		87		230			564			333
Turn Bay Length (ft)	100		225			150			200	
Base Capacity (vph)	92	555	804	1060	992	357	472	1153	209	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.50	0.93	0.22	0.42	0.28	0.75	0.68	0.89	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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Intersection												
Int Delay, s/veh	0.3											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	1025	8	10	1325	10	5	1	6	5	1	5
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1079	8	11	1395	11	5	1	6	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1415	0	0	1097	0	0	1833	2540	564	1992	2539	723
Stage 1	-	-	-	-	-	-	1104	1104	-	1431	1431	-
Stage 2	-	-	-	-	-	-	729	1436	-	561	1108	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	478	-	-	632	-	-	47	27	469	36	27	369
Stage 1	-	-	-	-	-	-	225	285	-	141	198	-
Stage 2	-	-	-	-	-	-	380	197	-	480	284	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	474	-	-	627	-	-	44	26	461	34	26	363
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	114	-	107	114	-
Stage 1	-	-	-	-	-	-	221	280	-	138	193	-
Stage 2	-	-	-	-	-	-	363	192	-	463	279	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	23.1	29.4
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	211	474	-	-	627	-	-	159
HCM Lane V/C Ratio	0.06	0.011	-	-	0.017	-	-	0.073
HCM Control Delay (s)	23.1	12.7	-	-	10.8	-	-	29.4
HCM Lane LOS	C	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2



Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2021 WP PP LT phasing
5/5/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	151	115	713	225	396	95	335	750	176	145	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	225		0	150		0	200		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.98		0.98		0.94	0.97		0.97		1.00	
Frt		0.935				0.850			0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3228	0	1770	1863	1583	1770	1863	1583	1770	1860	0
Flt Permitted	0.611			0.306			0.625			0.231		
Satd. Flow (perm)	1107	3228	0	560	1863	1493	1132	1863	1529	430	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		121				336			164			
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		167			310			644			413	
Travel Time (s)		3.8			7.0			11.0			9.4	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	159	121	751	237	417	100	353	789	185	153	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	280	0	751	237	417	100	353	789	185	154	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

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Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2021 WP PP LT phasing
5/5/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8		8	2		2	6		
Detector Phase	7	4		3	8	8	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0	
Total Split (s)	10.0	20.0		56.0	66.0	66.0	9.0	33.0	56.0	11.0	35.0	
Total Split (%)	8.3%	16.7%		46.7%	55.0%	55.0%	7.5%	27.5%	46.7%	9.2%	29.2%	
Maximum Green (s)	6.0	16.0		52.0	62.0	62.0	5.0	29.0	52.0	7.0	31.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max	None	None	Max	
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	16.6	10.9		60.2	58.4	58.4	34.4	29.3	74.5	38.4	31.4	
Actuated g/C Ratio	0.15	0.10		0.55	0.54	0.54	0.32	0.27	0.69	0.35	0.29	
v/c Ratio	0.01	0.65		0.92	0.24	0.44	0.26	0.70	0.70	0.77	0.29	
Control Delay	20.5	34.4		40.5	14.1	4.6	28.9	46.7	11.0	52.3	34.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	20.5	34.4		40.5	14.1	4.6	28.9	46.7	11.0	52.3	34.5	
LOS	C	C		D	B	A	C	D	B	D	C	
Approach Delay		34.3			25.4			22.6			44.2	
Approach LOS		C			C			C			D	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 108.7
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 27.0
 Intersection Capacity Utilization 90.0%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 1: Norpoint Way NE & NE 29th St.

φ1	φ2	φ3	φ4
11 s	33 s	56 s	20 s
φ5	φ6	φ7	φ8
9 s	35 s	10 s	66 s

(21)

Queues
1: Norpoint Way NE & NE 29th St.

2021 WP PP LT phasing
5/5/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	2	280	751	237	417	100	353	789	185	154
v/c Ratio	0.01	0.65	0.92	0.24	0.44	0.26	0.70	0.70	0.77	0.29
Control Delay	20.5	34.4	40.5	14.1	4.6	28.9	46.7	11.0	52.3	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.5	34.4	40.5	14.1	4.6	28.9	46.7	11.0	52.3	34.5
Queue Length 50th (ft)	1	58	416	79	25	50	238	196	97	89
Queue Length 95th (ft)	4	105	#676	149	94	97	#393	364	#225	158
Internal Link Dist (ft)		87		230			564			333
Turn Bay Length (ft)	100		225			150			200	
Base Capacity (vph)	210	583	907	1109	1024	387	502	1219	239	536
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.48	0.83	0.21	0.41	0.26	0.70	0.65	0.77	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection												
Int Delay, s/veh	0.3											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	1025	8	10	1325	10	5	1	6	5	1	5
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1079	8	11	1395	11	5	1	6	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1415	0	0	1097	0	0	1833	2540	564	1992	2539	723
Stage 1	-	-	-	-	-	-	1104	1104	-	1431	1431	-
Stage 2	-	-	-	-	-	-	729	1436	-	561	1108	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	478	-	-	632	-	-	47	27	469	36	27	369
Stage 1	-	-	-	-	-	-	225	285	-	141	198	-
Stage 2	-	-	-	-	-	-	380	197	-	480	284	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	474	-	-	627	-	-	44	26	461	34	26	363
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	114	-	107	114	-
Stage 1	-	-	-	-	-	-	221	280	-	138	193	-
Stage 2	-	-	-	-	-	-	363	192	-	463	279	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	23.1	29.4
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	211	474	-	-	627	-	-	159
HCM Lane V/C Ratio	0.06	0.011	-	-	0.017	-	-	0.073
HCM Control Delay (s)	23.1	12.7	-	-	10.8	-	-	29.4
HCM Lane LOS	C	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2

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March 28, 2016

Mark J. Jacobs
JTE, Inc.
2614 39th Ave. SW
Seattle WA 98116

Dear Mr. Jacobs:

In accordance with the Public Records Act, RCW 42.56, this letter acknowledges receipt of your request for records dated March 22, 2016 (Request Number PDR-16-0960).

We have prepared a history of officer reported crashes that occurred *on or in the vicinity of* the following road segments in the City of Tacoma for the period of 1/1/2013 – 12/31/2015.

- 29th St from 59th Ave to 62nd Ave
- Norpoint Way @ 29th St (*within 1000 feet north or south*)

Federal law 23 United States Code Section 409 governs use of the data you requested. Under this law, data maintained for purposes of evaluating potential highway safety enhancements:

“ . . . shall not be subject to discovery or admitted into evidence in a federal or state court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.” [Emphasis added.]

The Washington State Department of Transportation (WSDOT) is releasing this data to you with the understanding that you will not use this data contrary to the restrictions in Section 409, which means you will not use this data in discovery or as evidence at trial in any action for damages against the WSDOT, the State of Washington, or any other jurisdiction involved in the locations mentioned in the data. If you should attempt to use this data in an action for damages against WSDOT, the State of Washington, or any other jurisdiction involved in the locations mentioned in the data, these entities expressly reserve the right, under Section 409, to object to the use of the data, including any opinions drawn from the data.

Public Disclosure Request PDR-16-0960
March 28, 2016
Page 2

With this package, your request for records is complete and closed.

If you have any further questions you may contact me at 360-570-2464.

Sincerely,



Julie Brown
Transportation Planning Technician 3
Transportation Data and GIS Office

(25)

PM PEAK HOUR LEVEL OF SERVICE

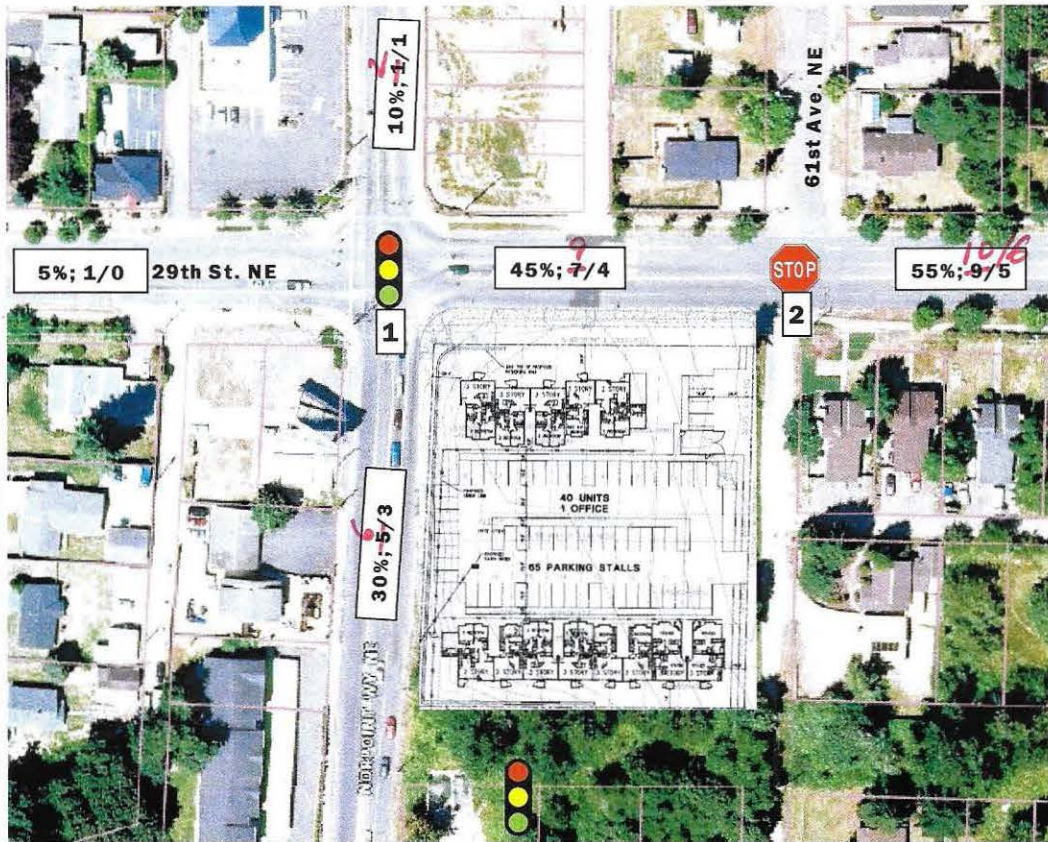
TABLE 1 *R*

NORPOINT LANDING – TACOMA
TRAFFIC IMPACT ANALYSIS

INTERSECTION	APPROACH	EXISTING	2021 W/O PROJECT	2021 W/ PROJECT	2021 W/ PROJECT and PP LT PHASING
1. Norpoint Way NE at 29 th St. NE	Overall	C (25.8)	C (31.3)	C ^{31.7} (31.6)	C (27.0) ^{27.1}
	WBLT 50% queue	D (45.9) 417'	D (53.0) 514'	D (53.1) ✓ 519' ✓	D (40.5) ✓ 416' ✓
2. 29 th St. NE at 61 st Ave. NE	Overall	A (0.2)	A (0.2)	A (0.3) ^{0.4}	A (0.3) ^{0.4}
	EBLT	B (11.7)	B (12.7)	B (12.7) ✓	B (12.7) ✓
	WBLT	B (10.2)	B (10.7)	B (10.8) ^{10.9}	B (10.8) ^{10.9}
	NB	C (22.9)	D (26.4)	C (23.1)* ^{22.4*}	C (23.1)* ^{22.4*}
	SB	C (24.3)	D (28.6)	D (29.4) ✓	D (29.4) ✓

* site traffic is added to the low delay right turn movement

Number shown in parenthesis is the average control delay in seconds per vehicle for the intersection as a whole or approach movement, which determines the LOS per the Highway Capacity Manual.



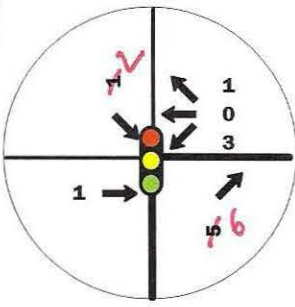
↑
NORTH

LEGEND

- PMPH Traffic Volume and Direction
- STOP Stop Sign
- Traffic Signal
- x Analysis I/S #

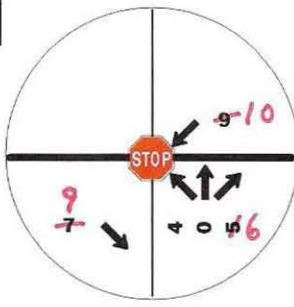
Image obtained from
Pierce County Public GIS

1



29th St. NE at
Norpoint Way NE

2



29th St. NE at
61st Ave. NE

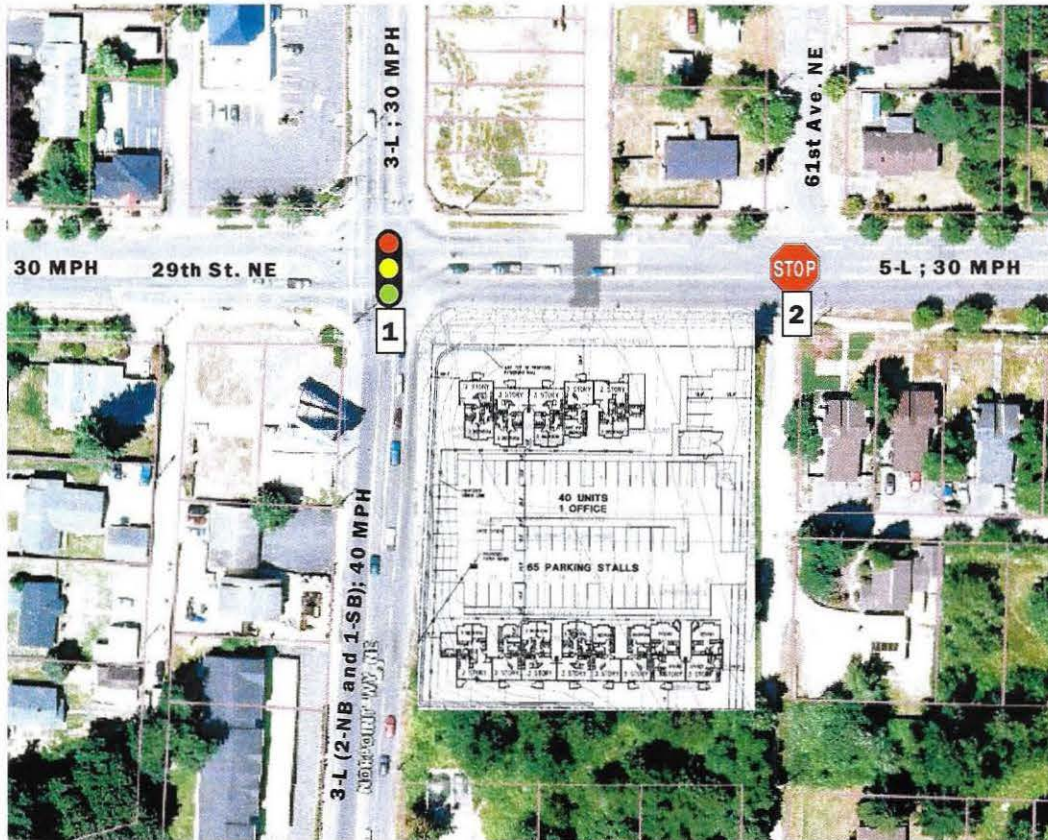
PM Peak Hour Trips:	25	29
Entering:	16	19
Exiting:	9	10

distribution %; enter/exit

JTE, Inc.
FIGURE 6 R

Reprint in Color Only

**NORPOINT LANDING - TACOMA
TRAFFIC IMPACT ANALYSIS
SITE GENERATED PM PEAK HOUR TRAFFIC VOLUMES
AND DISTRIBUTION**

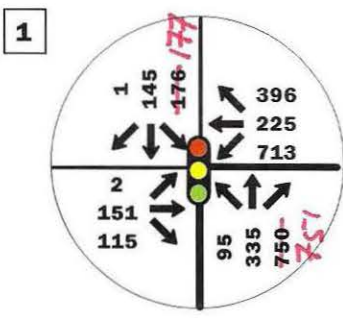


↑
NORTH

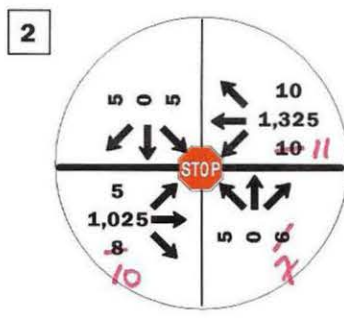
LEGEND

- PMPH Traffic Volume and Direction
- STOP Stop Sign
- Traffic Signal
- x Analysis I/S #
- X-L's # of Travel Lanes
- XX MPH Posted Speed Limit

Image obtained from
Pierce County Public GIS



29th St. NE at
Norpoint Way NE



29th St. NE at
61st Ave. NE

JTE, Inc.
FIGURE 7R

Reprint in Color Only

**NORPOINT LANDING - TACOMA
TRAFFIC IMPACT ANALYSIS
PROJECTED 2021 PM PEAK HOUR TRAFFIC VOLUMES
WITH THE PROJECT**

Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2021 WP (47 units)
8/10/2016

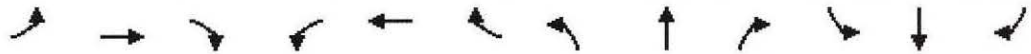


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	151	115	713	225	396	95	335	751	177	145	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	225		0	150		0	200		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.98		0.97		0.94	0.97		0.97		1.00	
Fr t		0.935				0.850			0.850		0.999	
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3228	0	1770	1863	1583	1770	1863	1583	1770	1860	0
Fit Permitted	0.950			0.950			0.611			0.201		
Satd. Flow (perm)	1722	3228	0	1725	1863	1493	1106	1863	1529	374	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		121				333			161			
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		167			310			644			413	
Travel Time (s)		3.8			7.0			11.0			9.4	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	159	121	751	237	417	100	353	791	186	153	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	280	0	751	237	417	100	353	791	186	154	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane				Yes								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

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Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2021 WP (47 units)
8/10/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						8	2		2	6		
Detector Phase	7	4		3	8	8	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0	
Total Split (s)	10.0	20.0		56.0	66.0	66.0	9.0	33.0	56.0	11.0	35.0	
Total Split (%)	8.3%	16.7%		46.7%	55.0%	55.0%	7.5%	27.5%	46.7%	9.2%	29.2%	
Maximum Green (s)	6.0	16.0		52.0	62.0	62.0	5.0	29.0	52.0	7.0	31.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max	None	None	Max	
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	5.7	11.2		51.3	64.6	64.6	34.1	29.0	80.4	38.1	31.0	
Actuated g/C Ratio	0.05	0.10		0.45	0.56	0.56	0.30	0.25	0.70	0.33	0.27	
v/c Ratio	0.02	0.66		0.95	0.23	0.42	0.28	0.75	0.69	0.89	0.31	
Control Delay	54.0	35.8		53.1	13.6	4.6	30.2	51.3	10.7	71.8	36.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	54.0	35.8		53.1	13.6	4.6	30.2	51.3	10.7	71.8	36.2	
LOS	D	D		D	B	A	C	D	B	E	D	
Approach Delay		36.0			32.1			23.8			55.7	
Approach LOS		D			C			C			E	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 114.6
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.95
 Intersection Signal Delay: 31.7
 Intersection Capacity Utilization 90.0%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 1: Norpoint Way NE & NE 29th St.

ø1	ø2	ø3	ø4
11 s	33 s	56 s	20 s
ø5	ø6	ø7	ø8
9 s	35 s	10 s	66 s

(17R)

Queues
1: Norpoint Way NE & NE 29th St.

2021 WP (47 units)
8/10/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	2	280	751	237	417	100	353	791	186	154
v/c Ratio	0.02	0.66	0.95	0.23	0.42	0.28	0.75	0.69	0.89	0.31
Control Delay	54.0	35.8	53.1	13.6	4.6	30.2	51.3	10.7	71.8	36.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	35.8	53.1	13.6	4.6	30.2	51.3	10.7	71.8	36.2
Queue Length 50th (ft)	1	60	519	79	26	51	243	199	100	91
Queue Length 95th (ft)	11	105	#827	149	96	97	#393	369	#206	158
Internal Link Dist (ft)		87		230			564			333
Turn Bay Length (ft)	100		225			150			200	
Base Capacity (vph)	92	555	804	1060	992	357	472	1153	209	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.50	0.93	0.22	0.42	0.28	0.75	0.69	0.89	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

(IPR)

Intersection												
Int Delay, s/veh	0.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	1025	10	11	1325	10	5	1	7	5	1	5
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1079	11	12	1395	11	5	1	7	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1415	0	0	1099	0	0	1836	2543	565	1994	2543	723
Stage 1	-	-	-	-	-	-	1105	1105	-	1433	1433	-
Stage 2	-	-	-	-	-	-	731	1438	-	561	1110	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	478	-	-	631	-	-	47	27	468	36	27	369
Stage 1	-	-	-	-	-	-	225	285	-	141	198	-
Stage 2	-	-	-	-	-	-	379	197	-	480	283	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	474	-	-	626	-	-	44	26	460	34	26	363
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	114	-	107	114	-
Stage 1	-	-	-	-	-	-	221	280	-	138	193	-
Stage 2	-	-	-	-	-	-	361	192	-	462	278	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	22.4	29.4
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	221	474	-	-	626	-	-	159
HCM Lane V/C Ratio	0.062	0.011	-	-	0.018	-	-	0.073
HCM Control Delay (s)	22.4	12.7	-	-	10.9	-	-	29.4
HCM Lane LOS	C	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2

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Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

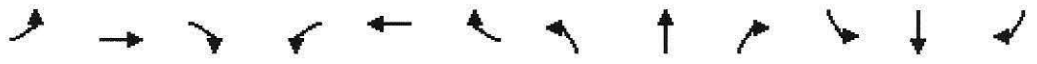
2021 WP P/P LT (47 units)
8/10/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	151	115	713	225	396	95	335	751	177	145	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	225		0	150		0	200		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.98		0.98		0.94	0.97		0.97		1.00	
Frts		0.935				0.850			0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3228	0	1770	1863	1583	1770	1863	1583	1770	1860	0
Flt Permitted	0.611			0.306			0.625			0.231		
Satd. Flow (perm)	1107	3228	0	560	1863	1493	1132	1863	1529	430	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		121				336			164			
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		167			310			644			413	
Travel Time (s)		3.8			7.0			11.0			9.4	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	159	121	751	237	417	100	353	791	186	153	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	280	0	751	237	417	100	353	791	186	154	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

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Lanes, Volumes, Timings
1: Norpoint Way NE & NE 29th St.

2021 WP P/P LT (47 units)
8/10/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8		8	2		2	6		
Detector Phase	7	4		3	8	8	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0	
Total Split (s)	10.0	20.0		56.0	66.0	66.0	9.0	33.0	56.0	11.0	35.0	
Total Split (%)	8.3%	16.7%		46.7%	55.0%	55.0%	7.5%	27.5%	46.7%	9.2%	29.2%	
Maximum Green (s)	6.0	16.0		52.0	62.0	62.0	5.0	29.0	52.0	7.0	31.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max	None	None	Max	
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	16.6	10.9		60.2	58.4	58.4	34.4	29.3	74.5	38.4	31.4	
Actuated g/C Ratio	0.15	0.10		0.55	0.54	0.54	0.32	0.27	0.69	0.35	0.29	
v/c Ratio	0.01	0.65		0.92	0.24	0.44	0.26	0.70	0.70	0.78	0.29	
Control Delay	20.5	34.4		40.5	14.1	4.6	28.9	46.7	11.1	52.7	34.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	20.5	34.4		40.5	14.1	4.6	28.9	46.7	11.1	52.7	34.5	
LOS	C	C		D	B	A	C	D	B	D	C	
Approach Delay		34.3			25.4			22.6			44.5	
Approach LOS		C			C			C			D	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 108.7
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 27.1
 Intersection Capacity Utilization 90.0%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 1: Norpoint Way NE & NE 29th St.

11 s	33 s	56 s	20 s
9 s	35 s	10 s	56 s

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Queues
1: Norpoint Way NE & NE 29th St.

2021 WP P/P LT (47 units)
8/10/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	2	280	751	237	417	100	353	791	186	154
v/c Ratio	0.01	0.65	0.92	0.24	0.44	0.26	0.70	0.70	0.78	0.29
Control Delay	20.5	34.4	40.5	14.1	4.6	28.9	46.7	11.1	52.7	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.5	34.4	40.5	14.1	4.6	28.9	46.7	11.1	52.7	34.5
Queue Length 50th (ft)	1	58	416	79	25	50	238	198	98	89
Queue Length 95th (ft)	4	105	#676	149	94	97	#393	368	#227	158
Internal Link Dist (ft)		87		230			564			333
Turn Bay Length (ft)	100		225			150			200	
Base Capacity (vph)	210	583	907	1109	1024	387	502	1219	239	536
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.48	0.83	0.21	0.41	0.26	0.70	0.65	0.78	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

22R

Intersection												
Int Delay, s/veh	0.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	1025	10	11	1325	10	5	1	7	5	1	5
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1079	11	12	1395	11	5	1	7	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1415	0	0	1099	0	0	1836	2543	565	1994	2543	723
Stage 1	-	-	-	-	-	-	1105	1105	-	1433	1433	-
Stage 2	-	-	-	-	-	-	731	1438	-	561	1110	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	478	-	-	631	-	-	47	27	468	36	27	369
Stage 1	-	-	-	-	-	-	225	285	-	141	198	-
Stage 2	-	-	-	-	-	-	379	197	-	480	283	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	474	-	-	626	-	-	44	26	460	34	26	363
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	114	-	107	114	-
Stage 1	-	-	-	-	-	-	221	280	-	138	193	-
Stage 2	-	-	-	-	-	-	361	192	-	462	278	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	22.4	29.4
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	221	474	-	-	626	-	-	159
HCM Lane V/C Ratio	0.062	0.011	-	-	0.018	-	-	0.073
HCM Control Delay (s)	22.4	12.7	-	-	10.9	-	-	29.4
HCM Lane LOS	C	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2

23R

TABLE 2R - VEHICULAR TRIP GENERATION
 NORPOINT LANDING - TACOMA
 TRAFFIC IMPACT ANALYSIS

Time Period	Size	TG Rate	Enter %	Enter Trips	Exit %	Exit Trips	Total
Apartments (ITE LUC 220; 47 - units)							
Weekday	47	6.65	50%	156.3	50%	156.3	312.6
AM peak hour	47	0.51	20%	4.8	80%	19.2	24.0
PM peak hour	47	0.62	65%	18.9	35%	10.2	29.1

T = trips, X = number of units

A vehicle trip is defined as a single or one direction vehicle movement with either the origin or destination (exiting or entering) inside the study site. The above trip generation values account for all the site trips made by all vehicles for all purposes, including commuter, visitor, recreation, and service and delivery vehicle trips.

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N.L. OLSON & ASSOCIATES, INC.

ENGINEERING, PLANNING AND SURVEYING

June 9, 2016

Project Number: 9120-16

Attn: Nick Parodi
Fulcrum Real Estate Services
6900 Capital BLVD SW
Tumwater, WA 98501

Subject: Geotechnical Engineering Investigation
Proposed Development
Near Norpoint Way NE and 29th ST NE
Tacoma, WA

Mr. Parodi,

N.L. Olson & Associates, Inc., (N.L. Olson) has been requested by Fulcrum Real Estate Services to address questions that have with the referenced Preliminary Geotechnical Engineering Report and make necessary modifications as needed. The following is N.L. Olson's response that is based on the question and answer per your earlier email on Monday, June 06, 2016 12:18 PM.

Question 2) Fulcrum Real Estate Services -Nick Parodi: Pg 2, 3rd Paragraph, Mentions a detention/retention vault. Our thought was that we would have direct discharge since the line in the street goes directly to the bay. Perhaps a vault for filtering parking lot runoff only. Please clarify and make appropriate edits.

NLO's Response:

Regarding the detention/infiltration system – even with direct discharge (which is a significant benefit and will help reduce costs) some level of storm detention will be required given the limited capacity of the existing downstream conveyance pipe system.

Question 3) Fulcrum Real Estate Services - Nick Parodi: Pg 6 1st Paragraph, Verbally, we had discussed the ability to remove and re-compact the existing material. Can we mention that as a possibility in this paragraph?

NLO's Response:

Report modified: In order to mitigate future settlement and cracking concerns, NLO recommends removal of uncontrolled fill and re-compaction of suitable existing fill material or axially supporting the proposed building's foundation system. N.L. Olson does not advise building placement on existing uncontrolled fill.

Question 4) Fulcrum Real Estate Services - Nick Parodi: Pg 6 2nd Paragraph Statement: 'That native soil has been removed and replaced with organic laden uncontrolled fill placed directly above the till.' This seems speculative to us—can we simplify by stating that 'uncontrolled fill exists above the till' or something like that?

NLO's Response:

Report modified "uncontrolled fill exists above the till".

Question 5) Fulcrum Real Estate Services - Nick Parodi: Pg 6 4th Paragraph, 12' to 13' – please clarify 12 or 13, below present site grades WILL be required to remove... Replace will with may

NLO's Response:

NLO Olson modified report to say up to 13 feet of uncontrolled fill may require removal.

Question 6) Fulcrum Real Estate Services - Nick Parodi: Pg 7 Structural Fill, Please add 'existing soils may be used if properly compacted and of an approved quality'

NLO's Response:

Existing soils may be used if properly compacted and of an approved quality. During dry weather, most soils that are compactable and non-organic can be utilized as structural fill, between May 1 through September 30. Based on the results of our subsurface exploration, the on-site soils at the time of our exploration appear suitable for use as structural fill, provided grading operations are performed during dry weather. Existing soils with a fine content greater than 5 percent passing the 200 sieve will degrade if exposed to excessive moisture, and compaction and grading will be difficult or impossible if soil moisture significantly increases. Fill material being considered for on-site use should be submitted for approval to the Geotechnical Engineer at least 48 hours prior to site utilization.

Question 7) Fulcrum Real Estate Services - Nick Parodi: Pg 8 Foundations ...previously placed uncontrolled fill WILL be susceptible to... Replace will with may

NLO's Response:

Report modified as requested.

Question 8) Fulcrum Real Estate Services - Nick Parodi: Pg 9 Pin Piles, This makes it sound as if it is the only option—please add language allowing for alternative solutions.

NLO's Response:

Our subsurface exploration indicates varying soil conditions underlies the site. During our subsurface exploration work, uncontrolled fill was encountered along the western portion of the site, which extended down 13 feet below current site grades. The previously placed uncontrolled fill may be susceptible to settlement by both the weight of the buildings and self-weight of the fill if constructed on present grades. Given that the soil is comprised of a variety of materials and organics it will be very difficult to predict future settlement rates. Therefore, we do not recommend placing the proposed building's foundations on areas the uncontrolled fill soils may exist. The area of uncontrolled fill has been delineated on the Site Plan, Figure 2. In

order to minimize settlement concerns, we have provided the following methods of foundation support:

- *In the proposed building areas, the uncontrolled can be removed down to the dense underlying soil condition and the subsequent subgrade brought back to the desired construction grade with structural fill or suitable onsite soil.*
- *Another approach to help reduce potential fill thickness below proposed building's foundation would be to increase the building footing's stem wall height. By increasing the stem wall heights the structural fill requirements can be reduced.*
- *The site grades can be dropped to the lower the proposed buildings finish floor elevation or the site terraced to better accommodate the underlying soil conditions.*
- *A combination of removing fill, altering site grades and modifying stem wall heights could be implemented if this method shows a cost savings to the project.*
- *The buildings can be axially supported with pin piles or other means of axial support. N.L. Olson has provide discussion later in this report.*

Should you have any questions, which have not been addressed, or if we may be of additional assistance, please call our office.

Sincerely,



Wesley R. Johnson, P.E.
Geotechnical Division Manager

**GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED APARTMENT DEVELOPMENT
NEAR NORPOINT WAY NE AND 29TH ST NE
TACOMA, WA**

CLIENT:

Nick Parodi
Fulcrum Real Estate Services
6900 Capital BLVD SW
Tumwater, WA 98501

BY:

**N.L. OLSON AND ASSOCIATES, INC.
2453 BETHEL AVE. SE
PORT ORCHARD, WA 98366
(360) 876-2284**

Project Number: 9120-16

PRELIMINARY

JUNE 2016



N.L. OLSON & ASSOCIATES, INC.

Engineering, Planning and Surveying

June 9, 2016

Project Number: 9120-16

Attn: Nick Parodi
Fulcrum Real Estate Services
6900 Capital BLVD SW
Tumwater, WA 98501

Subject: Geotechnical Engineering Investigation
Proposed Development
Near Norpoint Way NE and 29th ST NE
Tacoma, WA

Mr. Parodi,

We are pleased to submit our geotechnical engineering report for the subject property. The report presents our geotechnical investigation results and provides foundation recommendations for the proposed development.

We appreciate the opportunity to be of service to you on this project. If we can be of further assistance or if you have any questions regarding this project, please contact our office.

Sincerely,

Wesley R. Johnson, P.E.
Geotechnical Division Manager

P.O. Box 637 • 2453 Bethel Avenue • Port Orchard, Washington 98366

Phone: 1(800) 755-1282 • Fax: (360) 876-1487

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LU16-0198 Norpoint Landing Rezone
Exhibit 11

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**GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED DEVELOPMENT
NEAR NORPOINT WAY NE AND 29TH ST NE
TACOMA, WA**

INTRODUCTION

This investigation was performed to provide preliminary geotechnical engineering recommendations for the proposed development. N.L. Olson & Associates, Inc., (N.L. Olson)'s scope of work included a subsurface exploration program, site reconnaissance, review of available geologic site information, and our conclusion and recommendations summarized in this geotechnical engineering investigation.

SITE LOCATION

The site is located southeast of the intersection of Norpoint Way NE and 29th ST NE, Tacoma, WA. The site is situated in the southeast quarter of the northeast quarter of Section 25, Township 21 North, Range 03 East, W.M., in Pierce County, Washington as shown on Figure 1.

SITE CONDITIONS

The site is bordered by Norpoint Way NE and beyond by an apartment building and commercial property to the west, to the north by 29th ST NE and beyond by single family residences, to the south by undeveloped property and material storage area and to the east by 61st Avenue NE. The property is rectangular in shape and about 1.75 acres. During our site visit, we observed the site has been cleared and some areas.

The site topography was gradual sloping with a slight gradient of roughly five (5) percent descending from east to west. Along the west side of the property, a slope with a maximum vertical height of about 10 feet was observed paralleling Norpoint Way NE. The slope was highest along the southwest corner of the property daylighting along the northwest corner of the property. The slope gradient along the steeper slope area along the west side of the property was in the range of about 30 percent to 40 percent.

The vegetation comprising the property consisted primarily of blackberry briars, scots broom, and a scattering of cottonwoods.

PROPOSED DEVELOPMENT

As presently conceived, the client has proposed to develop the site with two (2) apartment buildings. For report purposes the buildings have been identified as the north and south building areas as illustrated on the Site Plan, Figure 2. The buildings as proposed will be of light wood frame construction and (2) to three (3) stories. The approximate footing area for the north building area will be in the range of 5,000 sf and the south building area 7,500 sf. The finish floor elevations of the proposed structures will be el 405 for the north building and el 403 for the south building. The structure's footing loads are anticipated to be light to moderate. As indicated on the provided plan set, the site improvements will provide 65 parking stalls for 40 units and one (1) office space. We have shown the proposed new construction on the Site Plan - Figure 2.

Cuts on the property will be in the range of about 5 feet with the higher cuts located along the building's the east side of the proposed building are. Minor fills above present grades of a few feet are anticipated around the perimeter primarily west of the buildings we anticipate open cuts will be utilized to achieve construction subgrade elevations.

Grade separation will be provided by a wall along the west side of the property. The exposed wall height will be in the range of about 5 feet to 13 feet.

Storm runoff that develops on the subject property will be directed to a detention/retention vault located more than likely between the two buildings within the parking area.

FIELD INVESTIGATION

Subsurface Investigation

The subsurface exploration occurred on March 18, 2016 and the test pits were excavated with a Kamatsu WB-140 back hoe. The contractor who performed the services was R-Cam who was arranged to be on-site by the client. The site's subsurface soil conditions were explored with six (6) test pits advanced to a maximum depth of 14.0 feet below current site grades within the project area. The test pit locations are shown on the Site Plan, Figure 2.

Site Soil Conditions

In the upper one (1) foot to twelve (12) feet of our test pits, our subsurface exploration revealed loose uncontrolled fill. The uncontrolled fill consisted of silty sand (SM) and organic laden fill with woody forest by products in a various state of decay. In localized areas, the fill soil was comprised of soft silts. In general, the fill soils were underlain by silt (ML) and glacially consolidated silty sand with gravel (SM). The relative soil density of the native soils ranged from dense to very dense. For a more detailed description of the subsurface conditions, please refer to our boring logs in Appendix A.

Note: N.L. Olson has delineated the approximate uncontrolled fill area as shown on the Site Plan, Figure 2.

Groundwater

Wet to water bearing soils were encountered along the east side of the property about ½ feet below current site grades in the sandy silt that reside above the glacial till. Along the west side of the subsurface water was encountered 3 feet to 12 feet below current site grades within the fill soils and above the glacial till. In our opinion, the encountered wet soil conditions were derived from unsaturated zone flow, also known as inter flow, from surface water conveyance upslope of the property. Subsurface water was also encountered at various depths in the fill.

On this site, a shallow seasonally dependent inter flow system is expected to exist within the weathered soil margin above the glacial till. Inter flow arises as surface water percolates downward through weathered soil and perches above less permeable conditions. The inter flow can discharge in the form of springs and seeps into underlying streams or bodies of open water such as lakes, ponds or wetlands. In areas similar to this site, an insignificant fraction of the

ground water from inter flow will permeate through the glacial till or lacustrine deposits to recharge the underlying deeper aquifer.

AVAILABLE GEOLOGIC SOILS INFORMATION

Geologic Soil Mapping

The Washington Division of Geology and Earth Resource (WDGER), Geologic Map of Washington – Northwest Quadrant, dated 2002, indicates Quaternary sediments, dominantly glacial drift and includes alluvium. Glacial till consists of an unsorted, unstratified, highly compacted mixture of clay, silt, sand, gravel and boulders deposited by glacial ice.

The Geologic Map of Pierce County, Shoreline Master Program Update, Geology, Map 7, indicated the subject property is underlain by Vashon Till (Qgt) soil. The Vashon Till is comprised of clay, silt, sand, pebbles and cobbles with the occasional large boulder. The color of this material appears gray to blue on a freshly exposed surface and may weather to brown or yellow. Vashon Till is extremely compact and will stand near vertical along cliffs, which generally lacks surficial cracks or joints. The gravel, cobble and boulders within the glacial till matrix are sub angular to round with some larger clasts exhibiting striations and faceting. Geologic mapping for this area has been shown of Figure 3.

SLOPES

Slope Stability:

Mapping of slope stability in the Coastal Zone Atlas (CZA) only extended 2000 feet inland from the shoreline and did not classify the slope stability that was on this property.

Landslide Hazard Areas:

Per City of Tacoma guidelines, all slopes greater than 40% are considered landslide hazards. Slopes between 15% and 40% may be landslide hazard areas depending on geologic setting and other factors.

Per our review of the subject site, steep slope hazards are areas defined as slopes with gradients of 40 percent or steeper with a vertical change in height of about 10 or more feet for the encountered soil conditions – glacial till. Tacoma slope stability mapping 40% slopes has been shown on Figure 4.

During our fieldwork, N.L Olson did not observe recent or past indicators of slope instability given the relatively gradual sloping topography of the subject property and areas adjacent to the proposed development.

SEISMIC

Seismic Fault Lines

N.L. Olson has reviewed fault line mapping for the general area and subject property. N.L. Olson has utilized the Seattle and Tacoma Tsunami Hazard Mapping Project¹. The Tacoma Fault resides roughly 0.5 mile to 1 miles to the north of the subject property.

The fault trends east to west from Hood Canal to the Cascades, passing above Shelton, through Vashon Island, the Puget Sound and slightly north of the subject property through Federal Way. This fault is capable of magnitude 7.1 seismic events based on recent literature indicate that the most recent seismic events may have occurred roughly 500 to 1,500 years ago. N.L. Olson has illustrated the fault line mapping of this area on Figure 5.

Seismic Ground Shaking Summary

NLO has reviewed the IBC for seismic design criteria for the proposed construction. The site's ground acceleration was determined from the 2002 USGS Earthquake Hazard Program for the Conterminous 48 States. The PGA was based on the Site Coordinates: 47.282°N, 122.368°W. The interpolated probabilistic ground motion values (PGA) for Horizontal peak acceleration and spectral acceleration are as provided in the following table.

Recommended Seismic Design Ground Shaking Parameters IBC - 2012

NLO has reviewed the 2012 International Building Code (IBC) for seismic design criteria for the proposed construction in regards to soil only. The IBC seismic design parameters for this site include a seismic zone soil profile type C. The recommended seismic design ground shaking parameters are the values in Seismic Parameter (2012 IBC) Table presented below for Site Class C soils.

<u>Seismic Parameters (2012 IBC)</u>	<u>Values</u>
Mapped Spectral Acceleration Short Period (S_s)	1.292
Mapped Spectral Acceleration For One Second (S_1)	0.499
Site Class	C
Short period Site Coefficient (F_a)	1.00
1-second Site Coefficient (F_v)	1.30
MCE Spectral Response Acceleration for short period ($S_{MS}=S_s \times F_a$)	1.292
MCE Spectral Response Acceleration for one second ($S_{M1}=S_1 \times F_v$)	0.649
Design Spectral Response Acceleration for Short Period ($S_{DS}=2/3 \times S_{MS}$)	0.861
Design Spectral Response Acceleration for one second ($S_{D1}=2/3 \times S_{M1}$)	0.433
Design Peak Ground Acceleration (PGA=$S_{DS} \times 0.4$)	0.344

¹ NOAA Technical Memorandum OAR PMEL-132, SEATTLE AND TACOMA, WASHINGTON, TSUNAMI HAZARD MAPPING PROJECT: MODELING TSUNAMI INUNDATION FROM TACOMA; Angie J. Venturato¹, Chris C. Chamberlin¹, Diego Arcas, Joint Institute for the Study of the Atmosphere and Ocean (JISAO), University of Washington, Seattle, WA, Pacific Marine Environmental Laboratory, Seattle, WA, Pacific Marine Environmental Laboratory, Seattle, WA, January 2007

SOIL LIQUEFACTION

To generate the necessary ground acceleration to initiate liquefaction, an earthquake of magnitude 5.0 or greater is typically needed. The liquefaction process is brought about by seismic waves passing through poorly draining saturated granular soil. As the seismic wave propagates through the stratum, the soil particles at the individual level are packed into a tighter arrangement decreasing the initial void space. The decreasing void space causes a decrease in volume and a corresponding pore pressure increase. If the water pressure in the void space (pore pressure) is substantial, and cannot be dissipated, the soil takes on the property of a fluid (or liquefies) and the soil structure loses load-carrying ability.

The liquefaction induced settlement can cause differential settlement, significant structural damage to the wall linings, windows, doors and fixtures, concrete slab cracks and cracking along the building structural walls. Outside the residences, driveways and garages can be distorted due to liquefaction-induced settlement.

If the soil is susceptible to liquefaction, the underlying layers of the liquefiable soils could also be susceptible to a fluid-like horizontal slope movement known as lateral spread. This condition generally occurs on gentle slopes and along bank areas adjacent to waterbodies when the overlying soils are transported a short distance. On sites where lateral spreading can occur, the buildings can become distorted, resulting in cracks in concrete slabs and foundations, brick veneers, and internal linings.

In our liquefaction assessment, N.L. Olson has encountered glacially consolidated soils that are unlikely to liquefy given the highly compressed nature of the soil.

CONCLUSIONS & RECOMMENDATIONS

N.L. Olson has reviewed Geologic Mapping for the Tacoma area and the referenced geologic mapping indicates the site is underlain by Vashon Till (Qgt), which was verified during our recent subsurface exploration program. In our opinion, the area of proposed development is not located within geologic hazard that has been previously discussed regarding steep slope hazard, landslide hazard area, or seismic hazard and slope instability appears low.

The seismic hazard was reviewed for both liquefaction and proximity to the Seattle Fault Line. Our findings indicate that the Seattle Fault resides to the north roughly 0.5 mile to 1 miles to the north of the subject property. Given the site was comprised of glacially consolidated soils the liquefaction hazard in our opinion appears remote. If the recommendations presented in this report are implemented in the project design, and construction guidelines, the potential for of site erosion within or adjacent to the property, resulting from the proposed construction appears negligible.

Based on the soil conditions encountered during our subsurface exploration program, N.L. Olson has determined the property was underlain by both uncontrolled fill and glacial till. Our subsurface exploration program revealed uncontrolled fill daylighted to the east side of the subject property and became thicker, about 13 feet, along the subject property's west side. N.L.

Olson has delineated the approximate uncontrolled fill area as shown on the Site Plan, Figure 2. In our opinion, the combination of proposed building's weight and self-weight of the uncontrolled fill will contribute to consolidation of the underlying soils and result in the buildings future settlement and cracking. In order to mitigate future settlement and cracking concerns, NLO recommends removal of uncontrolled fill and re-compaction of suitable existing fill material or axially supporting the proposed building's foundation system. N.L. Olson does not advise building placement on existing uncontrolled fill.

If pin pile are not used to support the proposed buildings, N.L Olson strongly recommends removal of previously placed fill material down to the till and site grades brought back up to the desired construction elevation with structural fill.

In regards to stormwater infiltration with the west side of the property modified with uncontrolled fill soil, N.L. Olson encountered sandy silt soil conditions along the east side of the property. Subsurface water or very wet soil conditions were encountered at a relatively shallow depth of half a foot (0.5) to one (1) foot below present site grades. Along the west side of the site, similar soil conditions were encountered between the fill and till. A relatively wet sandy silt layer with poor percolation characteristics. N.L. Olson also observed that uncontrolled fill exists above the till. In our opinion, the encountered organic laden soils encountered along the west side of the property will be not conducive to infiltration. Along the east side of the property, wet sandy silty soils were encountered that may prove to be difficult to infiltrate given the high subsurface water level and high fines content of the soil being that it's a sandy silt.

This study has been prepared for specific application to this project only and in a manner consistent with that level of care and skill ordinarily exercised by other members of the profession currently practicing under similar conditions in this area for the exclusive use N.L. Olson & Associates, Inc. and their representatives. No warranty, expressed or implied, is made. This study, in its entirety, should be included in the project contract documents for the information of the contractor. In the event that change in the nature, design, or location of the proposed construction is made, or any physical changes to the site occur, recommendations are not be considered valid unless the changes are reviewed by NLO and conclusions of this report are modified or verified in writing.

SITE PREPARATION AND GRADING

All pavement, slab-on-grade, fill and/or building areas should be stripped of all sod, organic soil, existing fill and debris. In most undisturbed areas of the site, a stripping depth of about 3 inches to 4 inches should be anticipated. However, deeper excavations potentially up to 12 feet to 13 feet as measured below present site grades will be required to remove previously placed uncontrolled fill. Deeper excavations may also be required to remove large tree root-balls, old foundations, "filled in basement area", septic tanks and associated drain fields. Stripped soils, contaminated with organics or debris, should be wasted off site or used in landscape areas.

After site stripping and previously placed uncontrolled fill removed, N.L. Olson recommends the newly exposed subgrade should be proof rolled. If necessary compaction may be necessary to achieve a firm, unyielding condition. As a preliminary guideline the equipment should be of appropriate size and type capable of developing a minimum dynamic compaction effort rating of

at least 25,000 pounds with a static smooth drum weight of 13,000 pounds. Compaction of the stripped subgrade should be continued until field density tests indicate a minimum compaction of 95% of the maximum dry density, as determined by ASTM method D-1557, has been achieved in all fill, building, roadway, and parking areas. Soft or weaving areas disclosed during proof rolling shall be excavated and replaced with compacted structural fill. Areas, which are to be filled to bring the building or pavement grades up to the desired elevation, should be filled with compacted granular material free from roots, trash or other deleterious materials. We recommend that all site grading and preparation be undertaken and completed during dry weather with soils. If grading in building, or pavement areas is necessary during wet weather, we recommend that all soil excavated on-site be removed from the site or set aside in covered stockpiles, and structural fill as defined below for the purposes of grading.

STRUCTURAL FILL

Structural fill is defined as compacted fill placed under buildings or pavements that consist of free draining gravelly sand having a maximum size of 1-1/2 inches and no more than 5.0% fines passing the No. 200 sieve. Soils with a fine content greater than 5 percent passing the 200 sieve will degrade if exposed to excessive moisture. All imported fill material should conform to the above recommendation regardless of the site's weather conditions. All Structural fill material should be submitted for approval to the Geotechnical Engineer at least 48 hours prior to delivery to the site.

Existing soils may be used if properly compacted and of an approved quality. During dry weather, most soils that are compactable and non-organic can be utilized as structural fill, between May 1 through September 30. Based on the results of our subsurface exploration, the on-site soils at the time of our exploration appear suitable for use as structural fill, provided grading operations are performed during dry weather. Existing soils with a fine content greater than 5 percent passing the 200 sieve will degrade if exposed to excessive moisture, and compaction and grading will be difficult or impossible if soil moisture significantly increases. Fill material being considered for on-site use should be submitted for approval to the Geotechnical Engineer at least 48 hours prior to site utilization.

COMPACTION REQUIREMENTS

All structural fill or on-site fills utilized for fill should be placed on a firm, properly prepared subgrade. Fill placement should be in loose lifts of approximately 8 inches in thickness, moisture content conditioned, and compacted to 95% of the maximum dry density as determined by ASTM D-1557 – Modified Proctor. The on-site fine grained soils utilized for fill should be moisture conditioned to within plus/minus 2 percent of the optimum moisture content prior to compacting. Additional fill layers shall not be placed, until the previous lift meets the compaction requirements presented in this report.

SURFACE AND SUBSURFACE WATER

To aid in minimizing potential erosion, it is recommended that the site should not be stripped and left without erosion protection for an extended period of time prior to the actual start of construction and/or landscaping. Silt fencing and other erosion control devices and measures may be required to control water runoff and sediment transport off the site.

It should be anticipated that perched water flows or water flows developed during periods of wet weather may occur in excavations as shallow as one to two feet below the present site grades. In that we are unable to predict where or when this might occur, we recommend that any development of seeps or flows be treated as a construction/maintenance problem.

Surface runoff from roofs, paved drive and hard surfaced areas should be intercepted, collected and disposed of away from the structures and slope areas. The discharge must be directed where the collected surface runoff will not impact structures, walls, or properties down slope of the site.

The contractor should also be aware that inter flow levels with in the upper soil horizon are not static. Although most of the inter flow levels fluctuations are dependent on the season. The amount of rainfall, surface water runoff, and other factors that develops can either elevate or decrease the inflow condition. In the wetter winter months (typically October through May), the inter flow level can be elevated and associated seepage rates increased.

FOUNDATIONS

Our subsurface exploration indicates varying soil conditions underlies the site. During our subsurface exploration work, uncontrolled fill was encountered along the western portion of the site, which extended down 13 feet below current site grades. The previously placed uncontrolled fill may be susceptible to settlement by both the weight of the buildings and self-weight of the fill if constructed on present grades. Given that the soil is comprised of a variety of materials and organics it will be very difficult to predict future settlement rates. Therefore, we do not recommend placing the proposed building's foundations on areas the uncontrolled fill soils may exist. The area of uncontrolled fill has been delineated on the Site Plan, Figure 2. In order to minimize settlement concerns, we have provided the following methods of foundation support:

- In the proposed building areas, the uncontrolled can be removed down to the dense underlying soil condition and the subsequent subgrade brought back to the desired construction grade with structural fill or suitable onsite soil.
- Another approach to help reduce potential fill thickness below proposed building's foundation would be to increase the building footing's stem wall height. By increasing the stem wall heights the structural fill requirements can reduced.
- The site grades can be dropped to the lower the proposed buildings finish floor elevation or the site terraced to better accommodate the underlying soil conditions.
- A combination of removing fill, altering site grades and modifying stem wall heights could be implemented if this method shows a cost savings to the project.
- The buildings can be axially supported with pin piles or other means of axial support. N.L. Olson has provide discussion later in this report.

General Foundation Guidelines

Unless otherwise stated, support for the planned structures can be provided utilizing a conventional shallow foundation system bearing on competent native soils or on structural fill. For the building's continuous and column footing system bearing on properly compacted structural fill or on dense native soils an allowable bearing pressure of 2,500 pounds per square foot (psf) can be used.

Building placement on structural fill or native dense soils will have an allowable soil bearing pressure of 2,500 pounds per square foot (psf).

For frost protections, footings should have a minimum embedment depth of 18 inches below adjacent grade. A base friction coefficient of 0.35 is considered appropriate for the expected dense site foundation soils. N.L. Olson has assumed that structural fill will be placed along or around the foundation and footing stem walls. An ultimate passive equivalent fluid earth pressure for retaining structures or foundation stem walls, considering a horizontal ground surface, of 250 pcf is available to develop additional resistance to lateral pressures.

Passive pressures should be ignored or appropriately reduced in areas where the ground slopes downward on the resisting side of the wall within 4 times the footing embedment depth of the wall. The upper two feet of soil should be neglected when calculating the passive resistance. A 1/3 increase in the above value may be used for short duration, wind, and seismic loads.

N.L. Olson should be on-site to verify all footing subgrade areas to determine if adequate foundation subgrade soils have been reached or if additional over excavation or compaction is required. If necessary, N.L. Olson may recommend that over excavation below the proposed bottom of anticipated footing level and backfilling with structural fill, crushed rock or CDF to derive the allowable soil bearing pressure. Prior to material placement, N.L. Olson recommends or review of structural fill, crushed rock or CDF and provide approval in writing that this material will meet foundation bearing requirements.

We recommend that a geotechnical engineer be on site to observe all shallow foundation subgrade areas prior to the placement of concrete formwork or rebar.

Foundations Settlement

Based on the provided allowable soil bearing pressures, total settlement in the range of one inch is anticipated with differential settlement of about ½ inch over a span distance of 50 linear feet. Most of the anticipated settlement should occur during construction as dead loads are applied.

Subsurface Drainage

To preclude groundwater build-up adjacent to the building's footing system, we recommended a perforated four (4)-inch diameter pipe - SDR 35 (ASTM 3034). The pipe's perforations must be placed down at the footing subgrade elevation around the bottom of footing level around the

foundation perimeter. The footing drainage system should be bedded in sand and gravel and designed to carry any accumulated water away from the structure to an appropriate discharge area.

N.L. Olson does not recommend connecting the roof drainage directly into the footing drain system because of the resulting soil saturation of the wall's backfill area. The footing drain system, however, will need to be connected into a similar disposal system as the roof down spout's.

SLAB-ON-GRADE FLOORS

Slab-on-grade floors may be supported on properly placed and compacted structural fill or on the dense to very dense in-situ native soils, following site preparation guidelines discussed above. A capillary break/drainage layer consisting of six inches of pea gravel, or clean crushed rock should be placed below the floor slab. The capillary break material should contain less than 1.0% material passing a U.S. No. 200 sieve and less than 4.0% material passing a U.S. No. 10 sieve. A visqueen vapor barrier having a minimum thickness of 6-mils should be placed between the capillary break and the floor slab. We understand that a sand cushion between the vapor barrier and the base of the slab may improve the curing of the slab concrete. If a sand cushion is placed between the capillary break material or the vapor barrier and the slab, it should not contain free moisture when the slab is constructed. Excess moisture in the cushion could cause impervious floor coverings to bubble.

PIN PILES

NLO has recommended axial anchor support for the proposed structures to include proposed floor slabs. The support provided by the proposed pin piles will provide a means of transferring building and floor slab loads down to the underlying dense soils, which should mitigate future settlement.

Due to the slenderness of the pin piles, no lateral pile capacity should be assumed. Lateral loads can be resisted by passive soil pressures acting against the buried portion of the foundation and grade beams. This will require the foundation or grade beams to be backfilled with structural fill. For passive earth pressure, the available resistance can be computed using an equivalent fluid pressure of 250 PCF. The lateral resistance value is an allowable value with a factor of safety of 1.5. As movement of the foundation element is required to mobilize full passive resistance, the passive resistance should be neglected if such movement is not acceptable.

Pin Piles

Based on the anticipated depths that may be required to embed the pin piles and buckling concerns, NLO is recommending 3 to 4 inch diameter pin piles for support of the existing structures strip and column footing areas.

Pin piles consist of 2, 3 and 4 inch diameter pipe driven with a jack hammer or track mounted pneumatic hammer. We have provided a chart below that provides the allowable capacity for the pin piles and hammer sizes. We recommend that the 3 and 4 inch pin piles should consist of schedule 40 galvanized pipe. Pin piles are typically cut in 5 to 10 feet lengths with the ends

cut perpendicular to the pipe. As the pin pile is advanced slip couplers are added between the pipe sections. In order to achieve the pin piles allowable capacities please see the refusal criteria in the table below identified as Pin Pile Summary, Table 3.

Pin Pile Summary Table 3			
Pin Pile Diameter	Hammer Size (lbs)	Refusal Criteria.	Allowable Pile Capacity
2 inch (Schedule 80)	90	Less than one inch of penetration for one continuous minute of driving	2 tons
3 inch (Schedule 40)	750	Less than one inch penetration for ten seconds of continuous driving at one thousand blows a minute for three cycles	6 tons
4 inch (Schedule 40)	850	Less than one inch penetration for ten seconds of continuous driving at one thousand blows a minute for three cycles	10 tons
<p><u>Notes:</u></p> <p>NLO does not recommend 2 inch pin piles for support of the building's foundation strip and column foundation areas based on anticipated pipe lengths, encountered soil conditions and foundation loads. However, the 2 inch diameter piles can be utilized to structurally support the floor slab.</p> <p>N.L. Olson will provide recommendations for pile lengths when the buildings' finish floor elevation have been finalized.</p>			

Based on previous experience with similar soil conditions, NLO is recommending that pile verifications test should be performed if refusal criteria cannot be achieved. NLO will provide testing procedures for pin pile placement at the time of installation.

SLOPES

Temporary Slopes

As a preliminary guideline for temporary slopes less than 10 feet in height, we recommend temporary slopes be made no steeper than 1H:1.5V for the dense granular soils and no steeper than 2H:1V in medium dense soils or structural fill placed in a manner described earlier in this report. The provided temporary slope recommendations have accounted for mechanical vibrations from traffic that will be occurring along the access drive area and along 17th Avenue SW. For temporary cut slopes in existing fill, topsoil, or loose materials over 12 feet in height, we recommend temporary slopes no steeper than 1 1/2H:1V for the full height of the cut. Temporary slopes or excavations should be benched as required by safety regulations in effect at the time of construction. The provided temporary slope recommendations are for native soils and fill materials; flatter slopes may be required in wet weather or if soil conditions other than those previously described are encountered.

Permanent Slopes

It is recommended that permanent cut slopes should not be steeper than 2H:1V (50%). Fill slopes should be placed in accordance with the requirements of Appendix J of the International Building Code (2012 edition). In areas where steeper slopes are required, retaining structures

should be provided. It should be anticipated that, if steeply cut, the near surface soils may be subject to caving, and sloughing will occur as the soils are exposed to drying. All temporary cuts and excavations should be sloped or shored in accordance with local, state and federal requirements.

The contractor should be aware that slope height, slope inclination, and excavation depths (including utility trench excavations) should in no case exceed those specified in local, state, or federal safety regulations; e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations. Such regulations are to be strictly enforced and, if not followed, the owner, the contractor, or the earthwork or utility subcontractors could be liable for substantial penalties. The contractor should be made responsible for the stability of all excavations and slopes during construction because they are continually on site and can observe the stability of the exposed soils. In addition, the contractor should be prepared to shore unstable slope area and provide shoring as required by local, state, or federal laws or codes. The provision of shoring design recommendations is beyond the authorized scope of this report.

Recommendations for slopes are provided solely as a service to our client. N.L. Olson, under no circumstances, assumes liability for the site with regard to safety or other construction activities directed by the contractor.

EROSION CONSIDERATIONS

During construction and until fully surfaced and/or landscaped, the exposed site soils may be subject to erosion. Erosion of exposed soils would be most noticeable during periods of intense rainfall and may be controlled by the use of normal erosion control measures, i.e., silt fences, hay bales, mulching, control ditches or diversion trenching, and contour furrowing. All disturbed soil areas and slopes should be replanted with fast-growing, deep-rooted grass, shrubs and other ground cover as soon after final grading as possible. If the vegetation is not fully established prior to the onset of wet weather, the slopes should be covered with visqueen to aid in preventing excessive erosion and water infiltration.

In a disturbed condition the site soils may be eroded by channelized water or sheet flow storm runoff. Therefore, it is recommended that all site preparation and excavation work be completed during the normally drier portion of the year. During periods of heavy rainfall, ditching should be used to divert water away from stripped areas and visqueen should be used to cover the slopes and soil stockpiles to aid in preventing excessive surface erosion. This covering also aids in preventing infiltration of water into the unprotected soils. In order to enhance the long-term stability of the slope, the surface runoff from the proposed development will need to be collected and directed away from slope areas.

CAST-IN-PLACE WALLS

The following earth pressures and design values are provided for cast-in-place retaining structures up to 10 feet in height. We recommend that all retaining wall foundations be designed as outlined above and bear on the dense to very dense native soils or structural fill placed and compacted as previously described.

Retaining Wall Loading Conditions

Retaining and subsurface walls should be designed for an active equivalent fluid pressure of 35 pcf, if the top of the wall is allowed to deflect, assuming a horizontal ground surface behind the wall. If the top of the wall is restrained an equivalent fluid pressure of 55 pcf is recommended. This restrained and active equivalent fluid pressure values have assumed a level backfill area above the wall. At the client's request, N.L Olson will provide specific information for active or restrained earth pressures for sloping ground or surcharge loads (such as vehicle traffic) behind the wall.

Resistance to sliding could be developed by a combination of passive pressure and base friction. A base friction coefficient of 0.35 is considered appropriate for the expected dense site foundation support soils. An ultimate passive equivalent fluid earth pressure for retaining structures, considering a horizontal ground surface, of 250 pcf is available to develop additional resistance to lateral pressures. Passive pressures should be ignored or appropriately reduced in areas where the ground slopes downward on the resisting side of the wall within 4 times the wall footing embedment depth. Appropriate safety factors by the design engineer should be applied to the provided base friction coefficient and ultimate passive pressure values.

Earthquake Loading

Earthquake loadings are also expected to increase the lateral pressures indicated above. The increases for most basement walls have historically been expected to be within limits that are generally compensated for with a reduced safety factor (Seed, H. B. & Whitman, R. V., Design of Earth Retaining Structures for Dynamic Loads, 1970 Specialty Conference on Lateral Stresses in the Ground and Design of Earth Retaining Structures, American Society of Civil Engineers, 1970). However, the increases in lateral loadings from earthquake forces are expected to provide a slightly increased component of the lateral pressures to be taken into consideration in the structural design of buried walls. Seed and Whitman discuss a procedure for determination of lateral loading following an approach suggested by Mononobe and Okabe. As input to the Mononobe-Okabe evaluation, a friction angle of 35 degrees for the backfill soils that will be placed between the wall and retained soil area and a horizontal earthquake acceleration, $K_r = \text{PGA}/2$ or $K_r = .17$.

Based on this input and some assumptions on wall friction, an earthquake loading surcharge of 10H (equivalent fluid pressure), for unrestrained walls, and 14H, for restrained walls is recommended. This loading is additive to the static "active" and "at-rest" pressures indicated above. This equivalent fluid pressure fluid pressure values have assumed a level backfill area above the wall. The application of this loading depends on the wall type chosen. The earthquake surcharge loading should be applied as a uniform distributed load evenly distributed along the back portion of the retaining structure.

The above-recommended pressures do not include the effects of hydrostatic pressure on the wall as N.L Olson has assumed a drained condition will exist along the wall's backfill section. Therefore, the maintenance of a dewatered/draind condition behind all retaining structures is required for the above values to be valid. In order to maintain the free draining condition along

the wall's backfill section, N.L Olson has recommended the following drain system and backfill requirements.

Retaining Wall Subsurface Drainage

A longitudinal sub-drain with a minimum diameter of 4 inches should be constructed at the base of the footing elevation behind the walls. This drain should be 4-inch diameter and consist of SDR 35 (ASTM 3034) perforated pipe laid perforations down, bedded in an eighteen-inch envelope of free-draining sand and gravel. This system should be sloped to drain with the water disposed of in the storm drainage system. Clean-outs should be provided at bends and convenient intervals, so that the drainage system can be maintained to a well-functioning condition. Flexible plastic piping (such as corrugated ADS-type piping) should not be used behind the wall.

Retaining Wall Backfill

All wall backfill over the gravel envelope should consist of clean, free-draining, well-graded sand and gravel containing less than 2.0% fines (material passing a U.S. No. 200 sieve). This material should extend out from the rear wall face a minimum of eighteen inches. The free-draining backfill should be placed to the surface in paved areas or to within eighteen inches of the surface in non-paved areas. Backfill should be compacted as recommended above for fills. In non-paved areas, the final eighteen inches of backfill should consist of topsoil or native materials firmly tamped into place.

SUBSURFACE WATER CONDITIONS

The contractor should be aware that subsurface water should be anticipated. As indicated in this report, the finish floor elevations for the proposed structure has been floor established at roughly el 403 to el 405 with the excavation being below present site grades that may collect surface runoff from either precipitation or seeps from the upper soil horizon near the upper contact layer of glacial till. Because of the likelihood that surface runoff may enter the exaction area, N.L. Olson anticipates that standing water conditions could develop that could make placement of the concrete formwork difficult and the contractor should have the contingency in their budget for removal of standing water conditions from the excavation area.

UTILITY TRENCHES

Safety Guidelines

The contractor shall excavate utility trench excavations in accordance with specified local, state, or federal safety regulations; e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations. The contractor should be made responsible for the stability of all utility trench excavations during construction because they are continually on site and can observe the stability of the exposed soils. The contractor should be prepared to shore any unstable trench wall areas and provide shoring as required by local, state, or federal laws or codes.

Vibration from equipment or traffic should be minimized near trench walls and prevent repeated wetting and drying of excavation side slopes. Depending on the locality and utility trench

excavation depth, groundwater seepage into the trench could occur. Design of temporary dewatering systems to remove standing water from trenches should be the responsibility of the contractor. The provision of shoring design recommendations is beyond the authorized scope of this report.

Trench Backfill Procedures

Compaction of utility trenches shall be determined with field density tests as determined by the maximum dry density ASTM method D-1557. Compaction requirements for the utility trench are as follows:

- Compaction of at least 95 percent for utility trench backfill placed in or adjacent to buildings and exterior slabs.
- Compaction of at least 95 percent for the upper 2 feet of utility trench backfill placed in pavement areas.
- At least 90 percent below 2 feet in utility trench backfill underlying pavement areas.
- Utility trench backfill shall consist of structural fill and the pipe bedding should be placed in accordance with pipe manufacturer's recommendations.

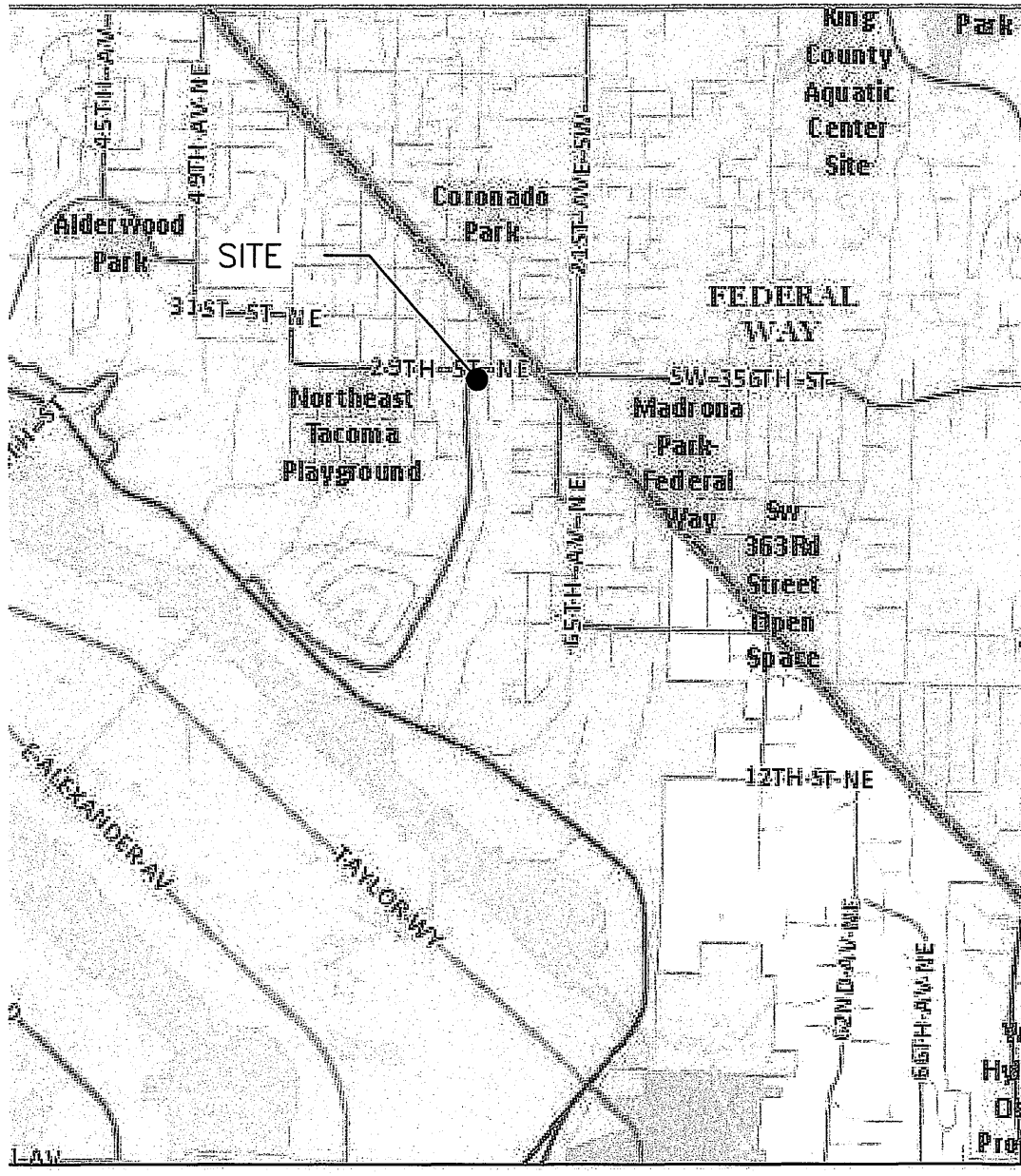
The contractor is fully responsible for achieving the specified compaction recommendations. N.L Olson may direct the contractor to remove, correct or amend fill soils that fail to comply with the structural fill criteria presented in this report. The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

REPORT LIMITATIONS

This report has been prepared for the client regarding the subject property. Information presented in this report has been collected and interpreted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions, and in accordance with sound and generally accepted principles consistent with normal consulting practice. No other warranty, expressed or implied, including (but not limited to) any warranty or merchantability or fitness for a particular use has been made.

In the event that change in the nature, design, or location of the proposed construction is made, or any physical changes to the site occur, recommendations are not be considered valid unless the changes are reviewed by N.L Olson and conclusions of this report are modified or verified in writing.

N.L Olson should be retained to provide geotechnical services during construction. This is to observe compliance with the design concepts, specifications or recommendations and to allow design changes in the event subsurface conditions differ from those anticipated prior to the start of construction. We do not accept responsibility for the performance of the foundation or earthwork unless we are retained to review the construction drawings and specifications, and to provide construction observation.



SCALE
NONE

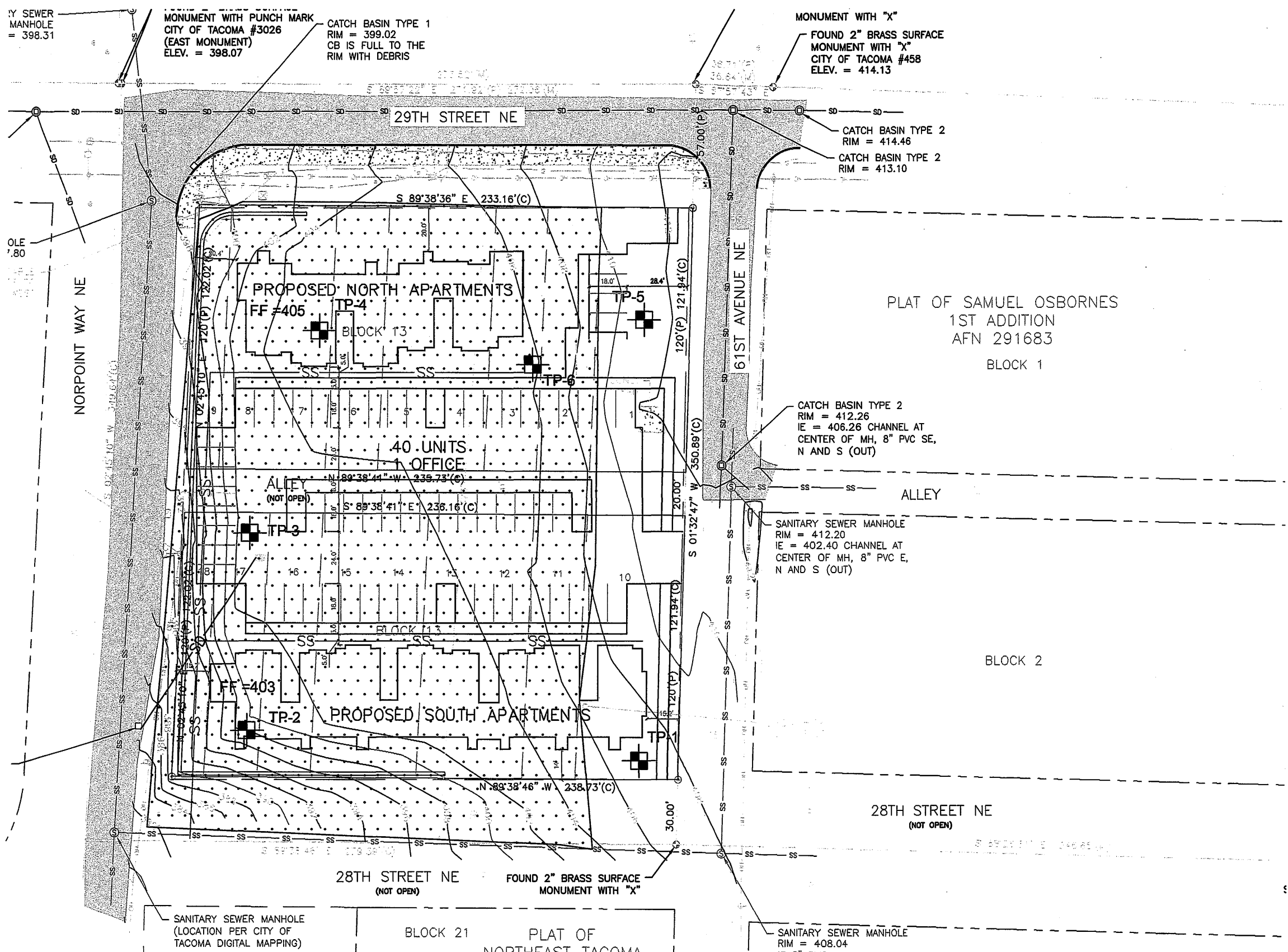
FIG 1

 **N.L. Olson & Associates, Inc.**
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

VICINITY MAP
PROPOSED DEVELOPMENT
NEAR NORPOINT WAY NE AND 29TH ST NE
TACOMA, WA

SCALE: AS SHOWN
DATE: MAY 2016
DRAWING NUMBER: 16-9120

SCALE
1" = 50'



TEST PIT LOCATION
TP-5

MARCH 18, 2016

APPROXIMATE
UNCONTROLLED
FILL AREA

FIG 2

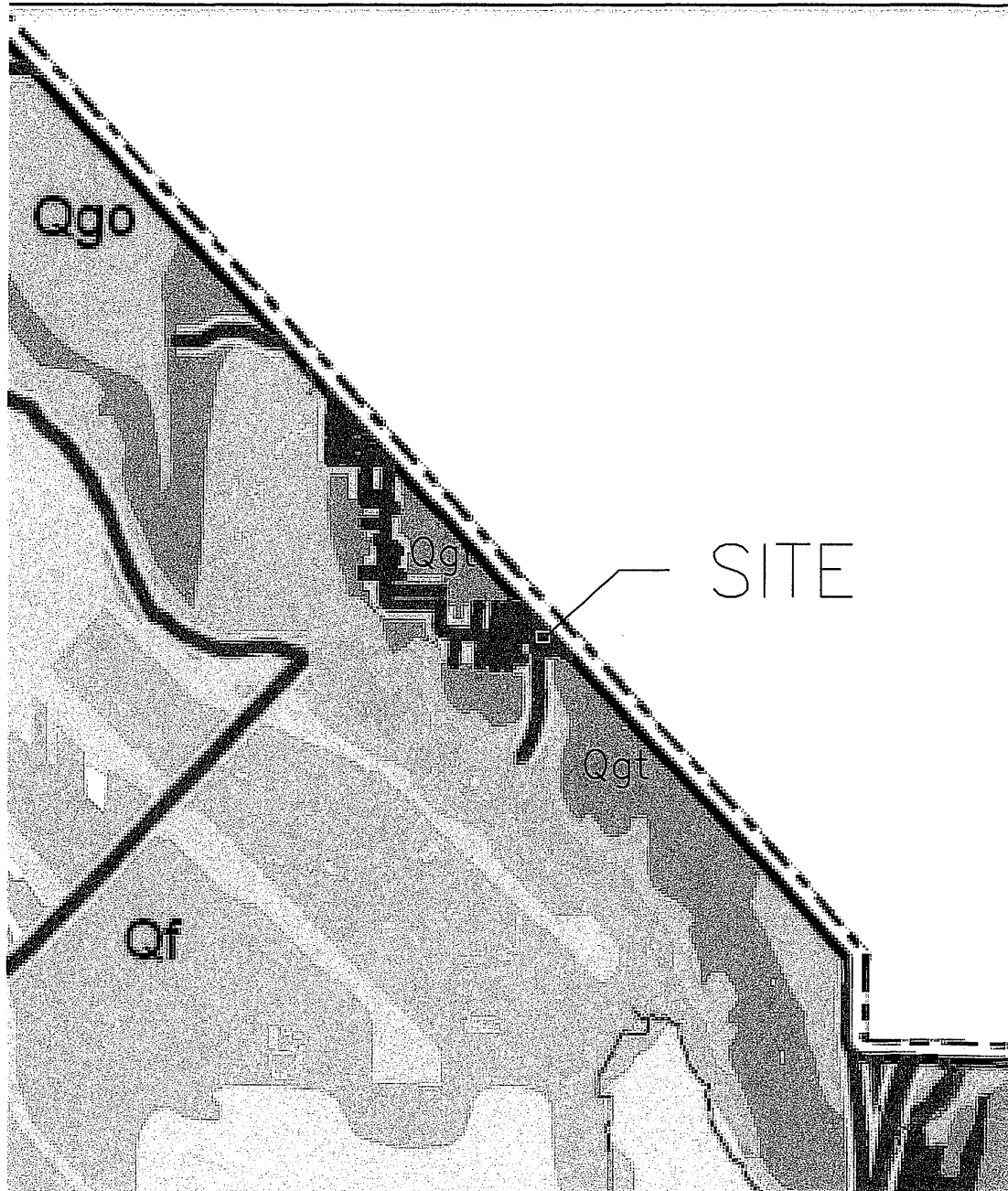
REVISIONS				BY	DATE
NO.	DATE	BY	DESCRIPTION		

N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

**SITE PLAN
EXISTING CONDITIONS**
NORPOINT WAY NE AND 29TH ST NE
TACOMA, WA

ATTN: **Fulcrum Real Estate Services**
Attn: Nick Parodi
6009 Capitol Blvd. SW
Tumwater, WA 98501

SCALE: AS SHOWN
DATE: MAY 2016
DRAWING NUMBER: 16-9120
SHEET OF




 SCALE
 NONE

THE GEOLOGIC MAP OF PIERCE COUNTY, SHORELINE MASTER PROGRAM UPDATE, GEOLOGY, MAP 7, INDICATED THE SUBJECT PROPERTY IS UNDERLAIN BY VASHON TILL (Qgt) SOIL. THE VASHON TILL IS COMPRISED OF CLAY, SILT, SAND, PEBBLES AND COBBLES WITH THE OCCASIONAL LARGE BOULDER. THE COLOR OF THIS MATERIAL APPEARS GRAY TO BLUE ON A FRESHLY EXPOSED SURFACE AND MAY WEATHER TO BROWN OR YELLOW. VASHON TILL IS EXTREMELY COMPACT AND WILL STAND NEAR VERTICAL ALONG CLIFFS, WHICH GENERALLY LACKS SURFICIAL CRACKS OR JOINTS. THE GRAVEL, COBBLE AND BOULDERS WITHIN THE GLACIAL TILL MATRIX ARE SUB ANGULAR TO ROUNDED WITH SOME LARGER CLASTS EXHIBITING STRIATIONS AND FACETING.

Fig 3


N.L. Olson & Associates, Inc.
 Engineering, Planning and Surveying
 (360) 876-2284
 2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

GEOLOGIC MAPPING
PROPOSED DEVELOPMENT
NEAR NORPOINT WAY NE AND 29TH ST NE
TACOMA, WA

SCALE: AS SHOWN
DATE: MAY 2016
DRAWING NUMBER: 16-9120

LU16-0198 Norpoint Standing Rezone
 Exhibit 11

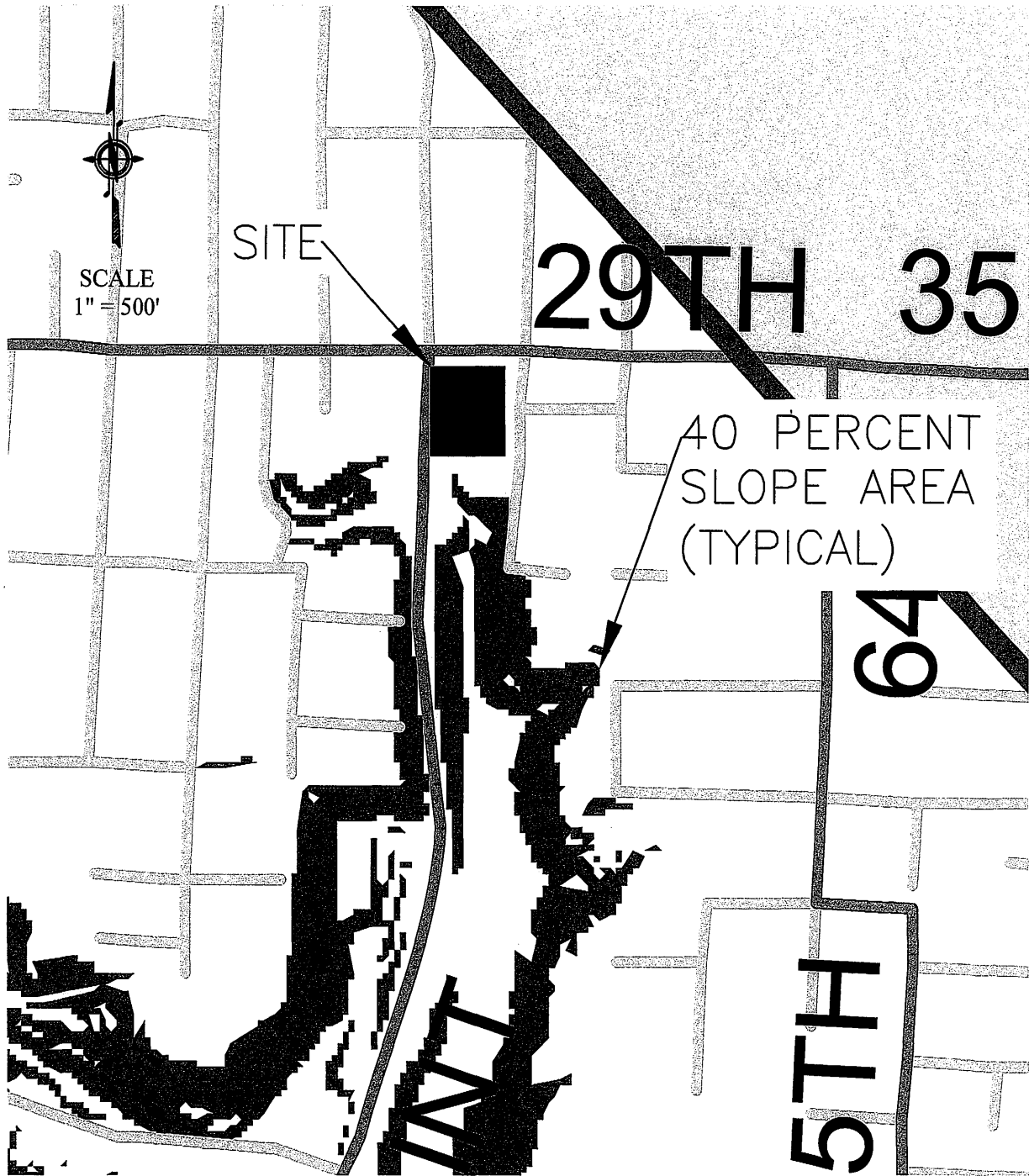
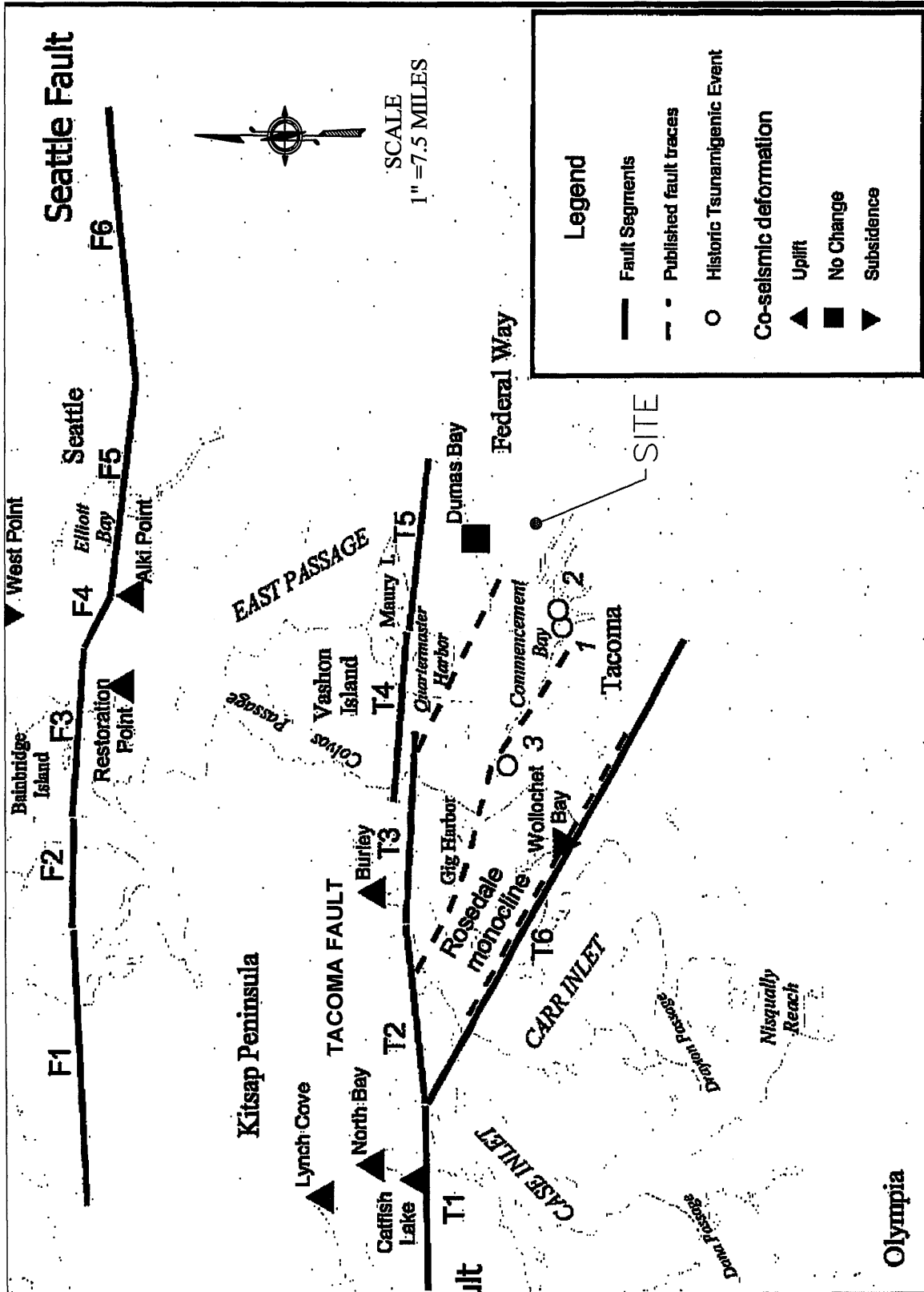


Fig 4

N.L. Olson & Associates, Inc.
 Engineering, Planning and Surveying
 (360) 876-2284
 2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

TACOMA SLOPE STABILITY MAPPING
40% SLOPES
 NORPOINT WAY NE AND 29TH ST NE
 TACOMA, WA

SCALE:	AS SHOWN
DATE:	MAY 2016
DRAWING NUMBER:	16-9120
SHEET	OF



NOAA TECHNICAL MEMORANDUM OAR PMEL-132, SEATTLE AND TACOMA, WASHINGTON, TSUNAMI HAZARD MAPPING PROJECT

Fig 5

N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 876-2284
2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98368

TACOMA FAULT LINE MAPPING
PROPOSED DEVELOPMENT
NEAR NORPOINT WAY NE AND 29TH ST NE
TACOMA, WA

SCALE:	AS SHOWN
DATE:	MAY 2016
DRAWING NUMBER:	16-9120
SHEET	OF

APPENDIX A

SUBSURFACE EXPLORATION DISCUSSION

TEST PIT LOGS

N.L. Olson was informed to be on-site to determine the site's suitability for stormwater infiltration. The test pits were excavated with a Kamatsu WB-140 back hoe. The subsurface exploration occurred on March 18, 2016. The contractor who performed the services was R-Cam who was arranged to be on-site by the client. The site's subsurface soil conditions were explored with six (6) test pits advanced to a maximum depth of 14.0 feet below current site grades within the project area. The test pit locations are shown on the Site Plan, Figure 2. For a more detailed description of the subsurface investigation, please refer to this appendix.

Stratification lines designating the interface between soil types in subsurface exploration logs represent approximate boundaries. The transition between materials may be gradual. The depths represented on our test pits logs were referenced to present site grades encountered during our subsurface exploration work.

The subsurface exploration logs and related information depicts conditions only at the specific locations and at the particular time designated on the logs. The passage of time may result in a change of subsurface conditions at these exploration locations. Subsurface conditions at other locations may differ from conditions occurring at the exploration locations. The nature and extent of variations of subsurface conditions between explorations are not known. If variations appear during additional explorations or construction, reevaluation of recommendations in this report may be necessary.

Job Number: 9120G	Logged By: WRJ	Subsurface Exploration		Ground Surface Elevation 407	Test Pit Number TP-1	Page 1 of 1
		Start Date: 3/18/16	End Date: 3/18/16			

General Notes Sample Collected	Graphic Symbol	USCS SYMBOL	Depth (ft)	Geologic Code	Surface Conditions: Cotton woods
		TPSL			4"-6" Topsoil
2.0		ML	1 2 3		Brown sandy SILT, wet, stiff - Very fine to fine grained sand - Contains trace gravels - Slight iron oxide staining el.
4.0		SM	4 5 6		Gray silty SAND with gravel, moist, very dense, glacially consolidated - Fine to medium grained sand - Contains trace cobbles el.
7.0			7		End of Test Pit 6.5 ft bgs
			8 9 10 11 12 13 14 15 16 17 18		

Contractor R-Cram	Operators Name Jack	Sampling Method Grab	Drawn By: NJL	Date 4/13/16	Test Pit Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
Equipment Kamatsu WB140		Groundwater Elevation 0.5' bgs	Checked By: WRJ	Date 4/13/16	
Notes:			Revision By:	Date	

Job Number: 9120G	Logged By: WRJ	Subsurface Exploration		Ground Surface Elevation 398'	Test Pit Number TP-2	Page 1 of 1
		Start Date: 3/18/16	End Date: 3/18/16			

General Notes Sample Collected	Graphic Symbol	USCS SYMBOL	Depth (ft)	Geologic Code	Surface Conditions: Tall Grass and Cotton woods, wet surface
		TPSL			2"-4" Topsoil
4.0		SM	1		Fill?: Brown silty SAND, moist, loose - Seepage at 3' bgs - Grades to gray and gravel/cobble content increases at 4' bgs
			2		
			3		
			4		
			5		
			6		
10.0 11.0		ORG	7		Fill?: Dark brown topsoil strippings with organics Black forest duff/strippings - Tree branches and forest byproducts - Plastic fragments - Seepage at 12' bgs
			8		
			9		
			10		
			11		
			12		
12.0		SM	13		Native?: Gray silty SAND with gravel, moist, dense, glacially consolidated - Fine to medium grained sand
			14		End of Test Pit 13.0 ft bgs
			15		
			16		
			17		
			18		

Contractor R-Cram	Operators Name Jack	Sampling Method Grab	Drawn By: NJL	Date 4/13/16	Test Pit Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
Equipment Kamatsu WB140		Groundwater Elevation 3' and 12' bgs	Checked By: WRJ	Date 4/13/16	
Notes:			Revision By:	Date	

Job Number: 9120G	Logged By: WRJ	Subsurface Exploration		Ground Surface Elevation 402	Test Pit Number TP-3	Page 1 of 1
		Start Date: 3/18/16	End Date: 3/18/16			

General Notes Sample Collected	Graphic Symbol	USCS SYMBOL	Depth (ft)	Geologic Code	Surface Conditions: Tall Grass and Cotton woods, wet surface
		TPSL			2"-4" Topsoil
2.0		SM	1		Fill?: Brown silty SAND with gravel, moist, loose to medium dense - Grades to gray and cobble content increases at 3' bgs
			2		
			3		
4.0			4		
			5		
6.0		ORG	6		Fill?: Dark brown silty SAND with organics
			7		
			8		
10.0		ML	9		Fill?: Gray sandy SILT, moist to wet, soft, mottled - Contains organics
			10		
13.0		SM	11		Native?: Grayish brown silty SAND with gravel, moist, medium dense - Fine to medium grained sand
			12		
			13		
14.0			14		Grayish brown silty SAND with gravel, moist, dense, glacially consolidated
			15		End of Test Pit 14.0 ft bgs
			16		
			17		
			18		

Contractor R-Cram	Operators Name Jack	Sampling Method Grab	Drawn By: NJL	Date 4/13/16	Test Pit Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
Equipment Kamatsu WB140		Groundwater Elevation 9' bgs	Checked By: WRJ	Date 4/13/16	
Notes:			Revision By:	Date	

Job Number: 9120G	Logged By: WRJ	Subsurface Exploration		Ground Surface Elevation 404	Test Pit Number TP-4	Page 1 of 1
		Start Date: 3/18/16	End Date: 3/18/16			

General Notes Sample Collected	Graphic Symbol	USCS SYMBOL	Depth (ft)	Geologic Code	Surface Conditions: Scotch broom, blackberries and Cotton woods.
		TPSL			2"-4" Topsoil
2.0		SM	1		Fill?: Brown silty SAND with gravel/cobbles, moist, loose to medium dense - Fine to medium grained sand - Pavement rubble at 18" bgs
2					
3					
4					
5					
6					
7					
8					
7.0		ORG	9		Fill?: Dark brown silty SAND with organics, moist, loose - Contains wood byproducts - Tree stump at 9' bgs
8.0			10		
9.0		SM	11		Native?: Grayish brown silty SAND with gravel, moist, medium dense, glacial till - Becomes very dense at 13' bgs
13.0			12		
			13		End of Test Pit 13.0 ft bgs
			14		
			15		
			16		
			17		
			18		

Contractor R-Cram	Operators Name Jack	Sampling Method Grab	Drawn By: NJL	Date 4/13/16	Test Pit Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
Equipment Kamatsu WB140		Groundwater Elevation	Checked By: WRJ	Date 4/13/16	
Notes:			Revision By:	Date	



N.L. Olson & Associates, Inc.

Engineering, Planning and Surveying
2453 BETHEL AVENUE
P.O. BOX 637
PORT ORCHARD, WASHINGTON 98366-0637

Test Pit Logs


Fulcrum - Site 1
Norpoint Way NE and 29th Street NE
Tacoma, WA

Job Number: 9120G	Logged By: WRJ	Subsurface Exploration		Ground Surface Elevation 411	Test Pit Number TP-5	Page 1 of 1
		Start Date: 3/18/16	End Date: 3/18/16			

General Notes Sample Collected	Graphic Symbol	USCS SYMBOL	Depth (ft)	Geologic Code	Surface Conditions:
		TPSL			Scotch broom, blackberries and Cotton woods
2.0		ML	1		4"-6" Topsoil
			2		
		3		SM	
			4		End of Test Pit 4.0 ft bgs
			5		
			6		
			7		
			8		
			9		
			10		
			11		
			12		
			13		
			14		
			15		
			16		
			17		
			18		

Contractor R-Cram	Operators Name Jack	Sampling Method Grab	Drawn By: NJL	Date 4/13/16	Test Pit Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
Equipment Kamatsu WB140		Groundwater Elevation 0.5' bgs	Checked By: WRJ	Date 4/13/16	
Notes:			Revision By:	Date	

Job Number: 9120G	Logged By: WRJ	Subsurface Exploration		Ground Surface Elevation 406	Test Pit Number TP-6	Page 1 of 1
		Start Date: 3/18/16	End Date: 3/18/16			

General Notes Sample Collected	Graphic Symbol	USCS SYMBOL	Depth (ft)	Geologic Code	Surface Conditions: Scotch broom, blackberries and Cotton woods
		TPSL			4"-6" Topsoil
2.0		SM	1		Brown sandy SILT with gravel, moist to wet, loose to medium dense - Seepage at 3' to 4' bgs
			2		
			3		
			4		
			5		
			6		
			7		
			8		
			9		
8.0					el.
9.0					Brownish gray silty SAND with gravel, moist, very dense, glacially consolidated el.
			10		End of Test Pit 4.0 ft bgs
			11		
			12		
			13		
			14		
			15		
			16		
			17		
			18		

Contractor R-Cram	Operators Name Jack	Sampling Method Grab	Drawn By: NJL	Date 4/13/16	Test Pit Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
Equipment Kamatsu WB140		Groundwater Elevation 0.5' bgs	Checked By: WRJ	Date 4/13/16	
Notes:			Revision By:	Date	

To: Shirley Schultz
From: Nick Parodi – LPI Holdings, LLC
RE: Site Rezone request for the parcels:
6350000900, 6350000890, 6350000880, 6350000940, 6350000930, 6350000910, 6350000920

Dear Shirley,

Please find attached the following items:

1. Site Plans to scale for our intended use of the above-mentioned parcels
2. Unit Floorplans to scale of our intended units
3. Building Elevations to scale for our intended buildings
4. SEPA Checklist completed and Signed
5. Traffic Impact Analysis
6. Geotechnical report
7. Proposed Landscape Plan
8. Responses to Criteria (Below)
9. Commentary on our project (Below)

LPI Holdings, LLC intends to develop the above-mentioned parcels into a 47-unit multi-family project with an estimated 65 parking stalls with the name of Norpoint Landing. The project is planned to have the following unit mix:

Studios:	12 Units
1 Bed 1 Bath:	12 Units
2 Bed 2 Bath:	18 Units
3 Bed 3 Bath:	5 Units

Operations

This property will be managed by Fulcrum Real Estate Services, Inc., an established multi-family property management company managing approximately 1,000 units across Thurston and Pierce counties. Nick Parodi, principal of LPI is the president of Fulcrum Real Estate Services, Inc.

The project will employ all best practices of resident screening, leasing practices, resident relations / management and building maintenance and will be an asset to the community.

The project proforma has units priced to meet a top-third of median income level. LPI Holdings, LLC understands the affordable requirement associated with this zoning request and will designate the appropriate number of units which is understood to be 25% or 10 units as Affordable Units with income restriction of residents who earn 50% or less of Area Median Income for Pierce County.

Vacation

There is currently an unimproved alley right of way bisecting our assemblage of parcels traveling from East to West. We are in process with Real Property Services to receive a vacation of this alley (No 124.1361, Project 15-222). We have submitted full payment for the value of the vacated piece as well as the valuation fee.

Site Rezone Responses to Criteria:

1. The change of zoning classification is generally consistent with its land use intensity designation and the Comprehensive Plan:
 - a. The Comprehensive Plan has designated this area as Neighborhood Commercial. We believe that our site will be rezoned as part of this designation to our desired zoning of C-1.
2. Substantial changes in conditions have occurred affecting the use and development of the property that would indicate the requested change in zoning is appropriate:
 - a. There is a latent demand for multi-family housing in the Northeast Tacoma area. Furthermore, the Comprehensive Plan has changed the designation of this land in line with our intended use.
3. If it is established that a rezone is required to directly meet the provisions of the Comprehensive Plan, it is unnecessary to demonstrate changed conditions supporting the requested rezone.
 - a. We believe our site falls under this provision.
4. The change is consistent with the district establishment statement for the zoning classification being requested.
 - a. Our intended use as a multi-family housing project is expressly in line with the zoning classification being requested of C-1.
5. The change of zoning classification will not result in a substantial change to an area-wide rezone action taken by the City Council in the two years preceding the filing of the rezone application.
 - a. We do not believe that this request presents a substantial change as our request is in line with future area-wide rezone actions as planned by the City Council.
6. The change of zoning classification bears a substantial relationship to public health, safety, morals, or general welfare.
 - a. We will provide quality multi-family housing managed with all best practices of resident screening, relations and building maintenance thereby adding value and stability to the community.

LU16-0194 Norpoint Landing

Exhibit 13: Comprehensive Plan, Applicable Goals and Policies

One Tacoma: 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. See Figure 2, Comprehensive Plan Future Land Use Map.

Policy UF–1.2 Implement Comprehensive Plan land use designations through zoning designations and target densities shown in Table 3, Comprehensive Plan Land Use Designations and Corresponding Zoning.

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.

Neighborhood Commercial

Typical Zoning:

C-1 General Neighborhood Commercial District, **T** Transitional District

This designation is characterized primarily by small-scale neighborhood businesses with some residential and institutional uses. Uses within these areas have low to moderate traffic generation, shorter operating hours, smaller buildings and sites, and less signage than general commercial or mixed-use areas. There is a greater emphasis on small businesses and development that is compatible with nearby, lower intensity residential areas.

Target Development Density: 14–36 dwelling units/net acre

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–1.5 Strive for a built environment designed to provide a safe, healthful, and attractive environment for people of all ages and abilities.

Policy UF–1.6 Support energy-efficient, resource-efficient, and sustainable development and transportation patterns through land use and transportation planning.

Policy UF–1.7 Integrate nature and use appropriate green infrastructure throughout Tacoma.

Neighborhood Pattern Area 1: Post-War Slopes

These areas were primarily developed during the post-war period and is characterized by the prevalence of garages, curvilinear streets, and cul-de-sac development. The disrupted street grid limits route directness but lends itself to a sense of privacy and security within neighborhoods. Houses tend to be ranch, double-ranch, or more contemporary building styles, often with garages more prominently situated at the front of the structure and facing the street, as alleys are rare. Many homes have long frontages and are typically 1–1.5 stories as the area includes view overlays.

Policy UF-13.10: Maintain and enhance the existing commercial areas while preserving the unique features of these neighborhoods.

GOAL DD–1 Design new development to respond to and enhance the distinctive physical, historic, aesthetic and cultural qualities of its location, while accommodating growth and change.

Policy DD–1.1 Encourage excellence in architecture, site design, and infrastructure and durability in building materials to enrich the appearance of a development's surroundings.

Policy DD–1.2 Promote site and building design that provides for a sense of continuity and order while allowing for creative expression.

Policy DD–1.3 Design buildings and streetscape of a human scale to create a more inviting atmosphere for pedestrians.

Policy DD–1.5 Encourage building and street designs that respect the unique built natural, historic, and cultural characteristics of Tacoma's centers, corridors, historic residential pattern areas and open space corridors, described in the Urban Form chapter.

Policy DD–1.6 Encourage the development of aesthetically sensitive and character-giving design features that are responsive to place and the cultures of communities.

Policy DD–1.7 Encourage development that responds to and enhances the positive qualities of site and context—the block, the public realm, and natural features.

Policy DD–1.8 Enhance the pedestrian experience throughout Tacoma, through public and private development that creates accessible and attractive places for all those who walk and/or use wheelchairs or other mobility devices.

Policy DD–1.9 Encourage development, building and site design that promote active living.

Policy DD–1.10 Provide for public access to light and air by managing and shaping the height, and mass of buildings, while accommodating urban scale development.

Policy DD–1.11 Encourage building and site designs that limit reductions in privacy and solar access for residents and neighbors, while accommodating urban scale development.

Policy DD–1.12 Encourage building and site design approaches that help prevent crime.

Policy DD–1.13 Encourage building and site design that improves fire prevention and life safety.

Policy DD–1.14 Encourage the continued use of alleys for parking access and expand their use as the location of accessory dwelling units and as multi-purpose community space.

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.

Policy DD–4.1 Preserve and enhance the quality, character and function of Tacoma’s residential neighborhoods.

Policy DD–4.2 Encourage more housing choices to accommodate a wider diversity of family sizes, incomes, and ages. Allow adaptive reuse of existing buildings and the creation of accessory dwelling units to serve the changing needs of a household over time.

Policy DD–4.3 Encourage residential infill development that complements the general scale, character, 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.

Policy DD–4.4 Support resource efficient and healthy residential design and development (see also Goal DD–7 and supporting policies).

Policy DD–4.5 Provide sufficient rights-of-way, street improvements, access control, circulation routes, off-street parking and safe bicycle paths and pedestrian walkways for residential developments.

Policy DD–4.6 Promote the site layout of residential development where residential buildings face the street and parking and vehicular access is provided to the rear or side of buildings. Where multifamily developments are allowed in established neighborhoods, the layout of such developments should respect the established pattern of development, except where a change in context is desired per the goals and policies of the Comprehensive Plan.

Policy DD–4.7 Emphasize the natural physical qualities of the neighborhood (for example, trees, marine view, and natural features) and the site in locating and developing residential areas, provided such development can be built without adversely impacting the natural areas. Where possible, development should be configured to utilize existing natural features as an amenity to the development.

Policy DD–4.8 Provide on-site open space for all types of residential uses. Specifically:

- For multifamily uses, this includes balconies, patios, rooftop decks, and/or shared common open space.

Policy DD–4.9 Promote multifamily residential building design that is compatible with the existing patterns of the area. Building design should incorporate:

- Façade articulation that reduces the perceived scale of the building and adds visual interest.

- For infill residential in established neighborhoods, encourage the use of similar façade articulation and detailing as existing structures.
- Covered entries visible from the street and/or common open space.
- Utilize building materials that are durable and provide visual interest.

Policy DD–4.10 Utilize landscaping elements to improve the livability of residential developments, block unwanted views, enhance environmental conditions, provide compatibility with existing and/or desired character of the area, and upgrade the overall visual appearance of the development.

Policy DD–4.11 Encourage the diversity of design in multi-unit residential developments. Examples include provisions for a diversity of façade treatments and architectural styles that can add visual interest and diversity to the neighborhood.

GOAL DD–8 Promote development practices that contribute to a sense of safety and reduction in opportunities for crime.

Policy DD–8.1 Encourage building and site design approaches in new public and private development that foster positive social interaction and help to prevent crime.

Policy DD–8.2 Maintain landscaping, lighting and other features in public spaces to ensure the continued effectiveness of safety-oriented design components.

Policy DD–8.3 Promote an understanding of the benefits of CPTED among design, development, and investment interests.

Policy DD–8.4 Promote natural sightlines and visibility through the design and placement of features on sites in ways that provide opportunities for people to observe the space, uses, activities, and people around them.

Policy DD–8.5 Clearly delineate private spaces from public and semipublic spaces using techniques such as paving treatments, landscaping, art, signage, screening, and fencing.

Policy DD–8.6 Use design features to encourage access to buildings and spaces at designated entrances and exits.

Policy DD–8.7 Focus should be given to projects located in areas where community safety is an issue and on spaces associated with private development that are intended for use by the general public.

Policy DD–8.8 Promote the voluntary integration of Crime Prevention Through Environmental Design (CPTED) principles for new development and substantial improvements to existing projects, particularly for multifamily housing and projects that attract large numbers of people.

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.

Policy DD–9.4 Minimize the impacts of auto-oriented uses, vehicle areas, drive-through areas, signage, and exterior display and storage areas on adjacent residential areas.

Policy DD–9.5 Protect non-industrial zoned parcels from the adverse impacts of activities on industrial zoned parcels.

Policy DD–9.6 Buffer between designated Manufacturing/Industrial Centers and adjacent residential or mixed-use areas to protect both the viability of long-term industrial operations and the livability of adjacent areas.

Policy DD–9.7 Encourage building and landscape design and land use patterns that limit and/or mitigate negative air quality and noise impacts to building users and residents, particularly in areas near freeways, high traffic streets, and other sources of air pollution.

Policy DD–9.8 Encourage lighting design and practices that reduce the negative impacts of light pollution, including sky glow, glare, energy waste, impacts to public safety, disruption of ecosystems, and hazards to wildlife.

Policy DD–9.9 Where uses, densities or intensities adjoining the city differ significantly from planned or existing development patterns inside the city, work in collaboration with adjoining jurisdictions ensure appropriate transitions and compatibility between uses. For example, McChord Field, part of Joint Base Lewis-McChord (JBLM), is located near the city's south border and development patterns in this area of Tacoma should be compatible with airfield activity. The City of Tacoma is working with JBLM to ensure long-term land use compatibility around the airfield (see sidebar).

Policy DD–9.10 Mitigate the visual impact of telecommunications and broadcast facilities through physical design solutions.

GOAL H–1 Promote access to high-quality affordable housing that accommodates Tacomans' needs, preferences, and financial capabilities in terms of different types, tenures, density, sizes, costs, and locations.

Policy H–1.1 Maintain sufficient residential development capacity to accommodate Tacoma's housing targets.

Policy H–1.2 Strive to capture at least 35 percent of Urban Pierce County's residential growth.

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; small units; accessory dwelling units; pre-fabricated homes such as manufactured, modular; co-housing and clustered housing.

Policy H–1.4 Promote the maintenance and improvement of the existing housing stock and encourage the adaptation of the existing housing stock to accommodate the changing variety of household types.

Policy H–1.5 Apply zoning in and around centers that allows for and supports a diversity of housing types.

Policy H–1.6 Allow and support a robust and diverse supply of affordable, accessible housing to meet the needs of older adults and people with disabilities, especially in centers and other places which are in close proximity to services and transit.

Policy H–1.7 Consider land use incentives (e.g. density or development bonuses, lot size reductions, transfer of development rights, height or bulk bonuses, fee waivers, accelerated permitting, parking requirement reductions, and tax incentives) in appropriate locations to facilitate the development of new housing units.

GOAL H–2 Ensure equitable access to housing, making a special effort to remove disparities in housing access for people of color, low-income households, diverse household types, older adults, and households that include people with disabilities.

Policy H–2.1 Foster inclusive communities, overcome disparities in access to community assets, and enhance housing choice for people in protected classes throughout the city by coordinating plans and investments with fair housing policies.

Policy H–2.2 Support barrier-free access for all housing consistent with the Americans for Disabilities Act (ADA). Consider additional actions to increase access such as implementation of visitability and universal design features.

Policy H–2.3 Coordinate plans and investments with programs that prevent avoidable, involuntary evictions and foreclosures.

Policy H–2.4 Evaluate plans and investments and other legislative land use decisions to identify potential disparate impacts on housing choice and access for protected classes.

Policy H–2.5 Evaluate plans and investments for the potential to cause displacement in areas with concentrations of communities of color, low- and moderate-income households, and renters.

Policy H–2.6 When plans and investments are anticipated to create neighborhood change, pursue corrective actions to address involuntary displacement of under-served and under-represented people. Use public investments, incentives, and programs, and coordinate with nonprofit housing organizations, to mitigate the impacts of market pressures that cause involuntary displacement.

Policy H–2.7 Encourage a range of housing options and supportive environments to enable older adults to remain in their communities as their needs change.

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.

Policy H–3.1 Meet the housing needs of under-served and under- represented populations living in high poverty areas by coordinating plans and investments with housing programs.

Policy H–3.2 Locate higher density housing, including units that are affordable and accessible, in and around designated centers to take advantage of the access to transportation, jobs, open spaces, schools, and various services and amenities.

Policy H–3.3 Promote transit supportive densities along designated corridors that connect centers, including duplex, triplex, cottage housing, and townhouses.

Policy H–3.4 Strive to accommodate 80% of the City’s housing targets within and around designated centers.

Policy H–3.5 Improve equitable access to active transportation, jobs, open spaces, high-quality schools, and supportive services and amenities in areas with high concentrations of under-served populations and an existing supply of affordable housing.

Policy H–3.6 Locate new affordable housing in areas that are opportunity rich in terms of access to active transportation, jobs, open spaces, high- quality schools, and supportive services and amenities.

Policy H–3.7 Provide incentives (e.g. density or development bonuses, lot size reductions, transfer of development rights, height or bulk bonuses, fee waivers, accelerated permitting, parking requirement reductions, and tax incentives) to promote the development of higher density multifamily housing in designated centers.

Policy H–3.8 Discourage the concentration of facilities for “high risk” populations in any one geographic area.

GOAL H–4 Support adequate supply of affordable housing units to meet the needs of residents vulnerable to increasing housing costs.

Policy H–4.1 Preserve and produce affordable housing to meet the needs that are not met by the private market by coordinating plans and investments with housing providers and organizations.

Policy H–4.2 Ensure that at least 25% of the 2040 housing targets are affordable to households at or below 80% of Pierce County AMI.

Policy H–4.3 Evaluate plans and investments for their impact on household cost; and consider ways to reduce the combined cost of housing, utilities, and/or transportation.

Policy H–4.4 Facilitate the expansion of a variety of types and sizes of affordable housing units, and do so in locations that provide low-income households with greater access to convenient transit and transportation, education and training opportunities, Downtown Tacoma, manufacturing/ industrial centers, and other employment areas.

Policy H–4.5 Encourage income diversity in and around centers and corridors by allowing a mix of housing types and tenures.

Policy H–4.6 Facilitate and support regional cooperation in addressing housing needs in the Tacoma metropolitan area and greater Puget Sound, especially for the homeless, low- and

moderate-income households, and historically under-served and under-represented communities.

Policy H–4.7 Promote a range of affordable housing strategies that extend from basic emergency shelter for the homeless to temporary transitional housing to permanent rental housing and to home ownership.

Policy H–4.8 Prevent homelessness and reduce the time spent being homeless by ensuring that a continuum of safe and affordable housing opportunities and related supportive services are allowed and appropriately accommodated, including but not limited to transitional housing, emergency shelters, and temporary shelters.

Policy H–4.9 Increase the supply of permanently affordable housing where practicable.

Policy H–4.10 Encourage development and preservation of small resource- efficient and affordable single family homes throughout the City.

Policy H–4.11 Align plans and investments to support homeownership rates and locational choice for people of color and other groups who have been historically under-served and under-represented.

Policy H–4.12 Encourage a variety of ownership opportunities and choices by allowing and supporting the creation of condominiums, cooperatives, mutual housing associations, limited equity cooperatives, land trusts and sweat equity.

Policy H–4.13 Pursue a variety of funding sources and mechanisms to preserve and develop housing units and various assistance programs for households whose needs are not met by the private market.

Policy H–4.14 Pursue incentives and mechanisms to enlist the private market as a partner in the provision of affordable housing units.



Northeast Tacoma Neighborhood Council

www.netacoma.org

6716 Eastside Dr. NE, Ste. 1, PMB 222

Tacoma, WA 98422

October 19, 2016

Re: LU16-0194 Application for Property Re-Zone on 29th St. NE

Shirley Schultz
Principal Planner
Planning and Development Services
City of Tacoma

By e-mail

Dear Ms. Schultz:

The Northeast Tacoma Neighborhood Council's Executive Committee finds the traffic mitigations in the Final SEPA DNS and its attachments for the property re-zone application above inadequate, and are disappointed in the determination.

The residents of the eventual apartments will most likely most of the time be restricted to a safe exit from 61st Ave. NE onto 29th St. NE only eastbound, which will require them to find a safe place to U-turn to gain access to Norpoint Way or other points west or north of the development. These U-turns will likely be informal (mid-29th St., business parking lots. etc.), and therefore not safe.

We encourage City traffic engineers and/or other appropriate staff to continue dialog with area property owners on eventual opening of the now dead-ended connection from 61st Ave. NE to the area street network, to be able to use more safe U-turn possibilities.

Sincerely,

/s/ Carolyn Edmonds

/s/ John Thurlow

Co-Chairs, Northeast Tacoma Neighborhood Council

cc: NETNC Board
Robert Thoms

Norpoint Landing Apartments

EX. 15

EX 12

Example Project – Same Building Designs



Example Project – Same Building Designs



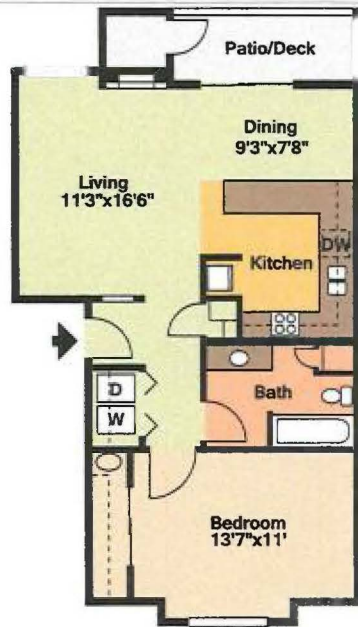
Typical Kitchen



Typical Living Room



Floor Plans



Ownership

The ownership of Norpoint Landing is a partnership of an experienced local home-builder and the president of a property management company – Fulcrum Real Estate Services, Inc.

The ownership is committed to the NE Tacoma community and is excited to serve the community with this project

The ownership has offices less than ½ mile from the site and will be very hands-on in its development and operations

Management

Fulcrum Real Estate Services, Inc is an established property management company managing around 1,200 apartment units in Pierce and Thurston counties.

All best practices in resident screening are strictly followed

- Including, Income, Credit, Criminal and Resident History verifications

There will be a dedicated property manager to Norpoint Landing Apartments managing the day-to-day operations of the property and managing resident compliance with rules and regulations.