



INFORMATIONAL MEMORANDUM

TO: **Planning and Community Development Committee**

FROM: **Brandon Miles, Business Relations Manager**

CC: **Mayor Ekberg**

DATE: **March 13, 2022**

SUBJECT: **Wadajir Development Agreement**
Parking and Setbacks

ISSUE

Follow up discussion from the March 7 Council meeting on Forterra's request for the City to execute a Development Agreement (DA) for the old Knight's Inn property at 14110 Tukwila International Blvd. This memo focuses on their request to modify the minimum number of parking stalls and building setbacks.

BACKGROUND

Forterra is proposing the construction of a 154,500 square foot mixed use project on the old Knight's Inn motel property, focused on supporting the environmental, social, and economic sustainability of Tukwila's East African immigrant community. A total of 100 owner occupied units will be constructed, with 25 one-bedroom units; 45 two-bedroom units; and 30 three-bedroom units and approximately 14,000 square feet of commercial space. The project is called Wadajir, which means "together" in Somali. Abu Bakr Islamic Center, which is located across Tukwila International Blvd, is a community partner on the project.

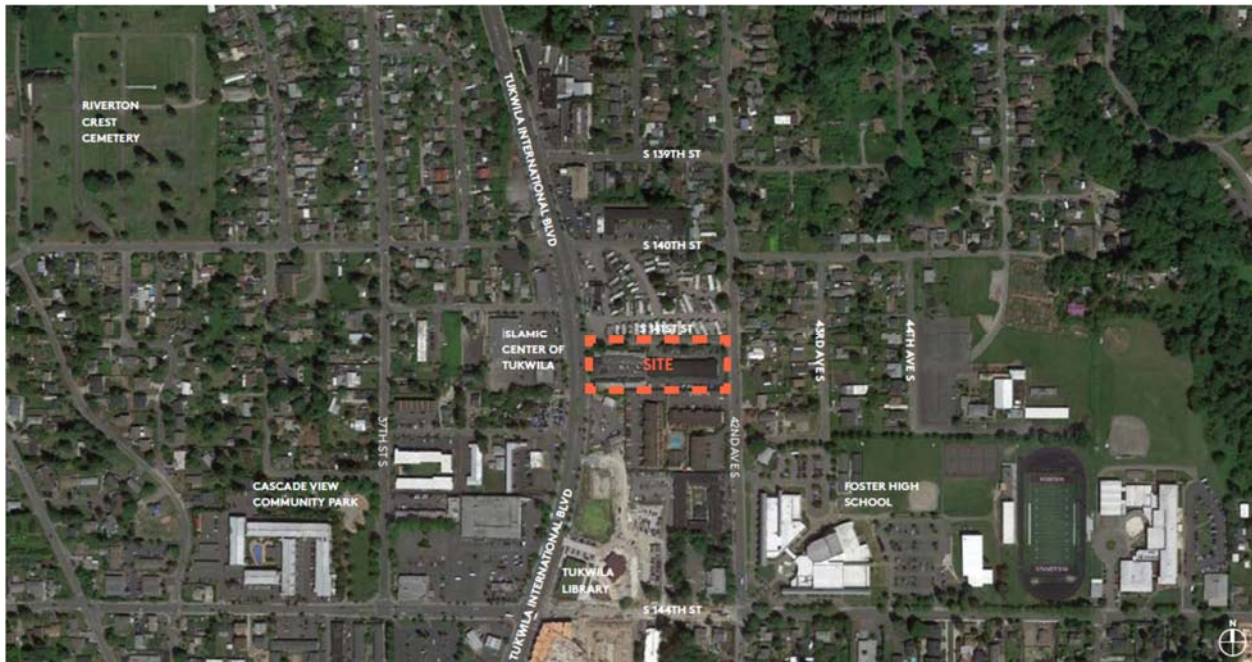


Photo 1, Aerial Photo of the Wadajir site.

The project aims to provide affordable, cooperatively owned, housing for households having annual income levels 70 to 110% of King County's area median income (AMI). To achieve this

affordability goal, the project proposes to use Cross Laminated Timber (CLT) technology and prefabricated modules to create a standardized set of building units. In addition to building construction technology, the applicant is also requesting certain deviations from the City's design and zoning standards to improve the project's financial feasibility.

DAs are permitted under Tukwila Municipal Code (TMC) 18.86 and are discretionary, legislative acts of the City Council. The City has used DAs in the past for the expansion of Southcenter Mall, Tukwila South, Bellwether Housing, and Tukwila Village. Major development and zoning issues requested to be modified by the applicant as part of a DA for the Wadajir project include:

1. Structured Parking. The applicant is asking that the urban renewal overlay requirement to provide the residential parking for the project within a parking structure be waived. If they don't qualify for the urban renewal overlay standards they would be limited to four stories instead of six.
2. Minimum Required Parking. The applicant is requesting that the number of parking stalls required for the development be reduced from approximately 200 spaces to a total of 69 stalls on site. The applicant has proposed adding additional parking on S. 141st Street for the project to have access to. This could increase the total number of on-site parking stalls for the project to 80 stalls, depending on the final design of S.141st Street.
3. Building Setbacks. The applicant is requesting that the requirement for the building's upper floors to be set back on the south façade be waived because the CLT construction method using prefabricated modules creates issues with modulation.

Note, there are other minor issues that will also need to be addressed as part of the DA. Staff wanted to highlight the major issues for the council discussion since they impact project feasibility.

On March 7, 2022, Economic Development staff and Forterra staff provided an overview presentation to the City Council on the proposed project and the request to enter into a DA with the City. At the March 7 meeting the Council provided input to Economic Development staff on the issues of minimum parking and setbacks. Staff would like to follow up on these issues with the Council and provide a staff recommendation.

DISCUSSION

Minimum Required Number of Parking Stalls

Tukwila Municipal Code Requirement

Per TMC 18.43 and 18.53, the project is required to meet the following standards for parking:

- 1 stall per dwelling unit per 1 bedroom, plus
- 0.5 spaces for every bedroom in excess of 1 bedroom in a dwelling unit.

With 100 units, including a mix of unit types, the Wadajir project is required to have 153 stalls for the residential portion of the project.

In addition to the residential parking requirements, an additional 1 stall is required for each 100 square feet of usable floor area for the proposed restaurant and 2.5 stalls for every 1,000 usable square feet for the retail uses. Thus, the required parking for the commercial uses on site is about 44 stalls.

Based upon the proposed project and parking standards outlined above, the project is required to have a total of approximately 200 parking stalls.

Analysis

Community Development staff believe that this parking requirement is too high for the proposed use.

While much focus is often on a project to ensure that it has a minimum number of parking stalls, it's just as important to make sure that a project does not overbuild and provide more parking than is needed for the specific characteristics of a project. Too much parking results in an inefficient use of land, with more stalls being provided than needed, and adds cost both for the concrete or asphalt and for the stormwater management needed for the larger impervious surface. Since this is intended to be an affordable housing project, added construction costs can hinder the affordability goals of the project.

While the City's parking standards work for most projects, it's important that the City provide flexibility for projects that have unique characteristics especially as some parts of the City are moving towards a more urban form, which can support lower parking requirements. As it relates to the Wadajir project, the City's parking codes does not take into account sharing between the residential and commercial uses, access to transit, walkability to neighborhood services, and household sizes.

The applicant has provided a parking study, which is attached with this memo, from the Transpo Group ("Transpo Study"), dated March 8, 2021 which supports a lower parking demand. The parking study concluded that 92 vehicle stalls would be needed during peak, daily demand. To support this lower parking demand the Transpo study examined two apartment buildings that had similar transit and amenities as being proposed with Wadajir. These two apartment buildings had a parking demand of .87 and .93 per unit. The Transpo study also examines shared parking between the residential and commercial tenants on the site, which the City's code does not consider, but which can be considered as part of a parking variance request.

The observations by the Transpo Group were consistent with the observations from a consultant DCD ("DCD Study") hired in 2019 to consider a parking reduction for the Bellwether project. This study examined parking demand at affordable housing projects throughout south Seattle, Tukwila, Renton, and other south King County locations. The DCD Study concluded that the City's parking count requirements for affordable housing projects was too high. The median parking demand rate for the apartment complexes surveyed in the study was 1.33. In fact, had many of the apartments surveyed in DCD study been subject to the City's parking requirements they would have been parked with 45% more stalls than were needed. It should be noted that Wadajir will have better transit options than many of the apartment complexes included in the DCD study.

Further support for the lower parking count comes from the King County Right Size Parking tool. This online tool utilizes a variety of factors such as location, transit options, and unit affordability to "right size" parking for residential uses. Using this tool the suggested parking ratio for Wadajir is .97 stalls per unit.

Staff Recommendation

1. Forterra would be required to construct a total of approximately 125 stalls¹, both onsite and on the surrounding adjacent public streets (S. 141st Street and 42nd Ave South). This is based on the Transpo study, which staff believes is reasonable. The Transpo study concluded that 92 stalls were sufficient for the project; however, because the Wadajir project is unique and untested, staff believes the additional stalls should be required as a cushion. The City would require the on-site parking to be shared between the commercial and residential uses.



Photo 2, Portion of S. 141st Street that could be used to provide more public, on-street parking.

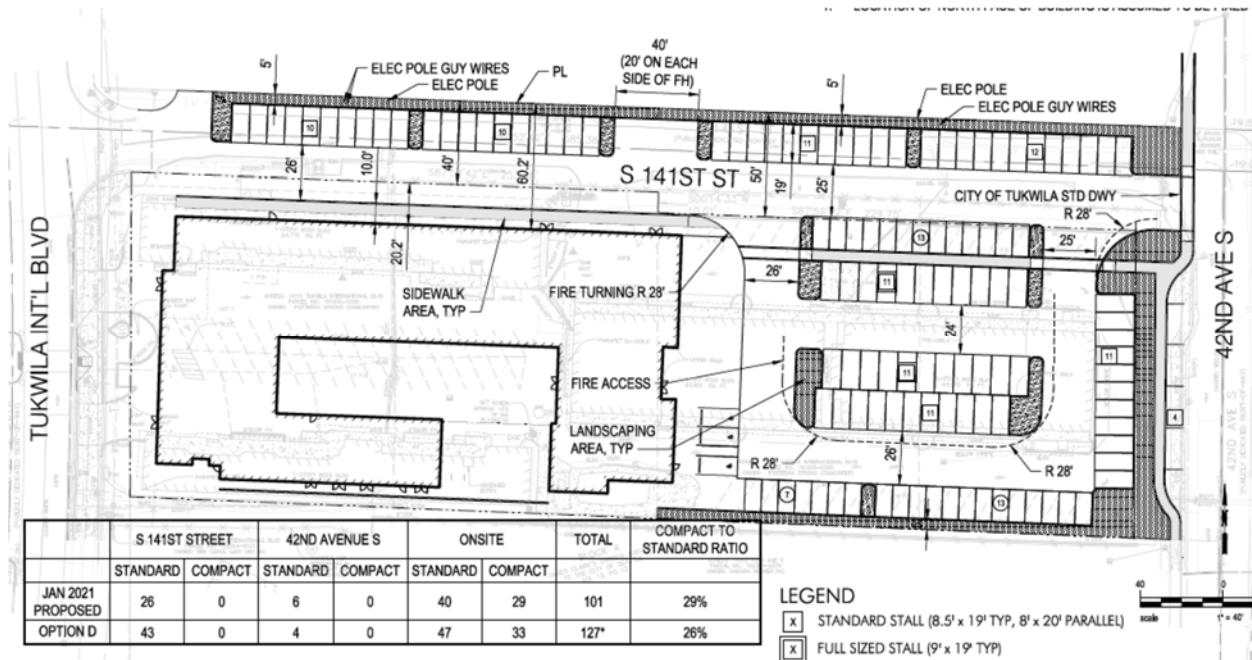


Figure 1, Conceptual Design of Parking Along S. 141st and 42nd Ave S².

2. Forterra would also provide an additional 25 parking stalls on a nearby property for five years. During that time, the City will review the parking and waive the requirement if not needed.

¹ The final count would be based on the design of the improvements on S.141st and 42nd Ave S.

² This design has not been fully reviewed by City staff and is provided for discussion purposes only.

- Forterra would also provide the City a onetime payment as a parking mitigation fee. The City would utilize the funds in the future to complete additional, post-project parking studies and could also use the funds for parking signage, enforcement, and the creation of residential parking zones, if needed. If legally allowed, any unused funds would be remitted to the co-op owners. This provides the co-op owners and incentive to effectively manage the parking.

This recommendation would provide a total of approximately 150 parking stalls both on and offsite for the project in the initial five years of the project.

Setbacks

The building is proposed to be one story of retail under five stories of residential. Within the Urban Renewal Overlay (URO), and in some situations, the City requires additional setbacks on upper floors when new buildings are built adjacent to residential properties. Overall, the Wadajir building complies with the setback requirements of the URO. Staff believes that only a minor exception to the zoning setback requirement along the south property line is needed to accommodate the design of the proposed development.

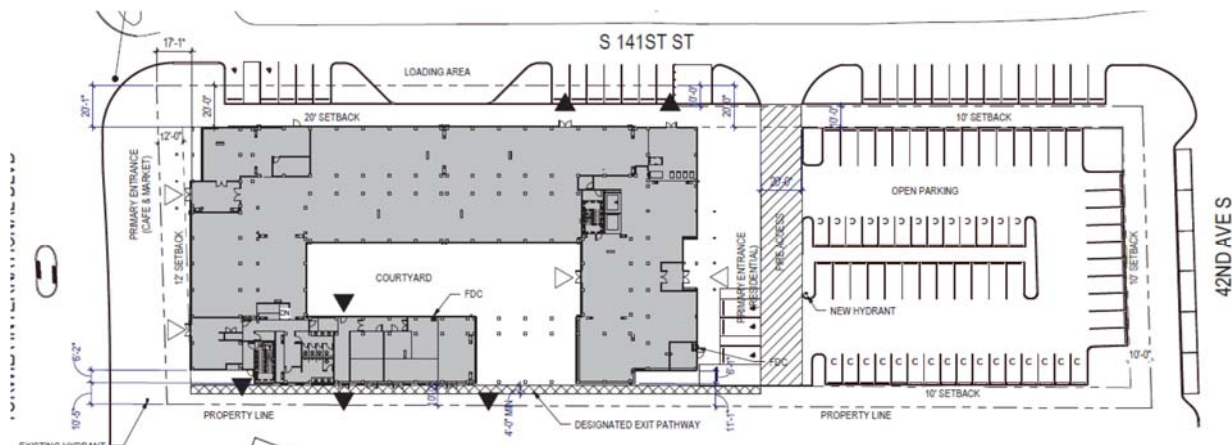


Figure 2, Site Plan for Wadajir.

West Property Line, along Tukwila International Blvd.

This is considered a front setback and according to TMC 18.43.080 the required setback is 12 feet from Tukwila International Blvd for all floors. As currently proposed the Wadajir buildings will be 12 feet from the west property line and meet the required setback.

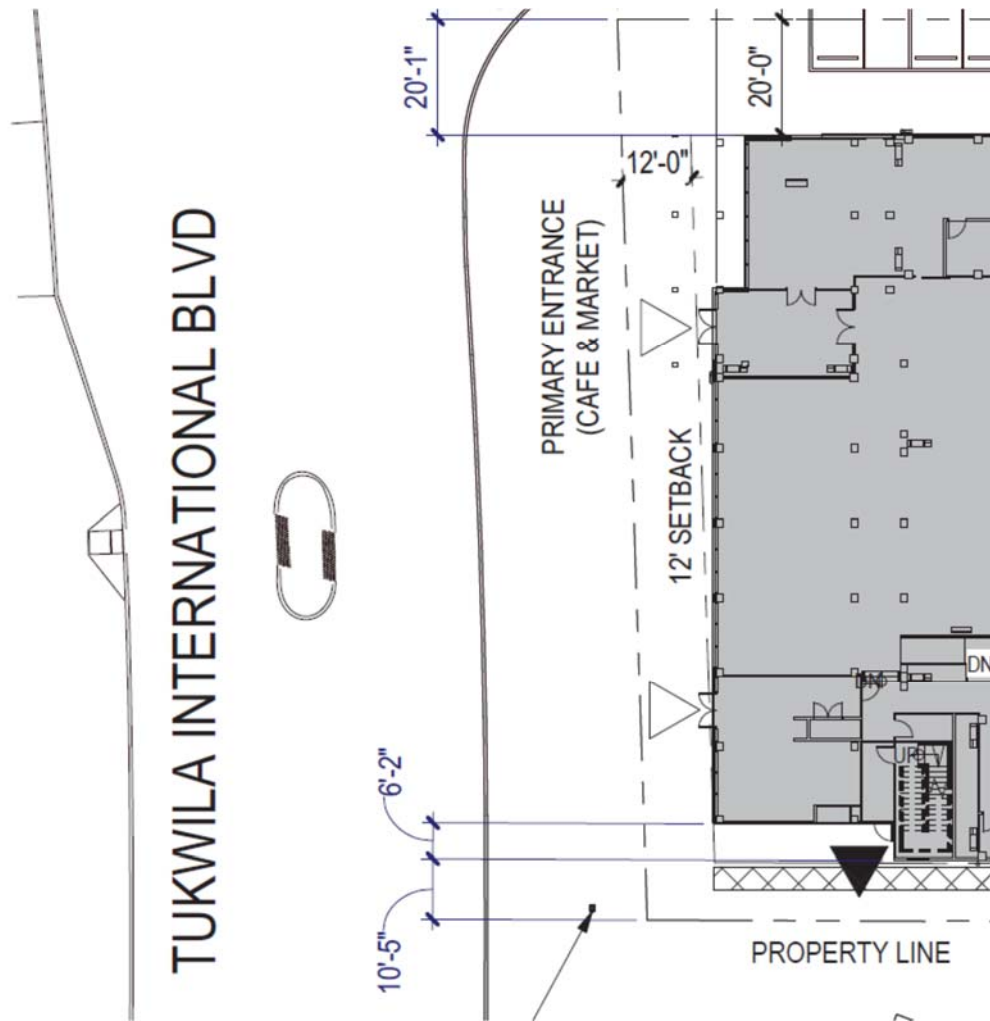


Figure 3, west property line along TIB.

North Property Line, along S. 141st Street

Since the north property line faces another city street it is considered a second front. The required setback along the north property line is ten feet for the first floor and 20 feet for the second and above floors. The first floor of the Wadajir project is proposed to be 20 feet from the north property line and thus the project meets the setback requirements.

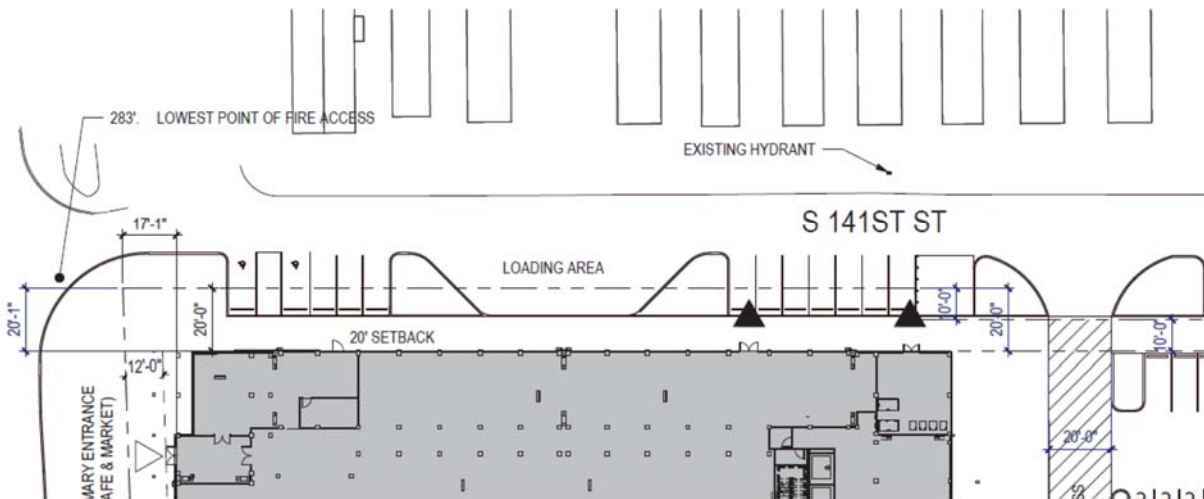


Figure 4, north property line.

East Property Line, along 42nd Ave S.

Since this also faces on another city street it is also considered a second front. The zoning across the street along 42nd Ave South from the Wadajir project is Low Density Residential (LDR). Under TMC 18.43.080 the setbacks for a project that is adjacent to or across the street from a property zoned LDR are as follows:

- 1st floor, 10 feet minimum/**maximum**.
- 2nd floor, 10 feet to 30 feet.
- 3rd floor and higher, 30 feet.
- Additionally, buildings over two floors must have one tier. To achieve tiers, setbacks will be both a minimum and a maximum.

The purposes of these tiers and setback requirements is to break up the massing of large buildings for single family homes near the URO District. The Wadajir project is unique in that it is being developed on a through lot, a lot that is bordered on opposite sides by a city street. To create a dynamic street presence on Tukwila International Blvd the building has been located as close to that street as possible. Thus, it is not possible to also meet the “build to” requirement along 42nd Avenue South.

As proposed the Wadajir project is over 230 feet from 42nd Ave South. Staff believes that the significant setback from 42nd Avenue South meets the goal of reducing the building’s scale and size for the adjacent LDR zoning.

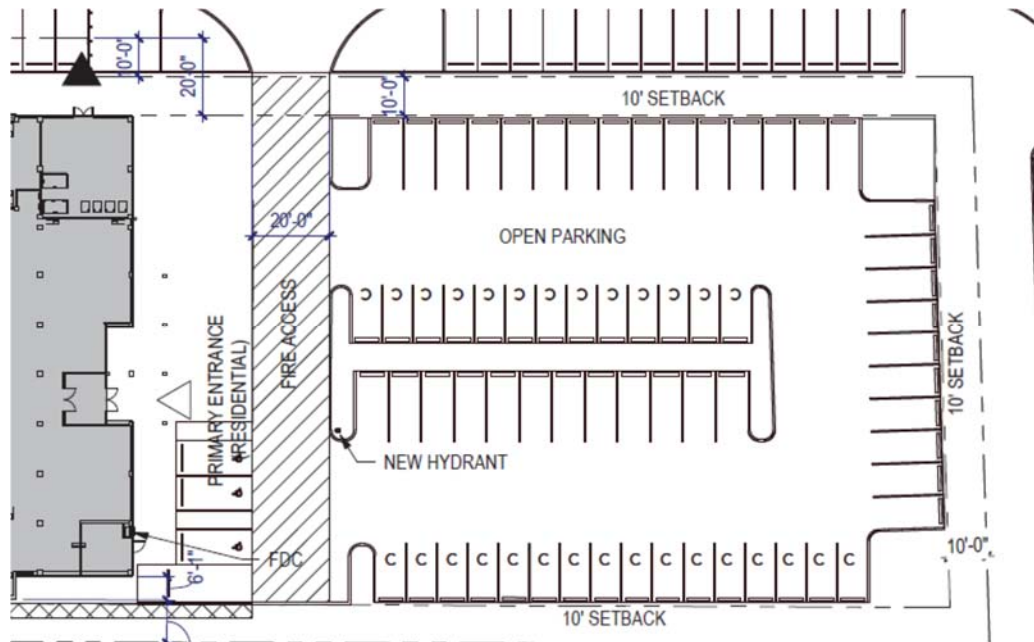


Figure 5, east property line.

South Property Line

The south property line is considered a side setback under the TMC. The south property line for Wadajir borders two properties, both of which are located within the URO.

Property 1 is zoned Neighborhood Commercial Center (NCC) and is currently used as taxi office. Property 1 is highly underutilized and would be a strong candidate for future redevelopment. Property 2 is zoned Medium Density Residential (MDR) and includes the Samara Apartment building.



Photo 3, South Property Line of Wadajir.

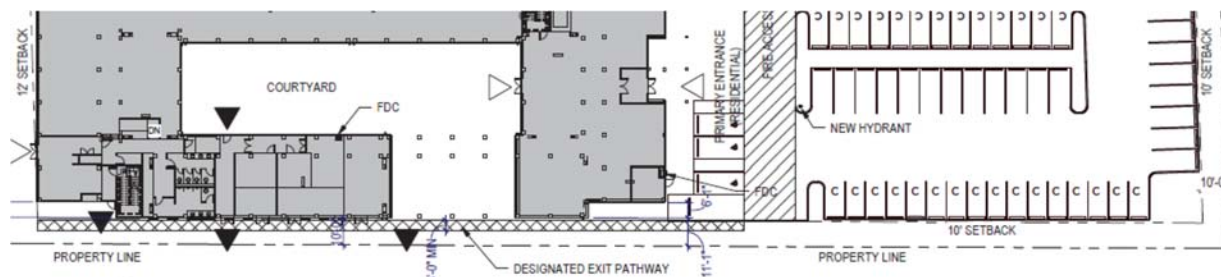


Figure 6, south property line setbacks.

Since a portion of the south property line is within 50 feet of an MDR zone, the setbacks are as follows:

- 1st floor, ten feet.
- 2nd floor, 20 feet.
- 3rd floor and higher, 30 feet.

Forterra is proposing a 10' setback along the South property line, which would meet the first-floor setback requirement, but not the upper floor setback requirements.

Staff Recommendation

Staff believes that the City should provide an exception to the south setback requirement for the following reasons:

1. LDR versus MDR/HDR. If the property on the south property line was zoned LDR the tiered setback requirements would not apply and only the ten foot setback would govern. This is because the property is within the URO and the City would want to encourage the redevelopment of the property. It seems like the tiered setback requirement from MDR should only apply to properties located outside of the URO and not to properties within it.
2. Solar Access is Maintained. The existing buildings on the Samara property are approximately 50 feet from the Wadajir property line at their closest point. This setback, combined, with the ten foot back that the Wadajir building will be setback from its south property line results in a 60 foot buffer between the Wadajir and the Samara buildings. This provides sufficient space for natural light on both properties. Since the sun will generally be to the south of both properties, the Samara will not see an impact from shade or solar impacts from the Wadajir project.
3. Lower Cost of Construction. Forterra has proposed to utilize cross laminated timber for the construction of the Wadajir project. This construction method requires that the building be constructed off site as modules and then assembled onsite. The construction method makes meeting the stepped back setbacks difficult and would add cost to the project and/or require that the scale of the project be reduced. As currently proposed, the entire south building wall will be ten feet from the south property line

To address any design issues with the south wall, staff suggests that a requirement be put into the DA requiring that the south wall provide articulation through detailing and design, approved by the DCD Director, to break up the size and mass of the wall.

FINANCIAL IMPACT

None

NEXT STEPS

The issues of parking and setbacks are major design issues that impact project feasibility. Staff would like input from the Committee on the recommendations provided in this memo regarding parking and setbacks. If the Committee supports the recommendations, Economic Development staff will engage Public Works and the Fire Department on a possible conceptual design of the on-street parking for S.141st Street and 42nd Avenue South. This design will help to determine the exact number of on street parking stalls that can be constructed. Our goal would be to present this to the PCD for consideration on April 18.

ATTACHMENTS

1. Informational Memo to the City Council, dated February 28, 2022.
2. 14110 Tukwila International Blvd Parking Study (Wadajir), prepared by Transpo Group, dated March 8, 2021 (Transpo Report).
3. Multi-Family Residential Parking Demand Assessment Summary Report, dated January 31, 2019 (DCD Report).



INFORMATIONAL MEMORANDUM

TO: Tukwila City Council

FROM: Brandon J. Miles, Business Relations Manager

CC: Mayor Ekberg

DATE: February 28, 2022

SUBJECT: Forterra's Wadajir Development Briefing

ISSUE

Forterra is requesting the City execute a Development Agreement (DA) for the old Knight's Inn property at 14110 Tukwila International Blvd. Staff would like to provide a briefing on the various issues related to the DA and discuss next steps. **No decision is needed at this time.**

BACKGROUND

Forterra is proposing the construction of a 154,500 square foot mixed use project on the old Knight's Inn motel property, focused on supporting the environmental, social, and economic sustainability of Tukwila's East African immigrant community. A total of 100 owner occupied units will be constructed, with 25 one-bedroom units; 45 two-bedroom units; and 30 three-bedroom units and approximately 14,000 square feet of commercial space. The project is called Wadajir, which means "together" in Somali. Abu Bakr Islamic Center, which is located across Tukwila International Blvd, is a community partner on the project.

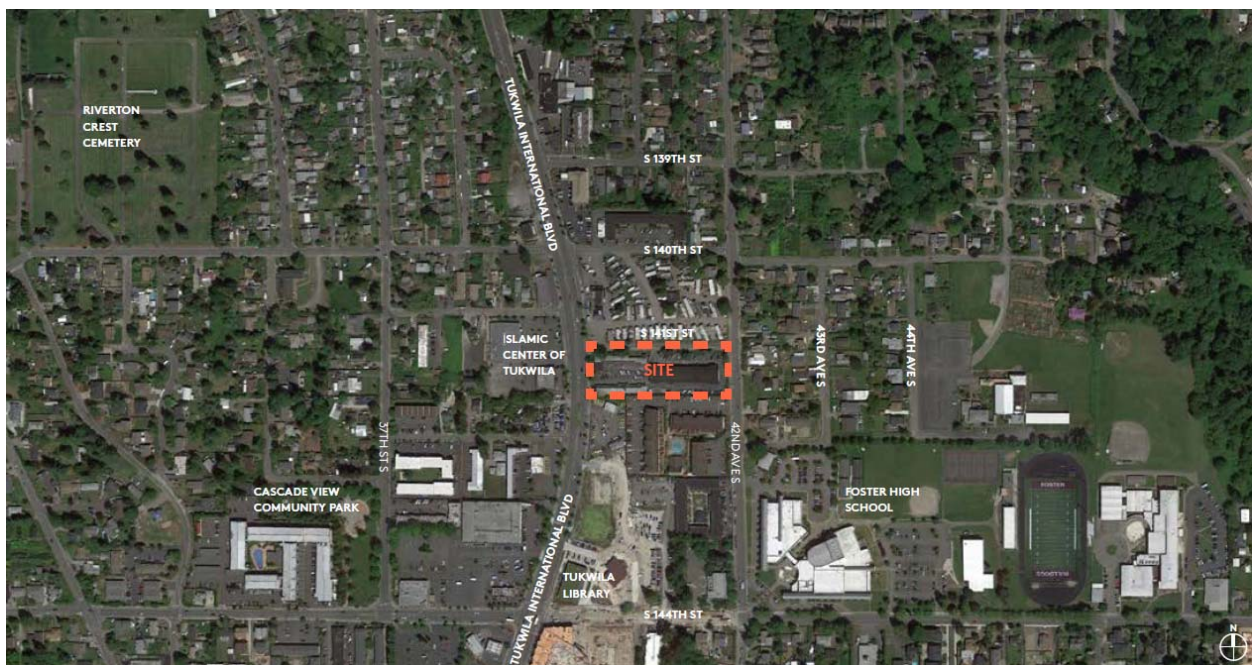


Figure 1, Project Site and Surrounding Area.

The project aims to provide affordable, cooperatively owned, housing for households having annual income levels 70 to 110% of King County's area median income (AMI). To achieve this affordability goal, the project proposes to use Cross Laminated Timber (CLT) technology and

prefabricated modules to create a standardized set of building units. In addition to building construction technology, the applicant is also requesting certain deviations from the City's design and zoning standards to improve the project's financial feasibility.

DA's are permitted under Tukwila Municipal Code (TMC) 18.86 and are discretionary, legislative acts of the City Council. The City has used DAs in the past for the expansion of Southcenter Mall, Tukwila South, Bellwether Housing, and Tukwila Village. Major development and zoning issues requested to be modified by the applicant as part of a DA for the Wadajir project include:

1. Structured Parking. The applicant is asking that the requirement to provide the residential parking for the project within a parking structure in the urban renewal area be waived.
2. Minimum Required Parking. The applicant is requesting that the number of parking stalls required for the development be reduced from approximately 200 spaces to a total of 69 stalls on site. The applicant has proposed adding additional parking on S. 141st Street for the project to have access to. This could increase the total number of on-site parking stalls for the project to 80 stalls, depending on the final design of S.141st Street.
3. Building Setbacks. The applicant is requesting that the requirement for the building's upper floors to be set back be waived because the CLT construction method using prefabricated modules creates issues with modulation.

Note, there are other minor issues that will also need to be addressed as part of the DA. Staff wanted to highlight the major issues for the council discussion since they impact project feasibility.

The applicant has also requested that the City reenact its Multi-Family Property Tax Exemption (MFTE) project to accommodate the project. The MFTE cannot be reenacted via a DA and would require a separate City Council action.

DISCUSSION

Wadajir provides an opportunity to expand the number of owner-occupied affordable housing units in south King County and would be the first project of its kind in Tukwila. As outlined above, the applicant is requesting deviations from several development standards for the project. Additional context on the request is provided below.

1. Structured Parking Requirements

TMC 18.43.070 requires that 75% of the required residential parking be in a structure such as a parking garage¹. Forterra is proposing to provide a surface parking lot at the rear of the building along 42nd Ave South, as shown in the site plan below. The applicant has indicated that structured parking could make the project financially unfeasible for owner occupied affordable housing.

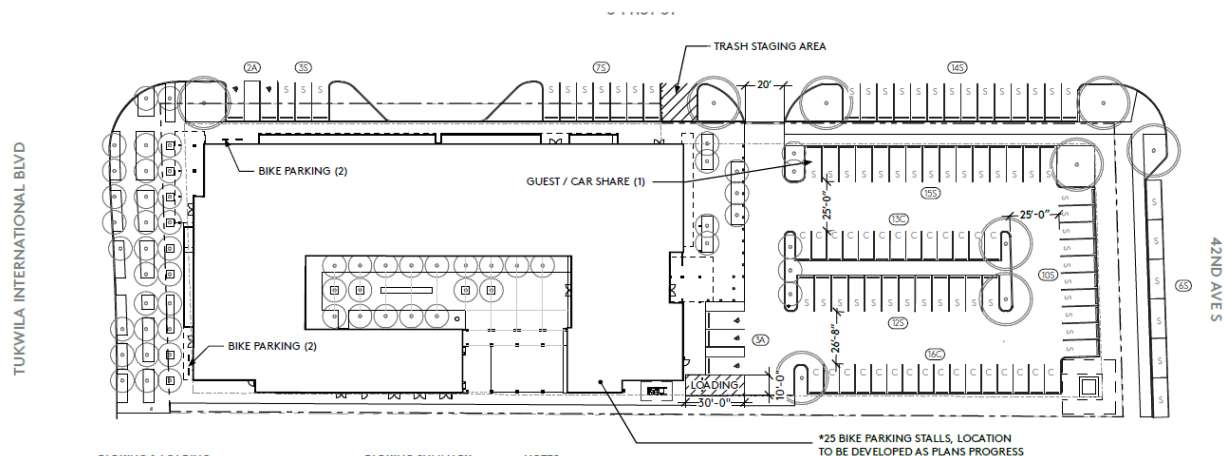


Figure 2. Forterra's Initial Site Plan and Parking Layout.

Staff Response

Structured parking can add additional development costs to a project, with a rough estimate of the cost being \$30,000 to \$40,000 per stall. Thus, a 100-stall garage adding between \$3 and \$4 million to a project's cost. The goal of the structured parking is to reduce the visual impacts of large surface parking lots on Tukwila International Blvd and to allow more dense development. By locating the building along Tukwila International Blvd. the applicant is screening the parking lot from the street. However, the parking area would be visible to 141st and 42nd Ave South unless it has significant landscape screening.

Through the DA the City could waive up to 100% of the requirement that the parking be structured.

Both Tukwila Village and Bellwether Housing provided structured parking for the residential components of their projects. Because those are rental units and not ownership, they were able to receive significant funding through the federal tax credit program.

2. Minimum Required Parking

Per TMC 18.43 and 18.53, the project is required to meet the following standards for parking:

- 1 stall per dwelling unit per 1 bedroom, plus
- 0.5 spaces for every bedroom in excess of 1 bedroom in a dwelling unit.

With 100 units, including a mix of unit types, the Wadajir project is required to have 153 stalls for the residential portion of the project.

In addition to the residential parking requirements, an additional 1 stall is required for each 100 square feet of usable floor area for the proposed restaurant and 2.5 stalls for every 1,000 usable square feet for the retail uses. Thus, the required parking stalls for the commercial uses on site is about 44 stalls.

Based upon the proposed project and parking standards outlined above, the project is required to have a total of approximately 200 parking stalls. The applicant is requesting a reduction of the onsite parking to approximately 69 stalls on-site (or 80 stalls depending on the design of South 141st Street) and would pay to construct approximately 45 public parking stalls along South 141st Street and S 42nd Ave South.

The applicant provided a Parking Study prepared by Transpo Group, dated March 8, 2021. The Parking Study concluded that 92 vehicle stalls would be needed during peak demand.

Staff Response:

Based upon preliminary analysis, staff believes that the City’s parking requirement for nearly 200 stalls for this project is high and would likely result in unneeded stalls being constructed. Staff’s review, which is still ongoing, found that the following factors would likely result in the project needing lower parking than what is required in the TMC.

1. The units at Wadajir will have access to frequent, convenient transit, including buses along Tukwila International Blvd and the light rail station.
2. The unit mix for the project consists of a significant number of two- and three-bedroom units. It’s unlikely that the additional bedrooms will all generate additional parking demand since these bedrooms may be used for individuals not driving (children and seniors).
3. In 2019 DCD hired a consultant to examine parking usage at apartment complexes in south Seattle, Tukwila, and other south King County cities. This parking study concluded that the City’s parking count requirements for affordable housing projects was too high. The median parking demand rate for the apartment complexes surveyed in the study was 1.33. Wadajir will have better transit options than many of the apartment complexes included in the 2019 parking demand study.
4. King County’s Right Size Parking tool, which utilizes a variety of factors, such as location, transit options, and unit affordability, provides a parking ratio of .97 stalls per unit.
5. The City’s parking requirements do not take into account the ability to share parking between residential and commercial uses.

Staff is still working to determine the appropriate parking demand for the proposed project. Staff and the applicant are also looking at possible mitigation measures to address parking overflow to limit impacts to adjacent residential and commercial areas. The table below presents some possible mitigation measures. These are provided for information only and neither the City nor the applicant are proposing any specific mitigation measures at this time. These mitigation measures are not mutually exclusive and multiple measures could be utilized to ensure there is adequate parking for the project and that any impacts to adjacent properties is minimized.

Proposed Mitigation Measure	Impact	Staff Comments
Add public parking along S. 141 st street and the west side of 42 nd Avenue	This option could add up to 45 stalls. The stalls would remain public and could be used by anyone in the area.	Forterra has proposed paying for the street improvements. Staff has not reviewed the design for feasibility and code compliance.
Leased parking	The applicant could examine securing an additional leased offsite parking spaces near the project for a certain number of years. This would be a cost for the future residents and businesses.	Typically, when offsite parking needs to be secured for a project the City requires the parking to be via a recorded covenant. This allows the parking to remain indefinitely. A concern with a lease

		<p>approach is that either party would have the ability to terminate the agreement. Enforcement of this provision after the project is completed may be difficult.</p>
Car share service	<p>Up to five parking spaces could be reserved for a car share service for residential use.</p>	<p>Per code, one ride share stall is required to be on site. Additionally, the code states that the rideshare spaces are to be in addition to the required onsite parking.</p>
Parking Mitigation Fee	<p>Require the applicant to provide a onetime payment to allow the City to better enforce and manage existing on-street parking in the area.</p>	<p>The applicant's Parking Study notes that during the day only 20% of the current on-street parking is utilized. With funding, the City could provide better signage along streets in the area that provides on-street parking, such as 42nd Ave South. This funding could also be used to help with staffing for a limited amount of time and to help set up the RPZ program discussed below.</p>
Residential Parking Zone (RPZ).	<p>RPZ's are common in parts of Seattle to manage on-street parking in dense neighborhoods, such as Capital Hill and First Hill. Parking permits are provided to residents in the area and parking is time restricted for non-residents.</p> <p>RPZs could be created using 42nd Ave South as a boundary to ensure Wadajir's residential parking does not impact the neighborhood along the east side of 42nd Ave.</p>	<p>A RPZ would require administration by the City for the issuance of the permits and for enforcement. Signage along the streets subject to the RPZ would also have to be installed.</p>
Parking Improvement District	<p>Washington State law allows cities to create Parking Improvement Districts to manage and finance parking in neighborhoods. The District generates revenue with a parking tax and/or assessment on businesses. This revenue could be used for the acquisition and management of parking</p>	<p>A Parking Improvement District would need to apply to a larger area and could not apply to just one property. This could be a longer term strategy to address parking in the Tukwila International Blvd Neighborhood. It would take a significant amount of time to create a parking improvement district and to use the funds to</p>

	facilities or improvement of existing streets to include better managed parking.	mitigate any parking impacts associated with the Wadijar project. This would not provide immediate relief for any parking impacts associated with the project.
Reduce the project scale	Reducing the total number of residential units and/or square footage of the commercial space would reduce the total parking demand for the project.	Forterra has expressed concerns that any reduction in total unit count or commercial space could impact the project's feasibility. Staff acknowledges that typically new multi-family housing developments are at least 100 units due to financial economies of scale.
Structured Parking	The applicant could add structured parking on site. However, they have indicated that structured parking is so expensive to construct that it would make the project infeasible.	Staff acknowledges that structured parking is very expensive to construct and can make projects financially infeasible.
<i>Mitigation measures would likely include several of the options listed above.</i>		



Figure 3, Portion of S. 141st Street that could be used to provide more public, on-street parking.

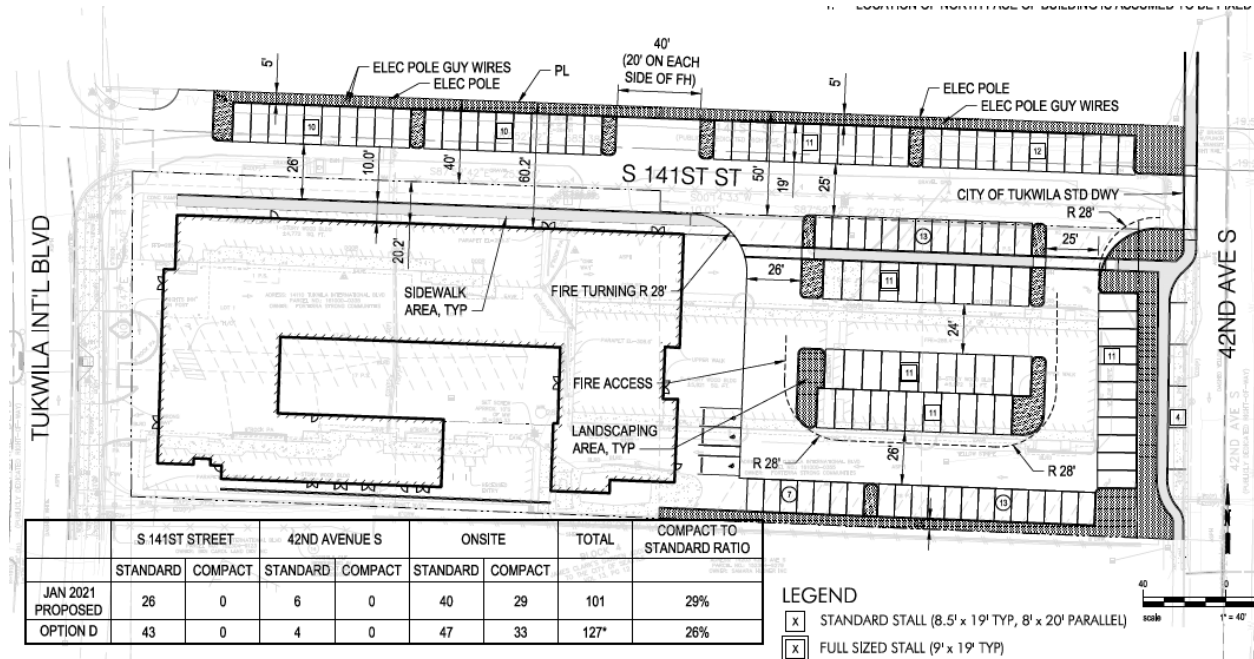


Figure 4, Conceptual Design of Parking Along S. 141st and 42nd Ave S².

3. Building Setbacks.

The City's design standards require tiered setbacks to provide modulation for residential projects in the Neighborhood Commercial Center (NCC) zoning. The applicant has noted that the use of modular mass timber construction hinders the ability to meet this requirement.



Figure 5 the image above shows the proposed massing for the building.

² This design has not been fully reviewed by City staff and is provided for discussion purposes only.

Multi-Family Tax Exemption (MFTE)

The applicant has requested that the City reenact its MFTE program in order to help with the financial feasibility of the project. The City had a limited MFTE in place for the Southcenter District in order to encourage housing in the Transit Oriented Development area of the District. The Southcenter MFTE program sunset at the end of 2019 and the City is no longer accepting applications.

MFTE programs can provide either an 8-year property tax exemption on the residential improvements for a property or up to 12 years if an affordability component is provided. The property tax exemption would apply only to the residential portion of the structure, not the commercial portion or the land value. The City has significant flexibility in designing a MFTE and using it to encourage certain development types. For example, in the Southcenter District the City required a minimum average size for units and limited the number of studios in a project requesting the MFTE. For example, the City could create a program just to apply to owner occupied housing within a specific area of the City.

A MFTE program cannot be created via a DA and would require a separate legislative action by the City Council. The program would also need to be developed that applies to specific development types and/or geographical areas of the City.

FINANCIAL IMPACT

N/A.

RECOMMENDATION

Discussion only.

For next steps, staff suggests that this request remain in the Planning and Community Development Committee for work in drafting a development agreement, which would be forwarded to the full council for its review and consideration.

Design Review

A project of this size would require a public hearing design review process. However, since the City Council may approve a DA for this project, staff is suggesting that the project be approved at the staff level through administrative design review. Many of the design elements such as parking, landscaped, modulation, and recreation space are being addressed through the DA, thus the scope of the design review would be limited. To assist moving this project forward, should the Council choose to approve a DA, staff recommends that design review be administrative. The public would still have the opportunity to comment on the project since the DA requires a public hearing before the City Council can take final action.

ATTACHMENTS

- Presentation slides for March 7, 2022 City Council meeting.

MEMORANDUM

Date:	March 8, 2021	TG:	1.19275.00
To:	Alison Crowley, Forterra		
From:	Stefanie Herzstein PE, PTOE & Jessica Lambert PE, Transpo Group		
Subject:	14110 Tukwila International Boulevard Parking Study		

This memorandum documents the parking study completed for the proposed mixed-use development located at 14110 Tukwila International Boulevard. It supports the request to reduce the parking supply requirements for the proposed project. This study includes the proposed project description, Code parking requirement, and a parking analysis that reviews supply, demand and available on-street parking.

The City of Tukwila Municipal Code section 18.56.140 Administrative Variance from Parking Standards allows for a parking reduction when specific criteria is met. The proposed project does not meet the administrative variance criteria since it is less than 300-feet from a single-family residential zone. City approval of the proposed project parking reduction would occur through a development agreement set forth in Tukwila Municipal Code Chapter 18.86 Development Agreements.

Key Findings

The following provides a summary of key parking study findings.

- Peak parking demand for the site is anticipated to be 92 vehicles based on local data for the affordable housing use and ITE Daycare (LU #565), Restaurant (LU #930), and Retail (LU #820) land uses.
- The project is proposing to provide 69 stalls on-site and 32 stalls along the S 141st Street and 42nd Avenue S street frontages.
- A review of typical weekday on-street parking shows there is available parking with only 20 percent of the spaces occupied within a 3 to 4-minute walking distance from the site.
- Based on a peak parking demand of 92 vehicles during the evening period, the demand could be accommodated with the proposed on-site parking and on-street. The project's peak parking spillover of 23 vehicles would be accommodated primarily within the proposed frontage on-street parking.
- On-street parking near the Abu Bakr Islamic Center is full during prayer services; however, there is available parking along S 140th Street, 37th Avenue S and 42nd Avenue S. The proposed project is being designed compatible with the Center and the project commercial uses may be closed during prayer services resulting in less parking demand. Improvements along S 141st Street and S 142nd Street could help increase parking supply.

Project Description

The project site is located east of Tukwila International Boulevard, south of S 141st Street in Tukwila, as shown in Figure 1. The proposed mixed-use development includes up to 100 affordable residential apartment units, 1,280 square feet of restaurant and 12,635 square feet of retail. The proposed development would replace the existing 62-room motel. The project is

proposing to provide 101 vehicle parking stalls. The preliminary site plan is included as Attachment A.



Figure 1 - Site Vicinity

Parking Code Requirements

The City of Tukwila Municipal Code (TMC) 18.56.050 Figure 18-7 defines parking requirements for multifamily housing and commercial uses. As noted above, the proposed project would include up to 100 affordable residential apartment units, 1,280 square feet of restaurant and 12,635 square feet of retail. The City of Tukwila identifies parking requirements for mixed-use residential projects and retail uses but does not identify any reductions for provision of affordable housing or shared parking between the uses. Table 1 presents the parking supply requirement based on the most similar use.

Table 1. City of Tukwila Parking Code Requirements

Land Use	Amount	Parking Rate ¹	Parking Required
Residential			
1-bedroom	25 du	1.0 stall/du	25
2-bedrooms	45 du	1.5 stalls/du	68
3-bedrooms	30 du	2.0 stalls/du	60
Residential Total			153
Restaurant	1,280 sf	1 stall/100 sf	13
Retail	12,635 sf	2.5 stalls/1,000 sf	32
Required Car Sharing Space	-	-	1
Commercial Total			46
Total			199

Note: du = dwelling unit, sf = square feet

1. City of Tukwila Municipal Code (TMC) 18.56.050 Figure 18-7. The code states 0.5 additional spaces for every bedroom in excess of one bedroom in a multifamily dwelling unit which equates to 1.5 stalls/du for 2-bedroom units and 2.0 stalls/du for 3-bedroom units.

As shown in Table 1, based on the TMC, a total parking supply of 199 automobile parking stalls would be required for the entire project.

Parking Analysis

The project is proposing 69 on-site surface parking stalls that would be shared between the residential and commercial uses. There is a total of approximately 21 existing on-street parking stalls adjacent to the site along S 141st Street and 42nd Avenue S (18 stalls along S 141st Street and 3 stalls along 42nd Avenue S). The project proposed frontage improvements would provide a total of 32 on-street stalls. Attachment A shows the street frontage improvements. No overnight on-street parking is currently allowed along the S 141st Street frontage; the proposal includes allowing on-street parking overnight. Currently, there is no overnight parking along the S 141st Street frontage and there are 3 stalls along 42nd Avenue S that could be used for overnight parking. With the proposed project changes to on-street parking supply, the overnight parking would increase by 29 stalls (i.e., 26 new stalls along S 141st Street and 3 new stalls along 42nd Avenue S frontage).

The following sections describes the estimation of the proposed project parking demand and the ability to accommodate the parking needs via proposed on-site and street parking.

Observed Parking Rates

Observations were conducted at two comparable affordable apartment facilities in the City of Tukwila to understand residential parking characteristics specific to the area. Table 2 provides a summary of the sites observed.

Table 2. Study Site Characteristics

Site	Location	Number of Dwelling Units	Parking Supply	Supply Ratio	Approximate Distance from Project Site
1	14210 37th Avenue S	51	57	1.12	725 feet
2	14440 41st Avenue S	60	78	1.30	1,335 feet

Source: Transpo Group

Both sites are within close proximity of the proposed project and are also affordable housing apartment buildings. Given the close proximity to the proposed project, these sites have the same transit services and facilities as well as other amenities as the proposed project.

Parking demand observations were conducted over two midweek evenings after 9 p.m. when residential parking peaks. Table 3 provides a summary of the observed parking demand for the two sites.

Table 3. Observed Parking Demand

Site	Location	Number of Dwelling Units	Evening 1 Demand	Evening 2 Demand	Average Demand	Parking Rate (Vehicles per Dwelling Unit)
1	14210 37th Avenue S	51	45	44	44.5	0.87
2	14440 41st Avenue S	60	55	56	55.5	0.93
Average			50	50	50	0.90

Source: Transpo Group

As shown in Table 3, the average parking demand rate for the two sites is 0.90 vehicles/dwelling unit. As a comparison, the *ITE Parking Generation Manual, 5th Edition (2019)* parking demand rate for affordable housing is 0.99 stalls/dwelling unit for general urban/suburban locations. The lower rate in Table 3 accounts for the local area and access to transit and proximity to the Link light rail station.

The proposed project as well as the observed sites are served by transit, with King County Metro route 124 with stops located along Tukwila International Boulevard and is less approximately 300 feet of a 1 to 2-minute walk from the proposed project site. Route 124 provides service between the Tukwila International Boulevard Link light rail station and Seattle 7 days a week. Weekday services is provided between approximately 5:00 a.m. and 3:15 a.m. with peak hour headways of approximately 15 minutes. The Tukwila International Boulevard Link light rail station is approximately 1 mile from the proposed project site and is served by route 124. The Link light rail provides service between SeaTac and the University District with new stations opening in the U District and Northgate in 2021.

Demand

Based on the observed average parking rate, a parking demand analysis for the proposed project was conducted to determine the peak parking demand. The methodology utilized for the residential and commercial uses are described in the following.

Parking demand for the commercial component of project was based on the *ITE Parking Generation Manual, 5th Edition (2019)*. Shopping Center (LU #820) and Fast Casual Restaurant (LU #930) land uses were used for the demand estimation. Parking demand associated with the affordable housing component was based on observed local rates at two similar developments in the area. Table 4 shows the parking demand for the proposed project.

Table 4. Proposed Project Parking

Land Use	Size	Rate	Peak Parking Demand by Use ³
Residential	100 DU	0.90 vehicles/DU ¹	90
Restaurant	1,280 sf	9.93 vehicles/1,000 sf ²	13
Retail	12,635 sf	1.95 vehicles/1,000 sf ²	25
Total Peak Demand by Use	-	-	128

DU = dwelling units, sf = square feet

1. Rate based on local data collected at similar sites near the project.

2. Rate based on *ITE Parking Generation Manual, 5th Edition* for restaurant LU 930 and retail LU 820.

3. This represents the peak parking demand for the individual uses, which may occur at different times during the day.

As shown in Table 4, the uses are anticipated to generate a cumulative parking demand of 128 vehicles; however, this does not account for the different peaking behavior of each use. Shared parking is described below.

Shared Parking

Residential and commercial uses peak at different times of day. Typically, commercial uses peak midday whereas residential uses peak overnight. Figure 2 show the anticipated hourly parking demand for the mixed-use project considering the peaking characteristics of each use.

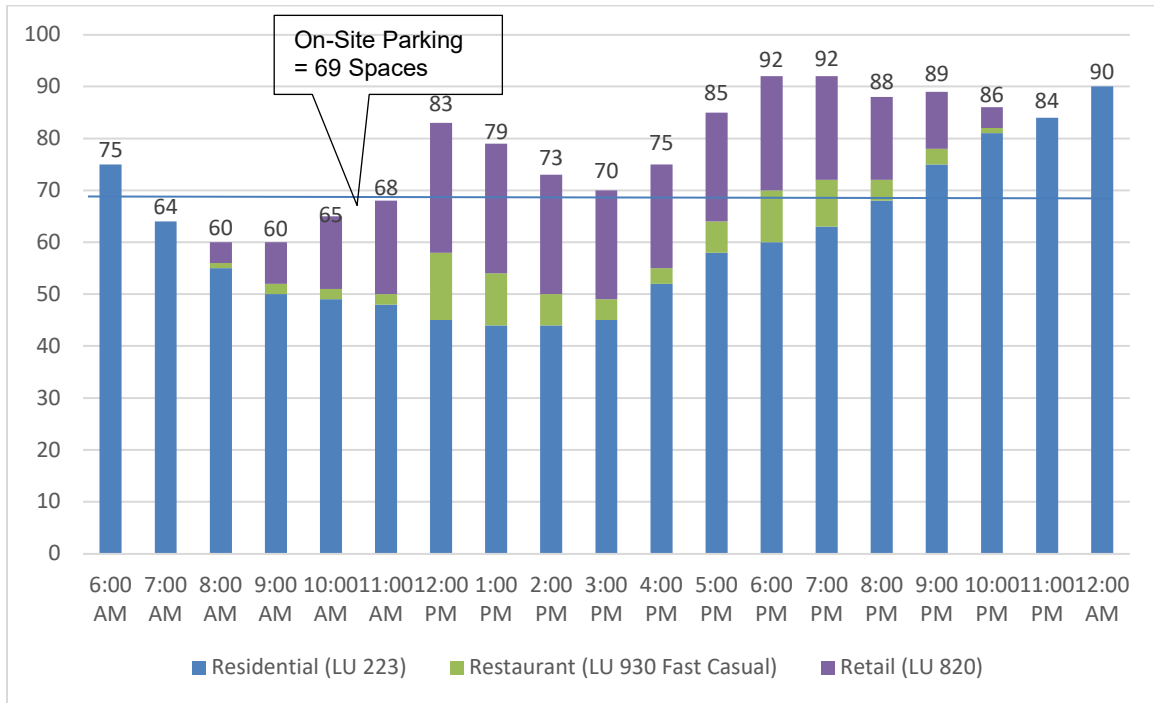


Figure 2 Proposed Project Hourly Parking Demand

As shown in Figure 2, parking demand is anticipated to peak at 6 p.m. with 92 vehicles. The proposed project includes 69 on-site parking stalls resulting in a potential parking spillover of 23 vehicles. The proposal would increase on-street parking supply for daytime use by 11 stalls as well as provide allowance for overnight on-street parking along the frontages. Currently, there is no overnight parking along the S 141st Street frontage and there are 3 stalls along 42nd Avenue S that could be used for overnight parking; the proposed project increases the overnight parking supply by 29 stalls (i.e., 26 new stalls along S 141st Street and 3 new stalls along 42nd Avenue S frontage). The ability to accommodate the potential project spillover parking was reviewed considering the proposed on-street parking supply of 32 stalls and the availability of on-street parking.

Evening On-Street Parking Review

An on-street parking study was completed within a 5- to 6-minute or 1,200-foot walking distance of the project site. The study area is residential in nature with neighborhood commercial along Tukwila International Boulevard. The principal arterial and collector roads have sidewalk facilities on at least one side of the roadway and many of the local streets do not have sidewalks, curb or gutters. The study included the area approximately S 137th Street to S 146th Street and 37th Avenue S to 45th Avenue S and is shown on Figure 3.





Figure 3 On-Street Parking Area

Parking supply and utilization data was collected in December 2019 within the study area for two days. Parking utilization was collected over two midweek evenings and averaged. Tukwila Municipal Code does not specify a restricted parking distance next to mailboxes, so a distance of 15 feet was assumed to calculate parking supply. Vehicles were observed parking in front of mailboxes and were included in the parking demand counts.

On-street parking utilization was collected in the evening when the proposed project peak parking demand occurs. The data provides supply and demand at 800-foot (3 to 4-minute) and 1,200-foot (5- to 6-minute) walking distances from the site. Parking utilization data were collected over two midweek evenings and averaged. A detailed summary of the parking supply and demand is provided in Attachment B and a map is shown on Figure 4.

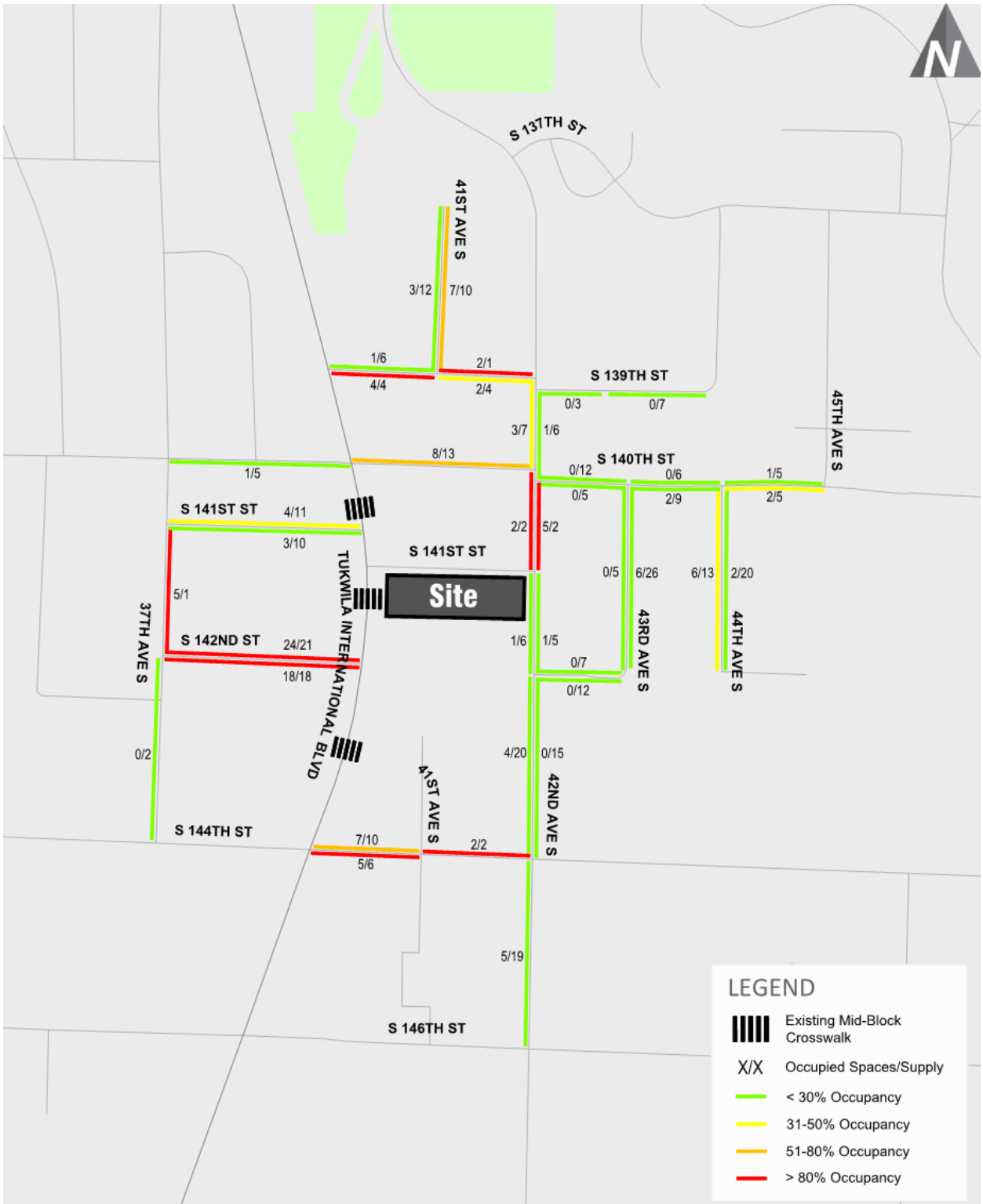


Figure 4 Evening Average On-Street Parking Utilization

Parking is currently allowed along south side of S 141st Street along the project frontage but is limited to 4-hour parking all day, which limits overnight parking. The S 141st Street parking was not included in the existing supply since it currently is limited to 4-hour parking and no vehicles

were observed parking along this street. It is anticipated with the proposed project the parking along S 141st Street would be available for overnight use. The proposal includes 44 stalls along the two frontages. The proposed on-street parking supply along the frontage has the potential to accommodate all of the anticipated 23 vehicle spillover. The on-street parking would be open to the public; therefore, the on-street parking study reviewed availability with 800- to 1,200-feet of the site to capture other on-street parking demands from nearby land uses.

As shown on Figure 4, many of the blocks near the project site are less than 30 percent utilized and could accommodate parking associated with the proposed project. Table 5 provides a summary of the results of the on-street parking study and the ability to accommodate the proposed project spillover demand of up to 23 vehicles.

Table 5. Evening On-Street Parking Study

	Walking Distance from Site	
	800-feet	1,200-feet
<i>Existing</i>		
On-Street Supply ¹	146	353
Average On-Street Parking Occupied ²	29	131
Available On-Street Parking	117	222
Average Percent On-Street Parking Occupied	20%	37%
<i>With-Project</i>		
Proposed On-Street Supply ³	175	382
Anticipated On-Street Project Demand ⁴	23	23
Total Future On-Street Parking Demand (Existing + Proposed Project)	52	154
Available On-Street Parking (Supply – Future Demand)	123	228
Percent of Parking Occupied in Study Area	30%	40%

1. Based on supply collected December 2019.
2. Based on an average of two days of data collection.
3. Reflects the increase in overnight parking supply with the proposed project including 26 spaces along S 141st Street and 3 additional spaces along 42nd Avenue S. Increase in parking supply along S 141st Street is due to restriping and the allowance of overnight parking with the proposed project.
4. Potential number of vehicles parking on-street for the proposed project based on shared parking demand calculations and evening overspill.

As shown in Table 5, there is on-street parking available within 800 and 1,200 feet of the project site to accommodate demand associated with the project under both scenarios. Under future with-project conditions, it is anticipated that parking within 800 feet of the proposed project would be 30 percent occupied and parking within 1,200 feet of the proposed project would be 40 percent occupied. Generally, it may become more difficult to find available parking on-street with areas are over 85 percent parking.

Midday On-Street Parking Review

Although the proposed project’s peak parking demand is anticipated to occur in the evening, an additional midday parking demand study was done with consideration for the Abu Bakr Islamic Center. The Abu Bakr Islamic Center of Washington (the Center) is located at 14121 Tukwila International Boulevard across from the project site. There is an approximately 30-minute midday prayer service that results in increased parking on-street. On-street parking counts were collected in 30-minute increments between approximately 12 and 2 p.m. on Friday, February 14, 2020 within a 4 to 5-minute walk from the Center to provide an understanding of midday parking occupancy. A detailed summary of the parking supply and demand is shown on Figure 5.



Figure 5 Midday 1p.m. On-Street Parking Supply and Utilization Summary

The study area for the midday review focuses on the area within a 4- to 5-minute walk from the Center and includes streets north of 140th Street along 37th Avenue S and 38th Avenue S. These two streets were not included in the evening on-street parking study because they are more than a 1,200-foot walking distance from the project site and the midday parking study focuses on parking within a 4- to 5-minute walk (or approximately 1,000-feet) of the Center.

As shown on Figure 5, with midday prayer services, many of the blocks near the Center are more than 80 percent occupied. The available parking in the study area is located along S 140th Street, 37th Avenue S and 42nd Avenue S and is not immediately adjacent to the Center. Table 6 provides a summary of the results of the midday on-street parking study and a potential increase in on-street parking within the proposed project. The with-project sensitivity analysis is provided to understand a potential worst-case scenario. The parking area that is within 4- to 5-minutes of the project site is slightly different than the Center parking study area so it is unlikely that all of the proposed project parking would occur within the same area as the Center parking.

Table 6 shows that currently there is a short period of about 30 minutes when parking in the study area is 84 percent occupied. As described previously, it may be more difficult to find available parking when approximately 85 percent or more of the on-street parking is occupied. Outside of the 30-minute period when the pray services are occurring, parking occupancy in the study area is 71 percent or less.

Table 6. Midday On-Street Parking Study – 800-feet from Abu Bakr Islamic Center

	Time		
	12:30 p.m.	1 p.m.	1:30 p.m.
<u>Existing</u>			
On-Street Supply ¹	202	202	202
On-Street Parking Occupied ¹	144	170	115
Available On-Street Parking	58	32	87
Average Percent On-Street Parking Occupied	71%	84%	57%
<u>With-Project Sensitivity Analysis</u>			
Proposed On-Street Supply ²	213	213	213
Anticipated On-Street Project Demand ³	14	10	10
Total Future On-Street Parking Demand (Existing + Proposed Project)	158	180	125
Available On-Street Parking (Supply – Future Demand)	55	33	88
Percent of Parking Occupied in Study Area	74%	85%	59%

1. Based on supply and peak parking counts collected February 2020.
2. Reflects the increase in midday on-street parking supply with the proposed project of 11 spaces for a total of 32 on-street parking spaces along the frontages.
3. Potential number of vehicles parking on-street for the proposed project based on shared hourly parking demand calculations and midday overspill.

The sensitivity analysis assuming the parking overspill from the proposed project occurred within a 4- to 5-minute walk from the Center shows that during the prayer services the on-street parking occupied could be up to 85 percent, making finding available somewhat parking difficult for a short period. The proposed project is being designed compatible with the Center and the project commercial uses may be closed during prayer services resulting in less parking demand than estimated for the proposed project. In addition, the lack of curb, gutter, and striping along both sides of S 141st Street and S 142nd Street results in some inefficiencies in parking. Improvements along S 141st Street and S 142nd Street could help increase parking supply.

Summary/Recommendations

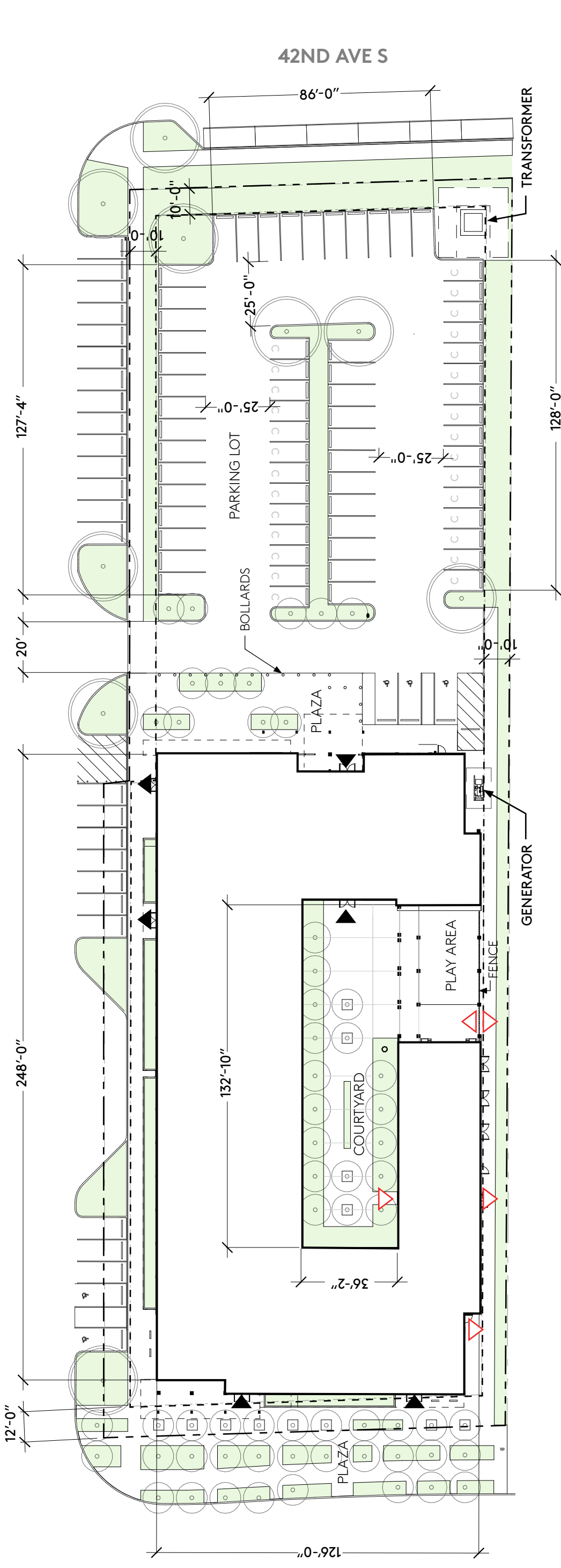
The proposed mixed-use development includes up to 100 affordable residential apartment units, 1,280 square feet of restaurant and 12,635 square feet of commercial space. The proposed development would replace the existing 62-room motel. The project is proposing to provide 69 on-site vehicle parking stalls and frontage improvements resulting in 32 on-street stalls. Through the use of shared parking, the peak parking demand for the proposed project is anticipated to be 92 vehicles. A review of existing on-street parking facilities indicated that the potential overspill could be accommodated on-street within an 800 to 1,200-foot walking distance of the project site.

On-street parking was also reviewed around the Abu Bakr Islamic Center during midday prayer services. The study shows for a 30-minute period finding available parking within a 4- to 5-minute walk of the Center may be difficult. There is available parking along S 140th Street, 37th Avenue S and 42nd Avenue S, but it is not immediately adjacent to the Center. The proposed project is being designed compatible with the Center and the project commercial uses may be closed during prayer services resulting in less parking demand. Improvements along S 141st Street and S 142nd Street could help increase parking supply.

Attachment A: Preliminary Site Plan

SITE PLAN

S 141ST ST

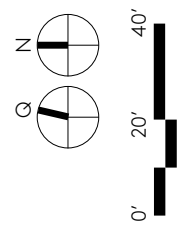


NOTE:
SEE PARKING AND LOADING PLAN FOR STALL AND BIKE PARKING COUNTS

SEE RECREATION SPACE PLAN FOR SQUARE FOOTAGES

LEGEND

- PROPERTY LINE
- SETBACK LINE
- ▲ EXIT/ENTRANCE
- ▲ EMERGENCY EGRESS



Attachment B: Parking Demand and Supply

14110 Tukwila Int Blvd

Weekday Shared Parking Demand Estimate

Use Size Parking Rate Rate Source Unadjusted Demand ²	Residential (LU 223)		Restaurant (LU 930 Fast Casual)		Retail (LU 820)		TOTAL Shared Parking Demand	
	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand		
		90		13		25		
		100 DU 0.9 vehicles/DU <i>Counts at affordable developments</i>		1,280 sf 9.93 vehicles/1,000 sf <i>ITE Parking Generation (5th Ed)</i>		12,635 sf 1.95 vehicles/1,000 sf <i>ITE Parking Generation (5th Ed)</i>		
Time of Day ³	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand		
6:00 AM	83%	75	2%	0	0%	0	75	
7:00 AM	71%	64	2%	0	0%	0	64	
8:00 AM	61%	55	5%	1	15%	4	60	
9:00 AM	55%	50	14%	2	32%	8	60	
10:00 AM	54%	49	17%	2	54%	14	65	
11:00 AM	53%	48	18%	2	71%	18	68	
12:00 PM	50%	45	100%	13	99%	25	83	
1:00 PM	49%	44	75%	10	100%	25	79	
2:00 PM	49%	44	45%	6	90%	23	73	
3:00 PM	50%	45	31%	4	83%	21	70	
4:00 PM	58%	52	23%	3	81%	20	75	
5:00 PM	64%	58	49%	6	84%	21	85	
6:00 PM	67%	60	77%	10	86%	22	92	
7:00 PM	70%	63	69%	9	80%	20	92	
8:00 PM	76%	68	28%	4	63%	16	88	
9:00 PM	83%	75	20%	3	42%	11	89	
10:00 PM	90%	81	11%	1	15%	4	86	
11:00 PM	93%	84	0%	0	0%	0	84	
12:00 AM	100%	90	0%	0	0%	0	90	
Daily Peak Parking Demand								
Minimum							92	
Supply 101							60	
Overspill							-9	

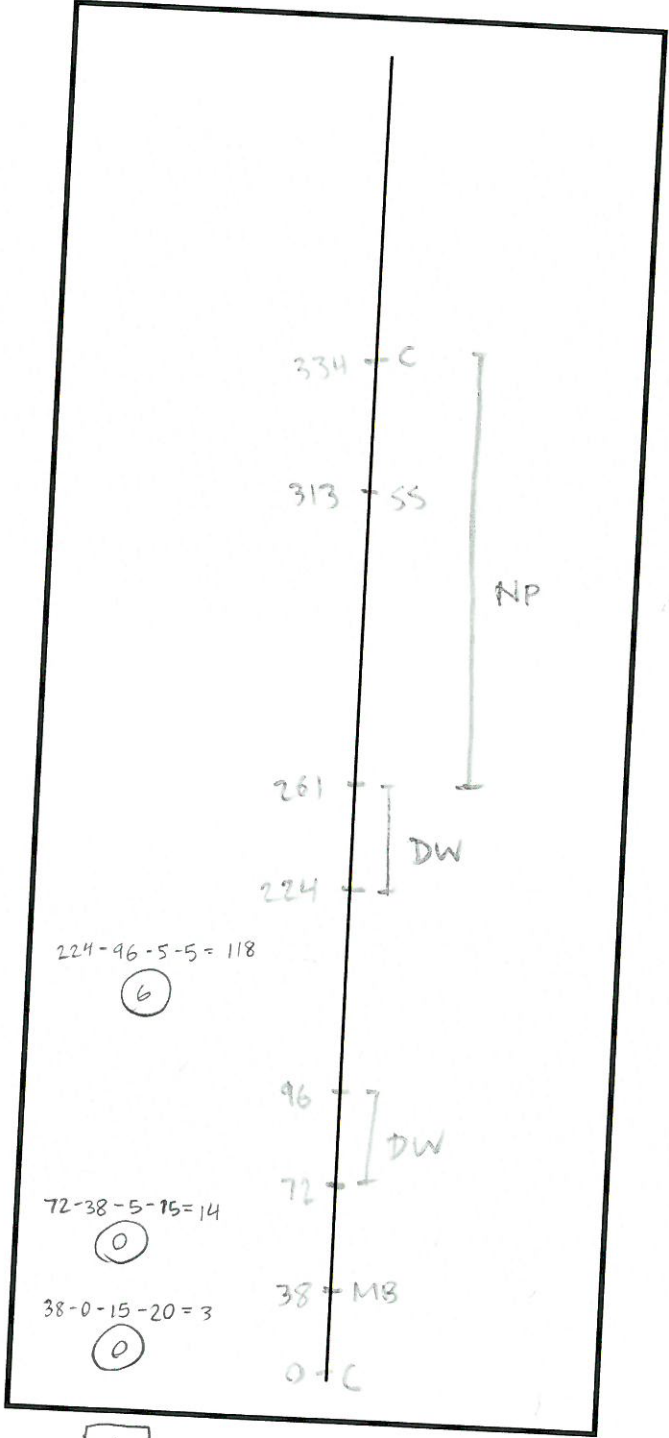
Note: sf = square-feet, DU = dwelling units
 Maximum Anticipated Parking Demand of All Uses
 1. No data available for hourly parking demand percentages in either ITE or ULI. It is assumed that all parking demand is related to daycare staff. The Parking Estimate does not include drop-off/pick-up and it is anticipated that there will be a designated drop-off/pick-up area. Based on *Parking and Trip Generation Characteristics for Day-Care Facilities* by John W. Van Winkle and S. Colin Kinton, it is estimated that on average staff account for approximately 55% of the total parking demand, which was assumed for estimating parking demand and for determining mid-day hourly demand. Hours outside of the midday were based on operations at the facility.
 2. No mode split reductions assumed.
 3. Based on the ITE Parking Generation, 5th Edition. Hourly demand for the residential use is based on LU 221 as no distribution was available for LU 223.

Block 1 S 139th St between Tukwila Int Blvd and 41st Ave S

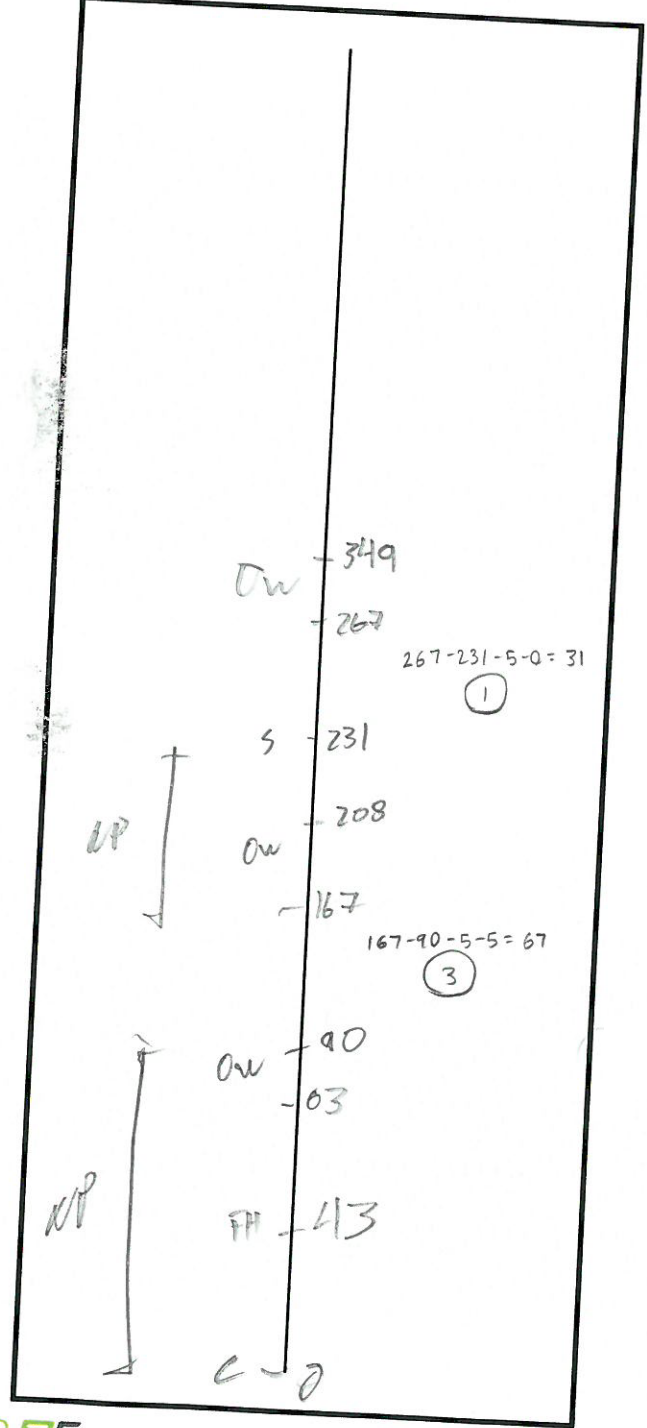
Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side
 Mail box (MB) = 15' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: N



Side: S

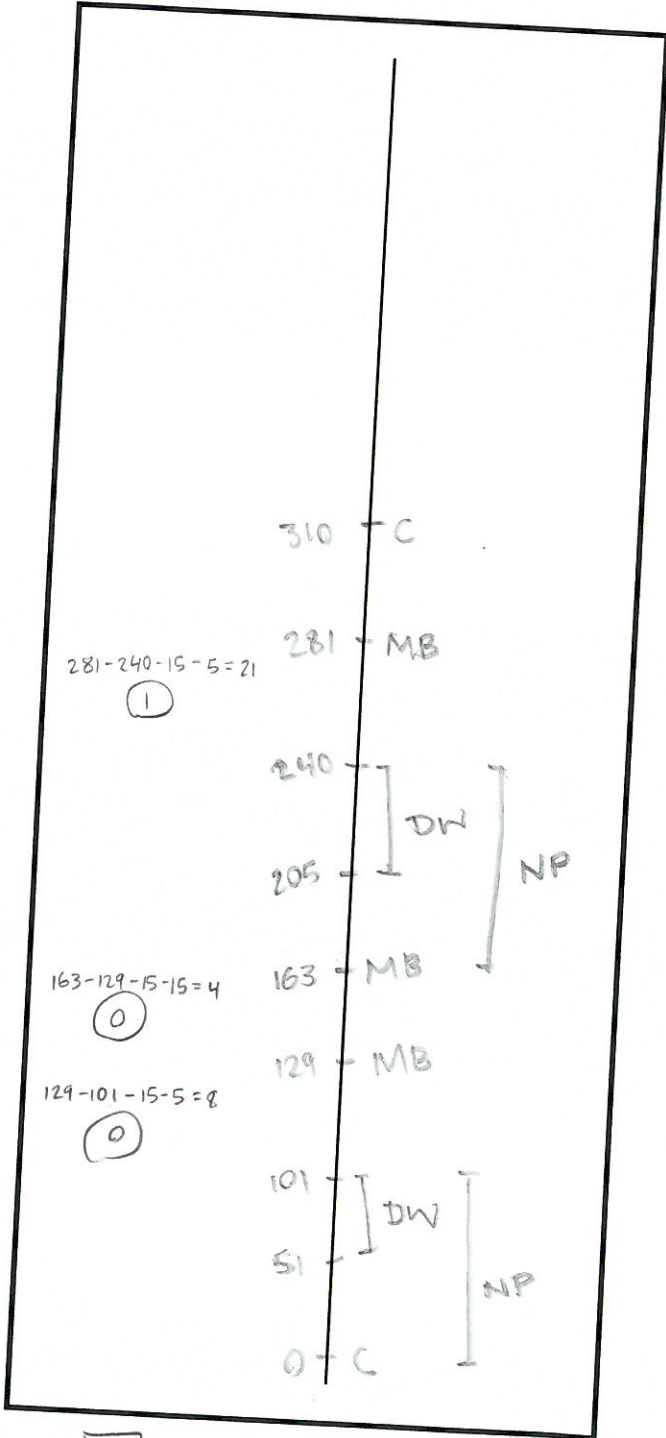


Block 2 S 139th St between 41st Ave S and 42nd Ave S

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 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

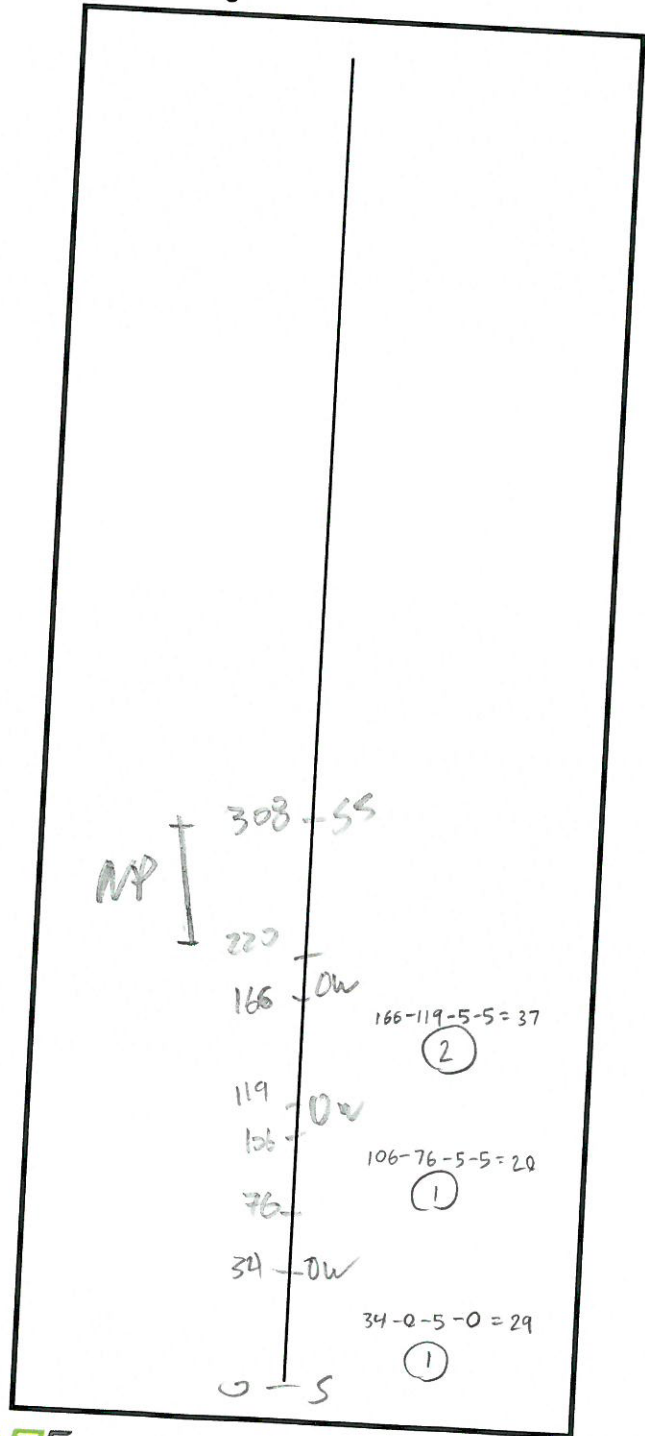
Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: N



1

Side: S



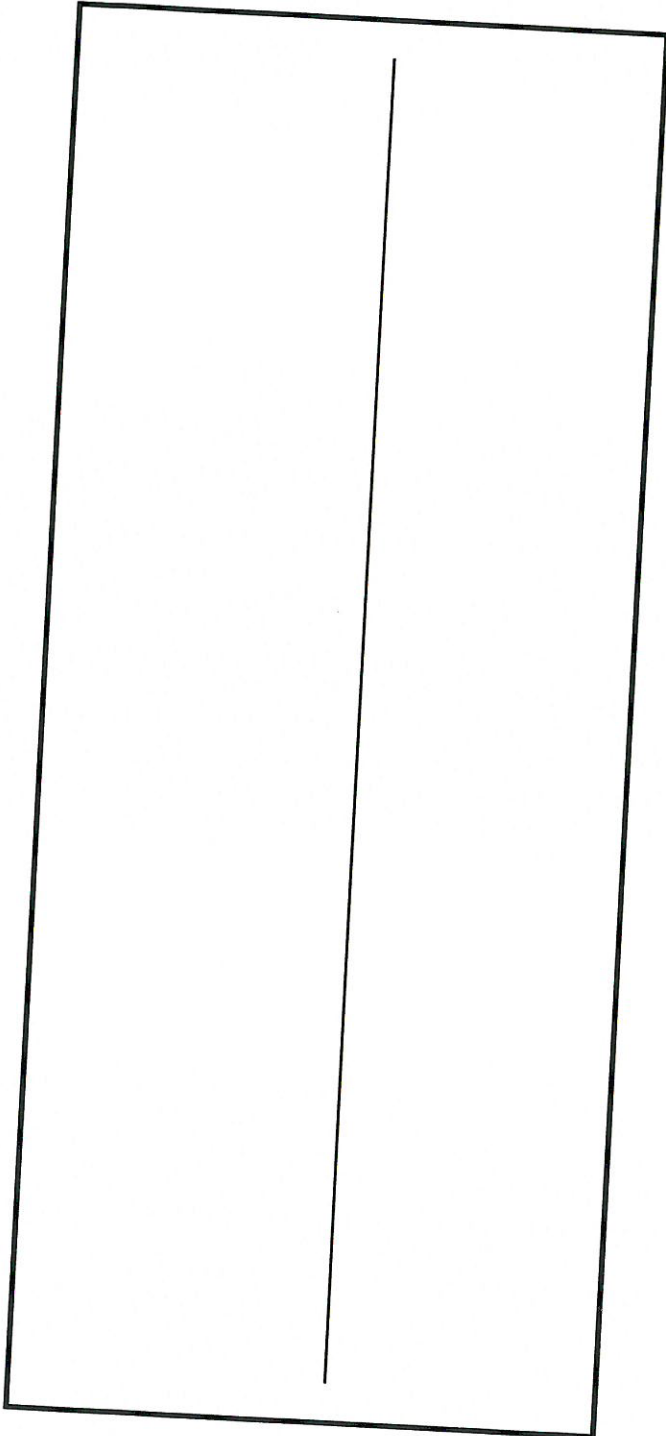
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Block 3 S 139th St between 42nd Ave S and Driveway

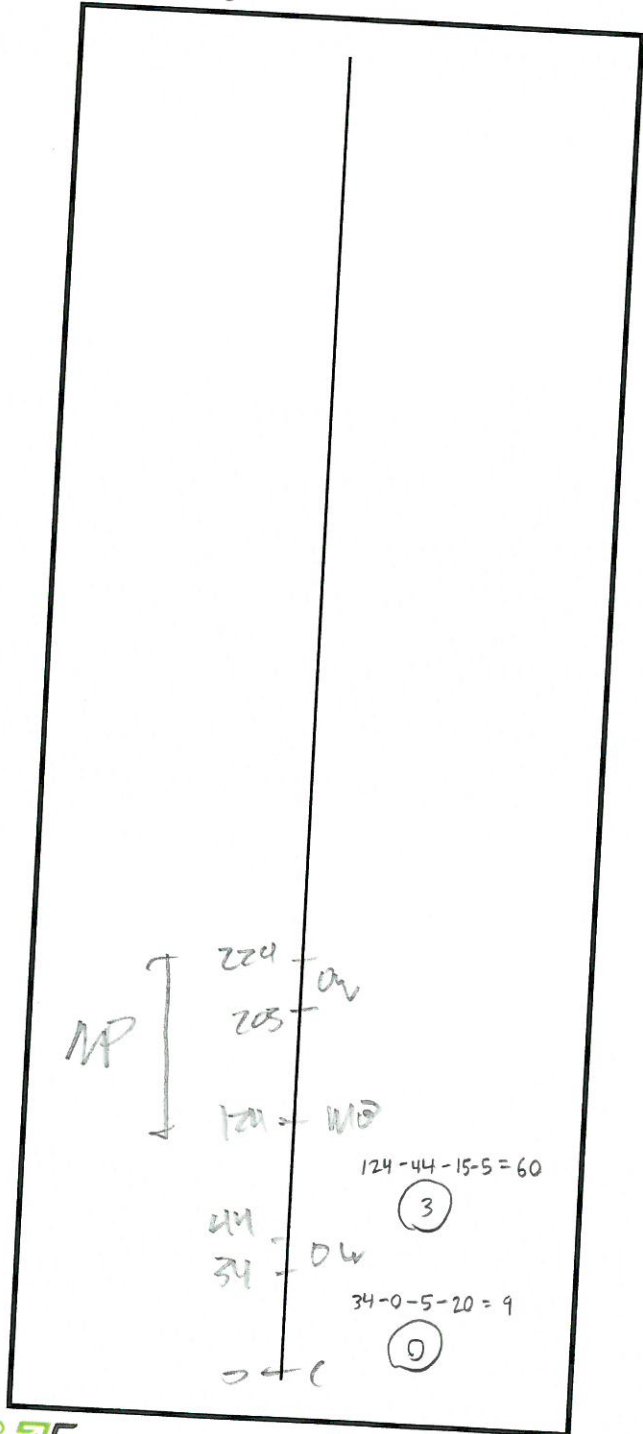
Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: N



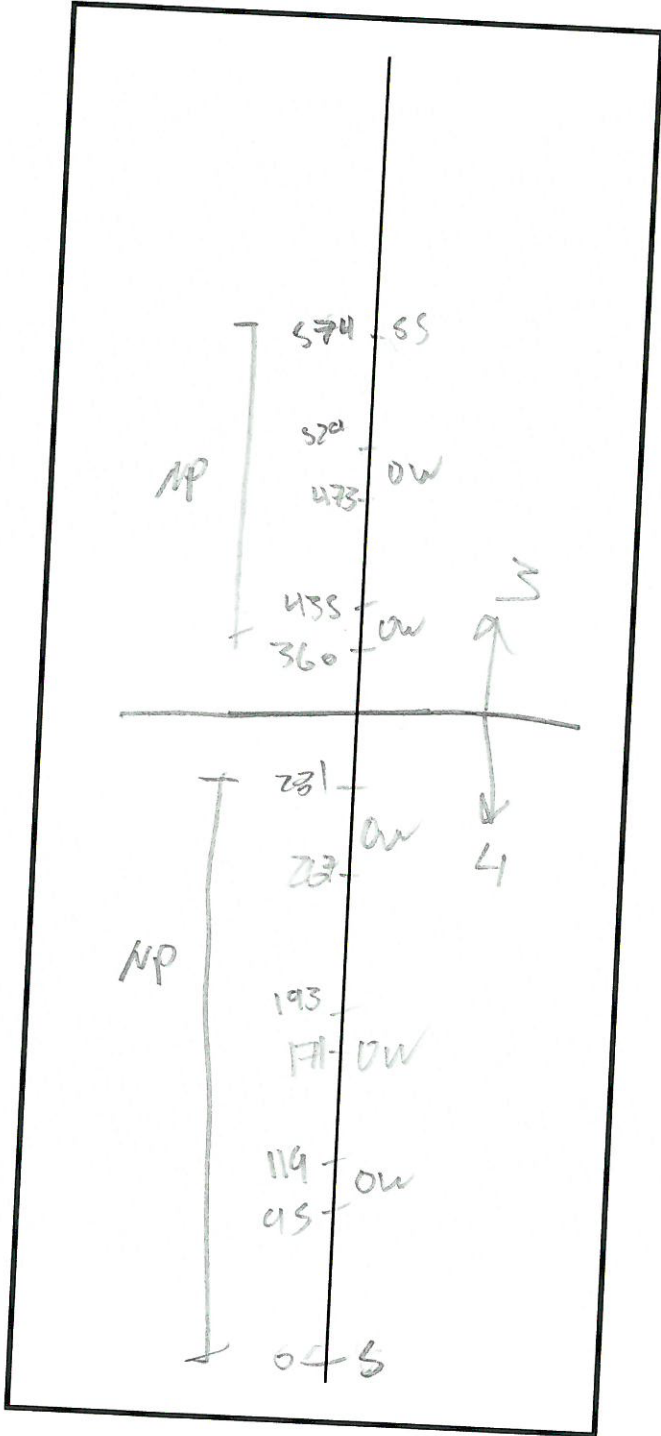
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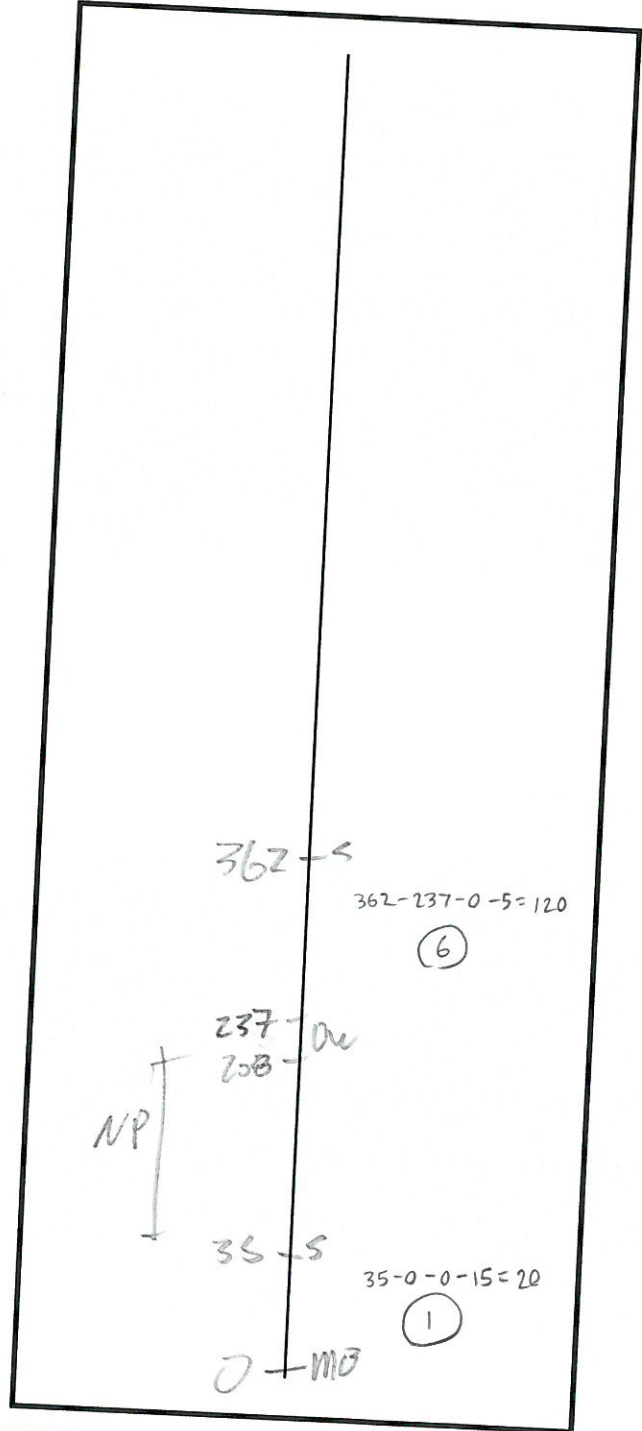
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 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: N



Side: S



Block

5

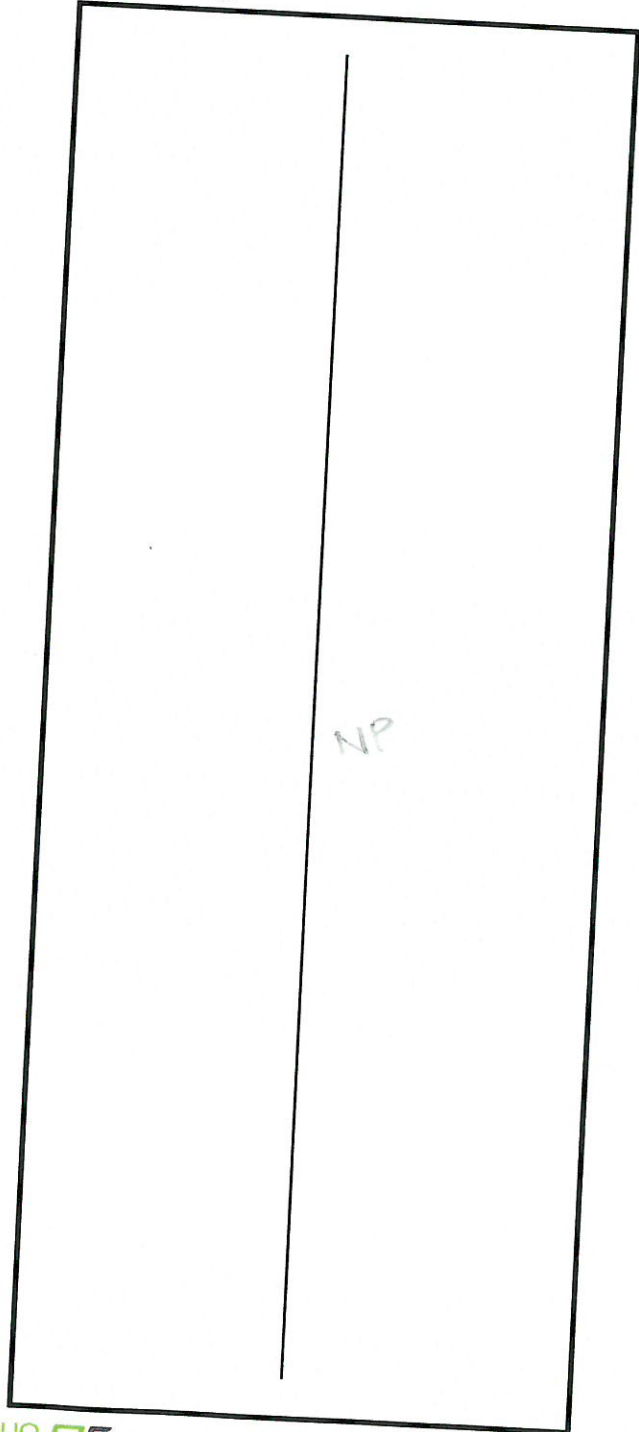
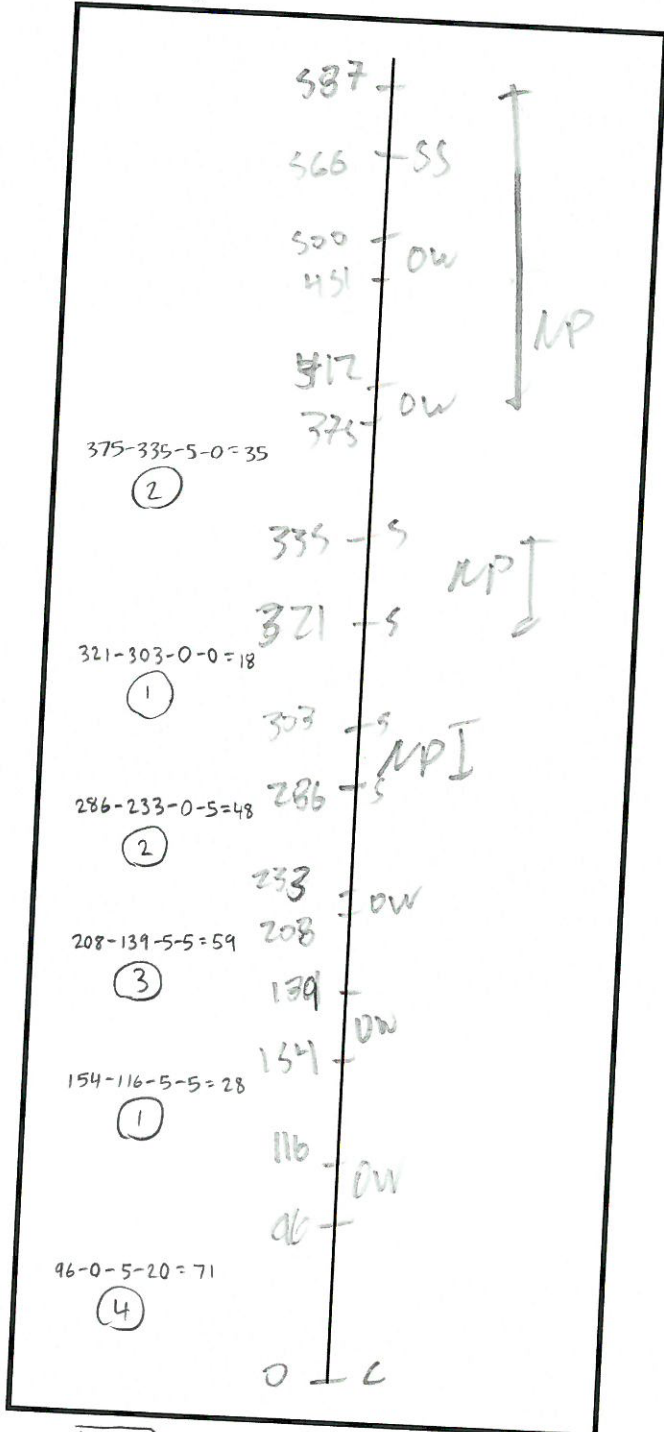
S 140th St between Tukwila Int Blvd and 42nd Ave S

Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: N

Side: S



13

Block

6

S 140th St between 42nd Ave S and 43rd Ave S

Curb (C), no sign (NS) = 20'

Stop or yield sign (SS) = 30'

Driveways (DW) = 5' per side

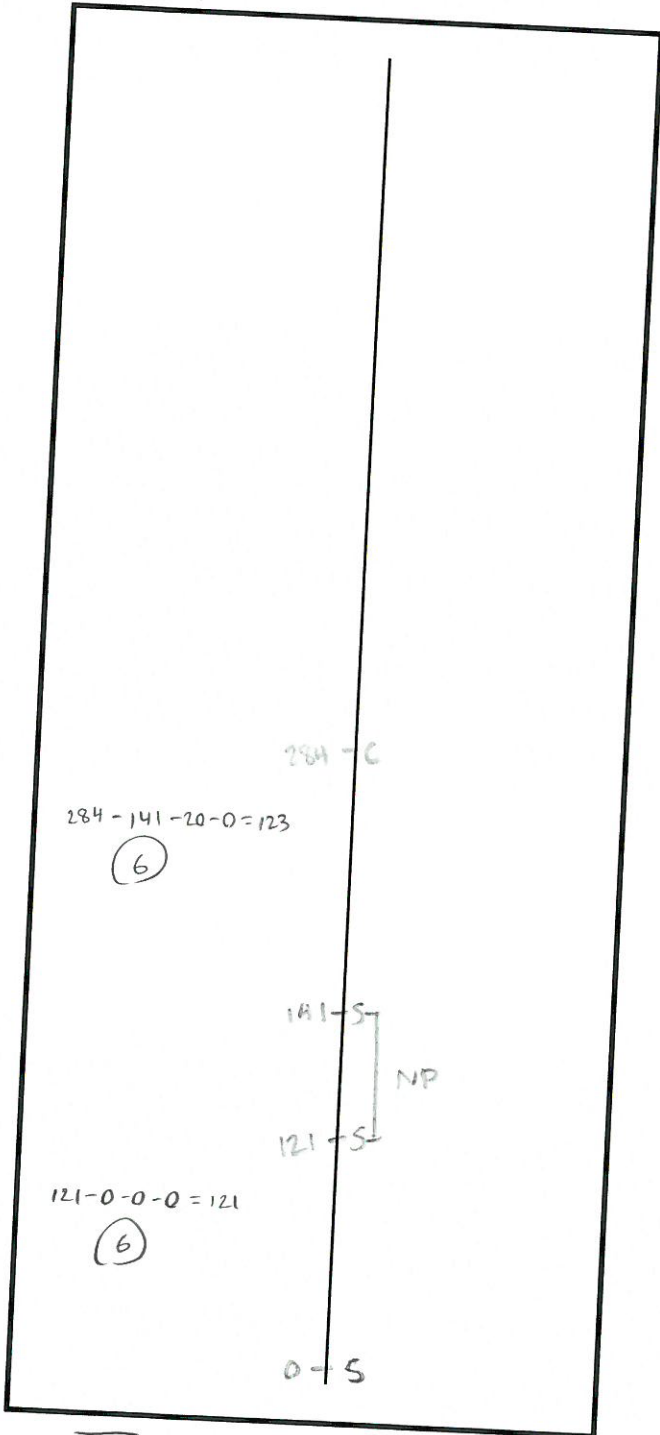
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Fire Hydrant (FH) = 15' per side

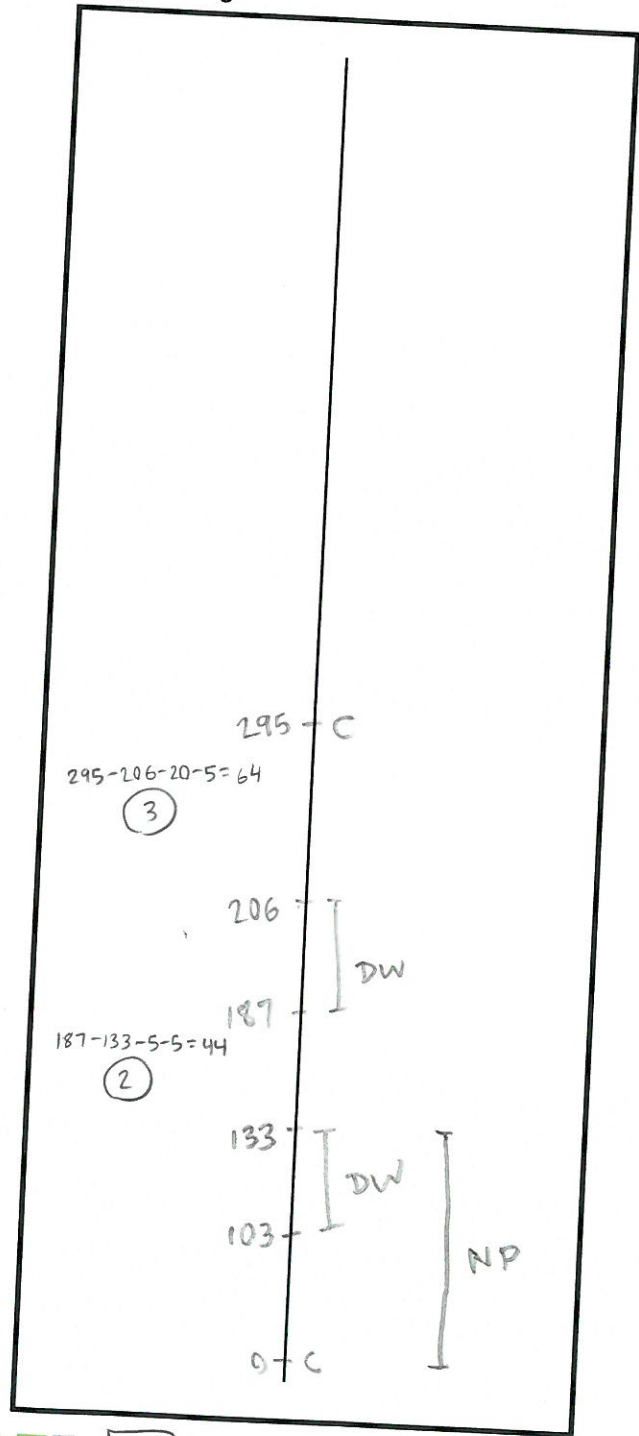
Parking Sign (S) = 0'

Curb, end of block = 20'

Side: S



12



5

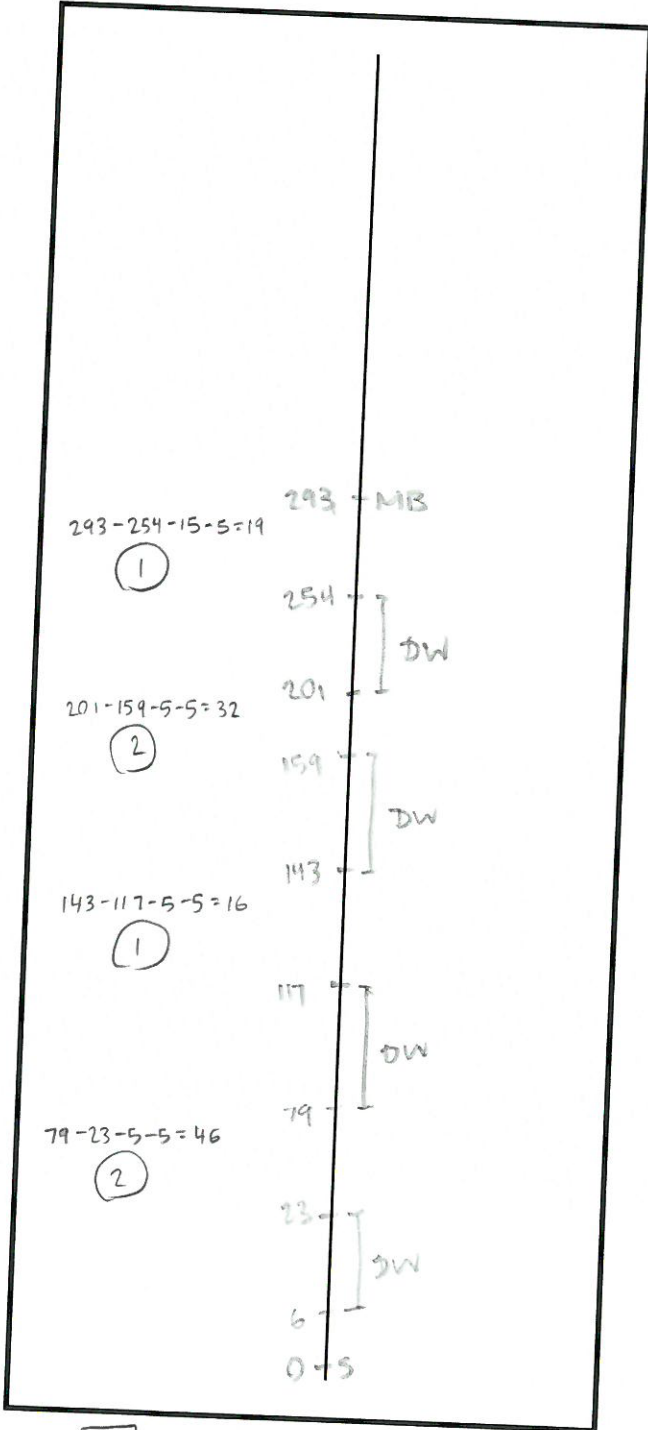
transpogroup
WHAT TRANSPORTATION CAN BE.

Block 7 S 140th St between 43rd Ave S and 44th Ave S

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 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

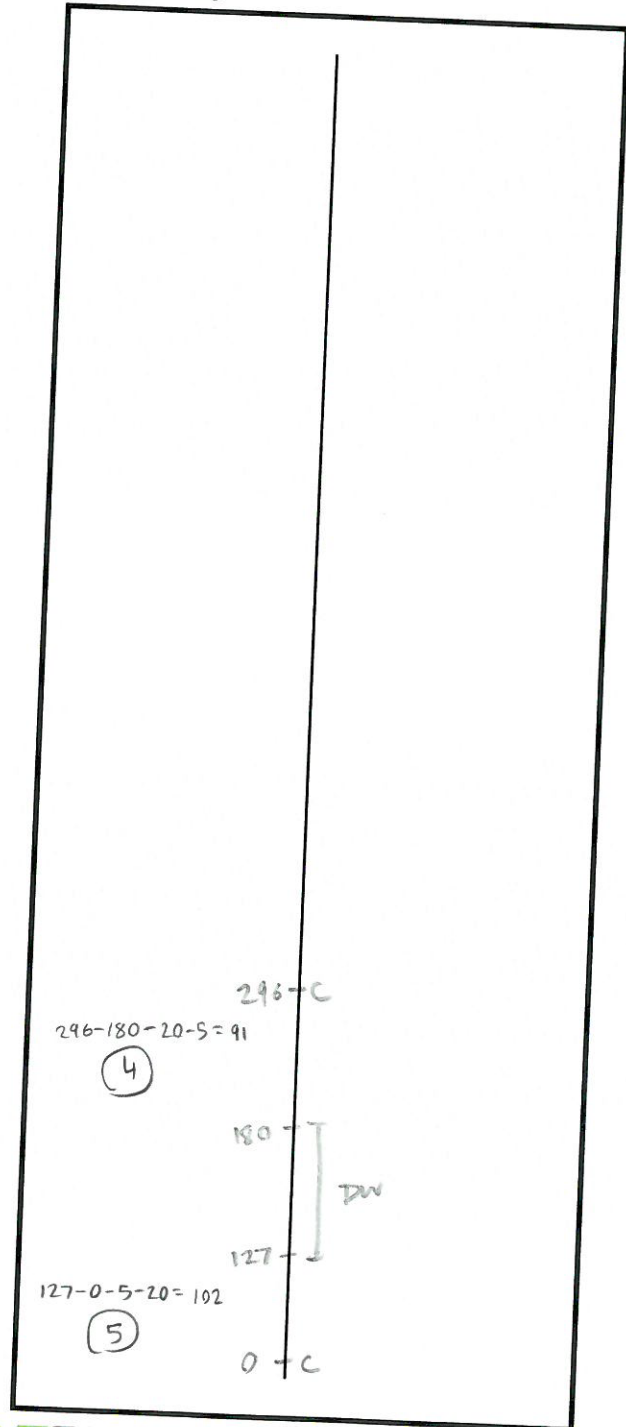
Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: N



6

Side: S



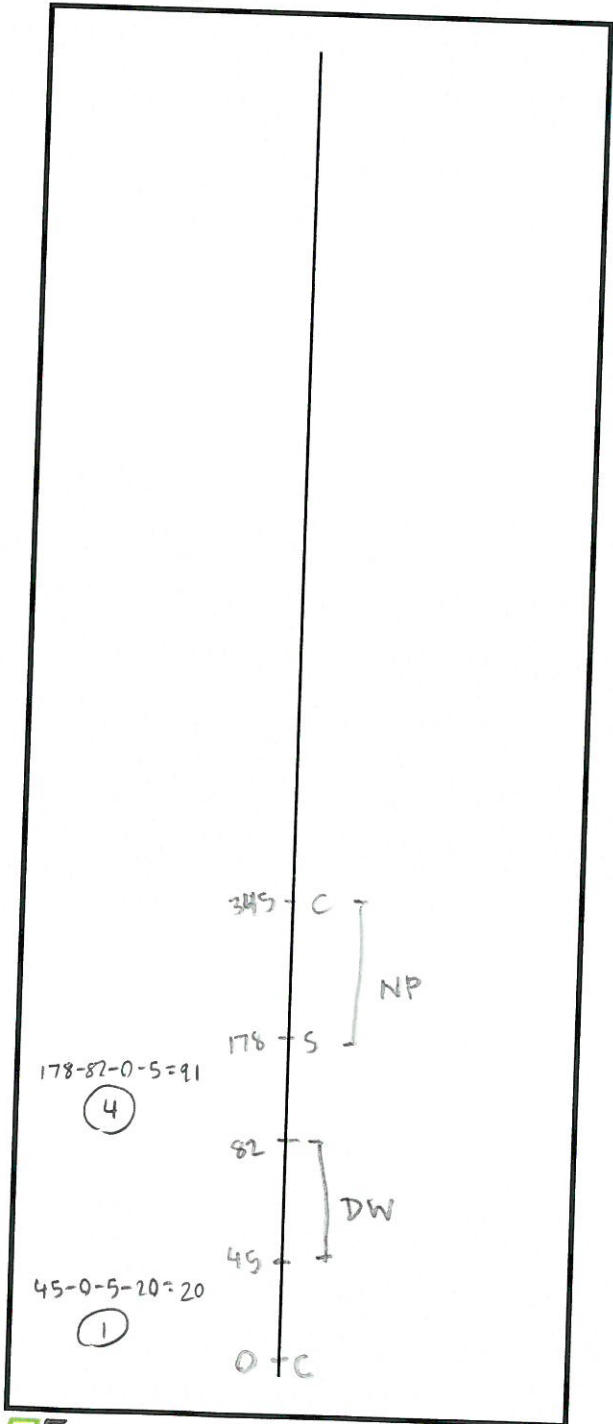
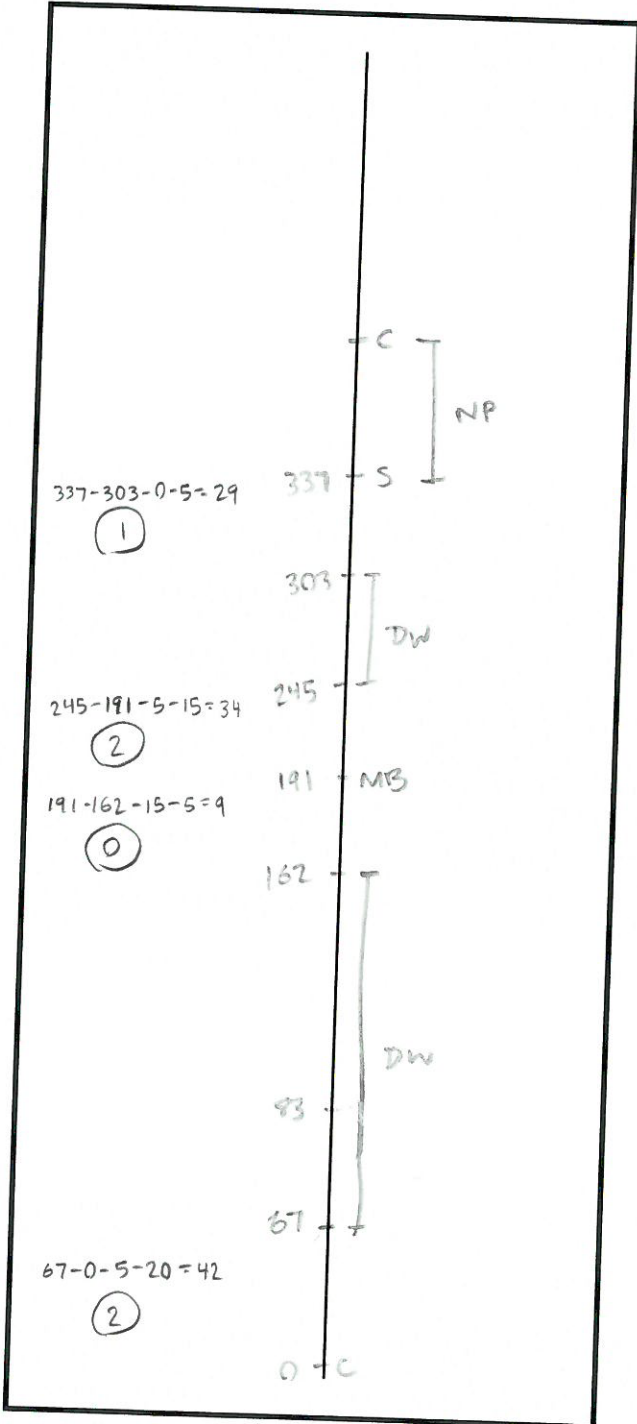
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Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: N

Side: S



5

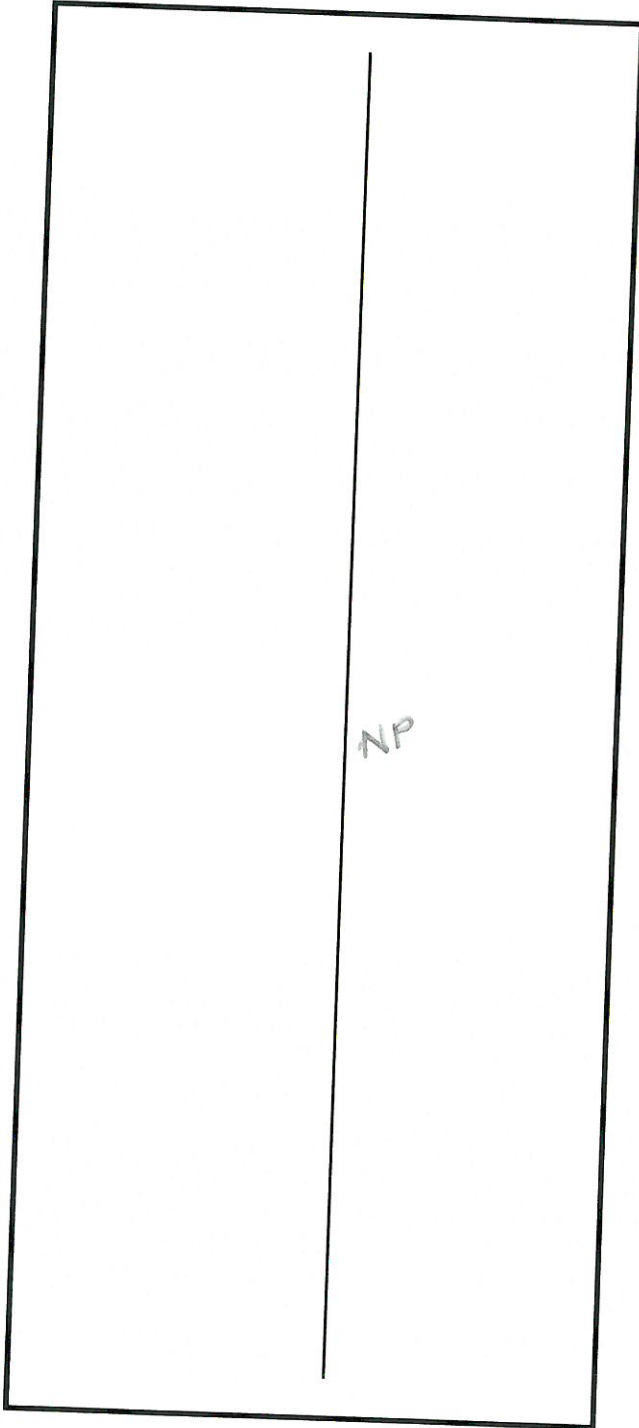
5

Block 9 S 141st St between Tukwila Int Blvd and 42nd Ave S

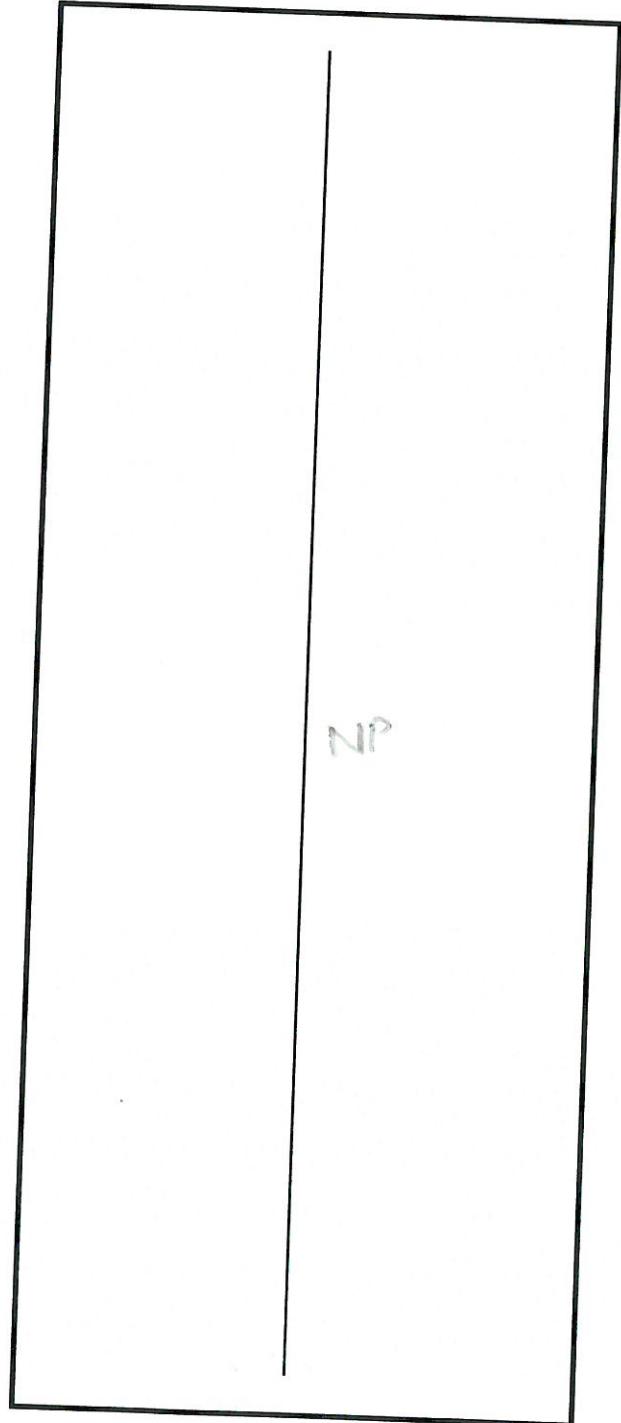
Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: N



Side: S



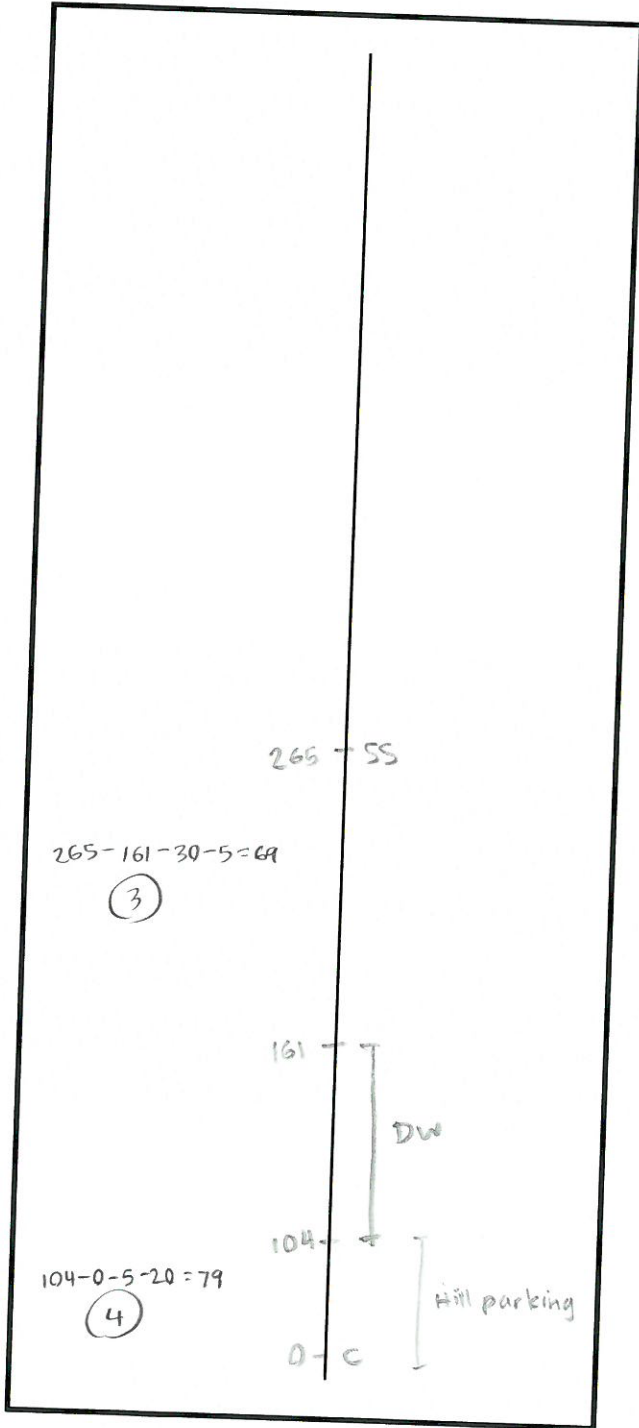
Block 10

S 142nd St between 42nd Ave S and 43rd Ave S

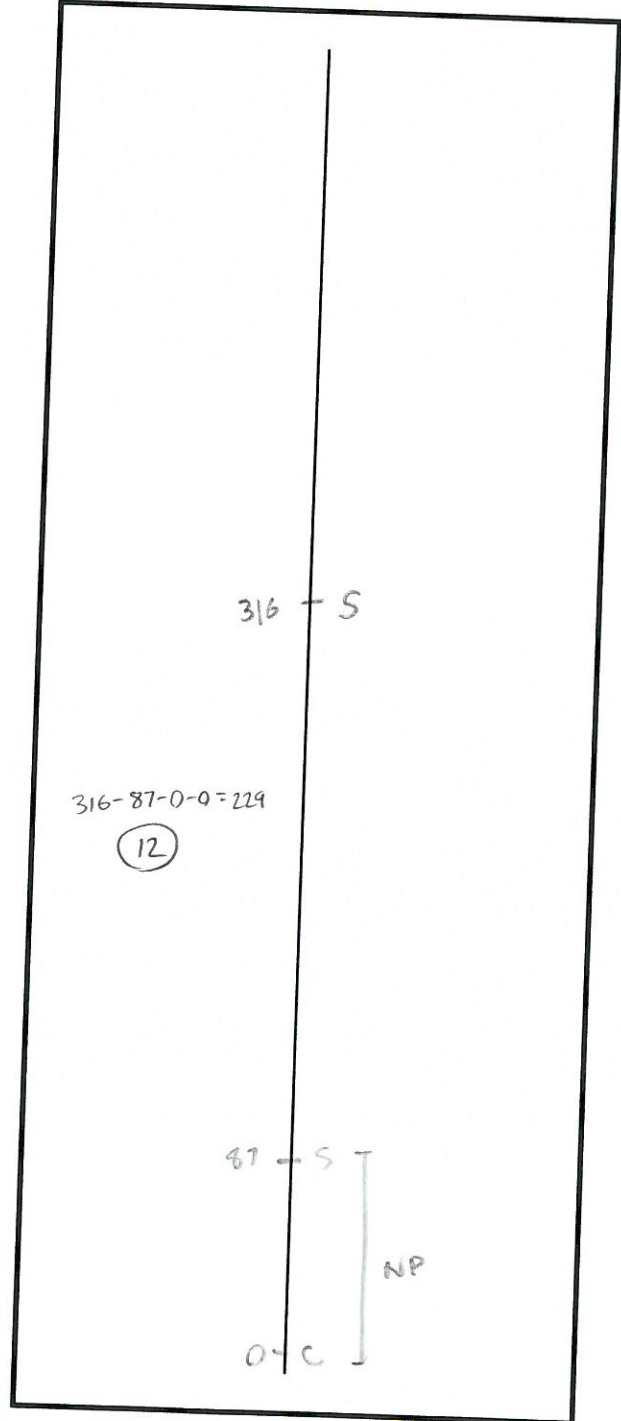
Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: N



Side: S



7

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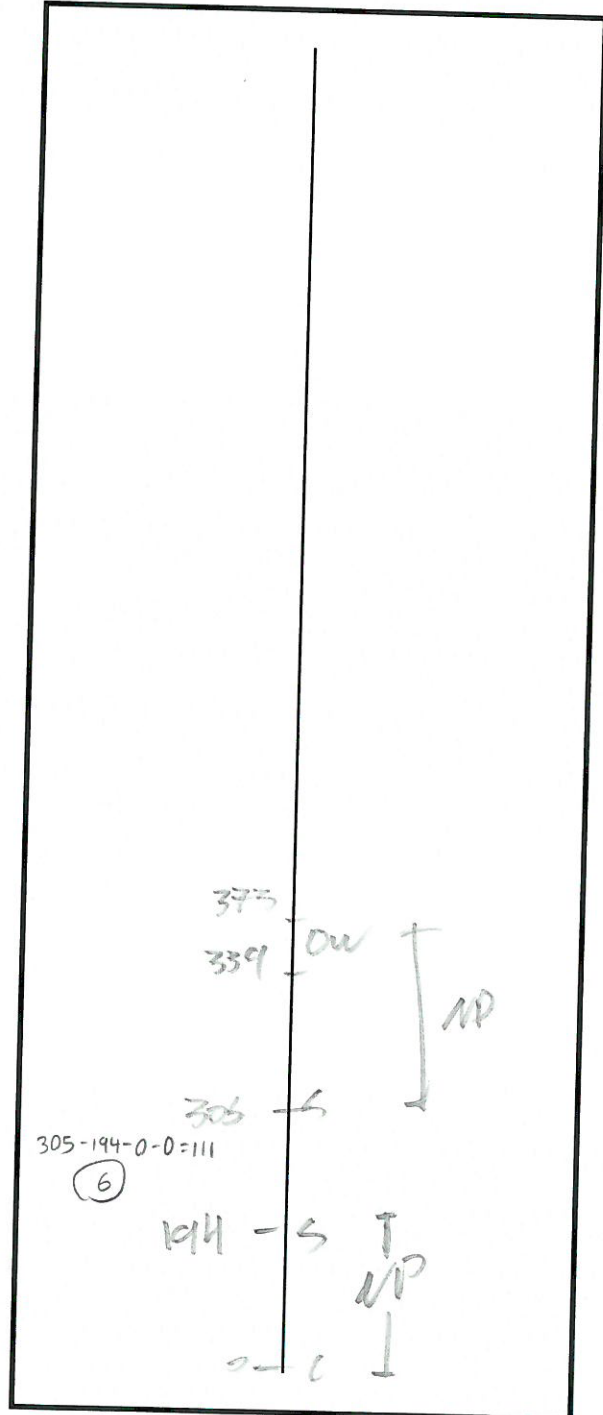
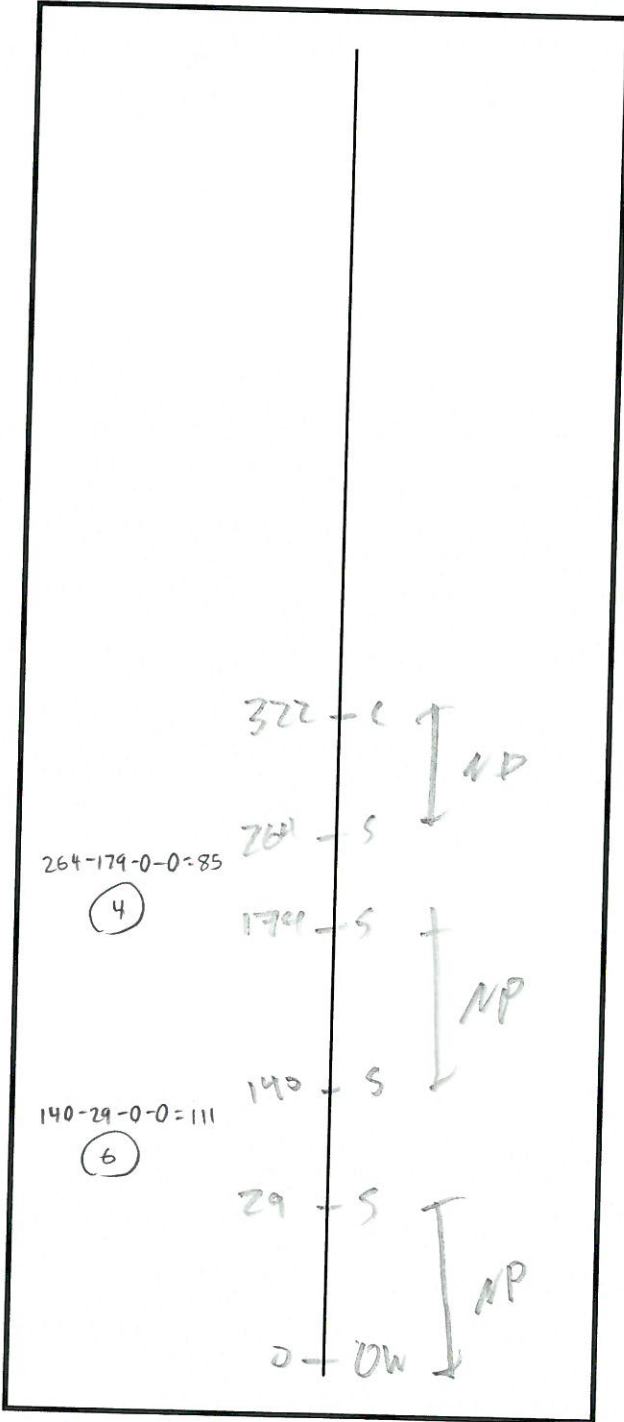
12

Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: N

Side: S



10

6

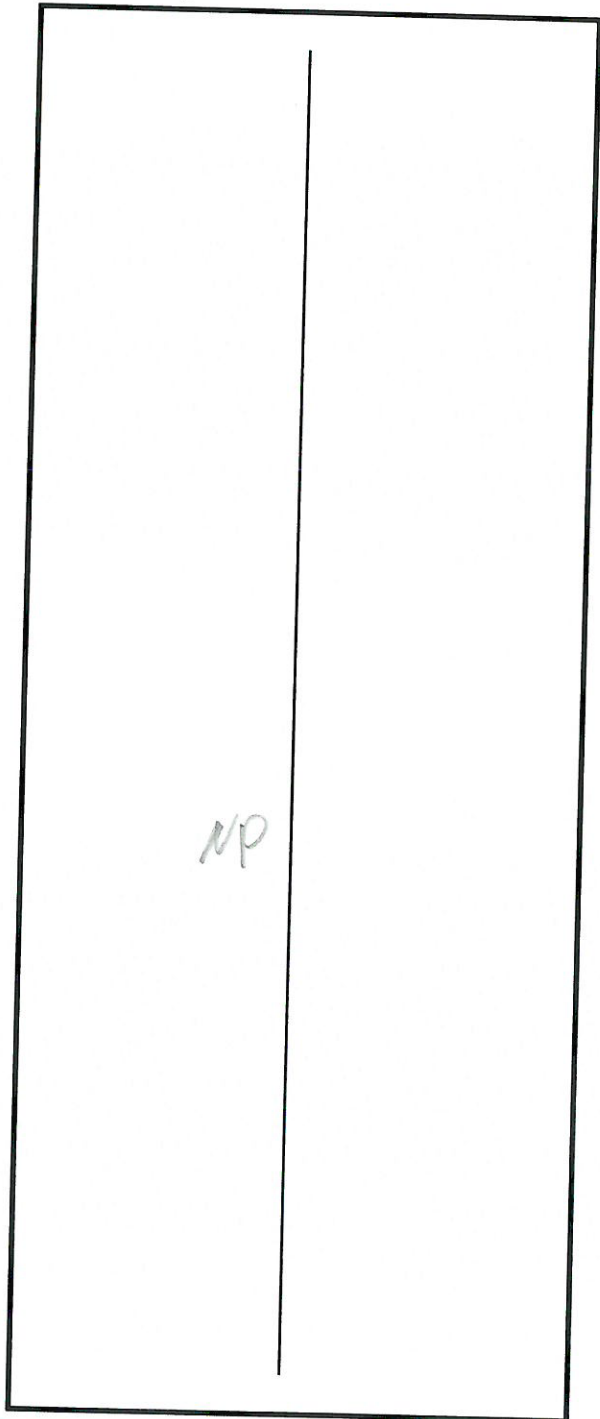
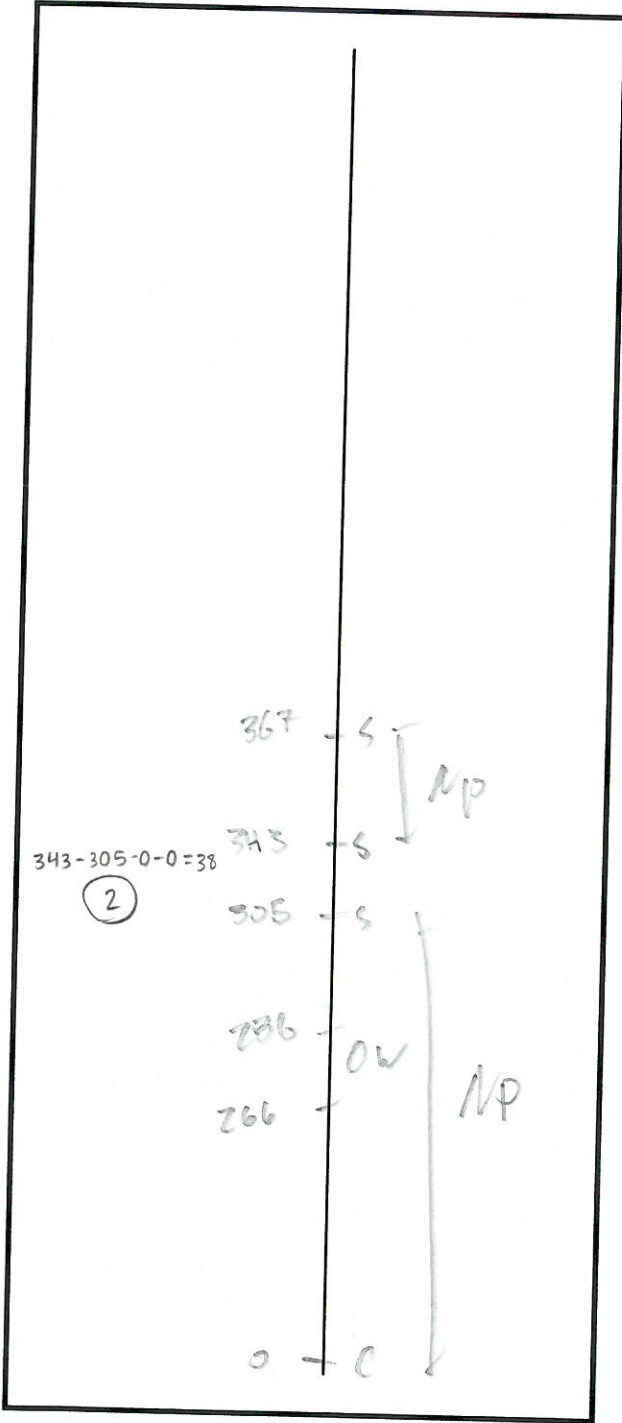
Block 12 S 144th St between 41st Ave S and 42nd Ave s

Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: N

Side: S

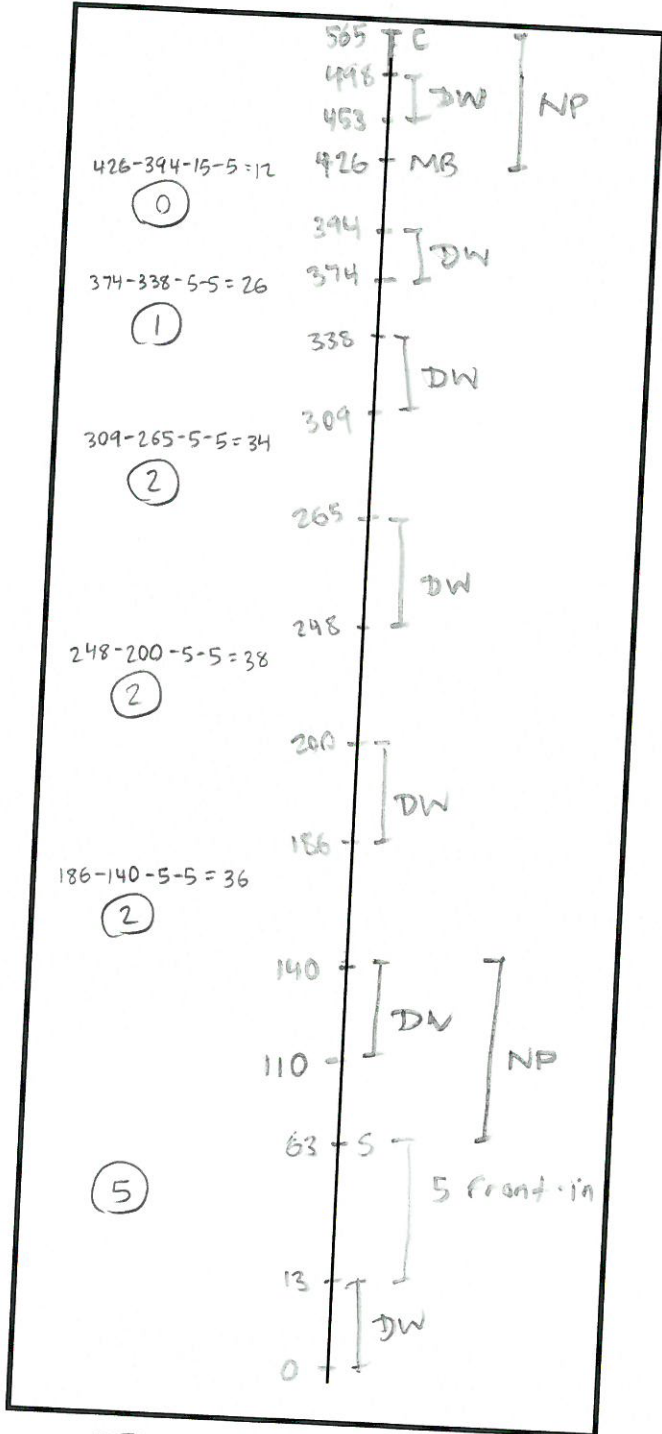


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 Driveways (DW) = 5' per side

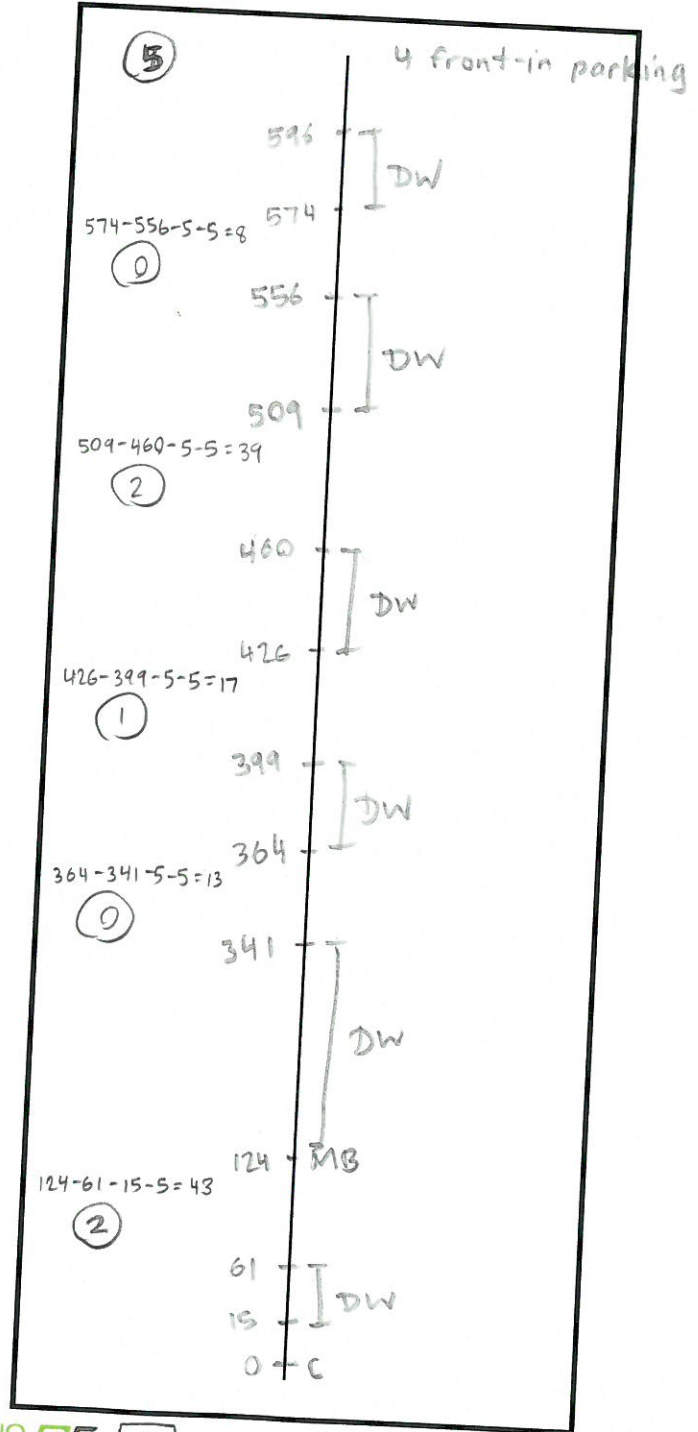
Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W



12

Side: E



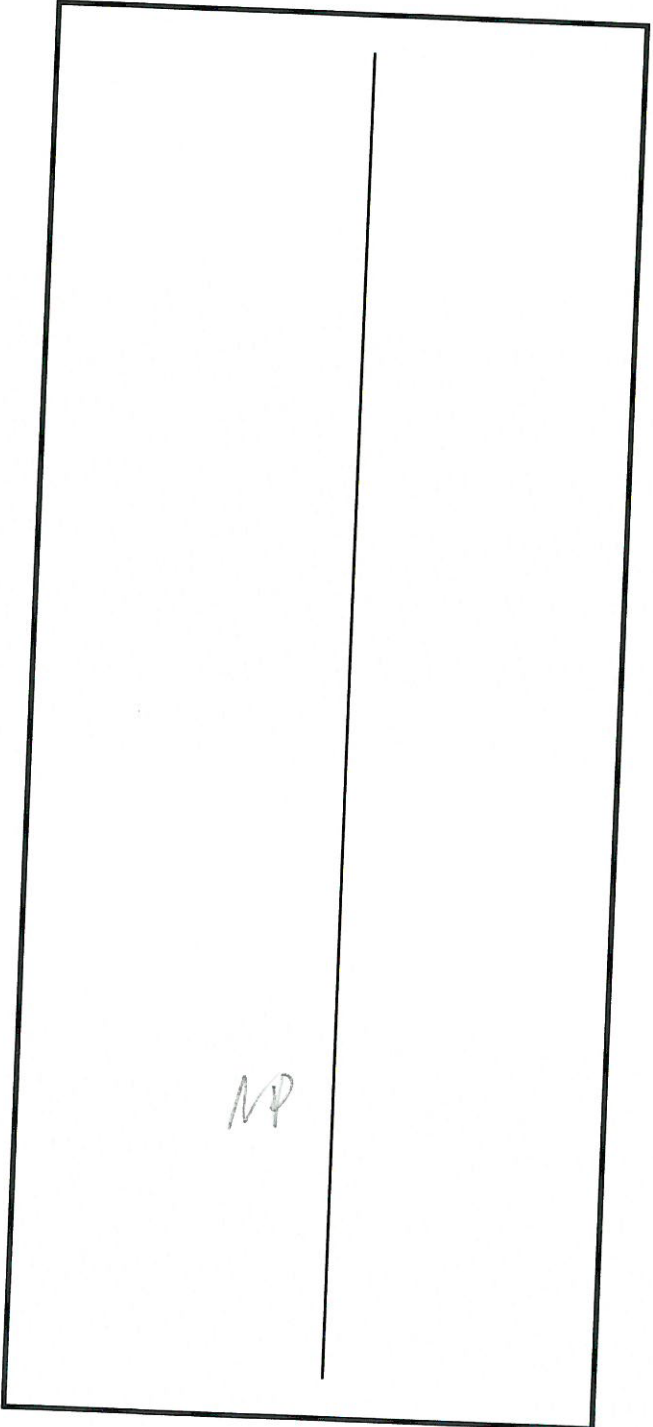
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Block 14 42nd Ave S between S 137th St and S 139th St

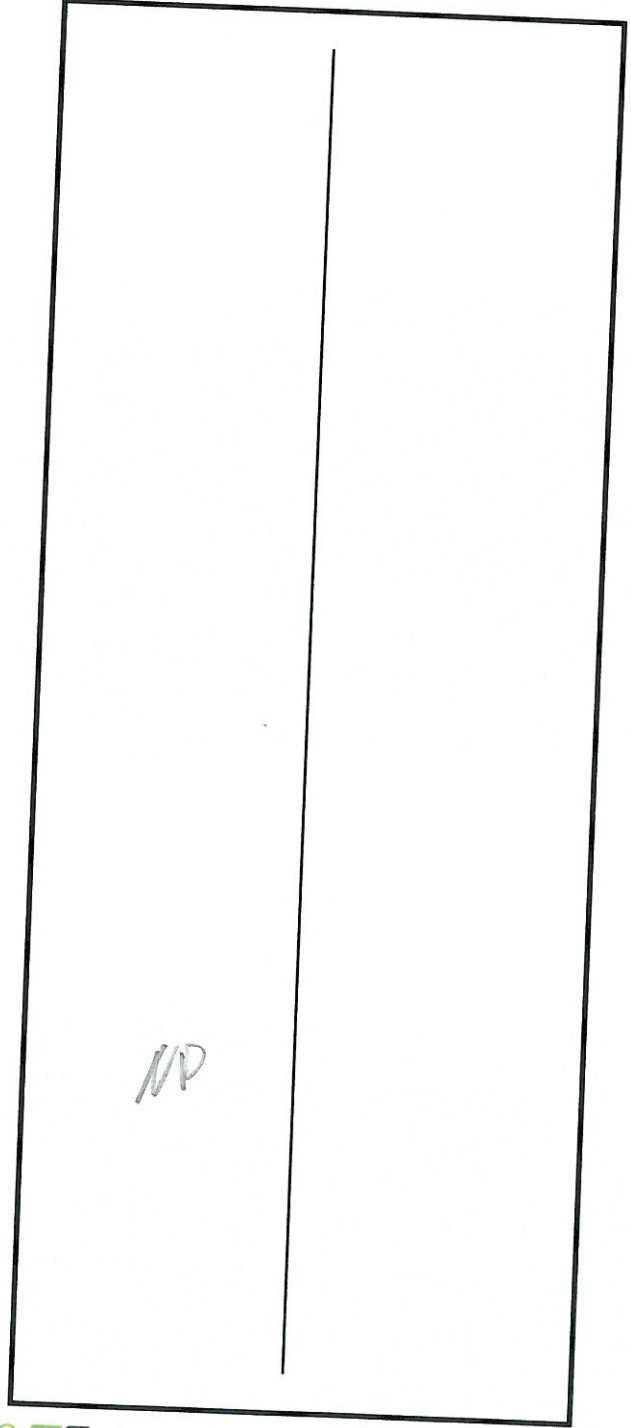
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Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: W



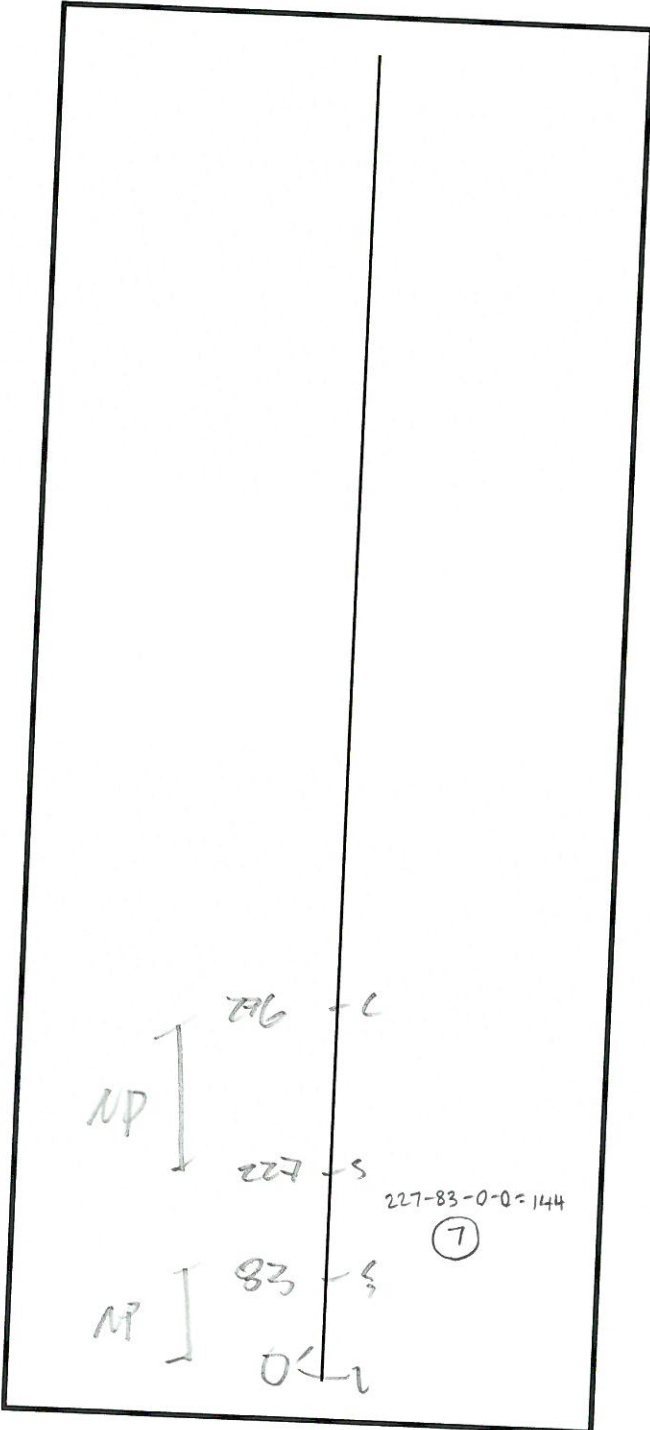
Side: E



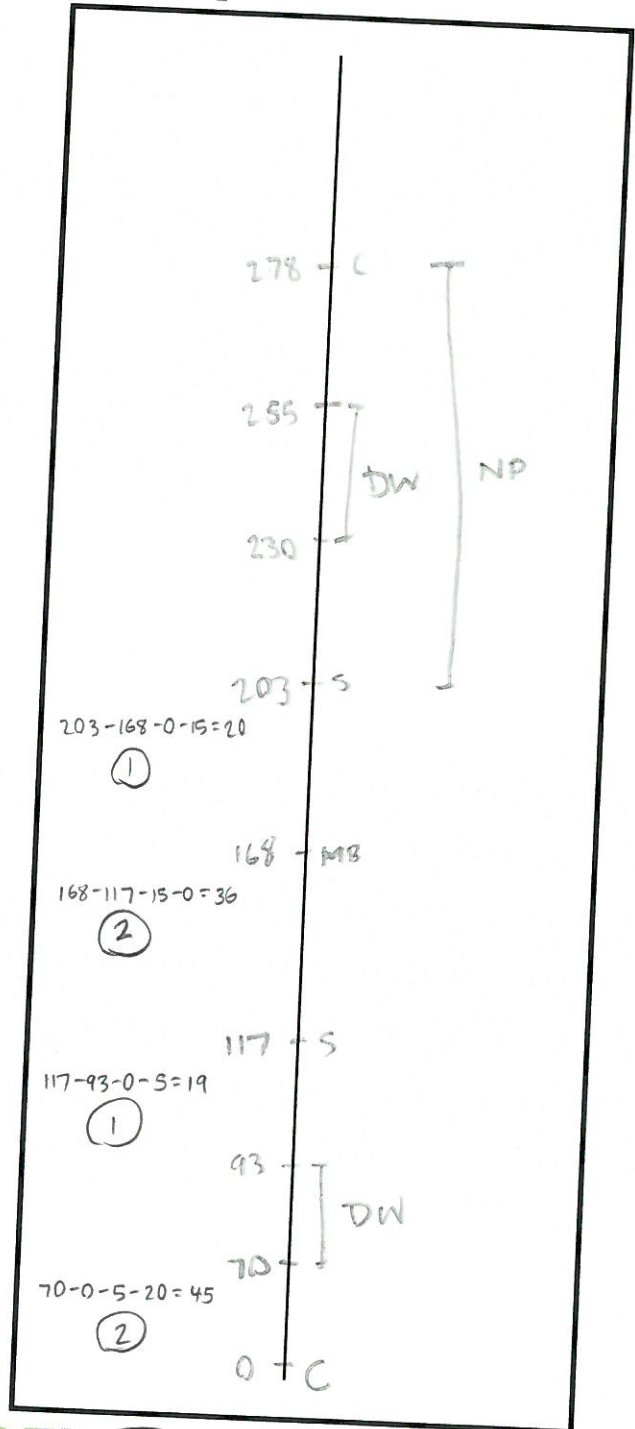
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 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W



Side: E



7

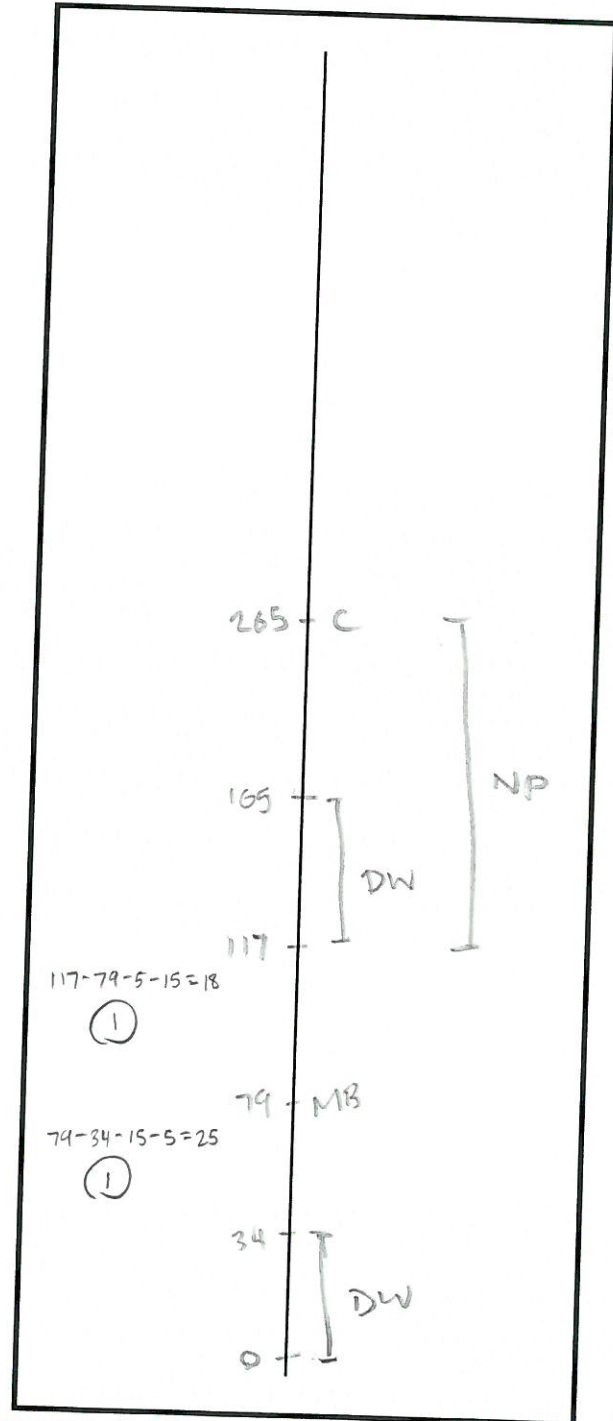
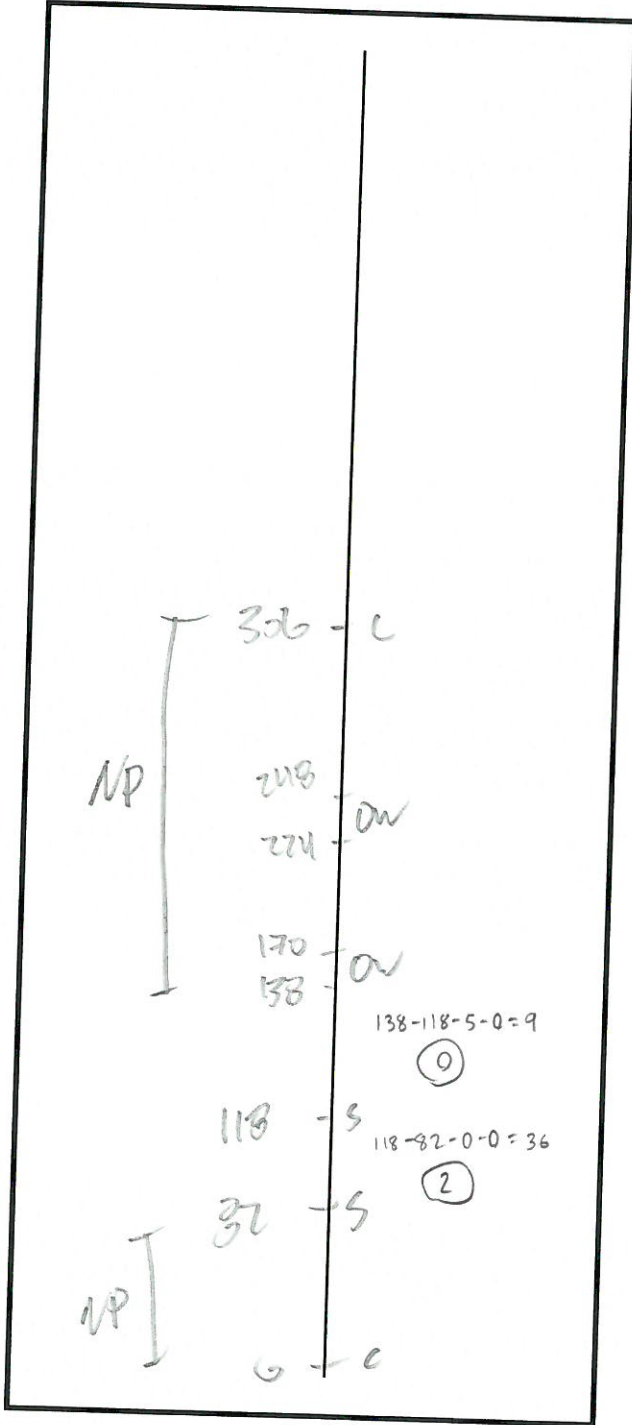
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Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W

Side: E



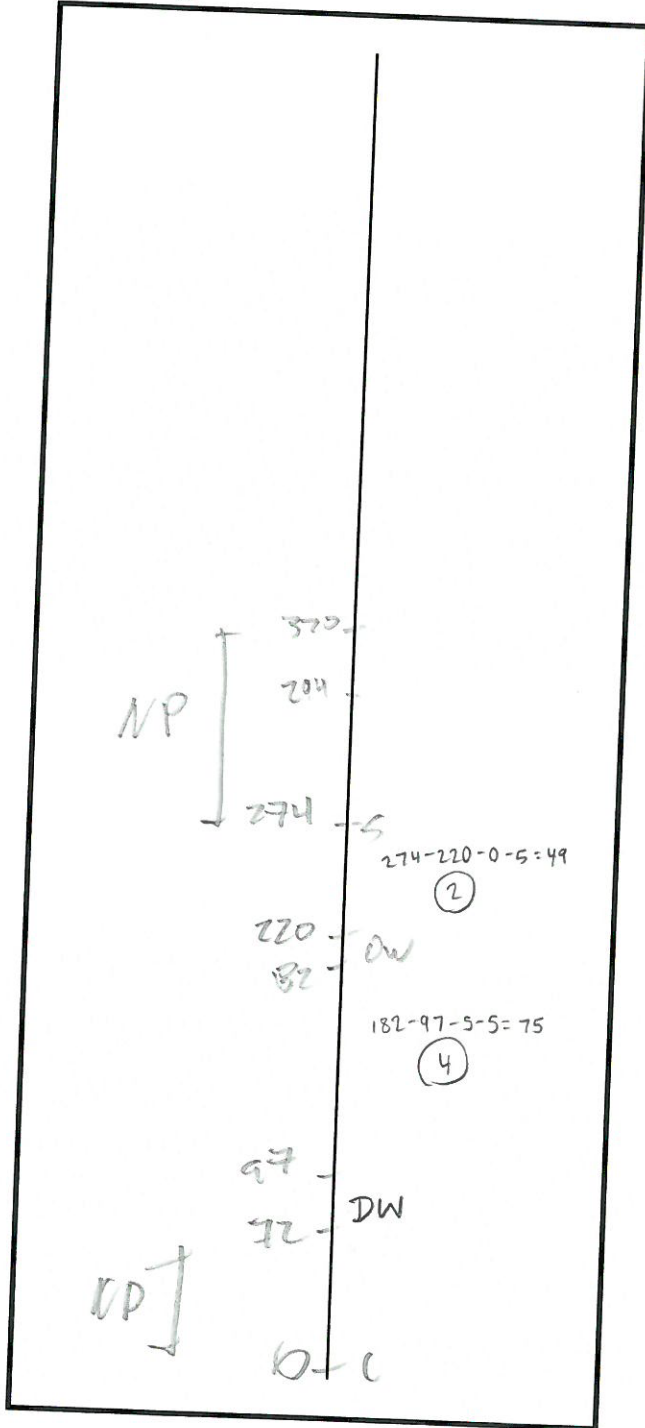
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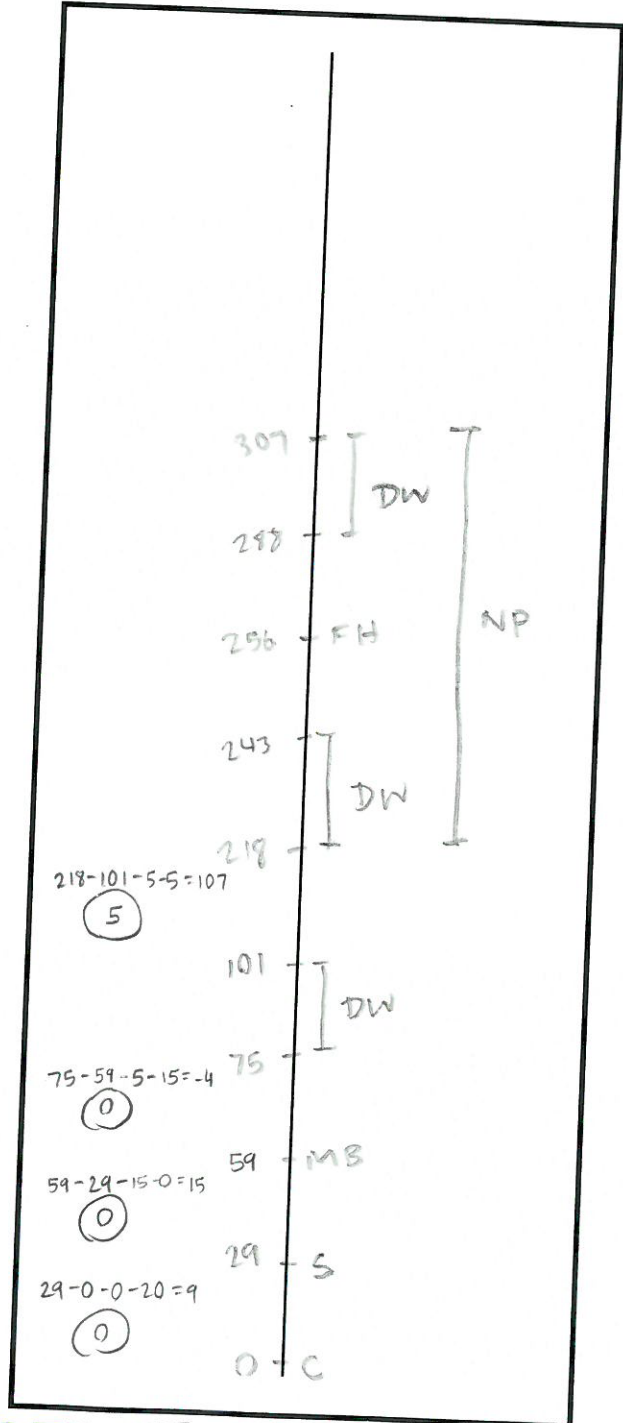
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 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W



Side: E



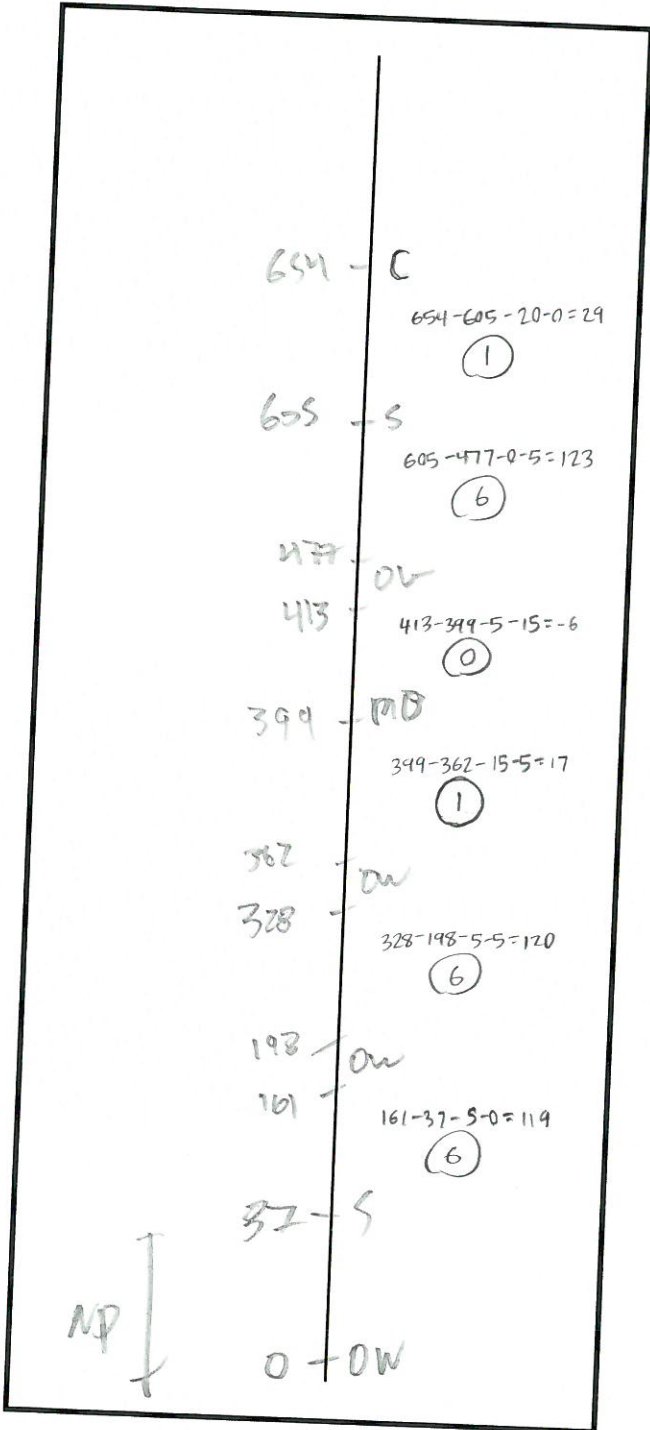
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5

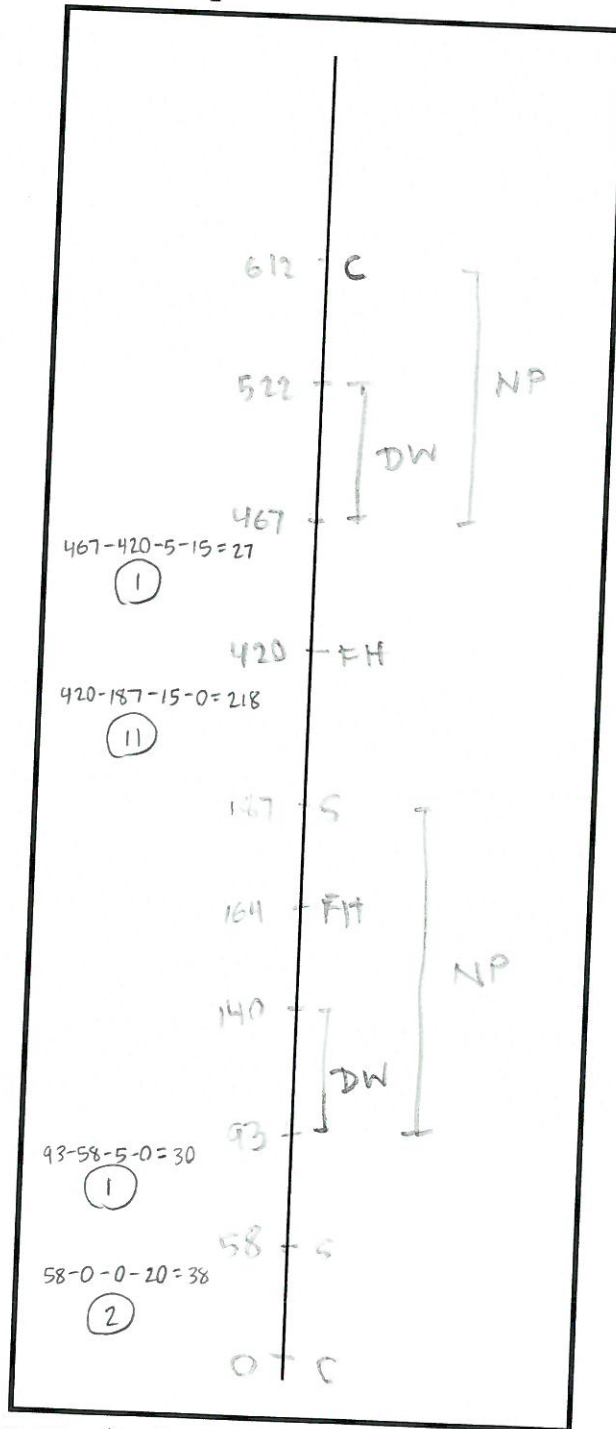
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 Stop or yield sign (SS) = 30'
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Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W



Side: E



20

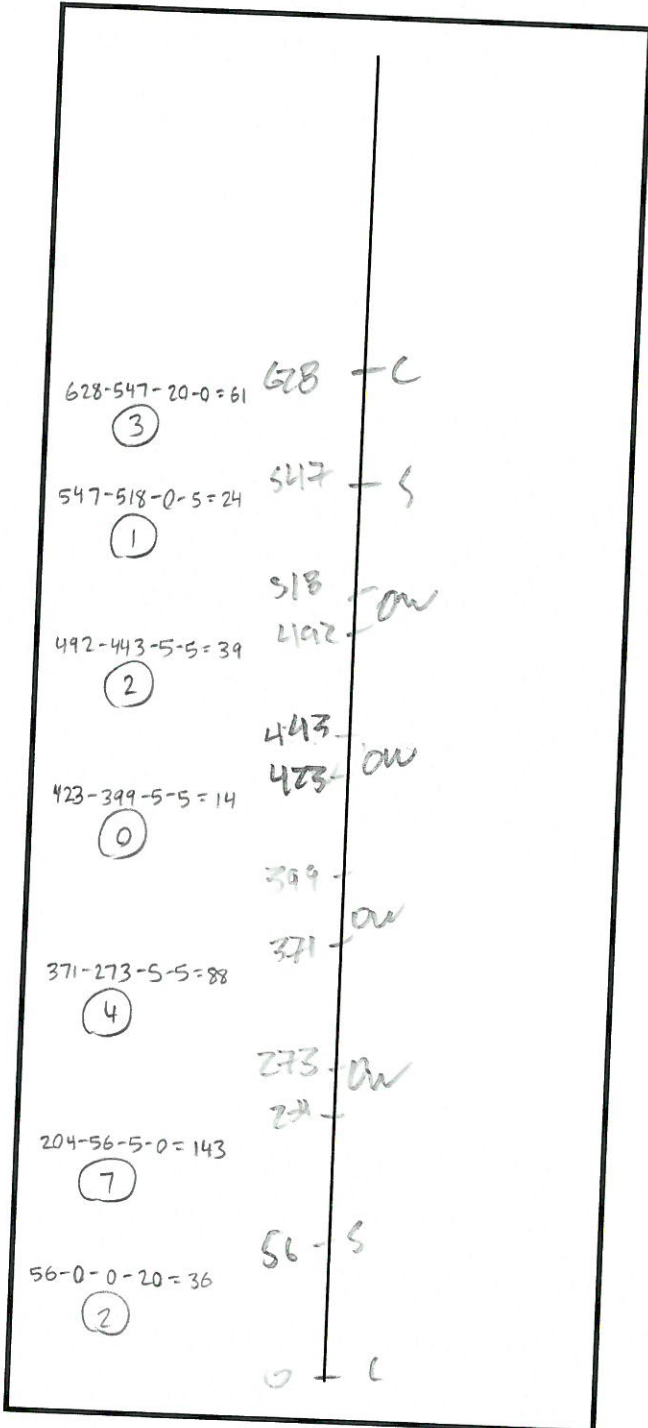
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 WHAT TRANSPORTATION CAN BE.

15

Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W



Side: E

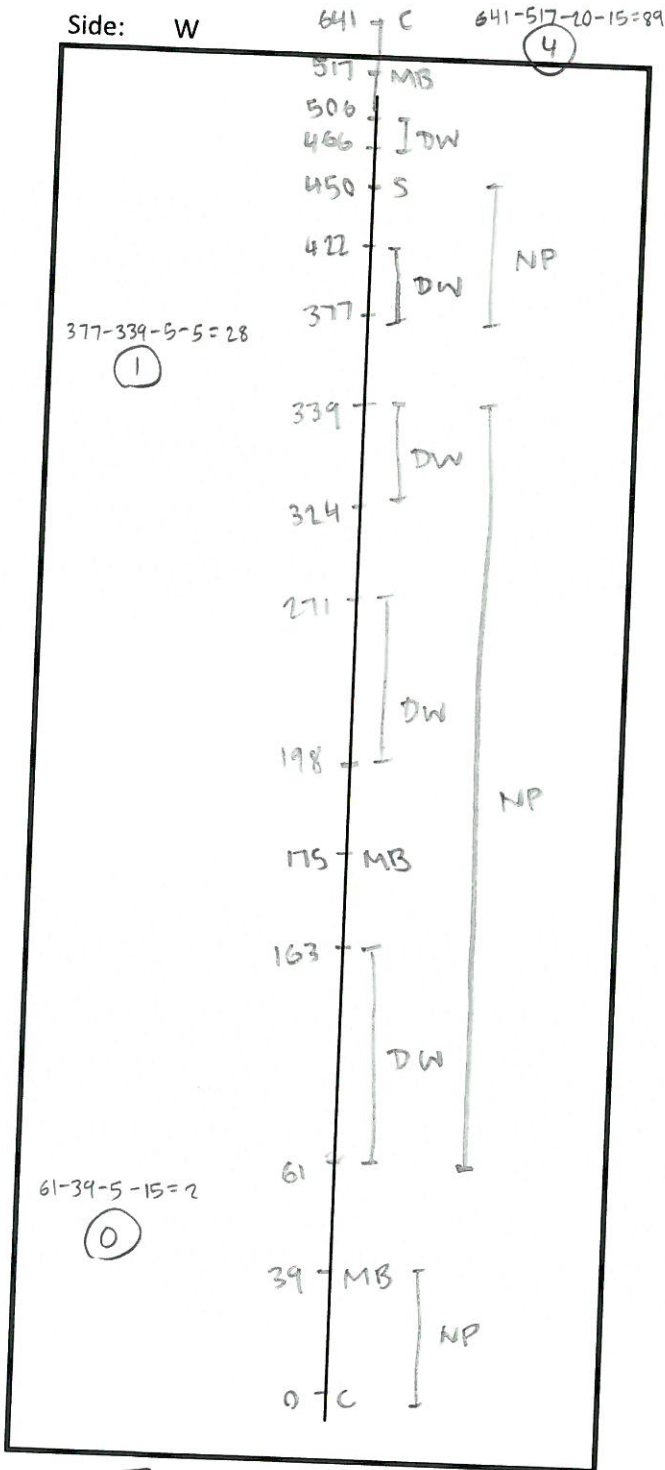


19

Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

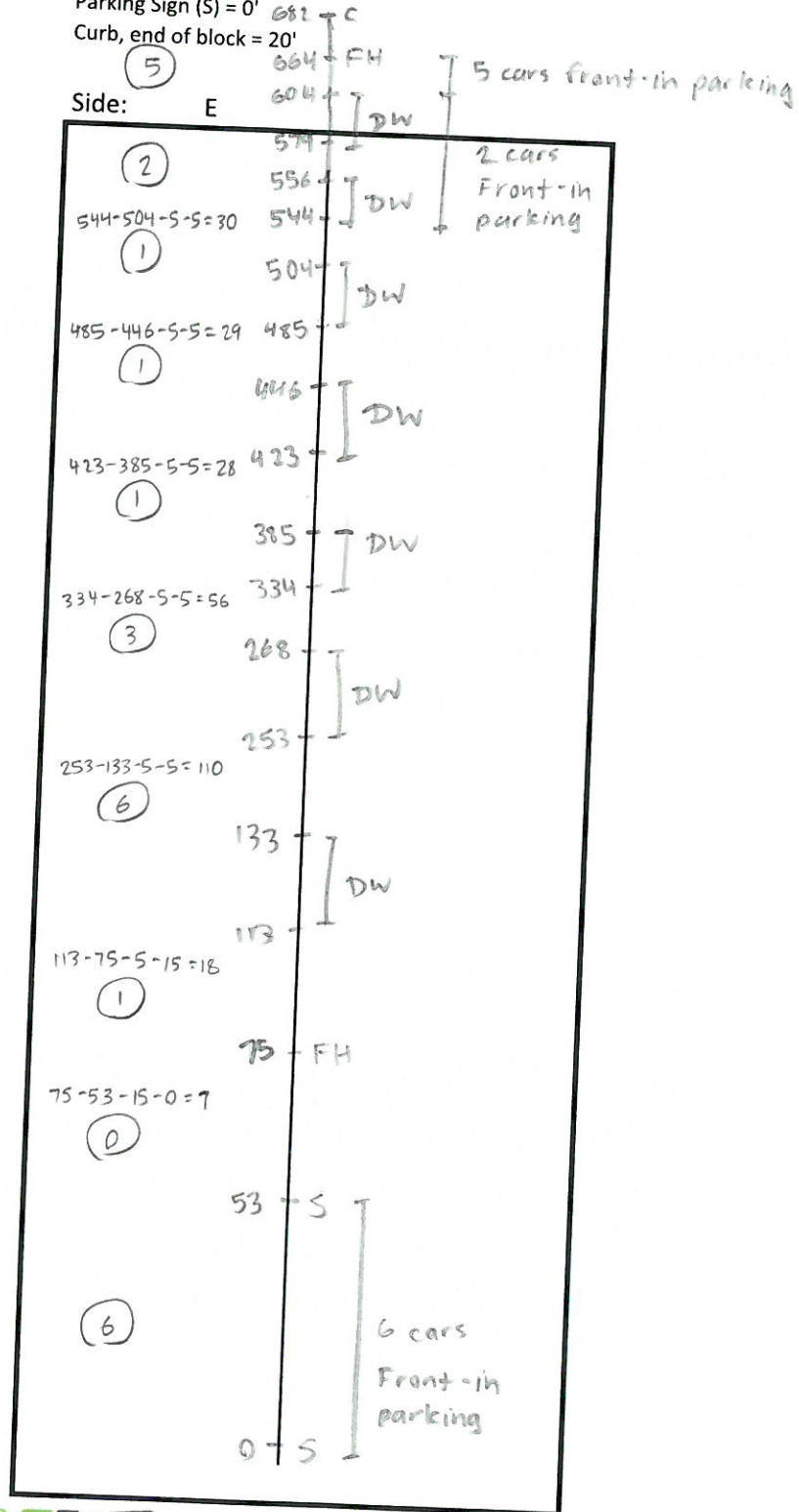
Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W



5

Side: E



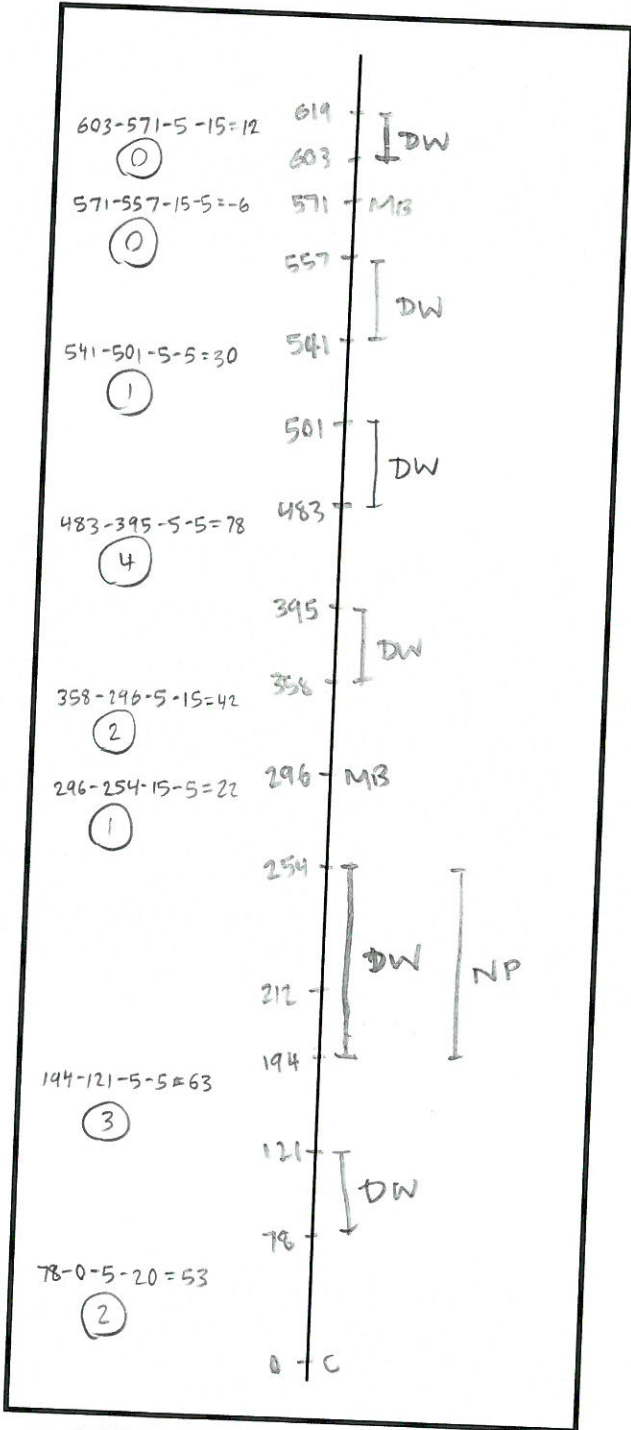
26

Block 21 44th Ave S between S 140th St and S 142nd St

Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

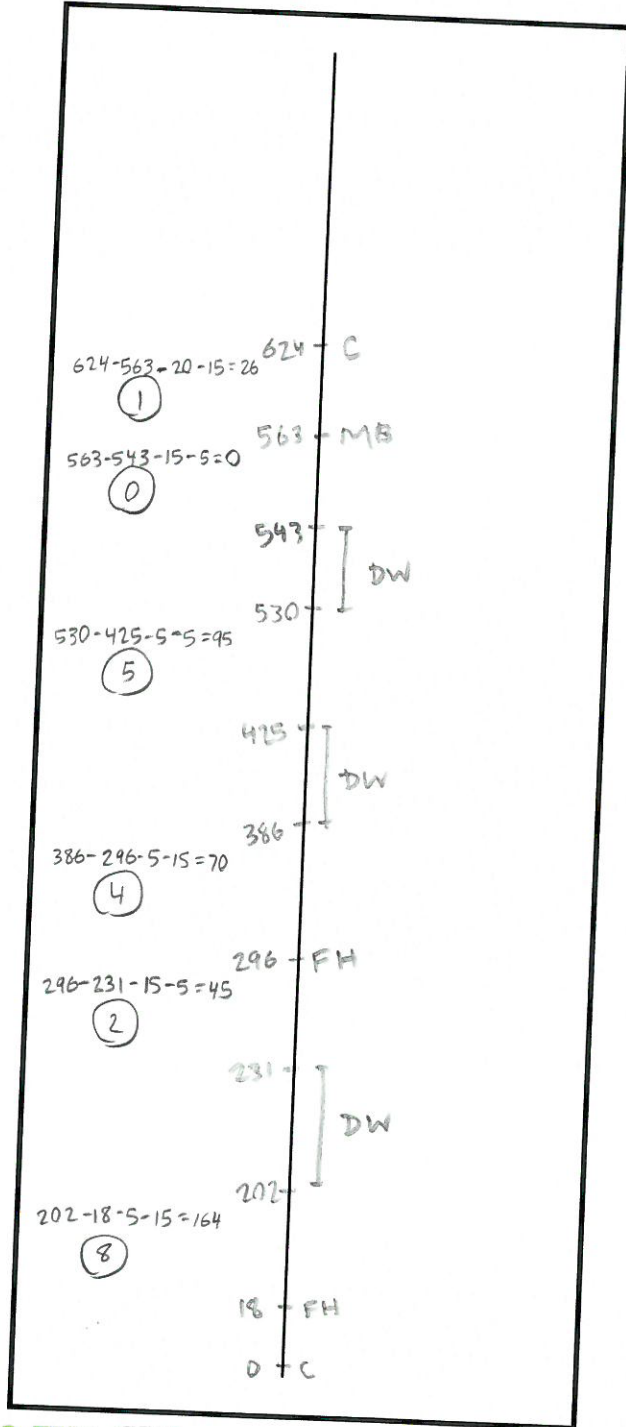
Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: W



13

Side: E



20

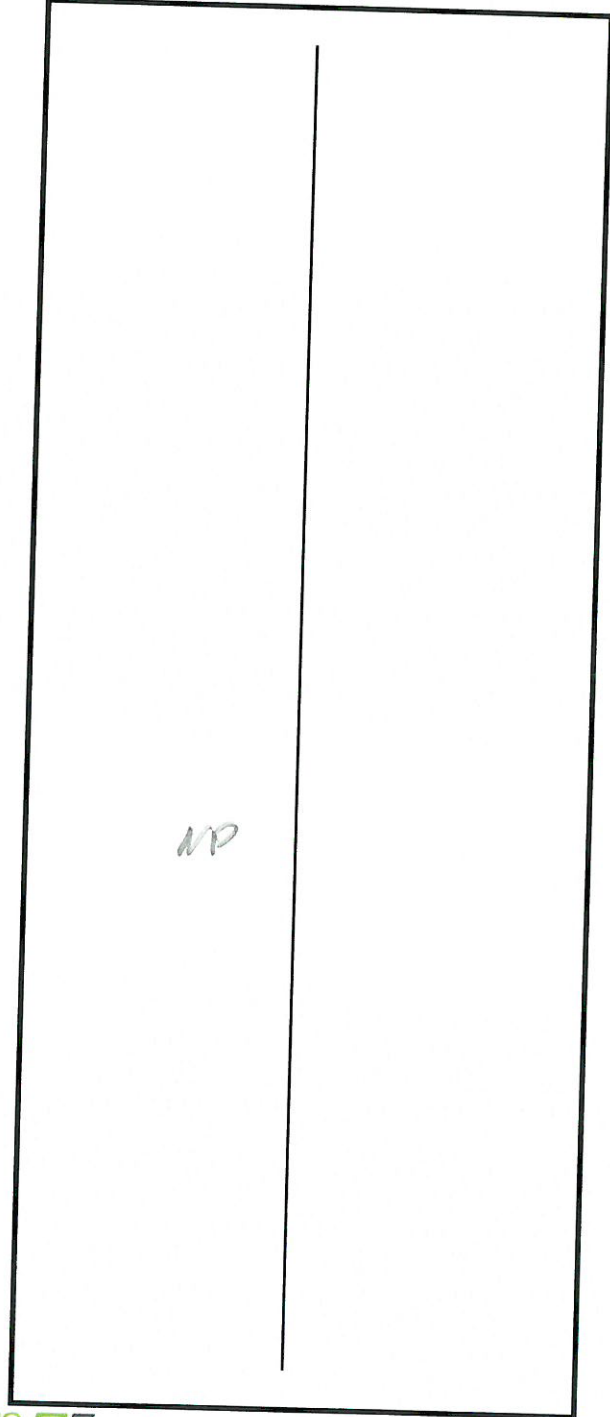
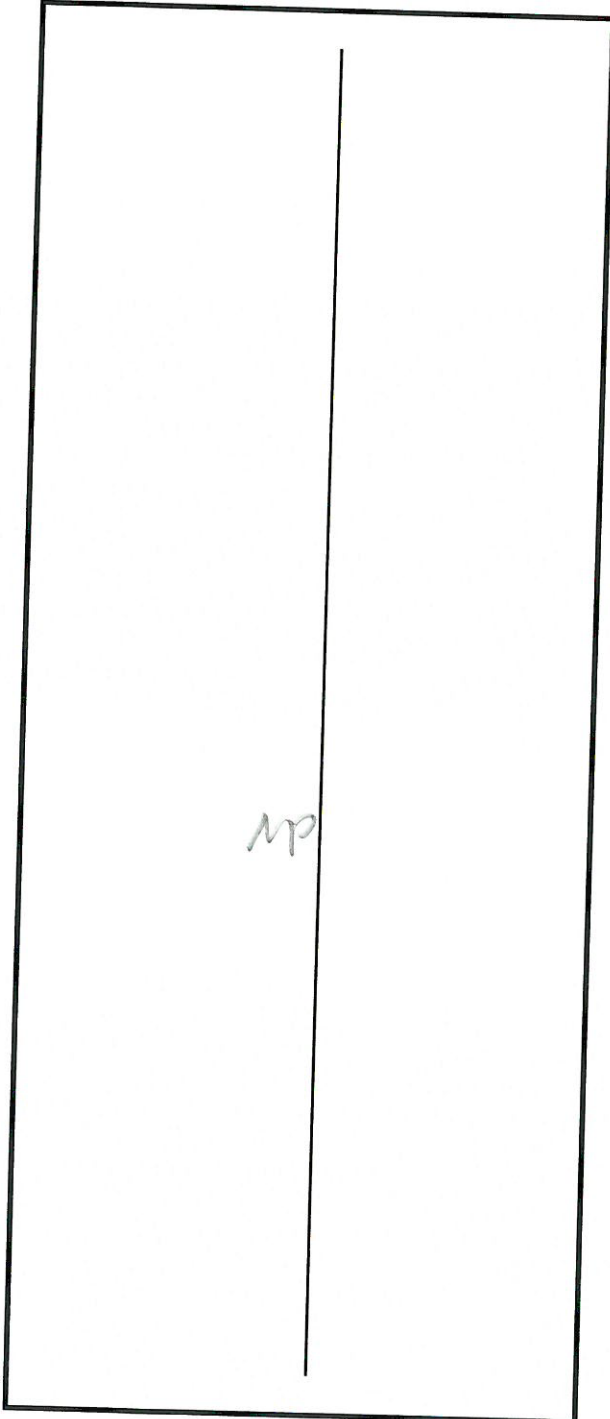
Block 22 Tukwila Int Blvd between S 139th St and S 140th St

Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: W

Side: E

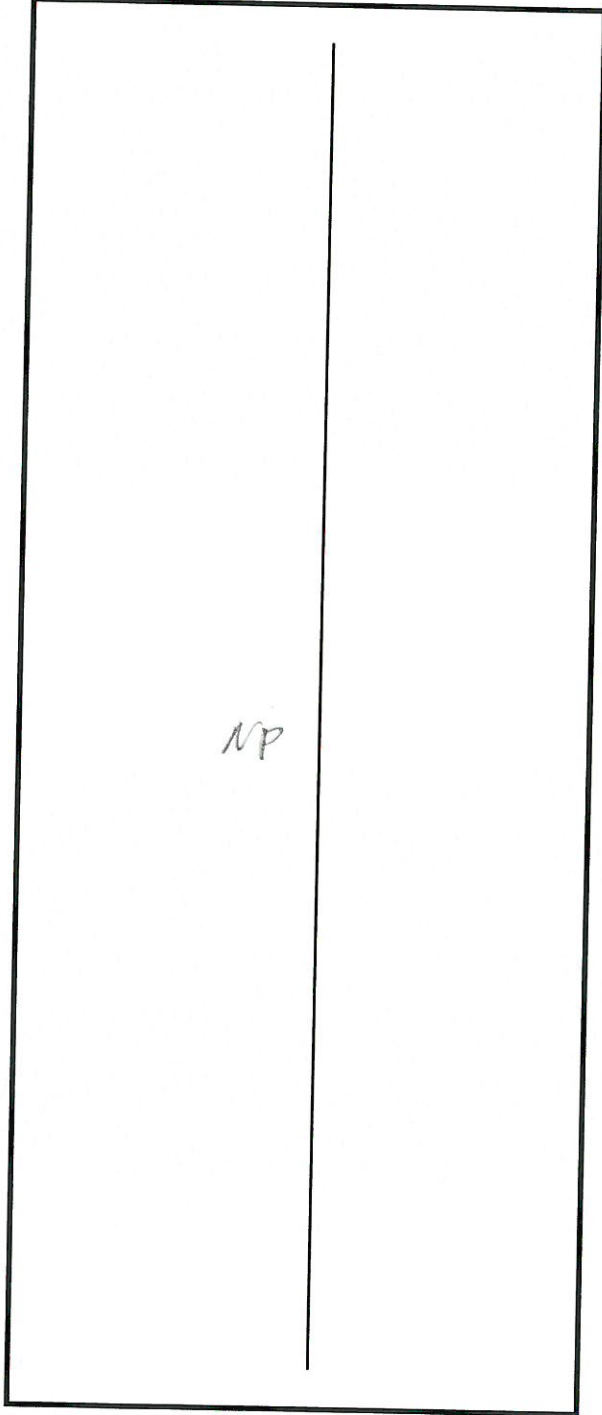


Block 23 Tukwila Int Blvd between S 140th St and S 141st St (north)

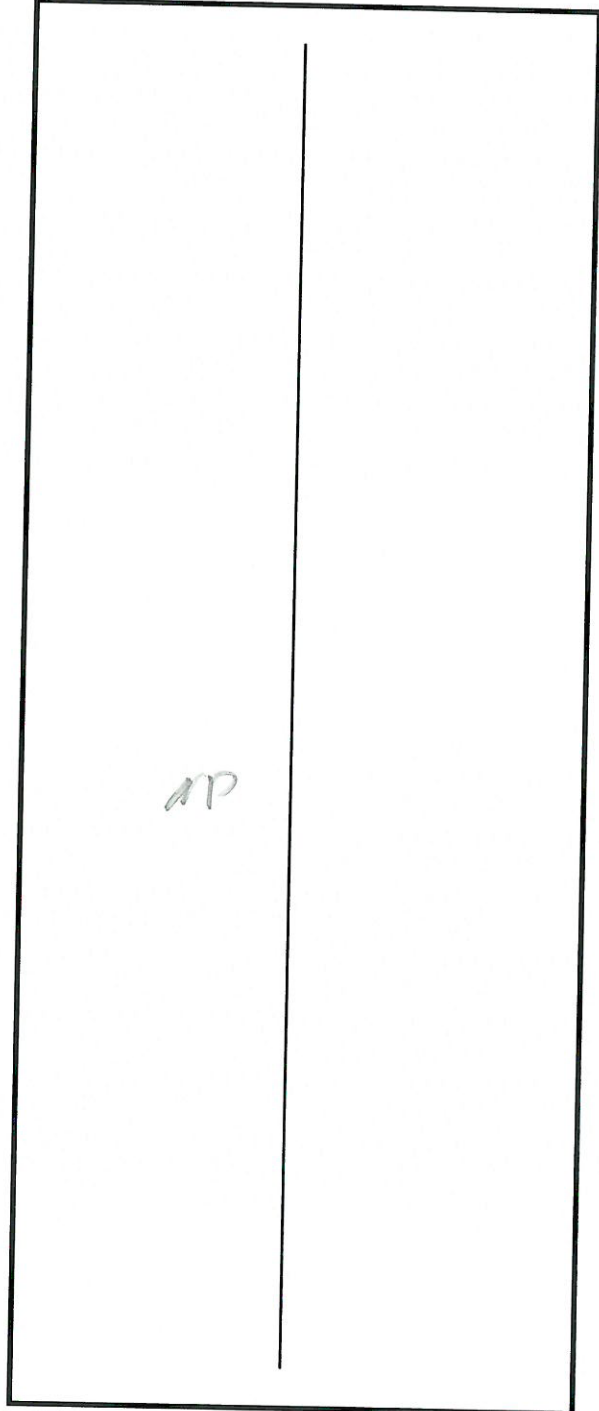
Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: W



Side: E

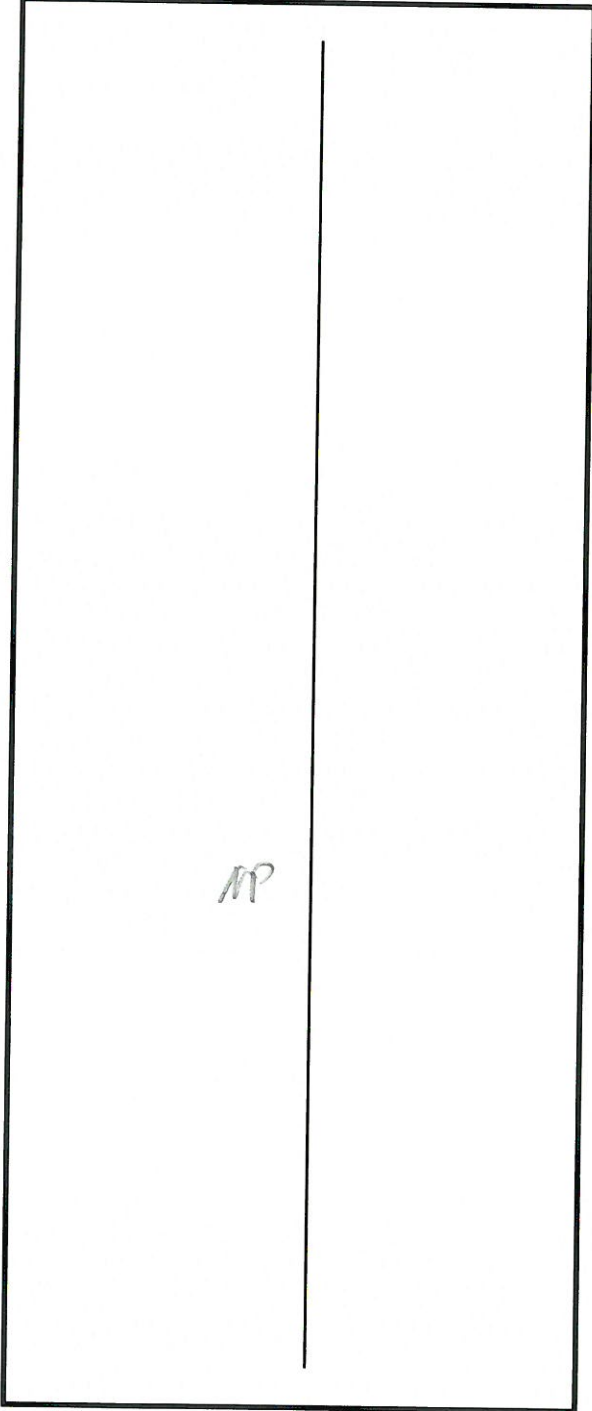


Block 24 Tukwila Int Blvd between S 141st St (north) and S 141st St (south)

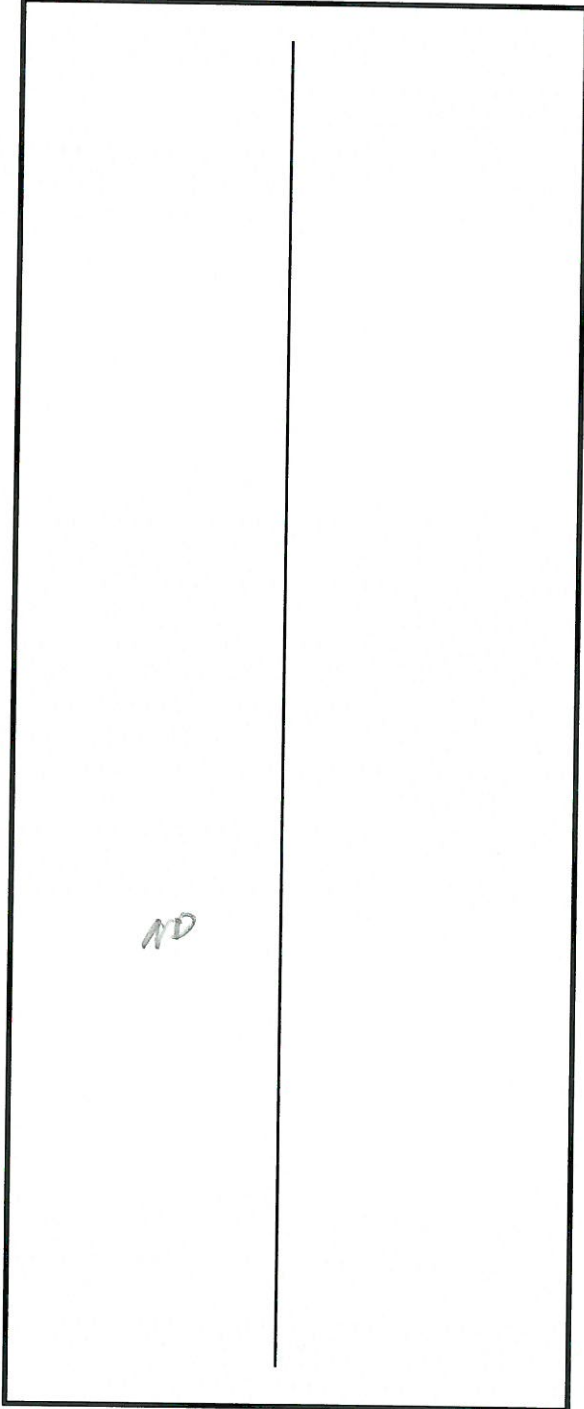
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Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: W



Side: E

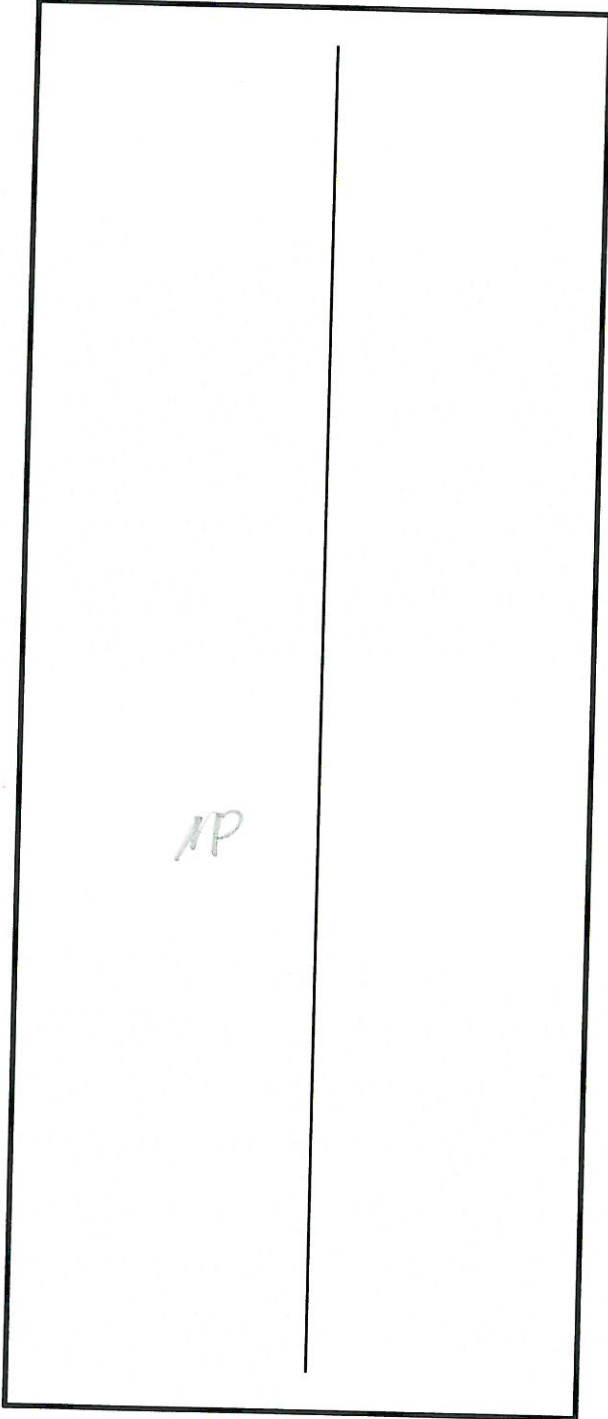


Block 25 Tukwila Int Blvd between S 141st St (south) and S 142nd St

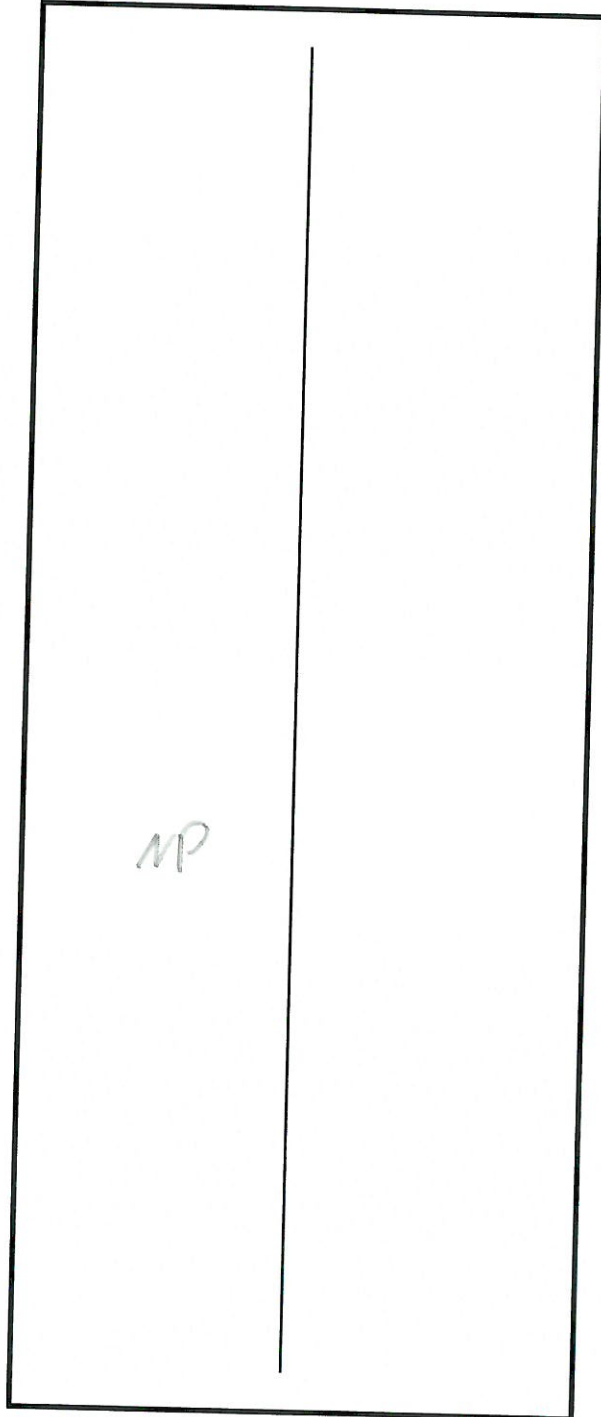
Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: W



Side: E

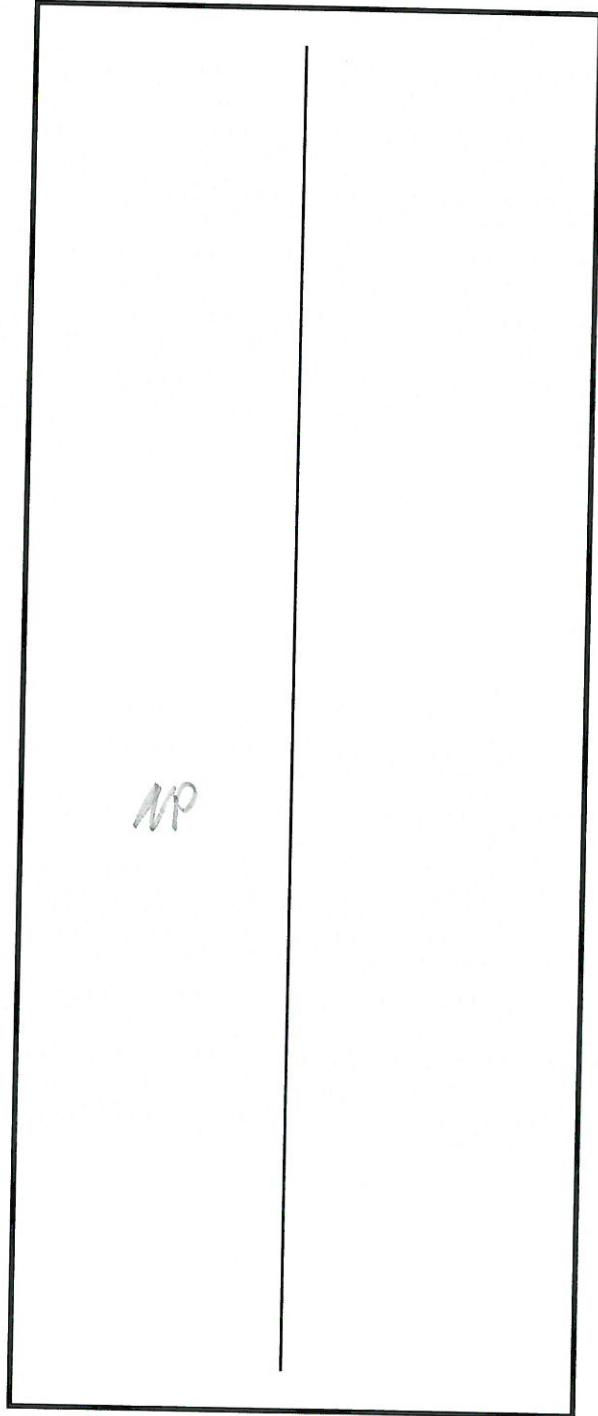
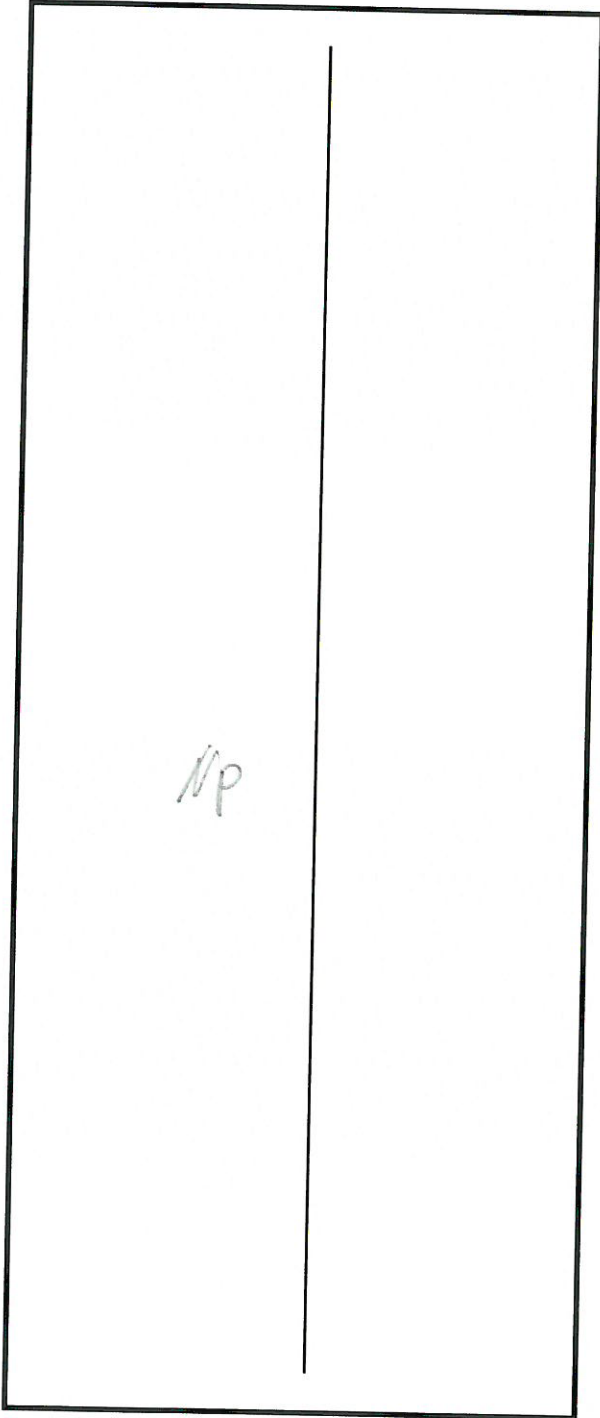


Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Side: W

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: E

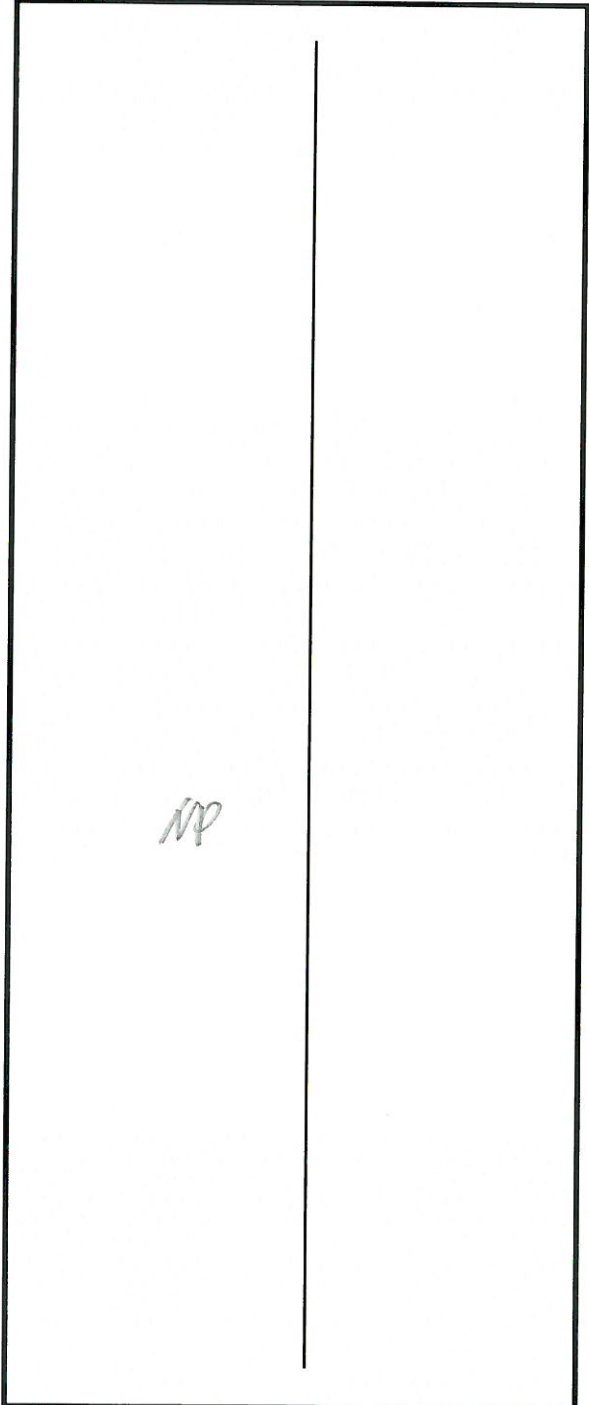


Block 27 Tukwila Int Blvd between 41st Ave S and S 144th St

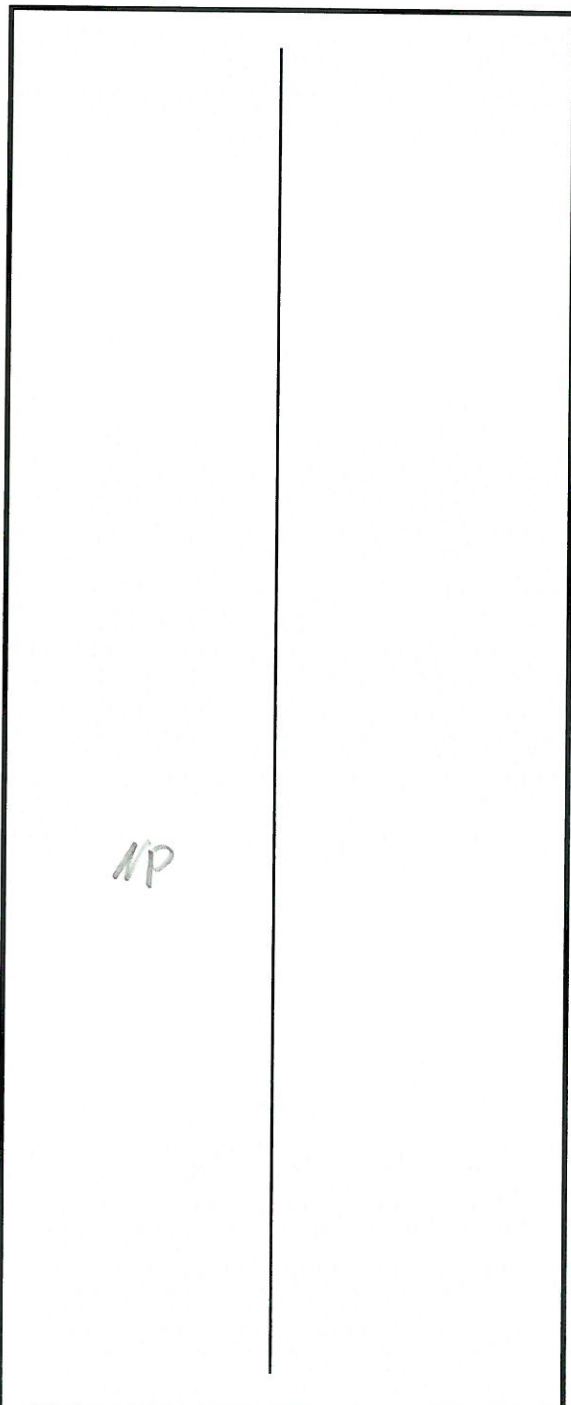
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Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: W



Side: E

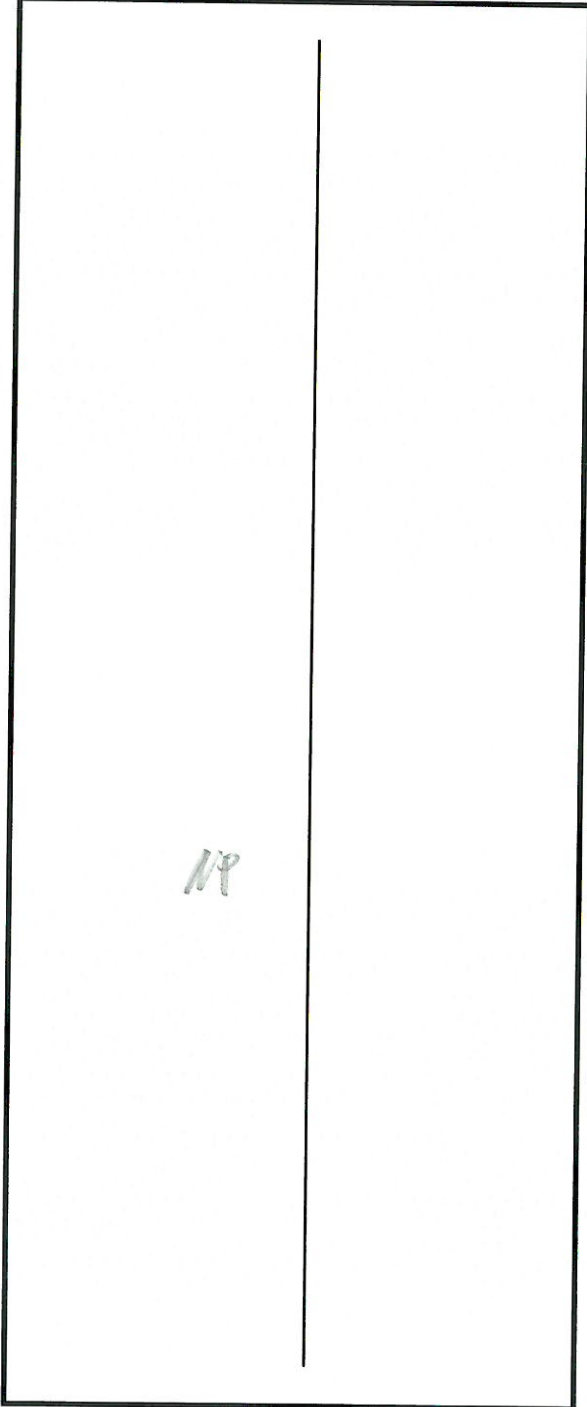


Block 28 Tukwila Int Blvd between S 144th St and S 146th St

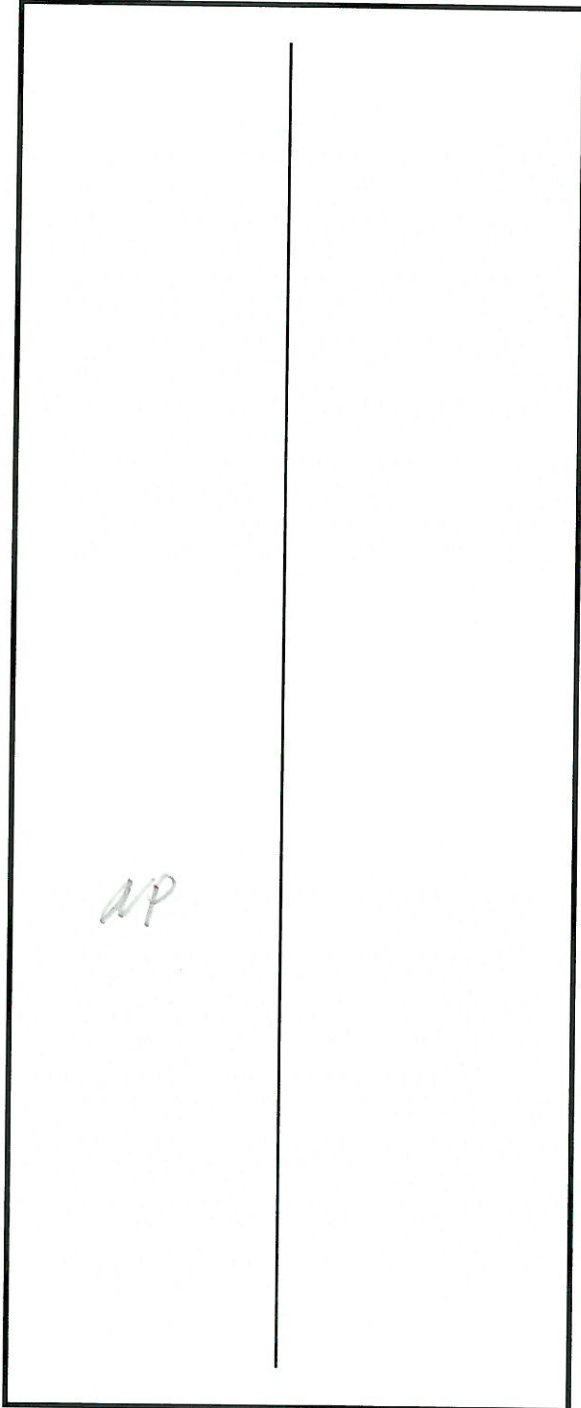
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Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: W



Side: E

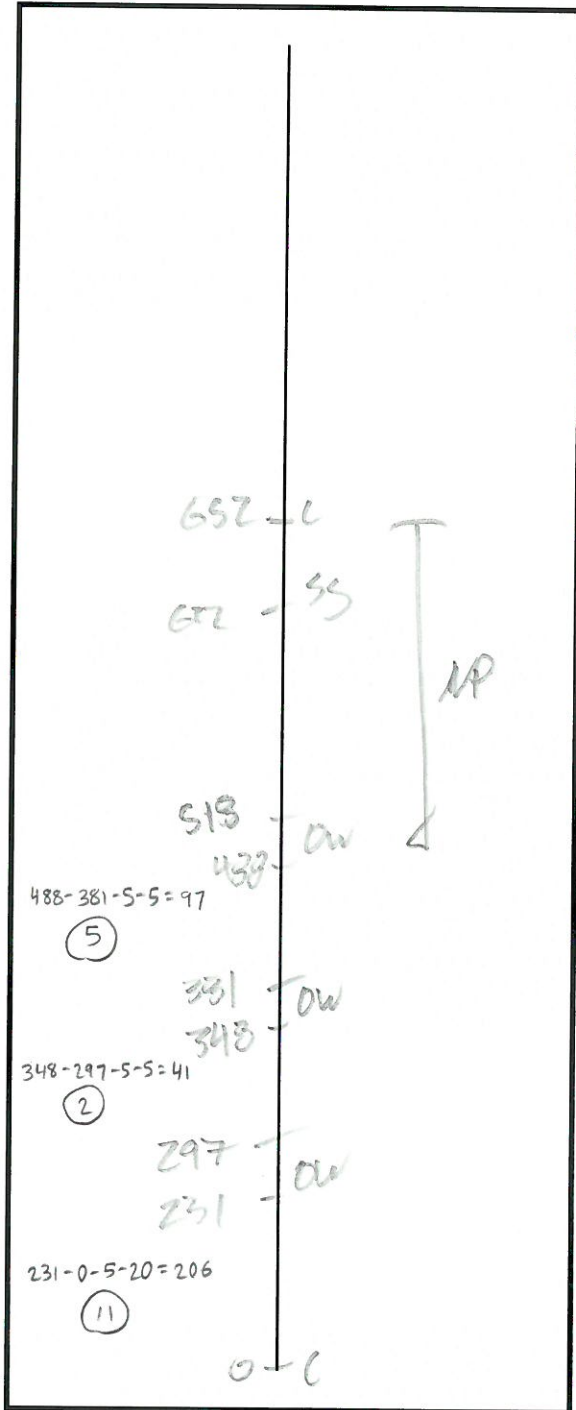
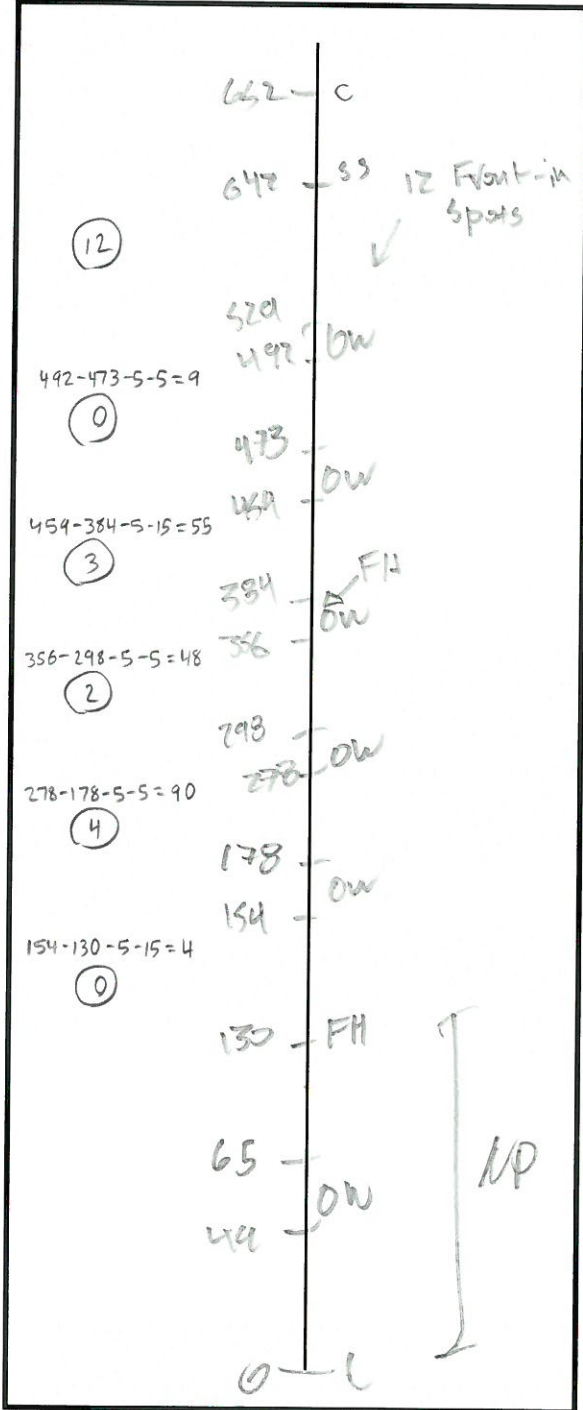


Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: N

Side: S



21

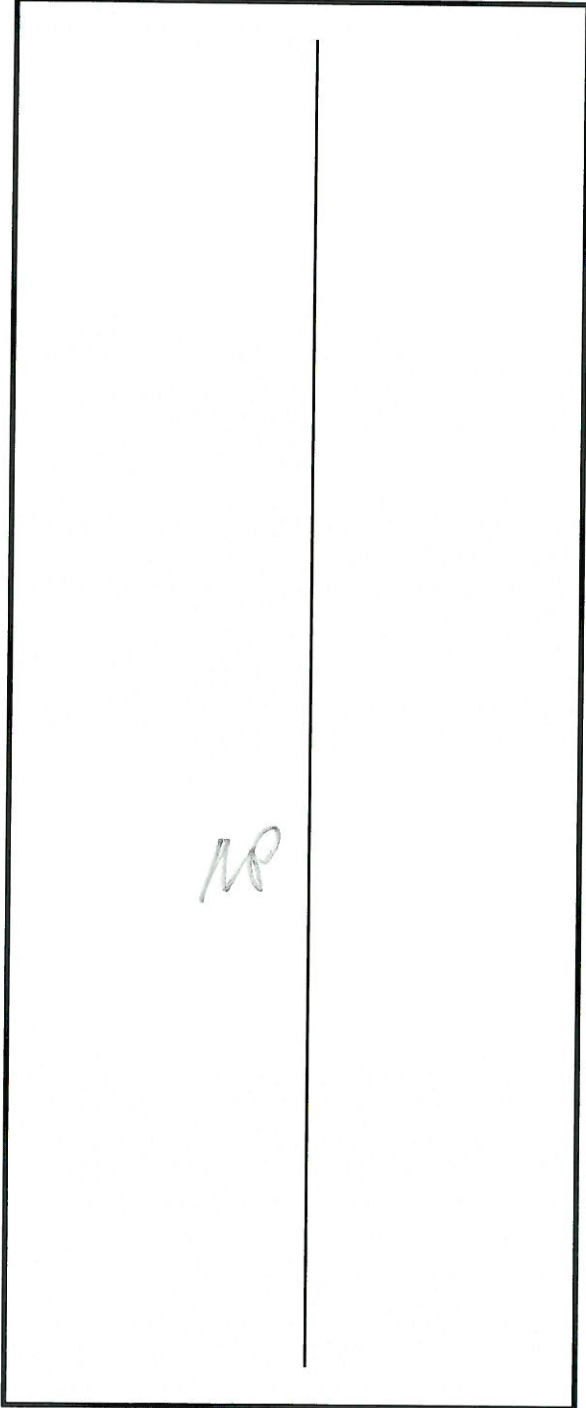
18

Block 30 S 144th St between 37th Ave S and Tukwila Int Blvd

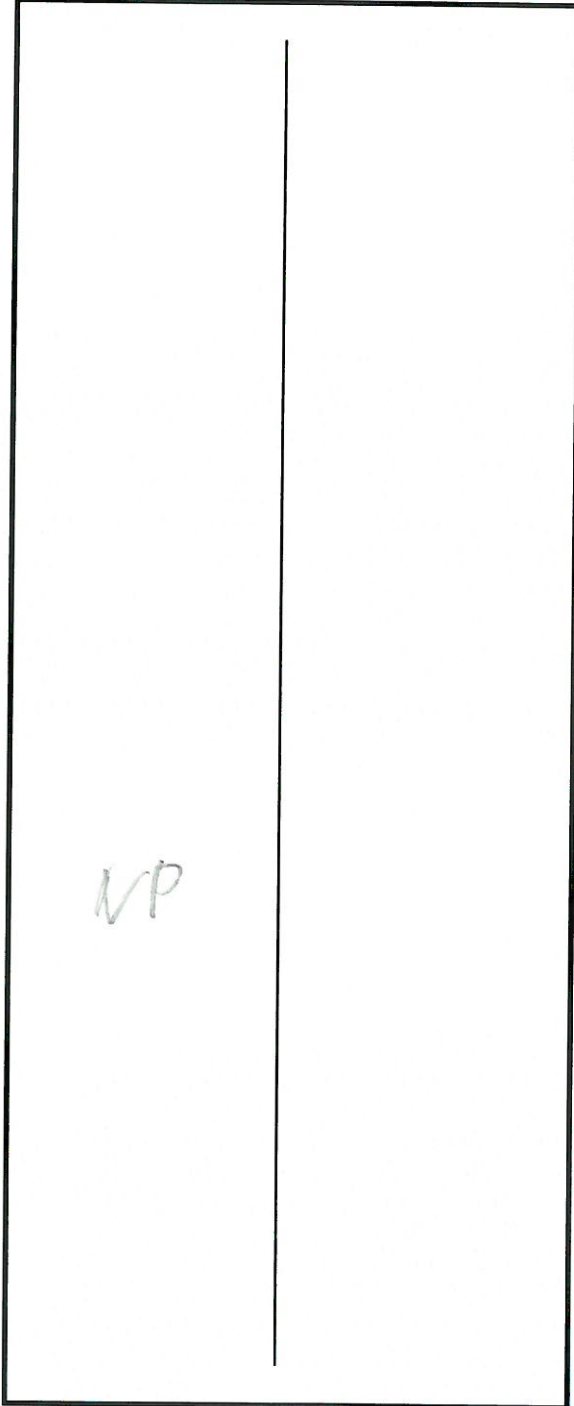
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Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: N



Side: S

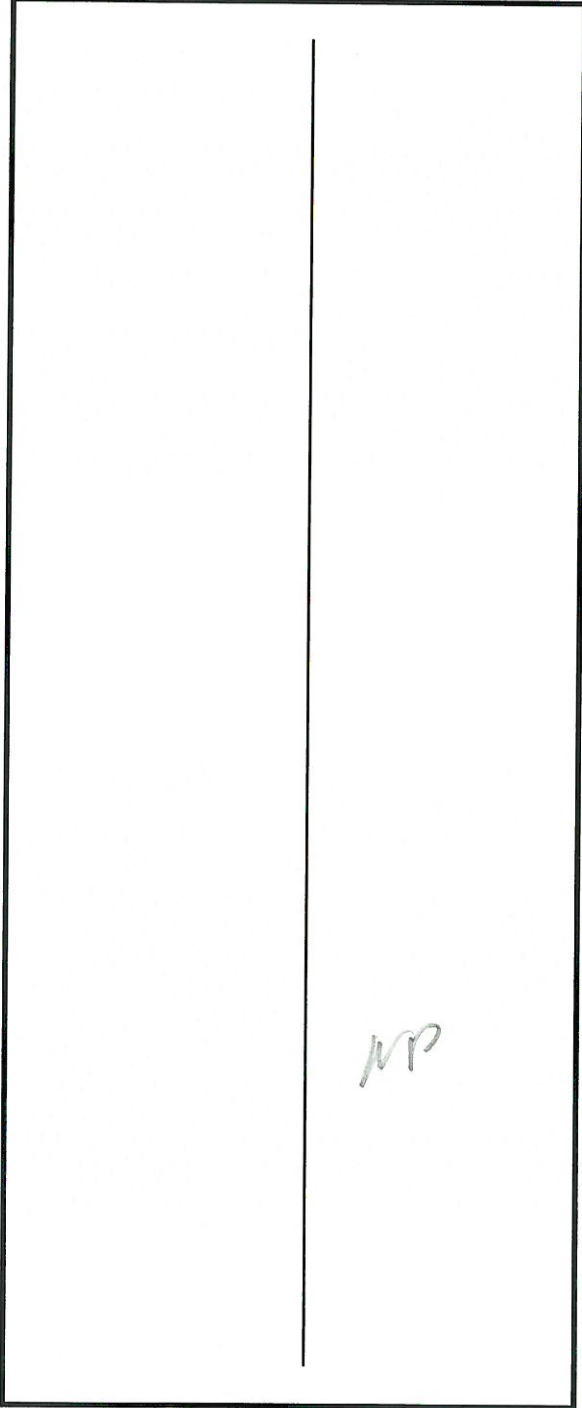


Block 31 41st Ave S between Tukwila Int Blvd and S 144th St

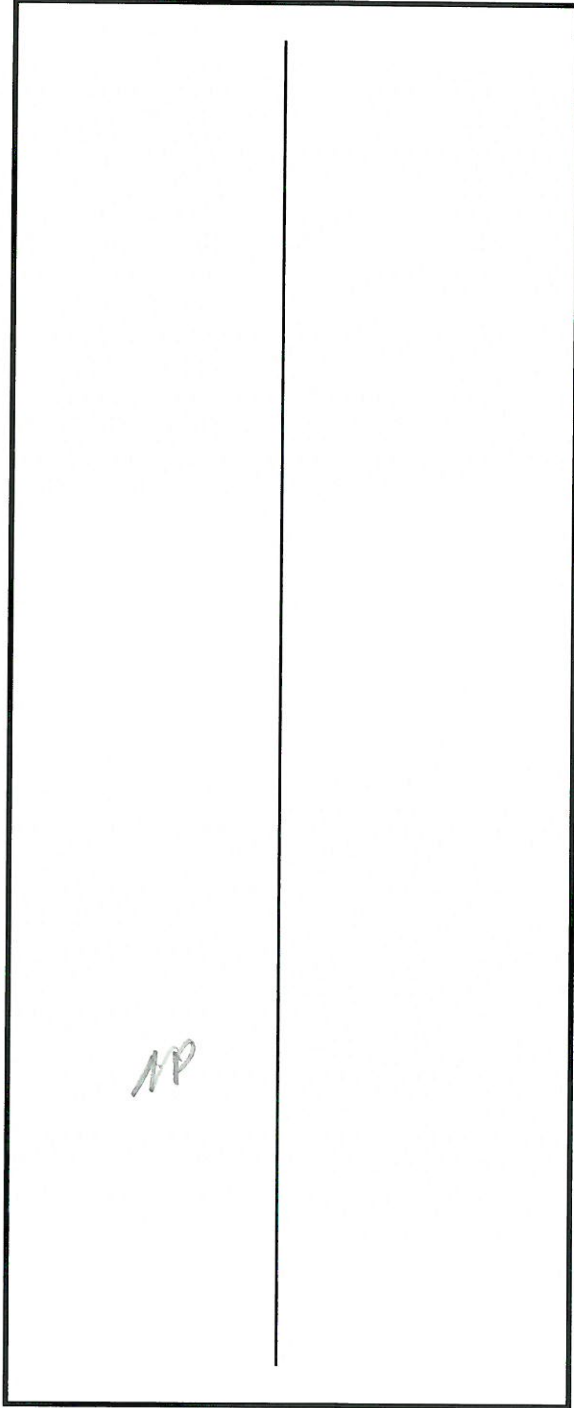
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Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: N



Side: S

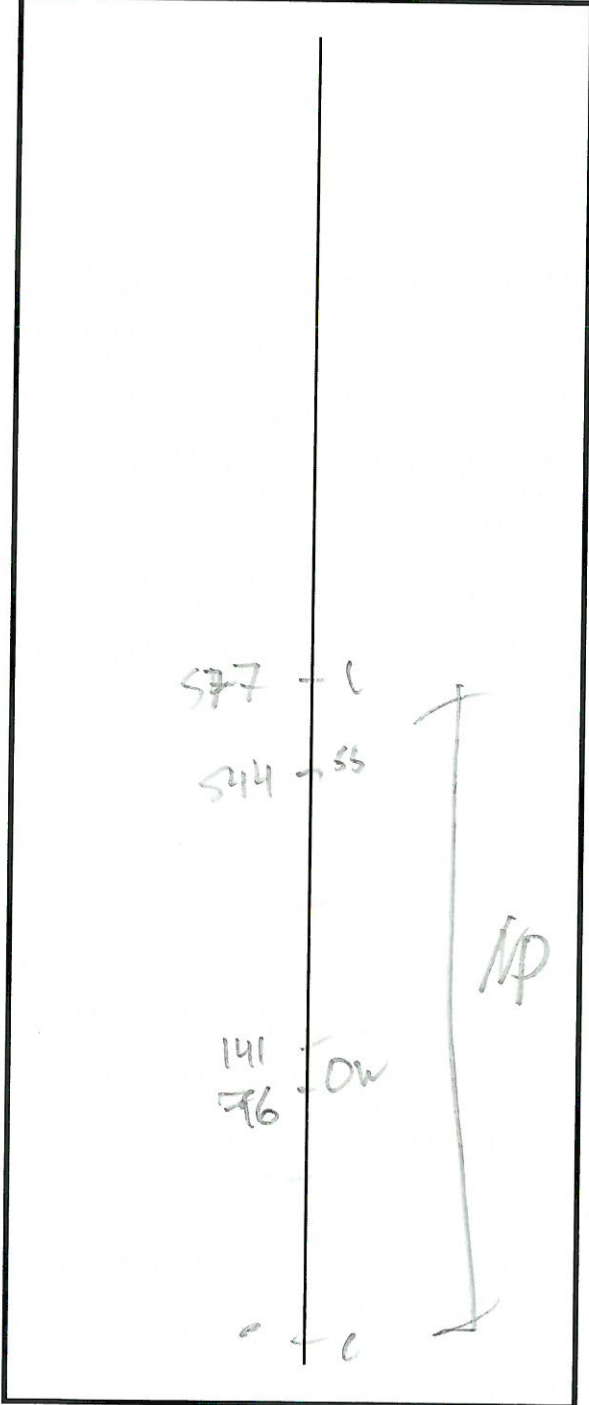


Block ~~33~~ 32 0

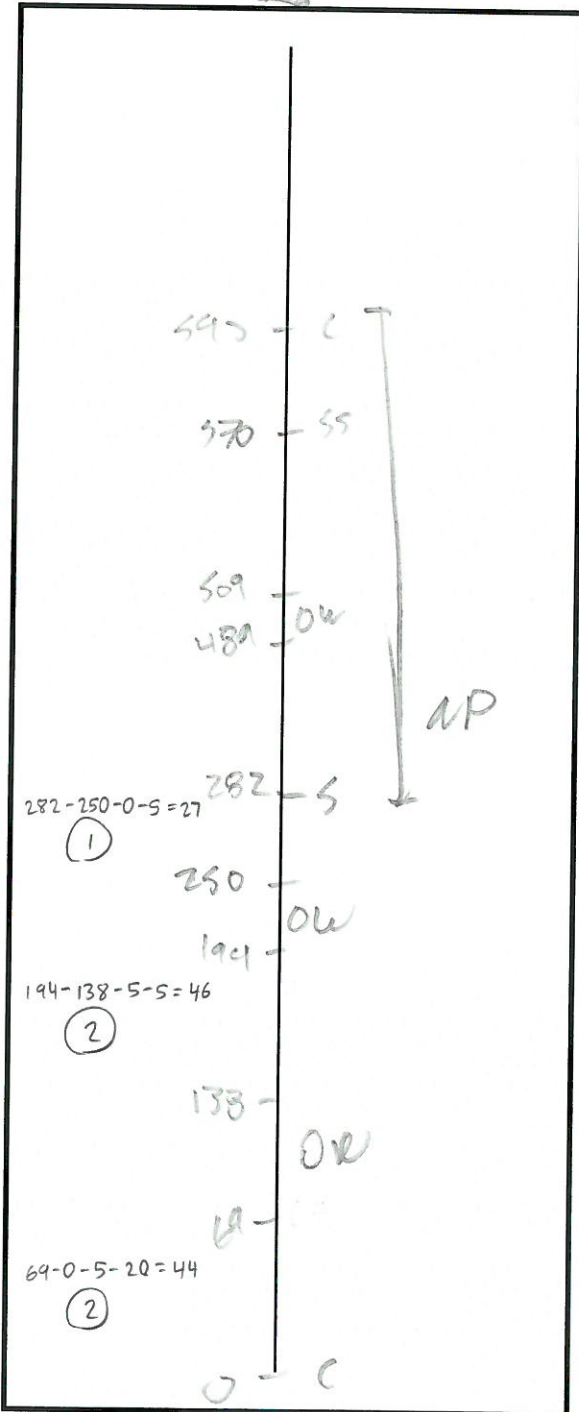
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Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: ~~0~~ N



Side: ~~0~~ S

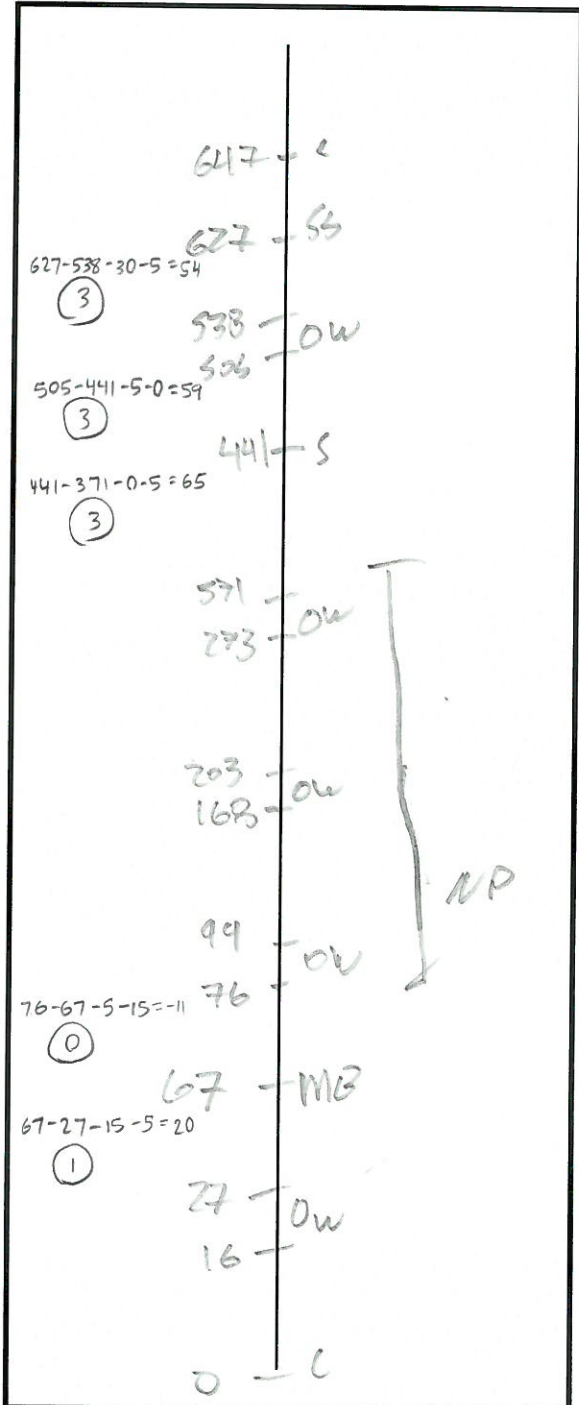
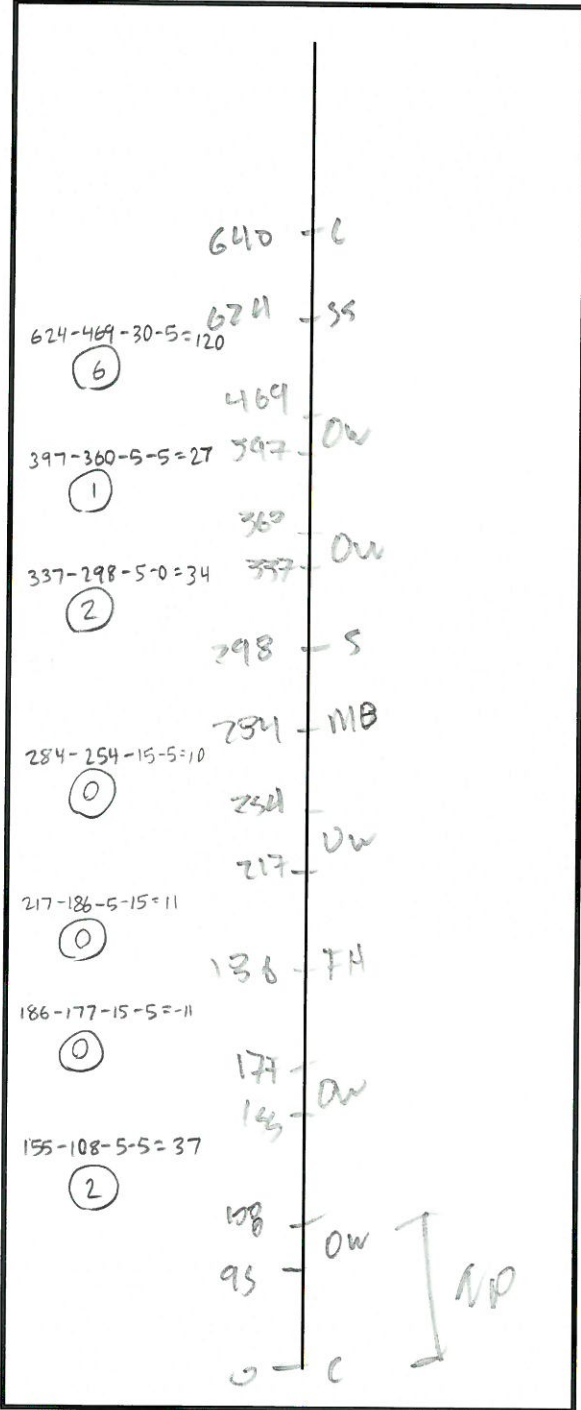


Curb (C), no sign (NS) = 20'
 Stop or yield sign (SS) = 30'
 Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
 Parking Sign (S) = 0'
 Curb, end of block = 20'

Side: ~~0~~ N

Side: S ~~0~~



11

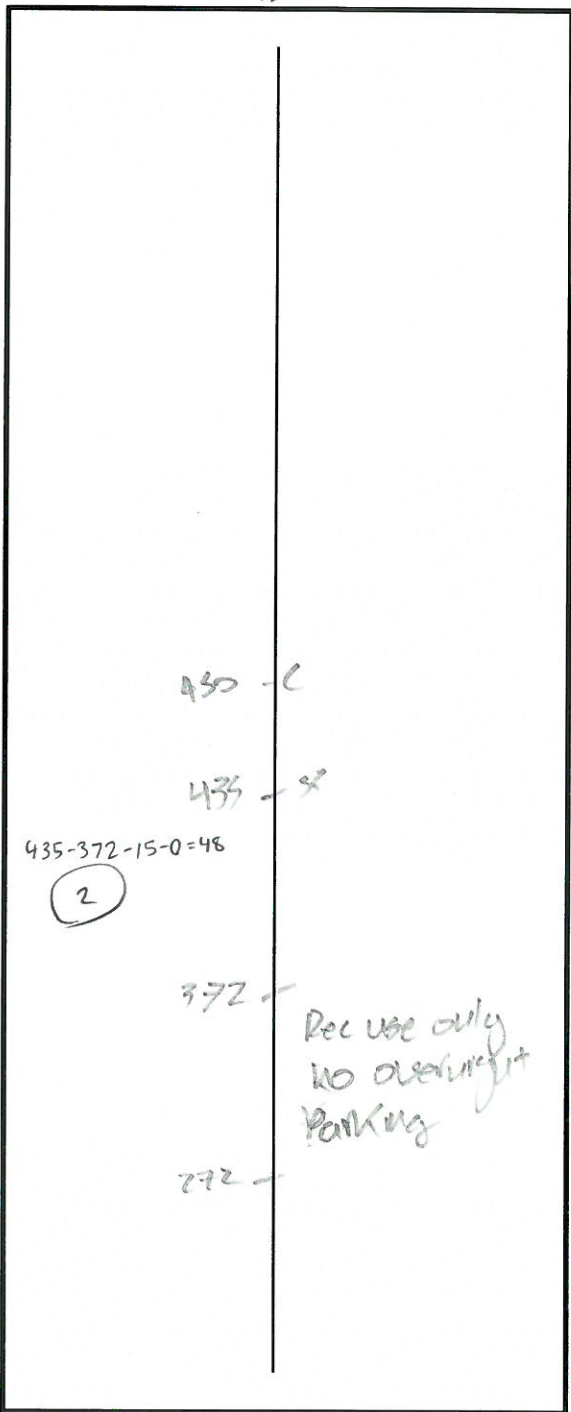
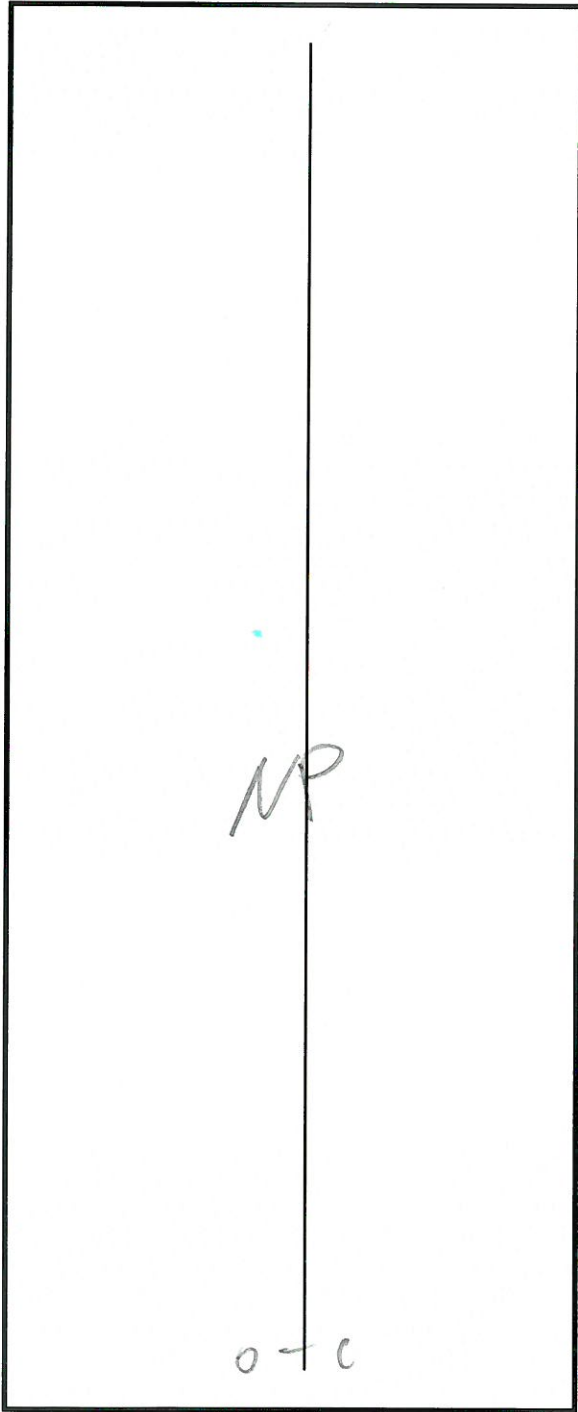
10

Curb (C), no sign (NS) = 20'
Stop or yield sign (SS) = 30'
Driveways (DW) = 5' per side

Fire Hydrant (FH) = 15' per side
Parking Sign (S) = 0'
Curb, end of block = 20'

Side: 0 E

Side: 0 W



2019

Multi-Family Residential Parking Demand Assessment Summary Report

January 31, 2019



Prepared for:
City of Tukwila
Dept of Community Development
6200 Southcenter Blvd
Tukwila, WA 98188

Prepared by:

RICK WILLIAMS CONSULTING
Parking & Transportation

PO Box 12546
Portland, Oregon 97212

Rick Williams, Principal
Owen Ronchelli, Project Manager
Pete Collins, Associate
Blair Daly, Data Collection

[Handwritten signature]

2019 Tukwila Parking Demand Assessment Summary Report

Background

Recent studies nationally and within King County have found that municipal minimum parking requirements for multi-family residential developments frequently result in an over provision of parking. King County Metro's **Right Size Parking** study found that on average, multi-family buildings in King County supply 40% more parking than is actually utilized.¹ Oversupply of parking leads to inefficient use of land and to increased automobile ownership, vehicle miles traveled, congestion and housing costs. The impact on housing costs and the availability of affordable multi-family housing is of particular importance to the City of Tukwila.

In light of recent private sector requests to reduce parking requirements associated with multi-family affordable housing development, Tukwila is interested in better understanding the relationship between actual parking demand for multi-family affordable housing and what Tukwila's code requires. The City wants assurance that its parking development standards closely reflect actual market demands and to avoid minimum standards that result in a surplus of overbuilt (and costly) parking. This will support cost effective development while at the same time ensuring that adequate parking is available.

Rick Williams Consulting (RWC) was engaged by the City of Tukwila to assess actual parking demand for a select number of affordable multi-family housing properties within proximity of Tukwila. This parking assessment is focused on representative sites within King County that:

- Are applicable to Tukwila,
- Allow comparison to existing Tukwila parking requirements for new or redeveloped uses (minimum parking ratios), and
- Represent a mix of development types (e.g., size of units, mix of bedrooms and number of parking stalls built).

If the analysis shows that the city's current parking requirements for affordable multi-family developments are higher than needed, then downward refinements to parking development ratios may be needed to ensure support for more efficient use of land. If the parking requirements are lower than needed, then upward adjustments can be made to reduce impacts of spillover into adjacent properties, on-street parking systems, or neighborhoods.

¹ metro.kingcounty.gov/.../right-size-parking/...final-report-8-2015.pdf

NOTE: After presenting the analysis of actual demand to existing code standards, we comment on the applicability of the findings to a specific affordable multi-family development called The Bellwether which is currently under review by the City. These comments begin on page 12.

Glossary of Terms

A number of technical terms are used throughout this document to describe parking demand. Short descriptions are provided below to facilitate understanding of these terms for readers.

Built Parking Ratio – This ratio is usually shown as stalls per 1,000 square feet of building area for commercial/industrial uses or as stalls per housing unit or stalls per hotel room. For instance, a 15,000 square foot building built with 30 parking spaces would have a built parking ratio of 2.0. The Built Parking Ratio has no relationship to the actual use (demand) of those spaces.

Code Minimum (Parking Requirement) – the minimum amount of parking that must be built for a specific land use type as required by city code.

Delta – the difference between the Code Minimum Requirement and the Market Calibrated Ratio.

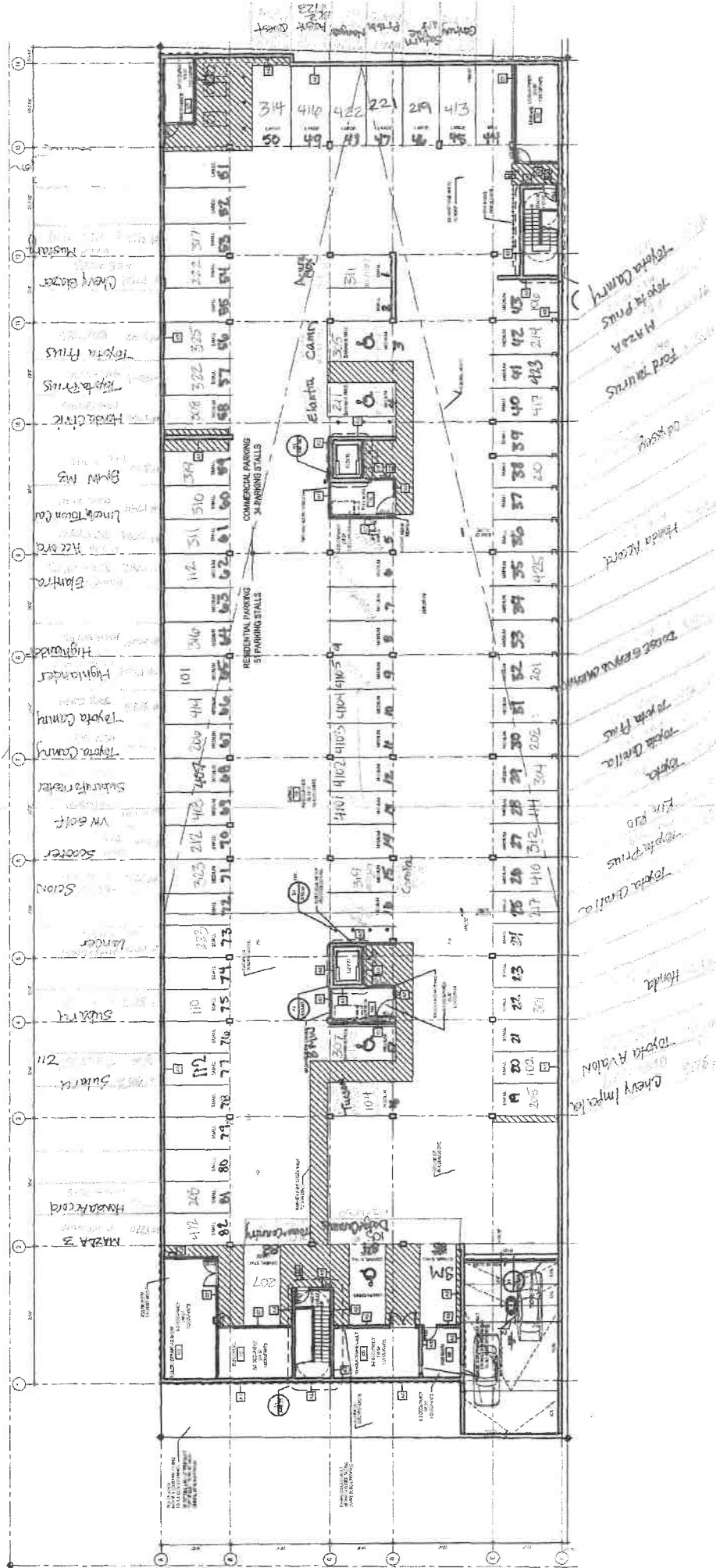
Demand Buffer – If projects were built only to True Demand, they would theoretically be 100% occupied at their peak hour, leaving little flexibility for unique variations in the ebb and flow of parking activity over the course of a day or over time. To this end, demand models generally provide for a demand buffer or “flexibility cushion” that is added to True Demand. Traditional commercial buffers (for land uses with high turnover) are 15% - which is the basis for the parking industry’s 85% Rule for visitor parking. Providing a 15% buffer for mixed use, retail, and office land uses is considered ideal.

Other land uses require smaller buffers. A 10% buffer is adequate for Industrial land uses as the primary use for parking is for employees and less parking turnover is needed to support visitor access. A 5% buffer is adequate for Residential and Hotel given that visitor demand for these uses is generally midday when many resident or hotel guests are away (i.e., to jobs or other daytime activities).

Market Calibrated Ratio – True Demand plus the Demand Buffer, which represents the most efficient demand ratio for the land use type.

Peak Hour – the period of day when the highest number of vehicles are observed parking for a given land use.

True Demand – the observed peak hour parking demand for a specific land use. This would include vehicles parked in the property’s parking lot and sometimes includes vehicles parked on-street in proximity to the property. True demand must be a measure of *actual vehicles parked* at the Peak Hour correlated to *occupied* building area.



Methodology

The City initially provided the consultant with 12 multi-family sites to observe and measure parking demand utilization. Specific sites were chosen to represent affordable housing units in a format that provided a broad cross-section of number of units, different sized-units (studio, one, two, three and four-plus bedrooms), and geographic distribution. The sampled sites represent cross-section of such sites around the I-5 and I-405 interchange. Two sites were dropped from the study as it was not possible to gather all information needed to conduct a demand assessment. A map of the final selected sites is provided on page 6.

Parking development requirements are typically expressed as ratios of stalls per 1,000 square feet of building area or, in this case, as stalls per residential unit. The analysis requires information specific to the total number of units for each survey site. City staff and RWC staff worked together to assemble profiles for each property. This included information such as street address, number of housing units (including number of bedrooms), number of built parking stalls, and current occupancy rate. This information combined with onsite field verification and thorough overnight peak-parking counts were used to derive the most accurate information possible.

RWC field staff counted occupied parking stalls from 2:30 – 5:00 AM for each property to determine the highest individual parking demand for each site. Industry standards indicate that residential peak parking demand occurs between the hours of 3:00 – 5:00 AM. Two separate weekend night counts were conducted, one on Saturday, December 8th, 2018 when seven sites were surveyed and a second on Saturday, December 15th, when the remaining three sites were surveyed. Weekday night counts were conducted on Wednesday, December 12th at all ten sites. To derive an apartment complex's true demand, only the highest occupied parking stall count is considered. In most cases, this was on a weeknight, but in some cases higher counts were found on the weekend.

For 8 of the 10 sites, it was evident that some of the vehicles parked on adjacent streets were associated with tenants of the subject property. These vehicles were included in the true demand calculation. For the most part, this type of spillover was marginal, ranging from 1 to 7 stalls.² Nonetheless, this demand was added to site totals to ensure a conservative analysis for measuring true demand.

We followed the same methodology employed by the Institute of Transportation Engineers (ITE) to calculate parking demand by land use category. The ITE manual is the de facto source of parking data for most jurisdictions. However, while the ITE information is a good starting

² One site, Residential #3 on Table 2 of this document, had 36 stalls of "spillover." This was due to the fact that this project maintains internal streets that directly serve the site in addition to stalls allocated as surface lots for the site. These streets have capacity for 67 vehicles. Given that the internal streets do not provide access for any other uses adjacent to this site, vehicles observed parked on the street during the peak hour counts were added to total demand.

point, it draws samples from across America, includes demand figures that date back as far as the 1980s, and contains data from extremely small samples. In other words, the methodology for conducting demand analyses is reliable and sound, but it is imprudent to rely heavily on ITE demand model outputs for unique jurisdictions. The approach followed by this study exclusively utilizes parking demand data gathered in areas within and proximate to Tukwila in December 2018. This provides the most accurate representation of local existing conditions to evaluate current code standards.

It is important to recognize that the sites studied were constructed at various points in time and most were not under the current Tukwila Development Code parking requirements. Therefore, when comparisons show that provided parking is less than current Tukwila Code requirements, that does not mean that the property owner didn't comply with Code requirements at the time of construction. To create an "apples to apples" comparison, the consultant evaluated all sites using Tukwila's minimum parking code requirements, thereby measuring outcomes as though the non-Tukwila sites had been built in Tukwila under the current code. This study evaluates the "on the ground" demand for parking based on the number of occupied units. This demand is independent of provided parking, however, it can help explain why any one site appears to have inadequate parking or too much parking. The derived demand for each site will be compared to the current code minimums to determine if it (code language) requires adequate parking for new multi-family development. This process provides the data necessary to "calibrate" Tukwila's Code to its specific community needs.

Map of Study Sites



Current Code Requirements

Off-street parking requirements for new development are located in Title 18 of the Tukwila Municipal Zoning Code, specifically *Chapter 18.56-Off-street Parking and Loading Regulations* - and *Figure 18-7* of the same chapter. The standard requirements for multi-family residential development is as follows:

- 2 parking spaces for each dwelling unit that contains up to 3 bedrooms.
- 1 additional parking space for every 2 bedrooms in excess of 3 bedrooms in a dwelling unit

In the urban renewal district, the standard is different if at least 75% of the required parking is in a structure. In that case, the requirements are:

- 1 parking space per dwelling with one bed,
- plus 0.5 parking spaces for every unit with more than one bedroom,
- plus, one additional space for a car sharing program for every 50 parking stalls.

NOTE: The Tukwila code can lead to different parking ratio requirements by unique site based on the makeup of the number of bedrooms in each unit. Many cities require a simpler flat ratio requirement (per unit versus per bedroom), which leads to a single ratio for all multi-family developments. Table 2 on page 10 demonstrates how the minimum required development ratio can vary by development (see Column 7).

Given that all the sample sites provided only surface parking, the RWC model used the base standard in Figure 18-7. None of the sites met the 75% structured parking standard of the urban renewal parking allowances.

Findings – Measured Sites

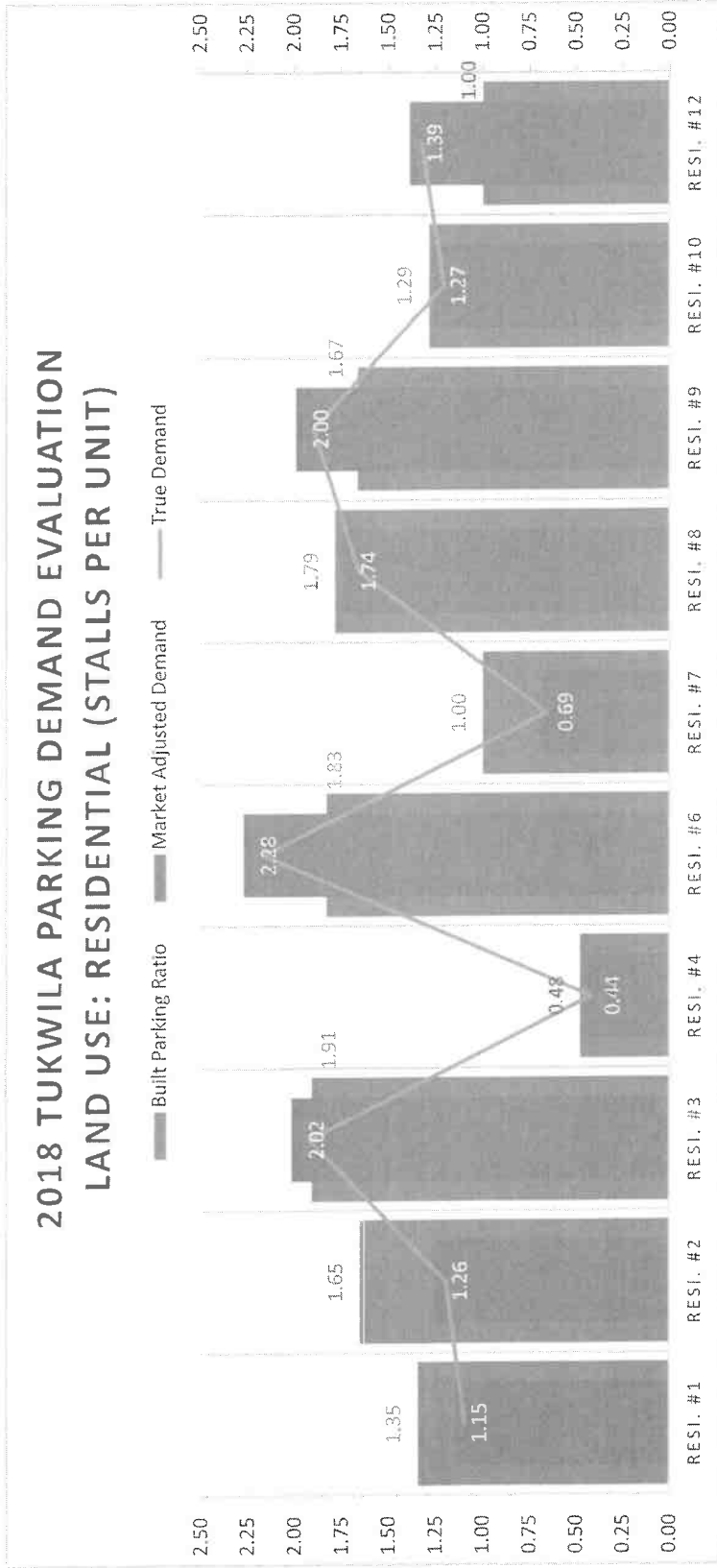
Each of the 10 sites were selected and vetted by the City of Tukwila. The intent was to have a variety of affordable multi-family residential housing stock represented – from properties with a small number of units (as few as 12) to large complexes with as many as 326 units. **Table 1** shows the distribution of residential sites chosen by number of units and distribution of bedrooms. Property managers were contacted by the consultant for additional information about the sites (e.g., vacancy rates, number of parking stalls/garages). As the table indicates, 1,078 total units were included in the survey. One- and two-bedroom units make up the majority of unit types, representing 79% collectively. Studios represented 18% of the units but were primarily concentrated in the largest site.

Table 1: Inventory of Multi-Family Residential Sites

Range of Residential Units	Sites	Aggregated Residential Units	Studios	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
10 - 50	5	179	0	85	57	30	7
51 - 100	2	186	14	55	86	23	8
101 - 200	2	387	40	120	141	50	36
200 +	1	326	165	166	157	2	1
Totals	10	1,078	219	426	441	105	52
Distribution of Bedrooms		1,243	18%	34%	35%	9%	4%

Figure A provides a graphic summary of the sampled sites at the peak hour of use. The figure compares the ratio of stalls built to accommodate the site (orange bar) with the actual use, or true demand, of those stalls (gray line). The market calibrated demand reflects the ratio of parking that would be "right sized" for the site (blue bar). Data inputs for this figure are derived from **Table 2** which provides greater detail for each site and aggregated totals. **Table 2** also provides site ID's which can be correlated for location on the Map of Study Sites above.

Figure A: Parking Demand Ratios – Multi-Family Residential Use



Key Takeaways from Figure A:

- Six sites had market calibrated demand that was less than the actual supply built (Residential #'s 1, 2, 4, 7, 9 and 10). Of these sites, Residential #'s 4, 8, and 10 were close to "right sized" with supply and market calibrated demand closely aligned.
- Three sites had higher parking demand (both true and market calibrated) than their built supplies (Residential #'s 3, 6, 9 and 12). In each instance, 'spillover' vehicles parked on-street were observed, generating the additional parking demand beyond the off-street built supply.

Table 2: 2018 Tukwila Parking Demand Evaluation – Multi-Family Residential Use³

1	2	3	4	5	6	7	8	9	10	11	12	
Site ID	Location	Affordable Housing Units	Residential Unit Occupancy Rate	Built Off-Street Stalls	Built parking ratio	Minimum Required Stalls (Tukwila Code Ratio) ⁴	True Demand (TD)	"Market Calibrated" Demand (MCD)	MCD Actual Parking Stalls Needed	Delta +/-	% Diff	
A	Resi. #1	SeaTac	95	97%	128	1.35	190 (2.00)	1.10	1.15	109	0.85	43%
B	Resi. #2	Tukwila	191	99%	316	1.65	382 (2.00)	1.20	1.26	241	0.74	37%
C	Resi. #3	Federal Way	91	99%	174	1.91	174 (2.04)	1.92	2.02	184	0.02	1%
D	Resi. #4	Seattle	50	100%	24	.48	100 (2.00)	0.42	0.44	22	1.56	78%
E	Resi. #6	Des Moines	12	100%	22	1.83	24 (2.00)	2.17	2.28	27	-0.28	-14%
F	Resi. #7	Seattle	44	100%	44	1.00	88 (2.00)	0.66	0.69	30	1.31	66%
G	Resi. #8	Renton	196	99%	350 ⁵	1.79	410 (2.09)	1.66	1.74	341	0.35	17%
H	Resi. #9	Tukwila	30	100%	50	1.67	64 (2.12)	1.90	2.00	60	0.12	6%
I	Resi. #10	SeaTac	326	99%	420	1.29	983 (3.01)	1.21	1.27	414	1.74	58%
J	Resi. #12	Des Moines	43	100%	43	1.00	86 (2.00)	1.33	1.39	60	0.61	31%
K	Total		1,078		1,571		2,501		1,488			
L	Median		71	99.5%	89	1.50	137 (2.00)	1.27	1.33		0.67	45%

³ The City maintains information on site name and site address. This information is not included in this report summary to assure property owners and managers of those sites that data was only collected for comparative purposes.

⁴ Tukwila's current minimum parking code requires 2 spaces for each dwelling unit that contains up to 3 bedrooms and 1 additional space for every 2 bedrooms in excess of 3 bedrooms in a dwelling unit.

⁵ Includes 47 private single-car garages.

Key findings from **Table 2** include:

- Actual built parking ratios for the 10 sample sites range from a low of 0.48 spaces per unit (Residential #4) to as much as 1.91 spaces per unit (Residential #3). The median for the actual built parking ratio is 1.50 spaces per unit, regardless of configuration of bedrooms provided (Column 6, Row L).
- Within individual sites, true parking demand ratios range from 0.42 spaces per unit (Residential #4) to 2.17 spaces per unit (Residential #6). When a demand buffer is added to true demand, the market calibrated demand ratio for these sites ranges from 0.44 to 2.28 stalls per residential unit.
- In only two sites is the market calibrated demand ratio less than 1.0 space per unit; Residential #4 (0.44) and Residential 7 (0.69). Both sites are in Seattle and are smaller in size (50 and 44 units, respectively). All other sites have market calibrated demand of greater than 1.0 space per unit.
- The aggregated median market calibrated demand ratio is 1.33 for all measured sites (Column 9, Row L). This is 0.17 spaces per unit lower than the median for actual parking built of 1.50 spaces per unit (Column 6, Row L).
- If all the sites were built based on the current standards of Tukwila's parking code, the median minimum parking requirement would have been 2.00 spaces per unit (Column 7, Row L). This would have resulted in an oversupply of 0.67 spaces per unit, or 45% more parking than market calibrated demand (Column 12, Row L). Stated differently, rather than the 1,571 spaces that were actually built (Table 2, Column 5, Row K); 2,501 spaces would have been required by code (Table 2, Column 7, Row K) and only 1,488 stalls needed to provide a right-sized supply (Table 2, Column 10, Row K).

Based on this analysis, the Tukwila code for minimum parking requirements would likely cause a significant oversupply of parking at the aggregate level in new affordable multi-family developments (in the range of 45% in the sampled sites).⁶ This is based on observed demand at representative affordable multi-family sites and compared to actual market calibrated parking demand for such land uses.

⁶ We cannot speculate whether the same finding would apply to market rate multi-family housing, given that all the sample sites were of affordable housing.

Findings – Applicability to Bellwether Review

The Bellwether multi-family development project is currently under review by the City of Tukwila. The project envisions approximately 101 units of affordable multi-family housing. Under the current code, the minimum parking requirement would be approximately 202 parking spaces. Under a development agreement approved in 2017 (Ordinance 2563), the City of Tukwila agreed to a reduction in parking required for the project at a ratio of 1.0 space per residential unit. In recent months, the applicant has asked the City to consider reducing the 1.0 space per unit allowance in the development agreement to 0.90 per unit.

Based on the findings of this study, it is difficult to find validation for a rate less than 1.0. There were two sites in the study that had market calibrated demand of less than 1.0 spaces per unit. Both were in Seattle. The remaining eight sites all had market calibrated parking demand of over 1.0 spaces per unit. The two sites located in Tukwila (Residential #s 2 and 9) had market calibrated demand of 1.26 (191 units) and 3.0 (20 units). In the aggregate, the median market calibrated parking demand rate is 1.33 spaces per unit. The development agreement allowance is below what the market has indicated is common for affordable multi-family projects. This is not to say that a ratio of 1.0 for The Bellwether will certainly result in parking spillover into adjacent areas. The site should make strong efforts to attract tenants who will use transit and leverage its close proximity to the Tukwila International Boulevard Station.

The applicant has also asked for allowances to increase the number of compact stalls on the site. This is a reasonable request. RWC reviewed the City's requirements for stall and aisle dimensions (18.56.040) and found the standards to mirror suburban, rather than typical urban development. Granting this allowance may provide flexibility to the applicant to maximize the stall count within the dimensions of the site using smaller stalls and narrower drive aisles.

Summary

Sampled sites

RWC sampled 10 affordable multi-family development sites in Tukwila and nearby cities. These are all existing sites and they were measured for actual built supply and actual market calibrated parking demand. As most sites were not in Tukwila, all sites were evaluated against the question of how much parking they would have been required to provide if they were new projects being reviewed against the current Tukwila Municipal Zoning Code for parking. This allowed for a direct comparison of market calibrated parking demand ratios from local samples and the role the Tukwila code could play in either right-sizing parking or causing an oversupply of parking in future affordable multi-family developments.

Findings from the data analysis of local sampled affordable multi-family residential sites indicate that for the most, the current parking supply for this land use type is being built at about 1.50 spaces per residential unit. This is approximately 11% more than its market calibrated demand of 1.33 parking spaces per unit. However, the most relevant finding is that the current Tukwila Municipal Code requirements for multi-family housing would require significantly more parking than market demand. The median Tukwila code parking minimum requirement (for the sampled sites) is 2.0 spaces per unit. This would lead to an overbuild of 0.67 spaces per unit, or 45% more parking than market calibrated demand.

To support land use efficiencies within the code, current standards could use some minor recalibration, tracking more closely to actual demand for parking, primarily in terms of simplifying ratios related to number of bedrooms to a per unit standard. The City's parking code minimums should allow for prospective residential multi-family developments to be built with "right-sized" parking supplies that more accurately represent true demand. Simplifying and standardizing the parking minimum will establish a more intuitive, user-friendly approach, while also reflecting the market's true demand. Given that the current code could play a role in the oversupply of parking, the City may want to consider reducing the required parking minimum to align with the median market calibrated demand ratio of 1.33 stalls per unit.

Going forward, the City should continue to periodically collect parking demand data to monitor changes in parking development and utilization patterns and work with developers during the design phase of their projects, educating them on the tendency to oversupply parking.

Bellwether Review

Bellwether has requested to reduce parking requirements to a rate less than 1.0 spaces per unit. It is difficult based on the findings in this analysis to affirm a rate less than 1.0. There were two sites in the study that had market calibrated demand of less than 1.0 spaces per unit. The remaining eight sites all had market calibrated parking demand of over 1.0 spaces per unit. The two sites located in Tukwila had market calibrated demand of 1.26 (191 units) and 3.0 (20 units).

To allow for more efficient utilization of surface parking at Bellwether, the City should consider re-evaluating minimum stall size standards in 18.56.040. The City could allow a uniform 8.5 ft stall width for all stalls provided, rather than a possible mix of 8.0, 8.5, and 9.0 ft stall widths as currently regulated. Similarly, consideration should be given to drive aisle widths for 90-degree spaces of 20 ft (one way) and 20 to 22 ft (two way). These standards are more consistent with urban parking facilities and provide for additional efficiency within constrained sites.

2017 National Household Travel Survey FHWA

are Based Statistical Area (CBSA) FIPS code for the respondent's home address: Seattle-Tacoma-Bellevue, WA

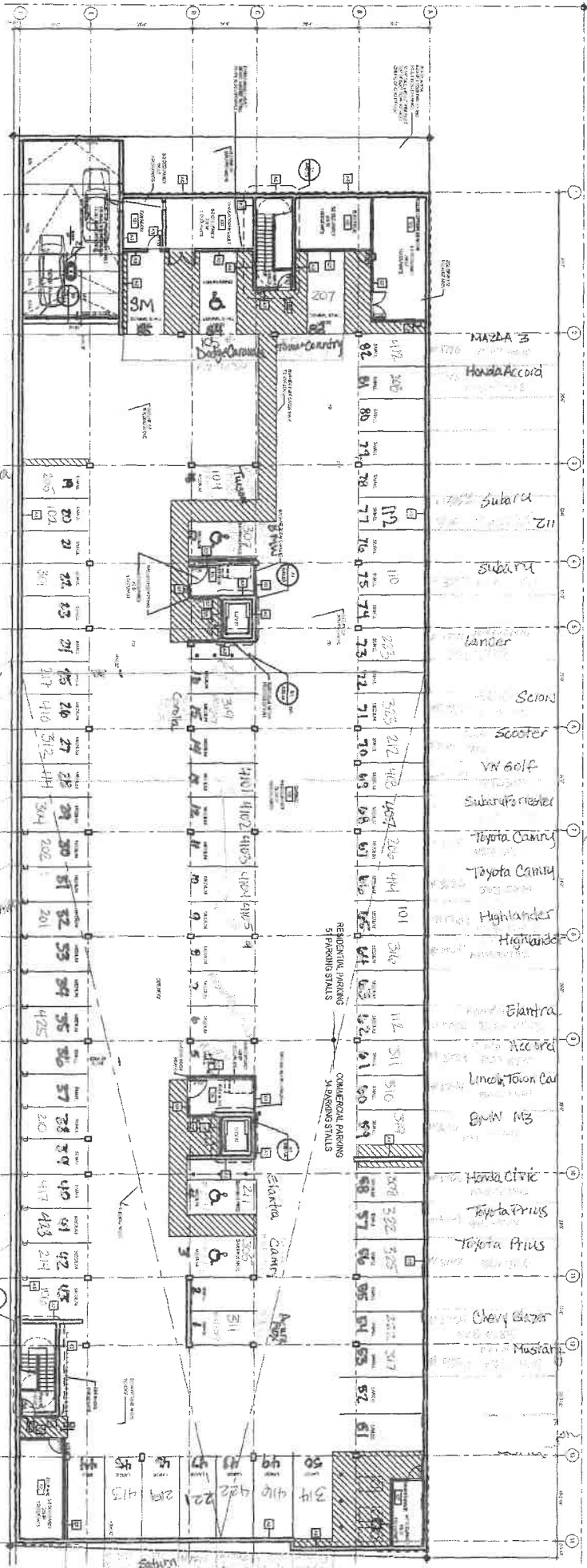
Number of Vehicles (Thousands)

Household income	Vehicle Type										All
	Automobile/Car/Station Wagon	Van (Mini/Cargo/Passenger)	SUV (Santa Fe, Tahoe, etc.)	Pickup Truck	Other Truck	RV (Recreational Vehicle)	Motorcycle/Motor bike	Something Else			
Less than \$10,000	29	1	3	3							30
\$10,000 to \$14,999	7	2	3	3							11
\$15,000 to \$24,999	16	0	8	2							27
\$25,000 to \$34,999	66	13	41	11							133
\$35,000 to \$49,999	171	10	44	44							245
\$50,000 to \$74,999	251	10	43	64		0					400
\$75,000 to \$99,999	194	42	65	58	2						370
\$100,000 to \$124,999	160	46	73	25		7					324
\$125,000 to \$149,999	157	3	39	31							230
\$150,000 to \$199,999	105	22	79	11							227
\$200,000 or more	276		147	50							401
All	1,432	139	521	300	2	0					2,000

Source: Federal Highway Administration, 2017 National Household Travel Survey (NHTS) evolution created on the NHTS website at nhts.com.gov

Income categories	Car/station wagon	Van	SUV	Pick up truck	motorbike	Total households
Less than \$10,000	88%	3%		9%		33
\$10,000 – 14,999	64%	18%	27%			11
\$15,000 – 24,999	59%		37%	7%	1%	27
\$25,000 – 34,999	50%	10%	31%	8%		133
\$35,000 – 49,999	70%	0%	4%	18%	9%	245

Attachment 3



Chevy Impala
 Toyota Avalon
 Honda
 Toyota Corolla
 Toyota Prius
 Kia Rio
 Toyota
 Toyota Corolla
 Toyota Prius
 Honda Accord
 Ford Taurus
 MAZDA
 Toyota Prius
 Toyota Camry

RESIDENTIAL PARKING
 51 PARKING STALLS
 COMMERCIAL PARKING
 34 PARKING STALLS

Attachment 4