

WHEELER STREET LOCAL IMPROVEMENT PROJECT DRAFT PRE-DESIGN



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Appendix A

Public Survey Input Summary (online)

BACKGROUND

Overview

The City's Engineering Services Department has initiated a process to reconstruct the underground and surface infrastructure of Wheeler St. This process is referred to as the **Wheeler Street Local Improvement (LI) Project**. Two public meetings and a survey occurred in late summer to collect property owner and resident feedback on infrastructure design preferences (a summary is available in online Appendix A). The Draft Preliminary Infrastructure Design ("Pre-design") featured in this document is informed by public input, technical assessments, and the City's safety and accessibility standards for infrastructure design.

Project Area & Scope Change

The Wheeler St project area extends from 4th Ave to the escarpment. Since the public consultations occurred, a scope change has happened to include the roadway segments of 5th, 7th, and 8th Ave between Wheeler St and Black St. Including these segments will help to provide continuity in road surfacing and is an efficient and cost effective approach to renewing these areas. This change will not impact the proposed costs to property owners and will not change the extent of eligibility for the property owner vote (reserved for properties to which the Local Improvement Charge is applied).



BACKGROUND

Rationale

The underground and surface infrastructure in various downtown areas is approaching the end of its service life. The City is staging the reconstruction of this infrastructure through Local Improvement (LI) Projects so that it does not require replacing all at once. The Engineering Services Department is proceeding with Wheeler St LI Project at this time for several reasons:

- **Aging water and sewer mains:**

The water and sewer mains that run underneath Wheeler St date back to the 1950s and are constructed of asbestos cement. This material typically has a functional life of 40 to 65 years. Since 1977, Wheeler St repairs have occurred to five water services, six sanitary sewer services, one sanitary main, and one hydrant. The City is pro-actively seeking to replace this infrastructure because repairs to the mains and services are disruptive and costly.

- **Bleeding water services:**

Many buildings in downtown have water systems that periodically “bleed” (release) water during cold months to prevent services from freezing. The City is seeking to replace bleeders with recirculating services because the practice consumes a vast amount of water, which is expensive and energy intensive for the City to treat to potable standards, heat, and circulate. The practice also contributes to dilution of the sanitary lagoon, which inhibits its proper functioning.

- **Service capacity requirements:**

The 150 mm diameter water mains that currently service Wheeler St require up-sizing to ensure that fire-flow requirements are met. Larger mains will also help to ensure that service provision is adequately maintained for current and future residents, in light of new development in the area.

- **Deteriorating road surface:**

In its current state, the level of service provided by the Wheeler St roadway is considered very poor. The paved surface is deteriorating and potholes are a common occurrence. The roadway has reached the end of its useful life, meaning that it is no longer economical to perform regular maintenance and repair, and it instead requires a complete rehabilitation.

PROCESS

August/September 2016

Public Consultation

Two public meetings and a survey on design preferences occurred to help inform the Draft Pre-design developed by the Engineering Services Department. Technical assessments and review of City standards, policies, and bylaws also occurred.

October (17th and 24th, tentative)

Report to City Council & Bylaw

Engineering Services will present a report to City Council that summarizes the Pre-design, provides cost estimates, and indicates initial support/opposition to the project. City Council will decide whether or not to introduce a bylaw that will launch a formal property owner vote.

October/November

Property Owner Vote

If City Council proceeds with a vote, a ballot will be mailed to each affected property and a Public Hearing will be scheduled. Owners will have 30 days to return the ballot. For the project to be canceled, at least 50% of properties plus one must return a ballot stating opposition.

December/January 2017 +

Detailed Design & Construction \$\$

If the result of the vote is supportive, a consultant will be hired to complete a Detailed Design. This report will require input from property owners to identify property-specific servicing details. City Council will make a decision on the allocation of funds for construction.

Spring 2017 +

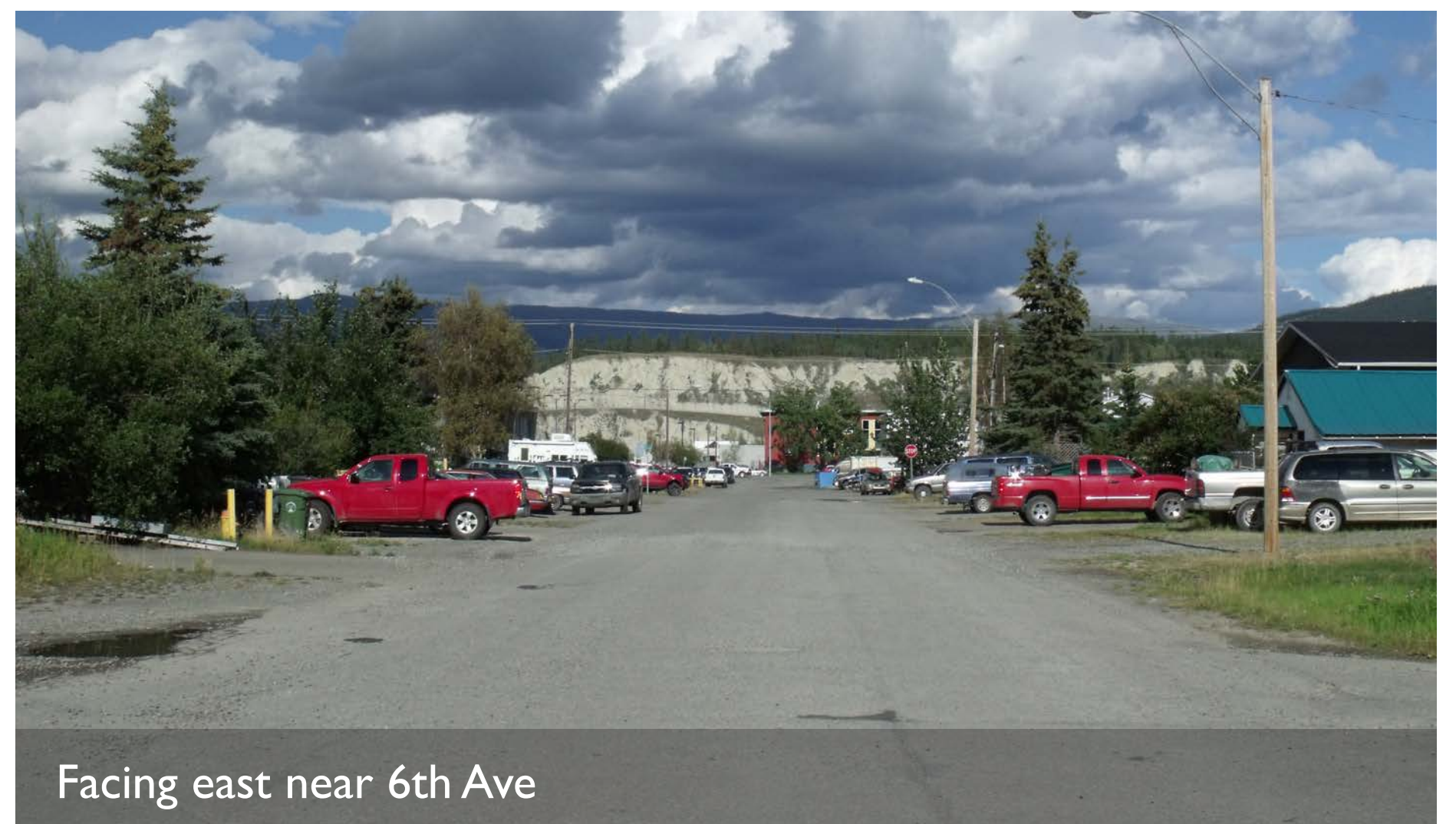
Construction

If construction funds are approved by City Council, the earliest potential start date for construction is spring 2017. Construction will likely take up to 3 years to complete.

CURRENT PROFILE

Street Profile

Wheeler St is a downtown street that features mixed-use zoning (commercial/residential) between 4th and 6th Ave and residential zoning from 6th Ave to the escarpment. The road right-of-way in this area is 24.4 m in width (extending approximately from fence-line to fence-line). Surface infrastructure includes: a paved asphalt roadway; a small section of gravel roadway near 8th Ave; gravel shoulders; nose-in parking on boulevards; parallel on-street parking; and overhead lighting on wooden utility poles. Some residents access parking at the rear of properties using laneways that run parallel to Wheeler St.



CURRENT PROFILE

Surface Conditions

The current surface condition of Wheeler St is considered to be very poor. The asphalt is failing in many sections. Ponding due to drainage problems contributes to potholes, which require annual maintenance.



PROPOSED PROFILE

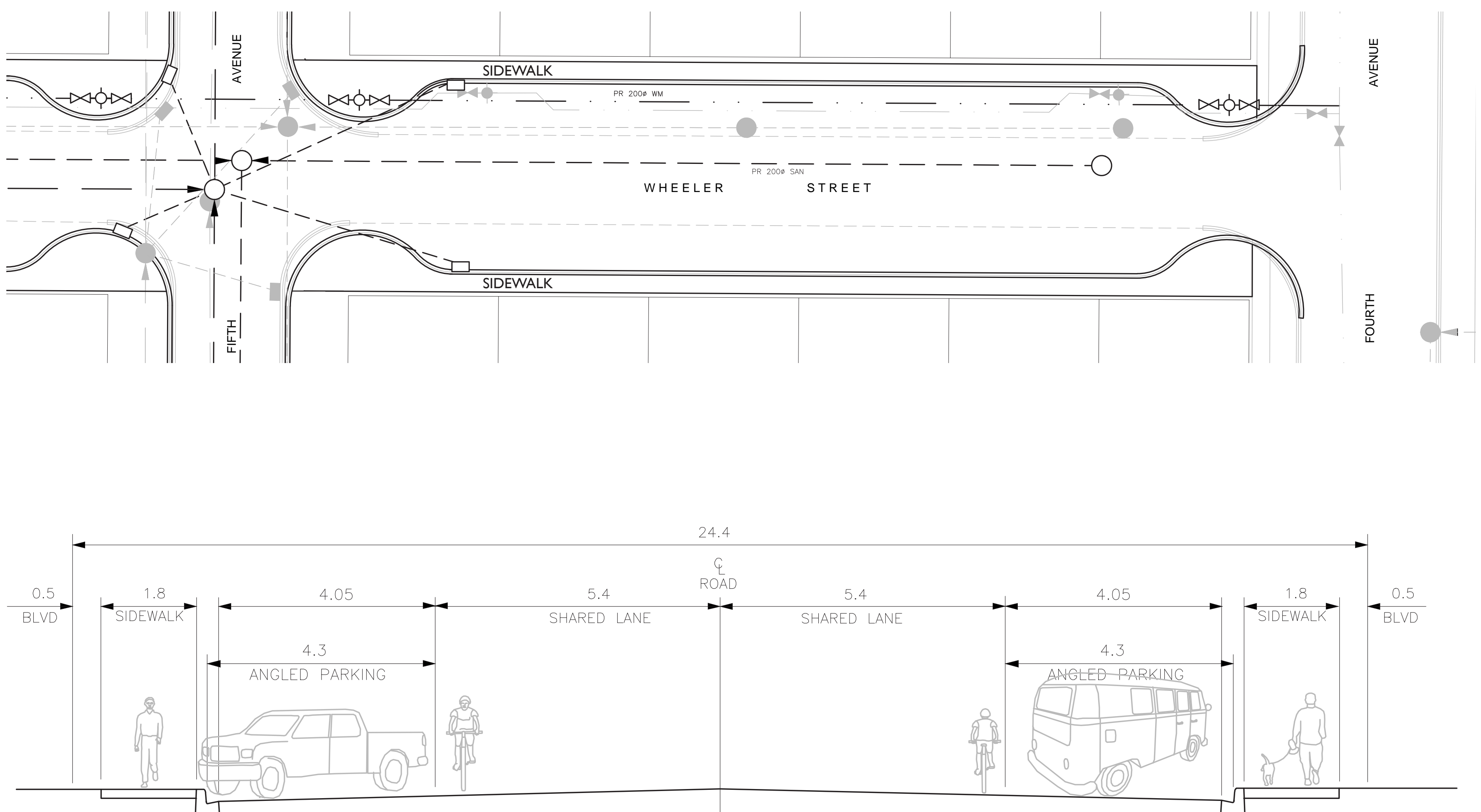
4th to 6th Ave - Sidewalks & Street Profile

Public input has identified safety concerns relating to parking along the commercial portion of Wheeler St, and along the adjacent and nearby areas of 5th Ave and Black St. The overspill of commercial parking can block the visibility of pedestrians and cyclists, creating a safety hazard.

The following design is proposed for Wheeler St in the area between 4th and 6th Ave. The design features monolithic sidewalks on both sides (meaning attached to the curbs and roadway), barrier curbs, angled parking, and intersection bulb-outs. Bulb-outs are beneficial for shortening crossing distances and recessing parking away from intersections to improve sightlines.

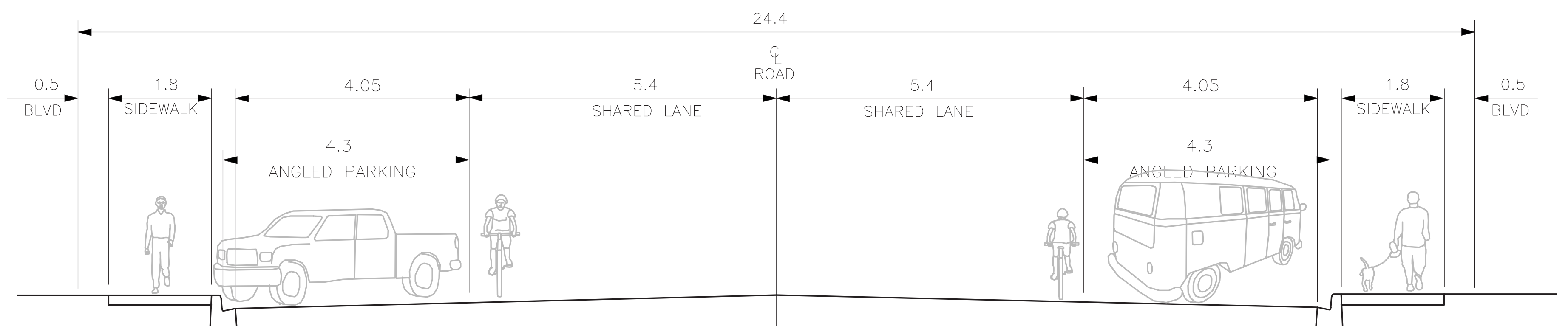
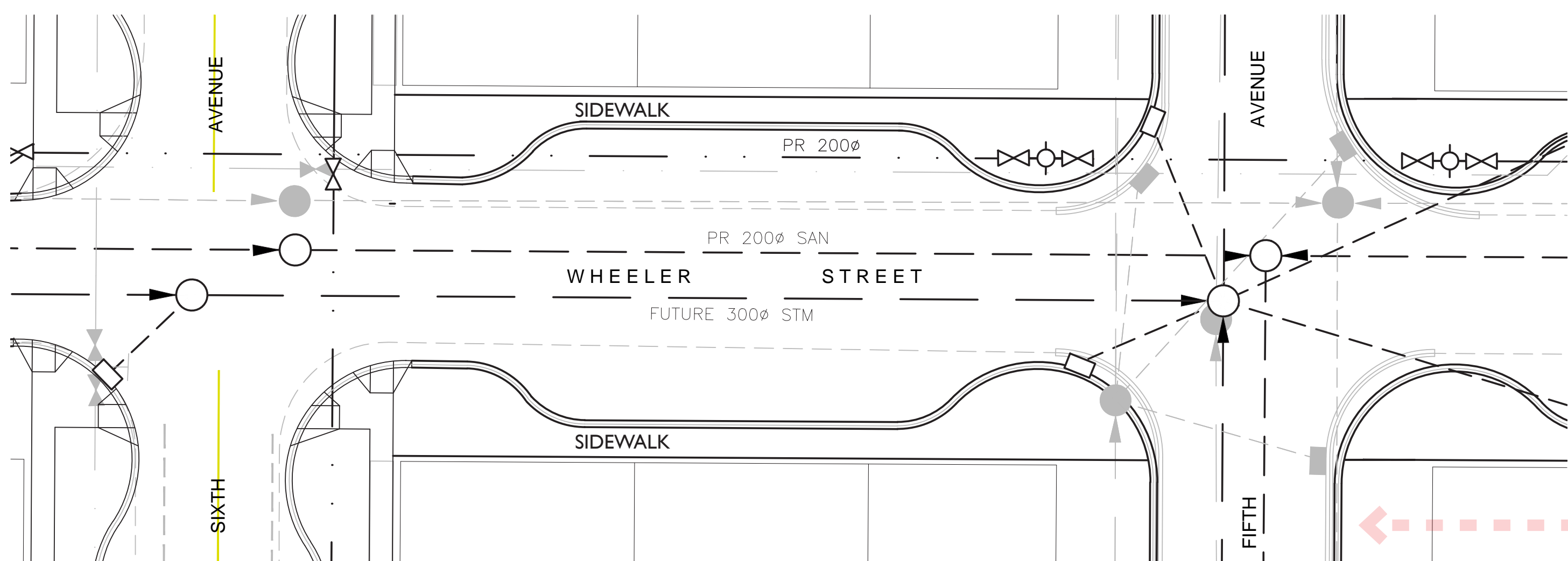
The City will communicate the input received relating to parking concerns to commercial owners and will explore strategies to better manage parking-stay durations in this area.

4th to 5th Ave proposed profile:



PROPOSED PROFILE

5th to 6th Ave proposed profile:



Scope change area: As a result of the scope change to the project area, the City is proposing to improve the segment of 5th Ave between Wheeler St and Black St. Improvements will be determined at the detailed design phase, but will likely include repairs or a full resurfacing.

PROPOSED PROFILE

Landscaping

The City would like to improve the streetscape of Wheeler St by adding landscaping to the proposed bulb-outs at the intersections of 4th, 5th, and 6th Ave. The goal is to introduce robust plantings that will be attractive and low-maintenance. Maintaining sightlines through vegetation will be an important consideration.

Reflecting public input received on landscaping preferences, efforts will be made to incorporate the following varieties along with some non-deciduous plantings in the design. The final selection will be subject to the availability of these varieties at the time of purchase and installation. Landscaping is typically installed in the final stages of construction.



Madame Lemoine Lilac



Princess Kay Plum Tree



Snow Pavement Rose

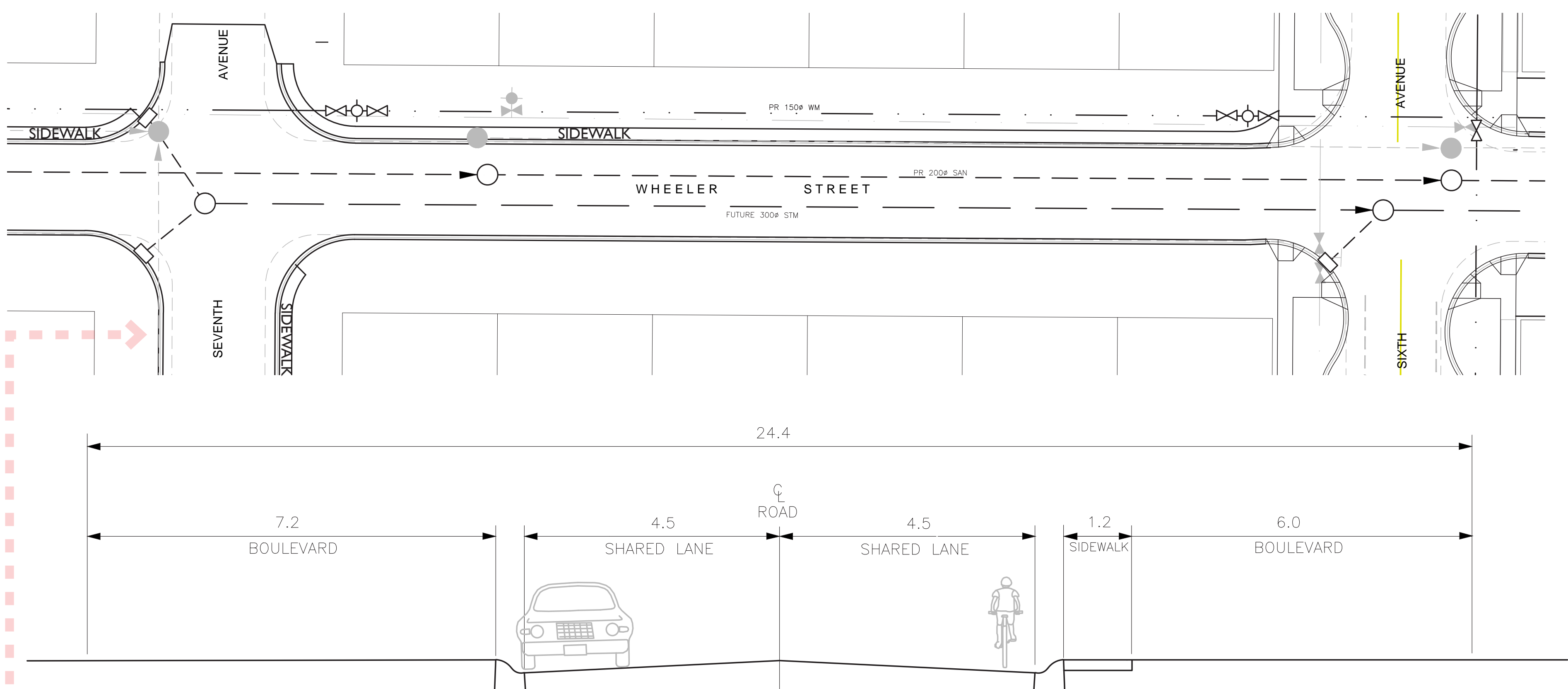
PROPOSED PROFILE

6th Ave to the Escarpment - Sidewalks & Street Profile

Public input from the survey indicated a clear preference for a monolithic sidewalk design (rather than detached) for the portion of Wheeler St between 6th Ave and the escarpment. The importance of retaining resident parking in boulevards was emphasized, along with interest to maintain separation distances between pedestrian areas and the front of residences. A clear preference did not emerge for the location of the sidewalk (north or south side).

The City has reviewed the input received and assessed technical considerations such as land uses, sun exposure, and pedestrian continuity to the three prominent destinations at the west end of Wheeler St (the park, Black St stairs, and Grace Community Church). The proposal is to have a monolithic sidewalk on the north side of this area.

6th to 7th Ave proposed profile (7th to 8th Ave will have the same profile):



Scope change area: As a result of the scope change, the City is proposing to reconstruct the segments of 7th and 8th Ave between Wheeler St and Black St. During renewal of other segments of these avenues (between Wood St and Jarvis St), a standard was established for the sidewalks to be built on the east side. The goal is to have continuity along these north/south pedestrian routes as additional segments are renewed through future Local Improvement Projects.

WHEELER ST LI PROJECT: DRAFT PRE-DESIGN

PROPOSED PROFILE

8th Ave to the escarpment proposed profile:

