

A long-term decline of parking demand is underway, driven by generational change, an increase in multi-modal mobility, and interest in more urban and less impactful lifestyles. Real estate developers are concerned about the risk of building hugely expensive structured and underground spaces that may not be in demand in the long-term. Rather than putting forward one prescriptive parking solution, this document provides context, guidance, and options to be considered as part of future efforts to advance development of the VTA Block.

The DDF considers it likely that the City of San José will dramatically reduce, or even eliminate, minimum parking requirements within Downtown. It also appears likely that the market will want at least some parking for future TOD on the VTA Block, even with a BART station immediately adjacent. This document provides a summary of parking provided by other recent developments in the area and then evaluates options for parking to serve the development envisioned by the DDF on the VTA Block.

In contrast to the block today, which is dominated by surface parking, the creation of a dynamic and walkable ground plane that accommodates pedestrian and community activities requires a compatible and complementary parking strategy.

6 Flexible Approach to Parking

6.1 District Approach to Parking

One component of such a parking strategy could be a district parking approach. There are over 7,500 parking stalls within a five minute walk of the site, including an existing city-owned parking garage across Market Street from the VTA Block. Some percentage of the parking demand for the block could well be accommodated off-site by employing a district approach to parking.

Figure 6-03 shows transit stops near the VTA Block and public and private parking within a third of a mile of the block.

6.2 Underground Parking

The DDF also explored options for underground parking . Underground parking is often twice or more the cost of above ground parking structures, however it does more than above-grade or surface parking to enable vibrant walkable places.

6.3 Shared Parking

Shared parking could also benefit developers, property owners, and tenants because it could reduce the amount of costly underground parking that may need to be built. Shared parking is most successful when developments have a mix of uses that require parking at different times of day (e.g., residential parked at night and office parked during the day), and there are many examples of operating and successful shared parking configurations. Shared parking also typically requires a lot of upfront coordination, especially regarding sharing of construction costs and agreement on management and operations approaches.

- Emergency Vehicle Access
- Pedestrian Access
- TOD Entry Driveways

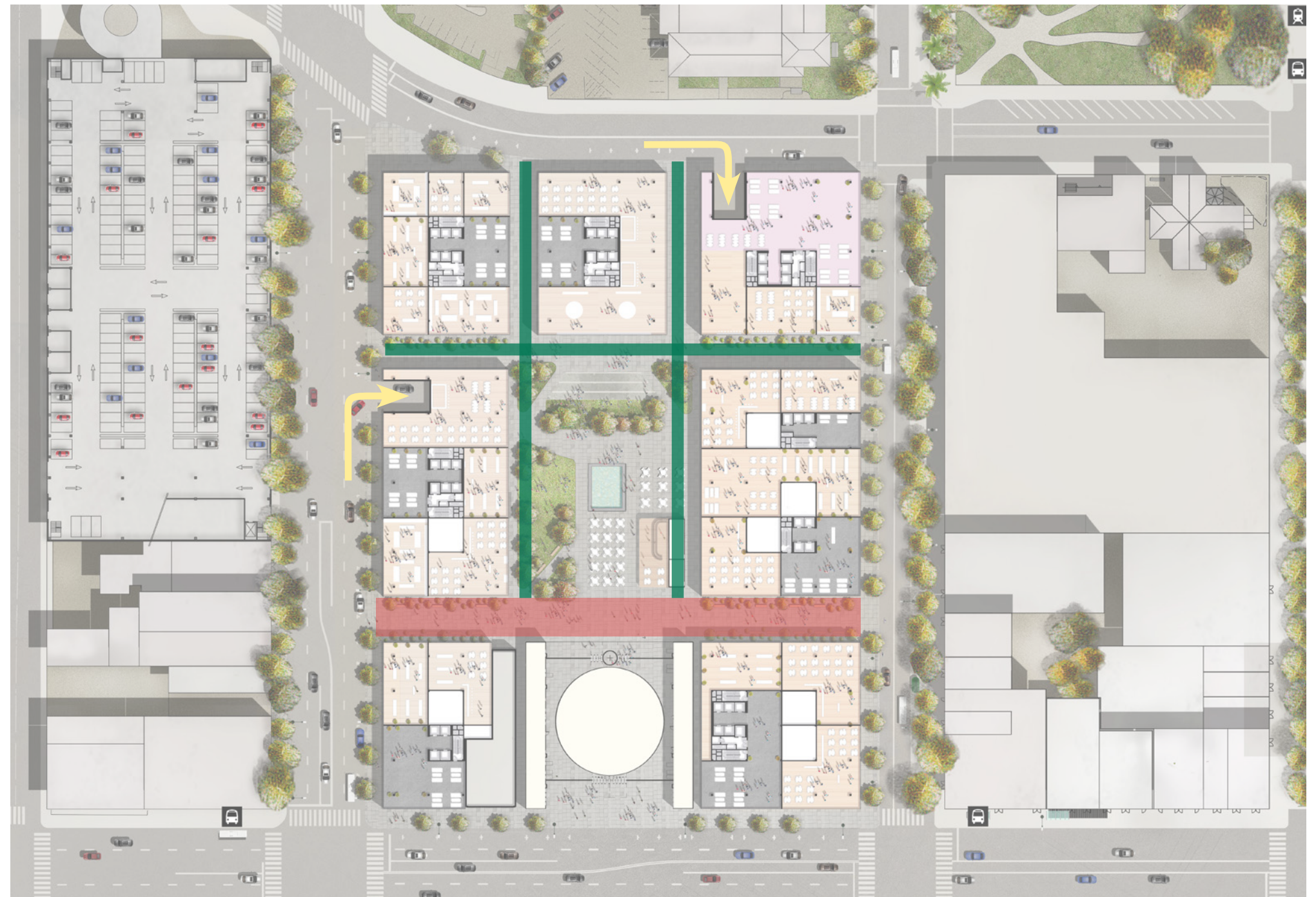


Fig. 6-01 Groundfloor Concept

6 Flexible Approach to Parking

6.4 Other Approaches: No Parking and Adaptable Parking

Other approaches to parking for the VTA block could include 'zero parking' or 'adaptable parking' approaches. Under a zero parking approach, all off-street parking for the block could be provided via a district approach like that described above. An adaptable parking approach could create options that could work within the uncertainty of future demand. One option for an adaptable parking approach is to provide above grade structured parking with larger floor-to-floor heights that could eventually accommodate occupiable uses, and this space could later be converted from parking to space for something else.

6.5 Parking Capacity

Figure 6-02 outlines the wide range of different parking requirements and options, from the current San José requirements on the left side to a more market-driven approach shown on the right. As noted above, the City of San José is considering reducing minimum parking requirements for Downtown.

The studies described herein all take into account the fact that no parking can be provided above or below the BART station facilities.

As shown in figures 6-04 given an assumed structural grid and core layout for the buildings above, including the need for parking to wrap around BART station "back of house" support facilities, analysis conducted as part of DDF development determined that two levels of underground parking can accommodate approximately 670 standard parking stalls. With the use of specific parking management techniques (i.e., valet parking in drive aisles to increase capacity) and double stackers in parking stalls, and taller parking structure floor-to-floor heights (which also require deeper excavation),

two levels of underground structured parking could accommodate up to 1145 parked vehicles. The figures 6-05, 6-06 that follow show conceptual layouts of two levels of underground parking in more detail and relationship of these parking facilities to the BART station footprint. Of course, the operational cost of a parking management system would need to be factored into any cost analysis.

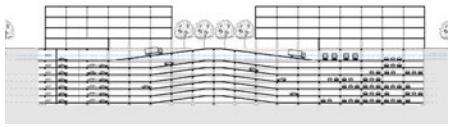

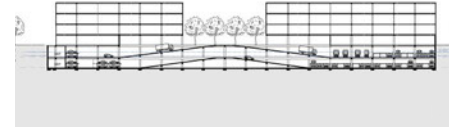
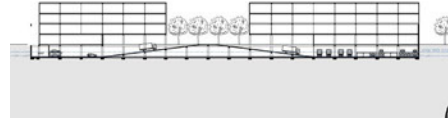
Current City Requirement		Current Market Demand	Cost Effective TOD Approach
1688 Carpark Spaces	1688 Carpark Spaces	800-1000 Carpark Spaces	400-500 Carpark Spaces
standard single	double stacker	double stacker	double stacker
			
7 Levels	4 Levels	2 Levels	1 Level
81 feet below grade	64.5 feet below grade	32 feet below grade	17.5 feet below grade
high carbon cost	high/mid carbon cost	mid carbon cost	lower carbon cost

Fig. 6-02 Parking Requirement Diagram

6 Flexible Approach to Parking

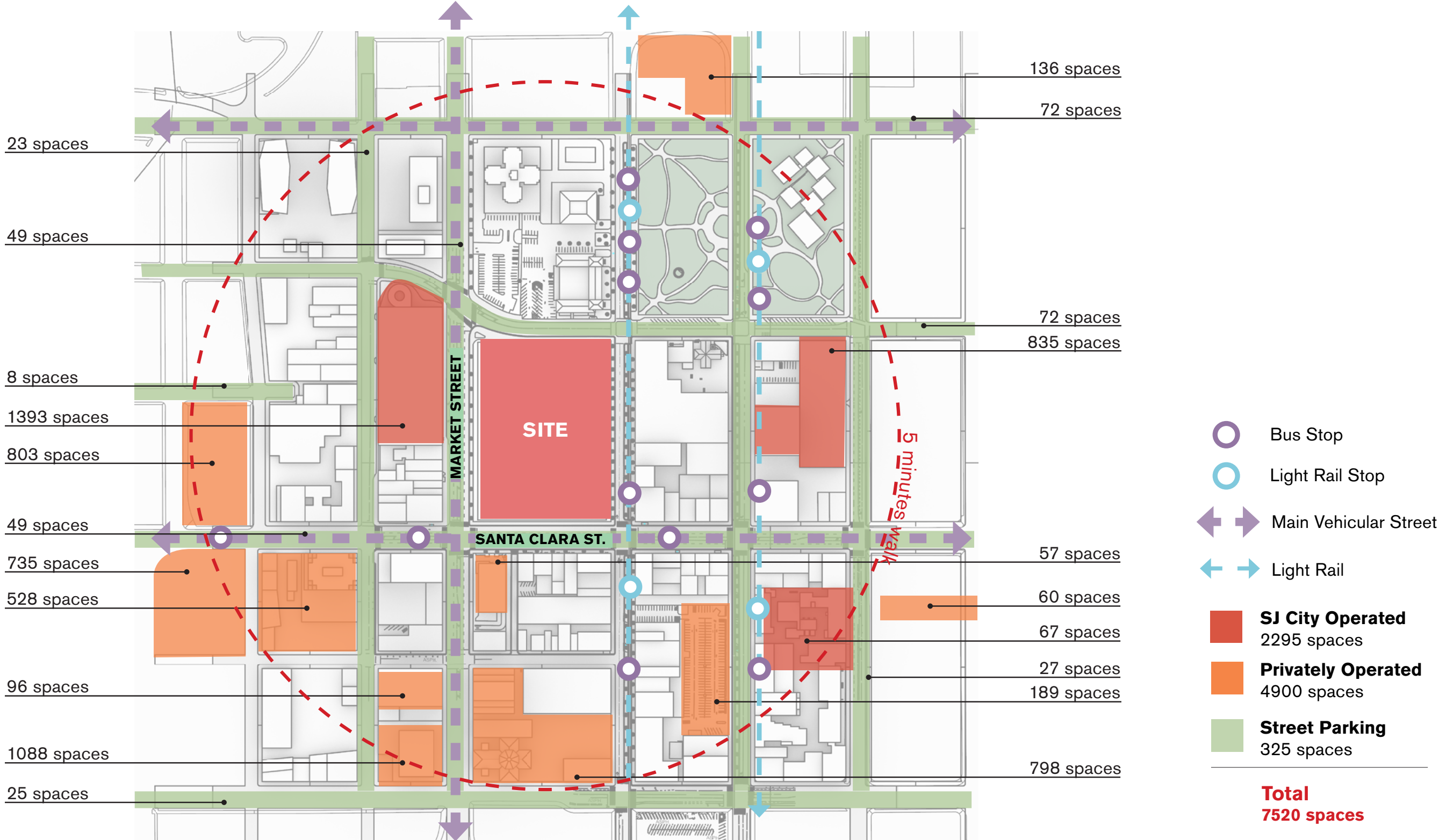
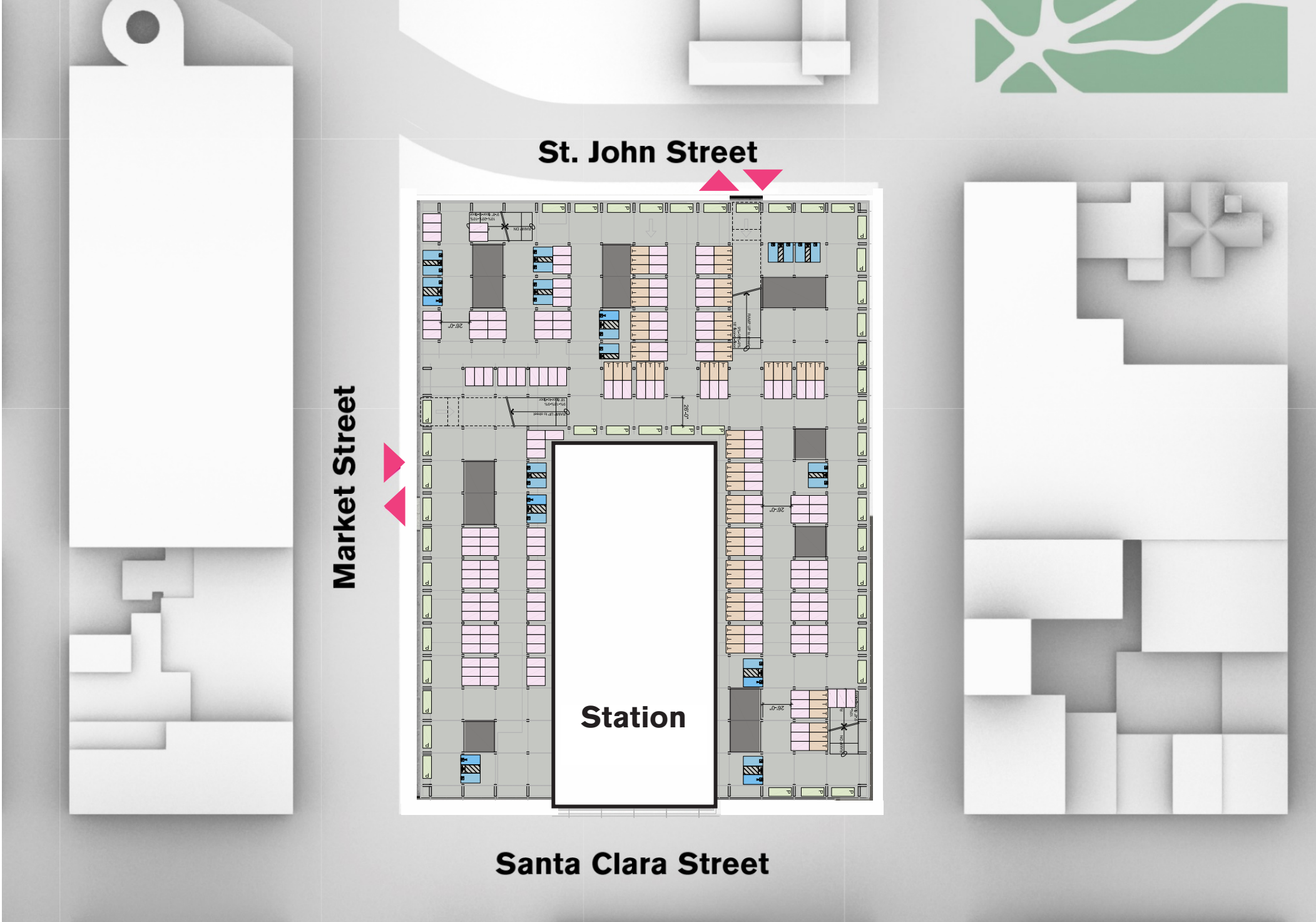


Fig. 6-03 Downtown San José Parking Map

6 Flexible Approach to Parking



One approach the DDF has taken to understand options for parking capacity is to understand how much can be provided in a two level basement. The answer ranges from appx 670 standard parking stalls to appx 1150 stalls using double stackers and valet parking.

- Base for two levels : 670 Total Spaces
- Using Double Stackers : 915 Total Spaces
- Using Double Stackers + Valet : 1145 Total Spaces

Fig. 6-04 Basement Level 1 Concept

6 Flexible Approach to Parking

This page shows a detailed parking layout for the B1 basement level, along with the current station footprint.

B1 Level Plan

Base Summary:

- 175 Standard
- 25 ADA Spaces
- 45 Parallel
- 60 Tandem

- 305 Total Spaces

Using Double Stackers :

550 Total Spaces

Using Double Stackers + Valet :

660 Total Spaces



*Note: Stall count is not final and are subject to development.

Fig. 6-05 Basement Level 1 Parking Layout

Property Line - - -

6 Flexible Approach to Parking

This page shows a detailed parking layout for the B2 basement level, along with the current station footprint.

B2 Level Plan

Base Summary:

265 Standard
 45 Parallel
 55 Tandem

 365 Total Spaces

With Valet :

485 Total Spaces



*Note: Stall count is not final and are subject to development.

Fig. 6-06 Basement Level 2 Parking Layout

Property Line - - -

6 Flexible Approach to Parking

6.6 Access and Loading

Two vehicular access points to underground structured parking have been provisionally located off Market and St John streets. This is to avoid the existing light rail and narrow width of First Street and the BART station, bus traffic, and pedestrian traffic along Santa Clara Street. Two entry and exit points should be adequate for a two-level basement of this size.

In terms of service access and loading, the ramps envisioned in the DDF would be sufficient for small trucks and delivery vans. Larger axle vehicles would need to load and unload at street level due to the tight turning radii resulting from the tight footprint of the basement. There could also be some service access to the plaza and the back of the buildings via the new paseos. These routes would be closed to public vehicular access; however, they can still provide periodic access for service and emergency vehicles to the TOD sites, just as they would for the station. An effective curb management approach for TOD at the street level will need to be well coordinated with the BART station to ensure the space needed for both uses is well balanced.

6.7 Parking Demand

Figure 6-03 maps out a number of recent developments in the project vicinity and demonstrates the wide range of parking ratios for these new developments. Given VTA's goals of promoting transit use, the future BART station being part of the block, and the many other transit options in very close proximity, the DDF assumes that excessive and costly parking is not desirable. A ratio of 0.5 parking stalls per 1000 square feet of development can be achieved with the proposed two-levels of underground structured parking.

Ultimately, the DDF seeks a flexible approach to parking that can adapt to uncertain futures for parking demand and evolve over time. The DDF also seeks to enable solutions where parking does not dominate the VTA Block ground plane in order to promote a walkable urban environment that encourages public transit use.

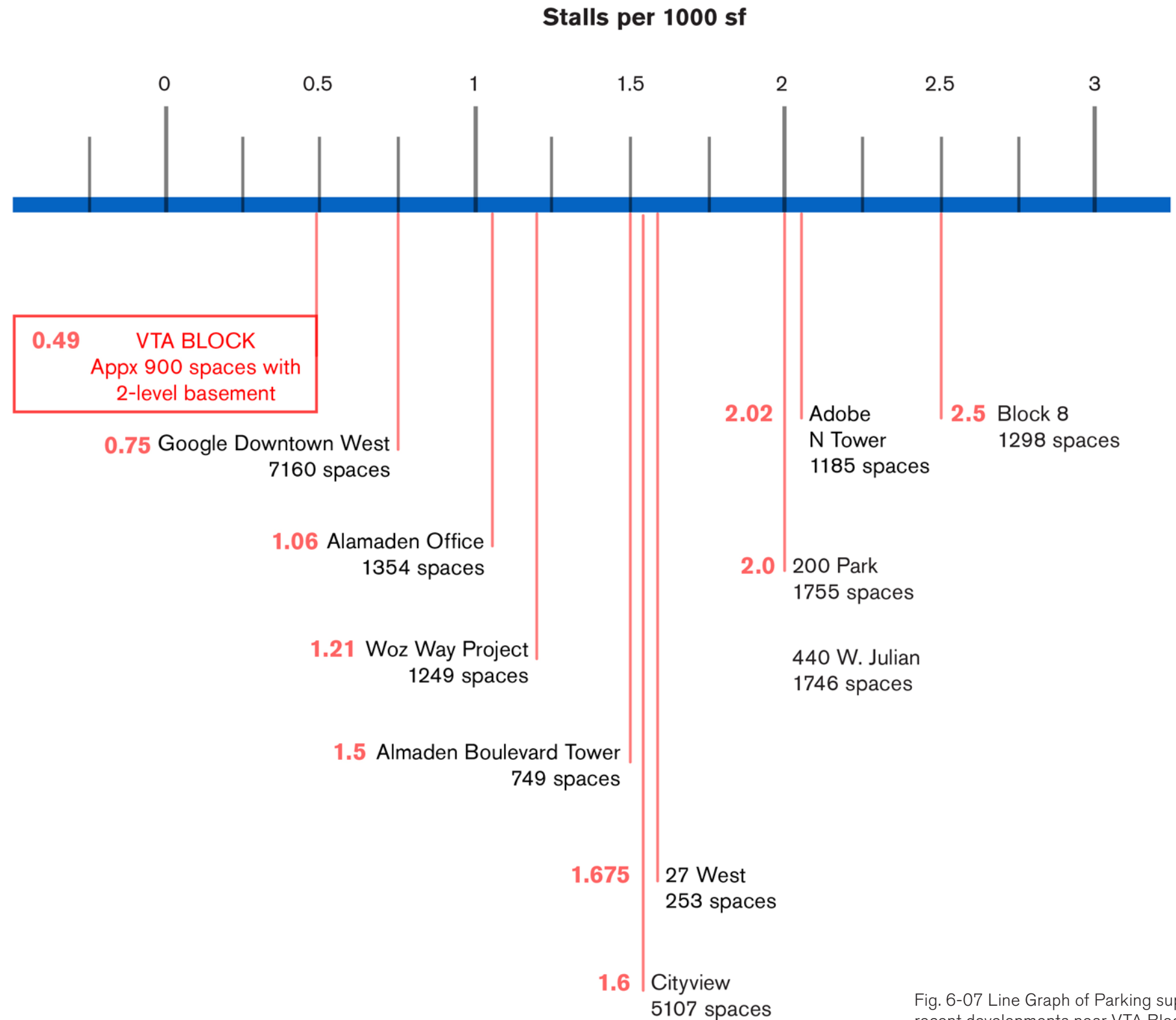


Fig. 6-07 Line Graph of Parking supply at other recent developments near VTA Block

6 Flexible Approach to Parking

Figures 6-08 and 6-09 show the excavation depth required for two levels of double stackers or triple stackers. Note that the deeper depth required for triple stackers also requires longer ramps, which make it inefficient or impractical.

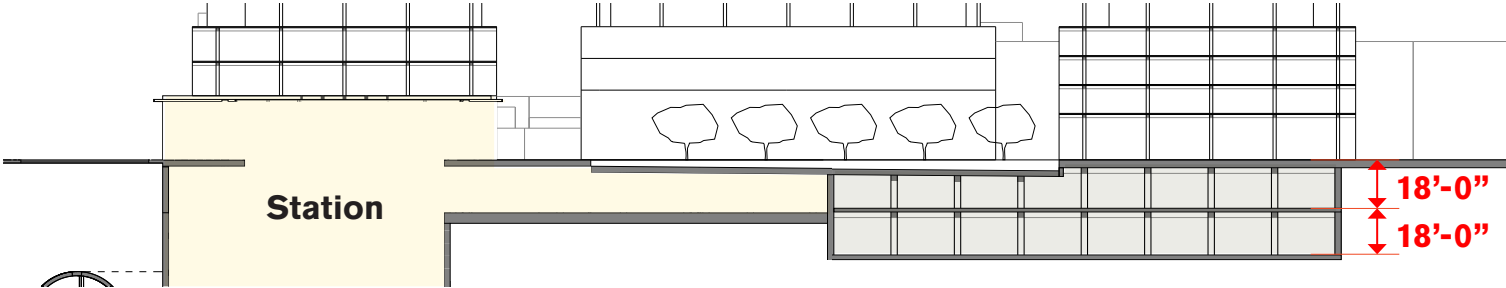


Fig. 6-08 Alt. Floor to Floor : 18' - Double Car Stackers

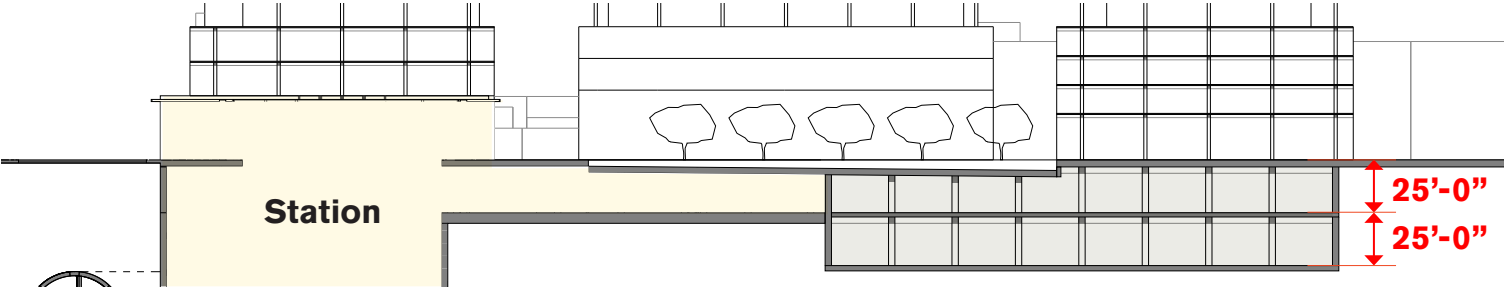


Fig. 6-09 Current Floor to Floor 25' : Triple Car Stackers

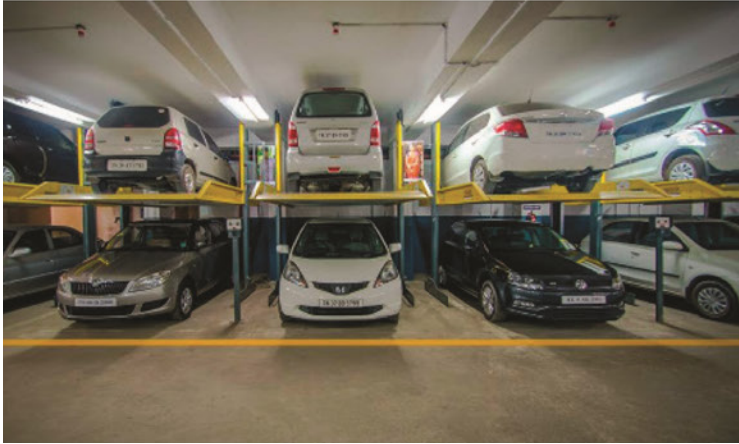


Fig. 6-10 Double Stacker Options



Fig. 6-11 Triple Stacker Options

