HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: June 10, 2022

To: Christy Cheung, City of San Jose

From: Robert Del Rio, T.E., Daniel Choi

Subject: 420 S. Second Street and 420 S. Third Street Local Transportation Analysis

Hexagon Transportation Consultants, Inc. has completed a Local Transportation Analysis (LTA) for the proposed 420 S. Second Street and 420 S. Third Street residential towers in Downtown San Jose. The project site is comprised of two development sites located on Second and Third Streets, south of San Salvador Street. The 420 S. Second Street site is located between S. Second and S. Third Street, south of San Salvador Street, and will include Towers A and B which will provide 306 residential units and 3,082 square feet (s.f.) of retail space. The 420 S. Third Street site is located on the east side of S. Third Street, approximately 100 feet south of San Salvador Street and will include Tower C which will include 168 residential units and 3,000 s.f. of retail space. Parking will be provided within below grade parking garages on each site. Access to the parking garages on each site will be provided via driveways located along S. Third Street. Figure 1 shows the project site location.

The project sites are located within the Downtown Growth Area Boundary, for which an Environmental Impact Report (EIR), *Downtown San Jose Strategy Plan 2040 (DTS 2040)*, has been completed and approved. With adoption of DTS 2040, this project is covered under DTS 2040 and no CEQA transportation analysis is required. The project, however, must perform an LTA to identify operational issues.

Scope of Study

The purpose of the LTA was to identify any potential operational issues that could occur as a result of the project and to recommend necessary improvements to ensure adequate access to each of the project sites is provided and review the project's effect on the surrounding transit, pedestrian, and bicycle facilities. Based on the proposed project size, site-generated traffic was estimated. Vehicular site access was evaluated based on the proposed driveway locations. Truck access, including trash pickup and loading activities, was evaluated. Parking and on-site vehicular circulation also was analyzed. Lastly, an operational analysis on vehicle turn pocket storage was evaluated.

Existing Conditions

This section describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Figure 1
Site Location

Existing Roadway Network

Regional access to the project site is provided by the Interstate 280/680 freeway and State Route 87. Local site access is provided by Second Street, Third Street, Fourth Street, San Salvador Street, William Street, and Reed Street. The freeways and local roadways are described below.

Interstate 280 connects from US-101 in San Jose to I-80 in San Francisco. It is generally an eight-lane freeway in the vicinity of downtown San Jose. It also has auxiliary lanes between some interchanges. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Connections from I-280 to the project site are provided via partial interchanges at Fourth Street (ramps to the west only), Sixth Street (ramps from the west), and Seventh Street (ramps from the east). I-280/I-680 provides access to SR 87 and US-101.

State Route 87 is primarily a six-lane freeway (four mixed-flow lanes and two HOV lanes) that is aligned in a north-south orientation within the project vicinity. SR 87 begins at its interchange with SR 85 and extends northward, terminating at its junction with US 101. Connections from SR-87 to the project site are provided via partial interchanges at Auzerais Avenue (ramps to and from the south) and Park Avenue (ramps to and from the north). SR 87 provides access to I-280/I-680 and US-101.

Second Street is a two-lane southbound arterial that runs along the 420 S. Second Street site frontage and extends from near I-880 at its northern terminus to south of the downtown area, where it terminates at First Street. On-street parking is permitted on both sides of Second Street in the project vicinity. A Class IV bikeway runs along the westside of Second Street between San Carlos Street and its southern terminus. From Second Street, the project site can be accessed via San Salvador Street, William Street and Third Street.

Third Street is a two-lane northbound arterial that runs between each of the project sites and extends from Humboldt Street from the south, to Mission Street in the north. There is on-street parking on both sides of Third Street in the project vicinity. There is a Class IV bikeway that runs along the east side of Third Street between Humboldt Street and St. James Street. Third Street will provide direct access to the project site via a driveway into underground garages for each of the sites.

Fourth Street is a two-lane southbound arterial that runs east of the sites and extends from Technology Place at its northern terminus, to Reed Street, where it terminates at the on-ramp to I-280 northbound. On-street parking is permitted on both sides of Fourth Street in the project vicinity. A Class IV bikeway runs along the westside of Fourth Street between St. James Street and Reed Street. From Fourth Street, the project site can be accessed via William Street and Third Street.

San Salvador Street is an east-west two-lane street that extends from Market Street from the west, to 16th Street in the east. On-street parking is permitted on only the south side of San Salvador Street between Market Street and 10th Street. Class II bike lanes are provided along San Salvador Street between Market Street and 10th Street. San Salvador Street is a designated Class III bikeway (Bike Route) and provides “sharrow” or shared lane markings west of 10th Street. From San Salvador Street, the project site can be accessed via Second Street or Fourth Street, William Street, and Third Street.

William Street is an east-west two-lane street that extends from Market Street in the west, to 24th Street in the east, where it becomes William Court. On-street parking is permitted on both sides of William Street. William Street is a designated Class III bikeway (Bike Route) and provides “sharrow” or shared lane markings along its entire extent. From William Street, the project sites can be accessed via Third Street.

Reed Street is an east-west three-lane street, with two westbound lanes and one eastbound lane. Reed Street extends from Market Street in the west to 14th Street in the east. Reed Street provides access to the project sites via Third Street.

Existing Bicycle Facilities

Class II Bikeway (Bike Lane). Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Within the vicinity of the project site, striped bike lanes are present on the following roadway segments.

- Second Street, between Taylor Street and Julian Street; between William Street and Keyes Street
- Third Street, between Jackson Street and St. James Street; between Reed Street and Humboldt Street
- Fourth Street, between Jackson Street and Santa Clara Street; between San Salvador Street and Reed Street
- Seventh Street, south of San Salvador Street
- San Salvador Street, between Market Street and Fourth Street
- Almaden Boulevard, between Woz Way and Carlysle Street
- Park Avenue, west of Market Street
- Woz Way, between San Carlos Street and Almaden Avenue
- Santa Clara Street, west of Almaden Boulevard
- Almaden Avenue, between Alma Avenue and Grant Street
- Vine Street, between Alma Avenue and Grant Street

Class III Bikeway (Bike Route). Class III bikeways are bike routes and only have signs to help guide bicyclists on recommended routes to certain locations. In the vicinity of the project site, the following roadway segments are designated as bike routes.

- William Street, between First Street and McLaughlin Avenue
- San Carlos Street, between Woz Way and Fourth Street
- Second Street, between San Carlos Street and Julian Street
- First Street, between San Salvador Street and St. John Street
- Balbach Street, between Almaden Avenue and Market Street
- San Salvador Street, between Fourth Street and Tenth Street (eastbound); between Tenth Street and Sixteenth Street (both sides)

Class IV Bikeway (Protected Bike Lane). Class IV bicycle facilities are currently being installed throughout the Downtown Area as part of the Better Bikeways project. Protected bike lanes have been implemented along the following roadways:

- Third Street, between St. James Street and Reed Street
- Second Street, between San Carlos Street and William Street
- Fourth Street, between Santa Clara Street and San Salvador Street
- San Salvador Street, between Fourth Street and Tenth Street (westbound)
- San Fernando Street, between Cahill Street and Tenth Street
- Tenth Street, between Hedding Street and I-280 Ramps
- Eleventh Street, between Hedding Street and I-280 Ramps
- Autumn Street, between Santa Clara Street and St. John Street
- Cahill Street, between San Fernando Street and Santa Clara Street

The existing bicycle facilities are shown on Figure 2.

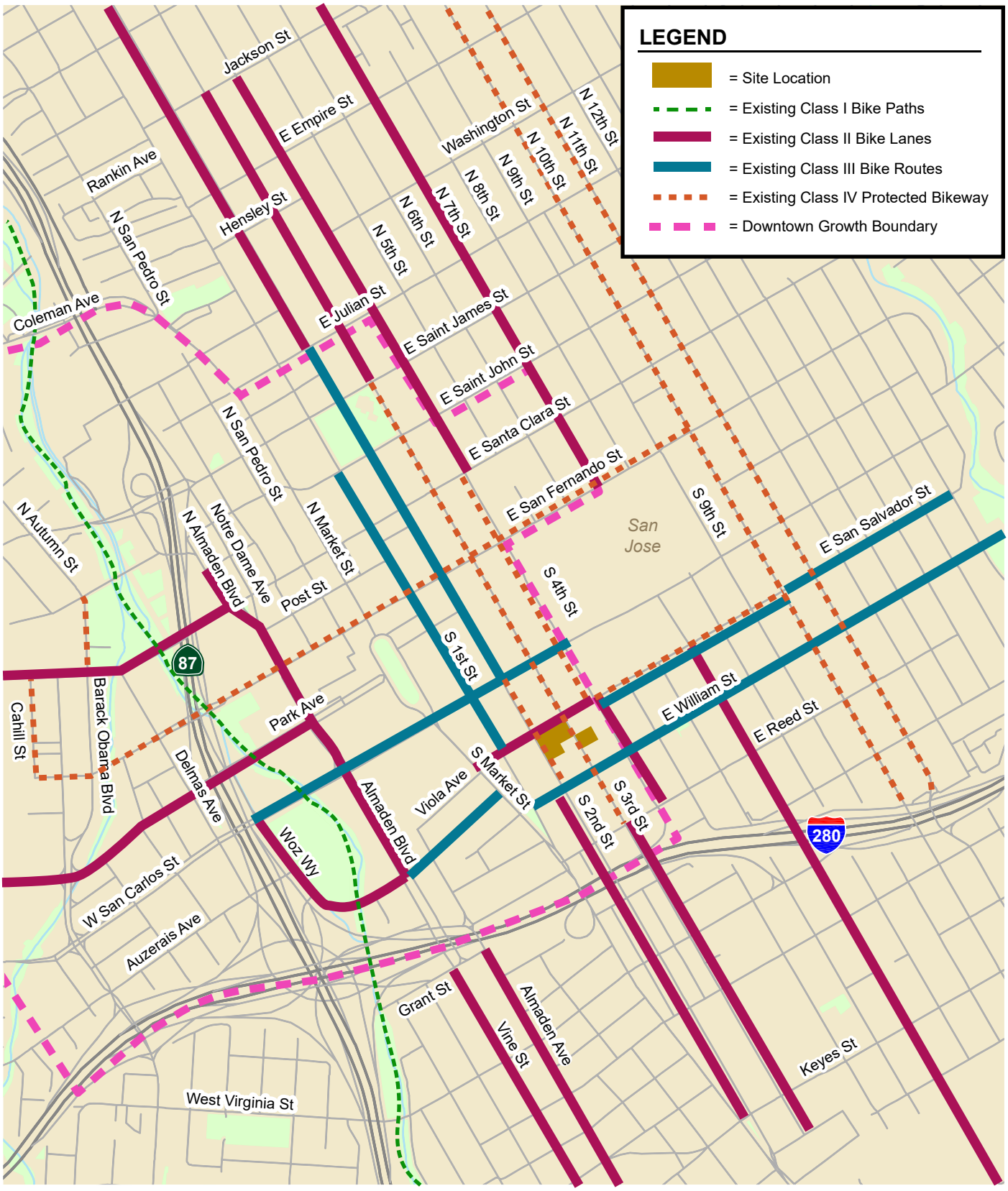


Figure 2
Existing Bicycle Facilities

NORTH
Not to Scale

Guadalupe River Park Trail

The Guadalupe River multi-use trail system runs through the City of San Jose along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. This trail system can be accessed via trailheads on either Woz Way or San Carlos Street, approximately ½-mile west of the project sites.

Bike and Scooter Share Services

Lyft operates the Bay Wheels bike share program that allows users to rent and return bicycles at various locations. Bike share bikes can be rented and returned at designated docking stations throughout the Downtown area. Additionally, the service offers a dockless, e-bike option that can be located and activated using Lyft's mobile app and can be parked at any public bike rack. Payment for either of the bike options is provided through the Lyft app or by use of a Clipper card. Two bikeshare stations are located within 1,000 feet of the project site, one approximately 1,000 feet northeast of the project site on the west side of Fourth Street, and one approximately 700 feet from the project site, on the southeast corner of Fifth Street and San Salvador Street.

In addition, other micro-mobility companies provide scooter rental services throughout the Downtown area. These services offer electric scooters with GPS self-locking systems that allow for rental and drop-off anywhere. Scooters are located, activated, and paid for through each of these services' mobile apps.

Existing Pedestrian Facilities

Pedestrian facilities in the study area consist of sidewalks along all the surrounding streets, including the project frontages along Second Street, San Salvador Street, and Third Street. High visibility crosswalks and pedestrian signal heads are present on all legs of all signalized intersections within the project vicinity, including the intersections of Second Street/San Salvador Street, Second Street/William Street, Third Street/San Salvador Street, and Third Street/William Street.

ADA compliant ramps are located at all crosswalks at the intersections of Second and Third Streets with both San Salvador Street and William Street. Overall, the existing sidewalks provide good pedestrian connectivity and safe routes to transit, nearby pedestrian destinations, and other points of interest in the project vicinity.

Existing Transit Services

Existing transit services in the study area are provided by the Santa Clara Valley Transportation Authority VTA, Caltrain, Altamont Commuter Express (ACE), and Amtrak. The closest bus stops serviced by the VTA are located on First and Second Streets, across the street from the Second Street frontage of Tower B. The project site is located approximately 1,500 feet away from the First/San Antonio and Second/San Antonio Light Rail Stations and approximately 1.1-mile from the Diridon Transit Center located on Cahill Street. Connections between local and regional bus routes, light rail lines, and commuter rail lines are provided within the Diridon Transit Center. Figure 3 shows the existing transit facilities.

Bus Service

The downtown area is served by many local bus lines. The bus lines that operate within ¼-mile walking distance of the project site are listed in Table 1, including their route descriptions and commute hour headways. The nearest bus stops are located along Second Street, across the street from Tower B. The nearest bus stops for northbound heading buses are on First Street and are approximately 700 feet away.

Figure 3
Existing Transit Services

NORTH
Not to Scale

Table 1
Existing Bus Service Near the Project Site

Transit Route	Route Description	Hours of Operation	Headway [1]
Frequent Route 23	De Anza College to Alum Rock Transit Center via Stevens Creek	5:00 am - 1:30 am	15 mins
Local Route 66	North Milpitas to Kaiser San Jose	5:00 am - 12:15 am	15 mins
Local Route 68	Gilroy Transit Center to San Jose Diridon Station	4:00 am - 1:30 am	15 mins
Rapid Route 523	Berryessa BART to Lockheed Martin via De Anza Collect	6:15 am - 10:45 pm	30 mins
Rapid Route 568	Gilroy/Morgan Hill to San Jose Diridon Station	5:30 am - 8:00 pm	30 mins

Notes:
[1] Approximate headways during peak commute periods.

VTA Light Rail Transit (LRT) Service

The Santa Clara Valley Transportation Authority (VTA) currently operates the 42.2-mile VTA light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly 24-hours a day with 15-minute headways during much of the day.

The Green (Winchester-Old Ironsides) and Blue (Santa Teresa-Baypointe) LRT lines operate along San Carlos Street, and First and Second Streets, north of San Carlos Street. The First/San Antonio and Second/San Antonio LRT stations are located approximately 1,500 feet from the project site. The San Jose Diridon station, approximately 1.1 mile away is served by the Green LRT line and serves as a transfer point to Caltrain, ACE, and Amtrak services.

Caltrain Service

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The project site is located about 1.1-mile from the San Jose Diridon station. The Diridon station provides 581 parking spaces, as well as 16 bike racks, 48 bike lockers, and 27 bike share docks. Trains stop frequently at the Diridon station between 4:28 AM and 11:12 PM in the northbound direction, and between 6:27 AM and 1:41 AM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

Altamont Commuter Express Service (ACE)

ACE provides commuter rail service between Stockton, Tracy, Pleasanton, and San Jose during commute hours, Monday through Friday. Service is limited to four westbound trips in the morning and four eastbound trips in the afternoon and evening with headways averaging 60 minutes. ACE trains stop at the Diridon Station between 6:22 AM and 9:44 AM in the westbound direction, and between 3:35 PM and 6:38 PM in the eastbound direction.

Amtrak Service

Amtrak provides daily commuter passenger train service along the 170-mile Capitol Corridor between the Sacramento region and the Bay Area, with stops in San Jose, Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun City, Davis, Sacramento, Roseville, Rocklin, and Auburn. The Capitol Corridor trains stop at the San Jose Diridon Station seven times during the weekdays between approximately 7:15 AM and 8:16 PM in the westbound direction. In the eastbound direction, Amtrak stops at the Diridon Station seven times during the weekdays between 6:18 AM and 6:05 PM.

Future Transit Services

Future transit services in the project vicinity will be provided by the VTA and BART. The future transit services are described below.

Bay Area Rapid Transit (BART) Phase II Project

Phase II of VTA's BART Silicon Valley Extension project will include a 6-mile-long subway tunnel through downtown San Jose and will extend the BART system from the current terminus at the Berryessa/North San Jose station. The Phase II project includes the addition of four BART stations including the Alum Rock, Downtown San Jose, Diridon, and Santa Clara stations. The BART extension will travel through downtown beneath Santa Clara Street, and terminate at grade in the City of Santa Clara near the Santa Clara Caltrain Station. Passenger service for the Phase II Project is planned to begin in 2035.

The Downtown San Jose BART Station would be located underground along Santa Clara Street between Market Street and Third Street. The main entrance will be located between Market and First Streets and the secondary entrance between First and Second Streets. The location of the entrances will provide convenient access to VTA bus and light rail services in the vicinity

Project Trip Generation

The trip generation analysis estimates the number of external vehicle-trips that will be generated by each of the proposed project site developments. Baseline (or gross) vehicle-trips were estimated by using average vehicle-trip rates from the *ITE Trip Generation Manual, 11th Edition* for the proposed sites land uses. The baseline trip estimates were reduced to account for the predicted vehicle mode share of the project based on its location and surrounding transportation system and land uses.

Trip Reductions

Mixed-Use Adjustment

A mixed-use development with complementary land uses such as residential and retail will result in a reduction of external site trips. Thus, the number of vehicle trips generated for each use may be reduced, since a portion of the trips would not require entering or exiting the site. Therefore, based on VTA's recommended mixed-use reduction, a 15 percent trip reduction is applied for the housing/retail mixed use of each site, based on the smaller retail component. The reduction is applied to the smaller of the two complimentary trip generators and the same number of trips is then subtracted from the larger trip generator.

Location-Based Adjustment

The location-based adjustment reflects a project's vehicle mode share based on the place type in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained

from the *San Jose VMT Evaluation Tool.* The results of the VMT Evaluation Tool can be found in Appendix A. Based on the VMT Evaluation Tool, each of the project sites are located within a designated central city urban area. Therefore, the baseline project trips were adjusted to reflect a central city urban mode share. Central City Urban is characterized as an area with very high density, excellent accessibility, high public transit access, low single-family homes, older high value housing stock. Housing uses within central city urban areas have a vehicle mode share of 71 percent. Thus, a 29 percent reduction was applied to the baseline trips estimated to be generated by the proposed uses of each site development.

VMT Reduction

Based on the San Jose VMT Evaluation Tool, the project is anticipated to generate 8.55 VMT per-capita in an area that currently generates approximately 9.20 VMT per-capita. It is assumed that every percent reduction from the existing per-capita VMT is equivalent to one percent reduction in peak-hour vehicle trips. Thus, the project trip estimates for the residential portions of the project were reduced by 7.1 percent to reflect the reduction in peak hour trips.

Net Project Trip Generation

Based on the trip generation rates and reductions, it is estimated that the proposed site developments would generate a total of 1,557 daily trips, with 89 trips (33 inbound and 56 outbound) occurring during the AM peak hour and 110 trips (59 inbound and 51 outbound) occurring during the PM peak hour. The trip generation estimates for each of the project sites are shown in Table 2.

Project Trip Distribution and Trip Assignment

The trip distribution pattern for the project sites were based on previous traffic studies prepared for similar projects in downtown San Jose. The project trips were assigned to the roadway network based on the proposed project site driveway locations, existing travel patterns in the area, freeway access, and the relative locations of complementary land uses. The project trip distribution patterns and trip assignments for the proposed project are shown on Figures 4 and 5, respectively. Trip assignments for the proposed project with the two-way conversion of Second and Third Streets are shown on Figure 6.

Table 2
Project Trip Generation

Land Use	ITE Land Use Code	Location	Vehicle Mode Share %	VMT Existing	VMT Project	Reduction %	Size	Daily Rate	Daily Trip	AM Peak Hour Rate	AM Peak Hour Trip In	AM Peak Hour Trip Out	AM Peak Hour Trip Total	PM Peak Hour Rate	PM Peak Hour Trip In	PM Peak Hour Trip Out	PM Peak Hour Trip Total
Towers A & B																	
Multifamily Housing (High-Rise)	**222**						**306** Dwelling Units	4.540	1,389	0.270	28	55	83	0.320	55	43	98
Housing & Retail (1)						***15%***			*-17*		*0*	*0*	*0*		*-1*	*-1*	*-2*
Location Based Reduction (2)		*Central City Urban*	***71%***			***29%***			*-398*		*-8*	*-16*	*-24*		*-16*	*-12*	*-28*
VMT Reduction (3)				***9.2***	***8.55***	***7.1%***			*-69*		*-1*	*-3*	*-4*		*-3*	*-2*	*-5*
Shopping Center	**820**						**3,082** Square Feet	37.010	114	0.840	2	1	3	3.400	4	6	10
Housing & Retail (1)						***15%***			*-17*		*0*	*0*	*0*		*-1*	*-1*	*-2*
Location Based Reduction (2)		*Central City Urban*	***84%***			***16%***			*-16*		*0*	*-1*	*-1*		*-1*	*-1*	*-2*
Total Tower A&B Trips									**986**		**21**	**36**	**57**		**37**	**32**	**69**
Tower C																	
Multifamily Housing (High-Rise)	**222**						**168** Dwelling Units	4.540	763	0.270	15	30	45	0.320	30	24	54
Housing & Retail (1)						***15%***			*-17*		*0*	*0*	*0*		*-1*	*-1*	*-2*
Location Based Reduction (2)		*Central City Urban*	***71%***			***29%***			*-216*		*-4*	*-9*	*-13*		*-8*	*-7*	*-15*
VMT Reduction (3)				***9.2***	***8.55***	***7.1%***			*-38*		*-1*	*-1*	*-2*		*-1*	*-1*	*-2*
Shopping Center	**820**						**3,000** Square Feet	37.010	111	0.840	2	1	3	3.400	4	6	10
Housing & Retail (1)						***15%***			*-17*		*0*	*0*	*0*		*-1*	*-1*	*-2*
Location Based Reduction (2)		*Central City Urban*	***84%***			***16%***			*-15*		*0*	*-1*	*-1*		*-1*	*-1*	*-2*
Total Tower C Trips									**571**		**12**	**20**	**32**		**22**	**19**	**41**
Total Project Trips									**1,557**		**33**	**56**	**89**		**59**	**51**	**110**

Source: ITE Trip Generation Manual, 11th Edition 2021
Notes:

(1) As prescribed by the Transportation Impact Analysis Guidelines from VTA (October 2014), the maximum trip reduction for a mixed-use development project with residential and retail is equal to 15% of the retail component.

(2) The project site is located within the central city urban area based on the City of San Jose VMT Evaluation Tool (February 29, 2019). The location-based vehicle mode shares are obtained from Table 6 of the City of San Jose, Transportation Analysis Handbook (April 2020). The trip reductions are based on the percent of mode share for all of the other modes of travel besides vehicle.

(2) VMT per capita for residential use. Existing and project VMTs were estimated using the City of San Jose VMT Evaluation Tool. It is assumed that every percent reduction in VMT per-capita is equivalent to one percent reduction in peak-hour vehicle trips.

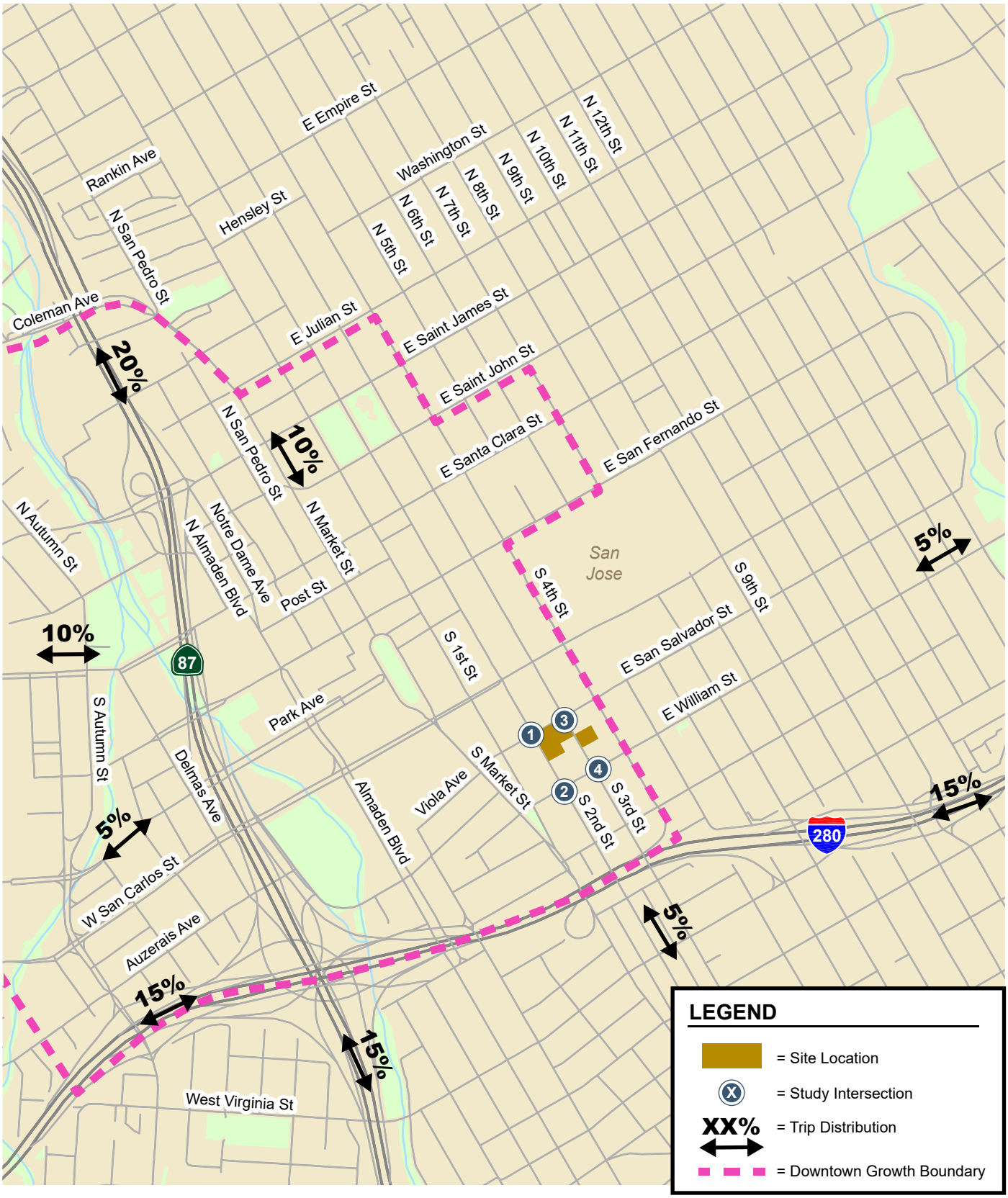


Figure 4
Trip Distribution

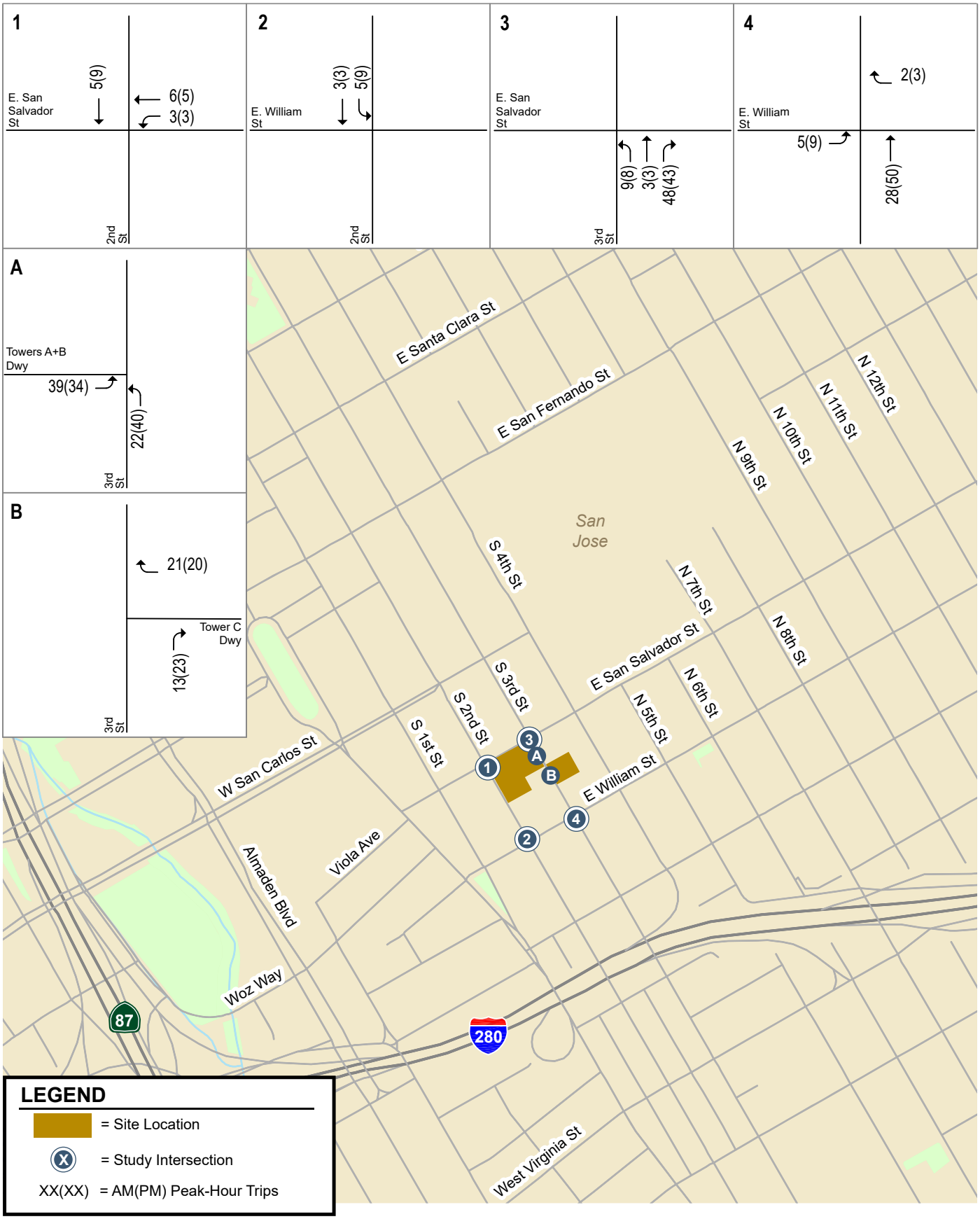


Figure 5
Trip Assignment

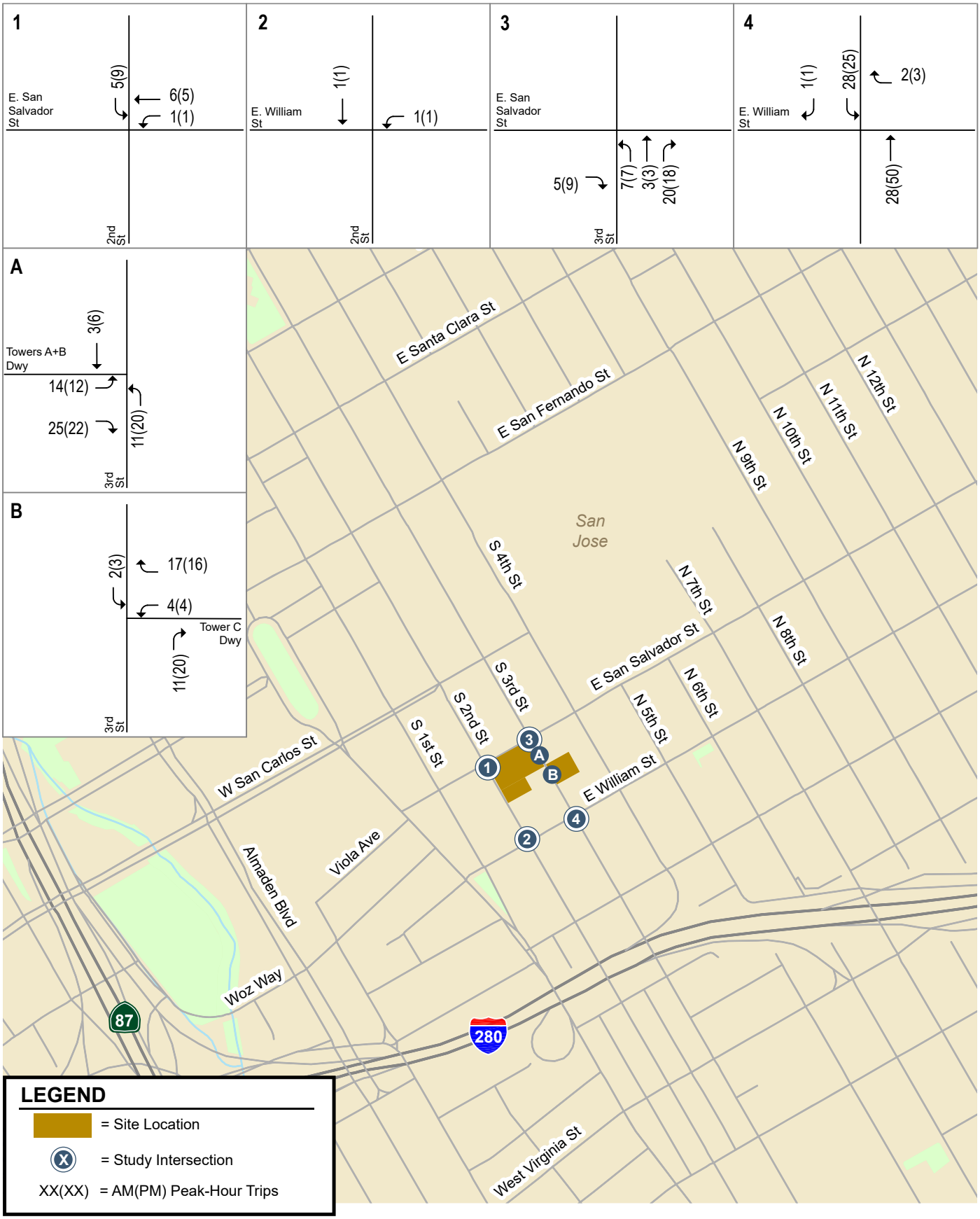


Figure 6
Trip Assignment (Two-Way Conversion)

Site Access and Circulation

A review of each of the project site development plans was performed to determine if adequate site access and on-site circulation is provided and to identify any access issues that should be improved. This review is based on the site plans dated January 2022 prepared by RMW Architecture Interiors, and in accordance with generally accepted traffic engineering standards and City of San Jose design standards. The site plans show that the design of the project frontages assume that the planned conversion of Second and Third Streets to two-way operations will be completed prior to or with project construction. Therefore, the evaluation of site access presumes two-way operations along Second and Third Streets.

Since site access and circulation for Towers A & B are separate from Tower C, the review of the site plans are presented in separate sections below.

Towers A & B

The layout of the basement levels and ground level of Towers A and B are shown on Figures 7 through 10.

Project Driveway/Site Access Design

A two-way driveway along Third Street will provide ingress and egress for the proposed on-site parking garage for Towers A and B. The City of San Jose Downtown Streetscape Guidelines (as referenced in the City's Complete Street Standards and Guidelines) identify maximum driveway widths of 26 feet for two-lane two-way driveways. This provides adequate width for vehicular ingress and egress and provides a reasonably short crossing distance for pedestrians. The driveway is shown to be 26 feet wide, which meets the maximum width identified by City guidelines.

Sight Distance at the Driveway Serving the Project

The project access point should be designed to be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Third Street. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site. Egress at the project driveway should be constructed at-grade to allow exiting vehicles to see pedestrians and bicycles crossing the driveway.

The site plan shows small trees that will be planted between the sidewalk and the planned raised bike lane along Third Street on the project frontage. The trees should be maintained so that they do not block the vision of exiting drivers. The conceptual plan line of the Third Street two-way conversion indicates parking will be permitted along Third Street between the bike lanes and travel lanes.

Recommendation: The proposed trees along the project frontage on Third Street should be maintained so that they do not obstruct the vision of drivers exiting the project driveway.

Adequate sight distance (sight distance triangles) should be provided at the project driveway in accordance with the *American Association of State Highway Transportation Officials* (AASHTO) standards. Sight distance triangles should be measured approximately 10 feet back from the traveled way. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway and locate sufficient gaps in traffic. The minimum acceptable sight distance is often considered the AASHTO stopping sight distance. Sight distance requirements vary depending on the roadway speeds. Third Street has a speed limit of 30 mph. The AASHTO stopping sight distance for a facility with a posted speed limit of 30 mph is 200 feet. Thus, a driver exiting the proposed project driveway must be able to see 200 feet along both sides of Third Street in order to stop and avoid a collision.

Based on the project site plan and observations in the field, vehicles exiting the proposed driveway would be able to see approaching northbound traffic on Third Street at least 200 feet south of the driveway. Drivers would have a clear view of southbound traffic approaching from the San Salvador Street intersection located approximately 75 feet to the north. With the signal control at the San Salvador Street and Third Street intersection, vehicle speeds along Third Street at the project driveway would be less than the 25-mph speed limit. There also is no roadway curve on Third Street that would obstruct the vision of exiting drivers. Therefore, it can be concluded that the project driveway would meet the AASHTO minimum stopping sight distance standards, and sight distance would be adequate at the project driveway.

Project Driveway Operations

The project trip assignment at the proposed project driveway for Towers A and B is shown on Figures 5 and 6. Based on the estimated project trips, it is projected that a maximum of 37 inbound trips (during the PM peak-hour) would enter the parking garage. A maximum of 36 outbound trips would exit the site onto Third Street during the AM peak hour.

The proposed site plan shows a gate to the parking garage will be located approximately 32 feet from the edge of sidewalk and 24 feet from the edge of the raised bikeway. Based on the site plan, the entry gates would consist of one inbound lane and one outbound lane at the driveway. The flow rate at which vehicles enter the garage will depend primarily on the processing ability, or service rate, of the entry gates. The gate must be able to process a minimum of 37 vehicles per hour (approximately one vehicle per 97 seconds, on average) to avoid inbound queueing during the PM peak hour. Based on previous parking design information, parking garage entry gates that utilize a transponder style device are capable of servicing between 600 to 800 vehicles per hour or up to 13 vehicles per minute. Standard card readers or ticket machines have service rates of much less at approximately 4 to 6 vehicles per minute. Although either of the gate operations options would adequately serve the projected demand, the project site plans do not specify the type of gate that the parking garage will utilize.

Some minor queuing could occur due to a combination of the inherent unpredictability of vehicle arrivals at the project driveway. The projected flow rate at the project driveway assumes an evenly distributed arrival rate. However, it is unlikely that inbound project traffic would be spread out evenly throughout the peak-hour. There would likely be instances where multiple vehicles (two to three vehicles for example) would arrive at the same time. Therefore, entry gates should be located within the parking garage to provide the maximum possible storage space for inbound queues. Inbound gates at parking garages are typically required to be located a minimum of two car-lengths back from the project driveway sidewalks. The proposed 24 feet distance between the raised bikeway and gate would provide enough space for only one vehicle to queue at the gate.

It should be noted that the proposed two-way conversion of Third Street would provide a 9-foot-wide loading lane. In the rare instances that multiple vehicles (three or more) arrive at the same time, vehicles could queue in the loading lane without disrupting through traffic operations along Third Street. Exiting vehicles may temporarily block the raised bikeway if exiting drivers notice oncoming vehicles along Third Street.

A sidewalk would be located at the side of the building where the gate would be located, appropriate visible and/or audible warning signs also should be provided at the project driveway to alert pedestrians and bicyclists of vehicles exiting the garage.

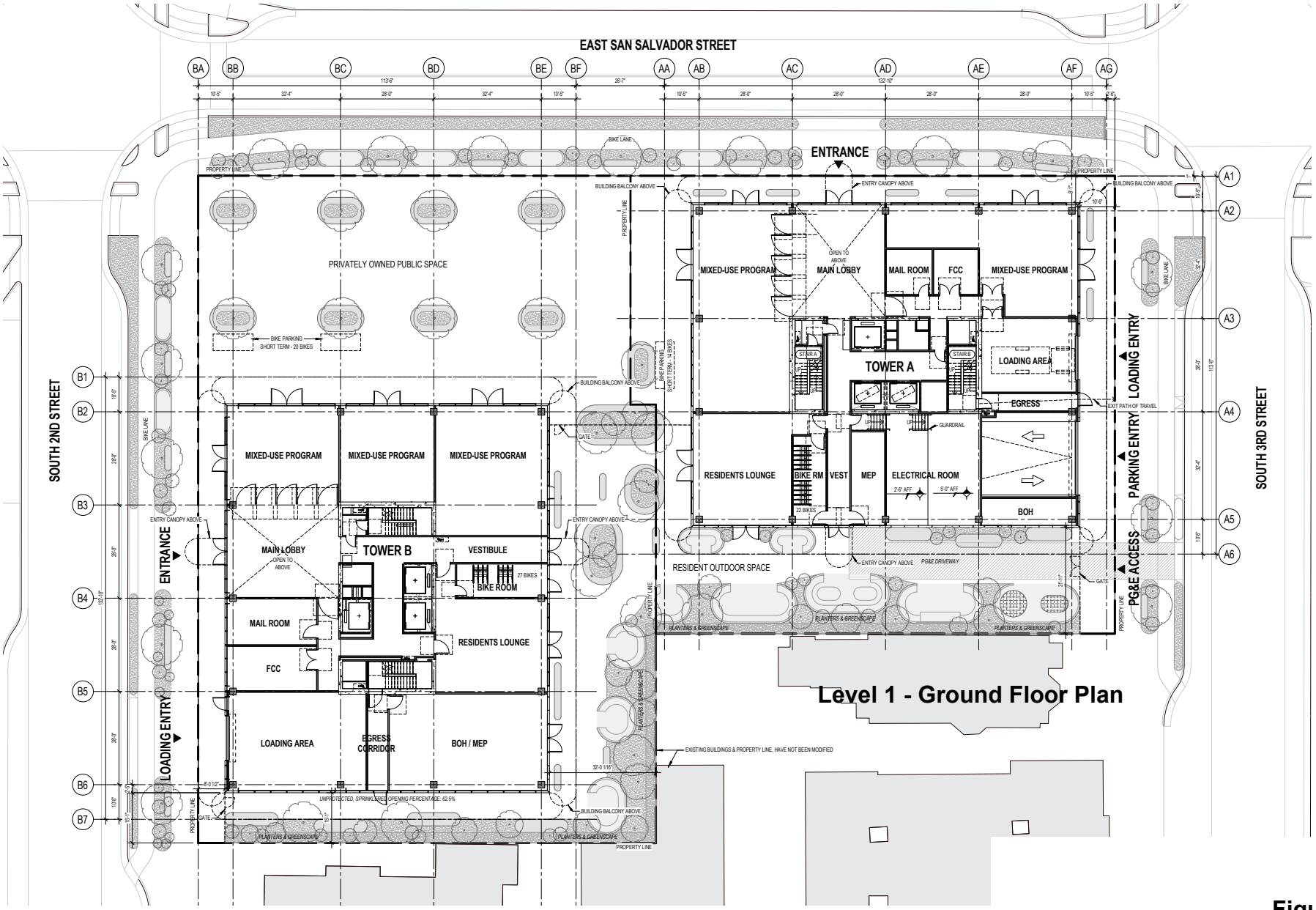


Figure 7
Towers A & B Site Plan

NORTH
Not to Scale

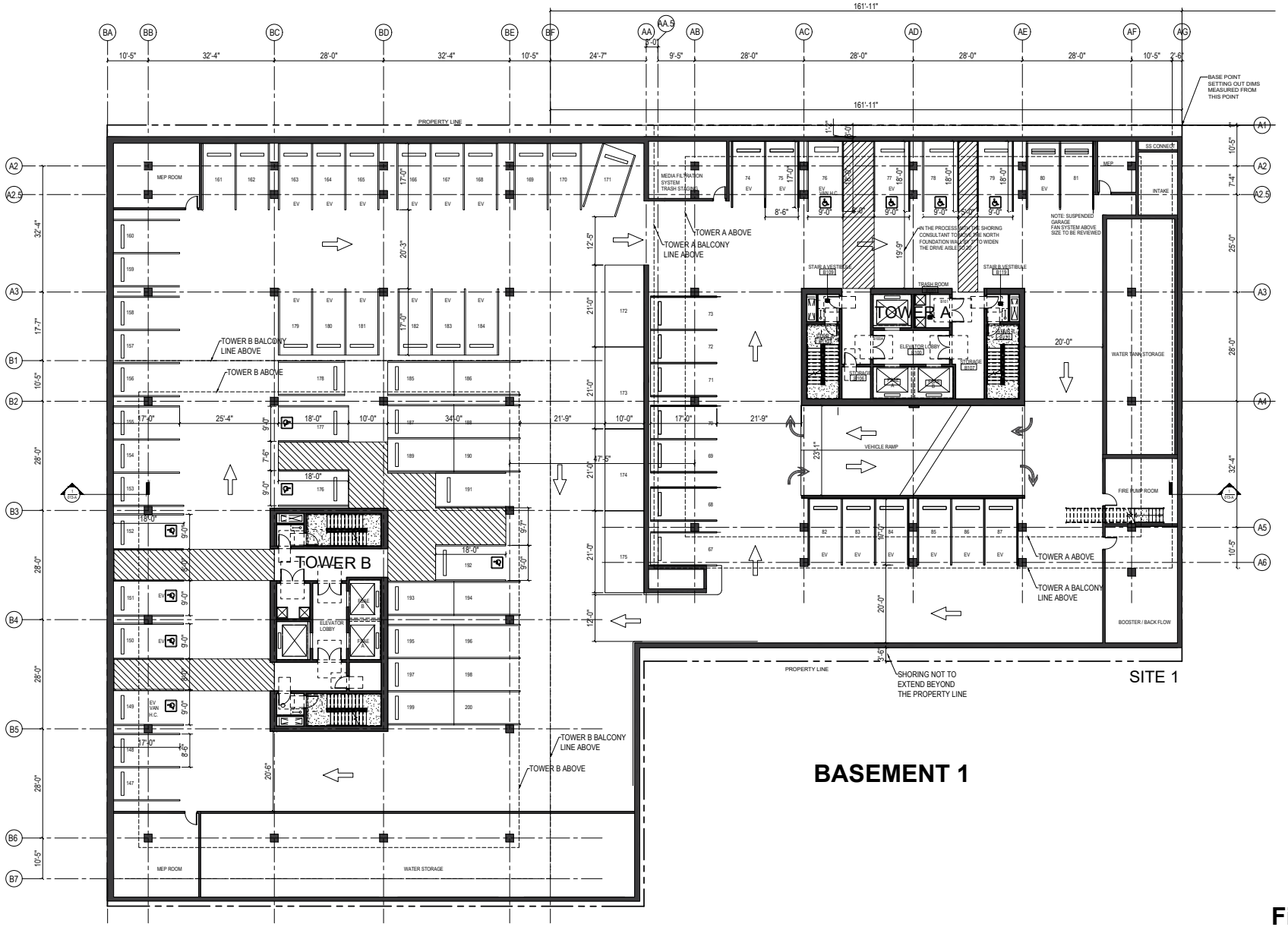


Figure 8
Towers A & B Site Plan

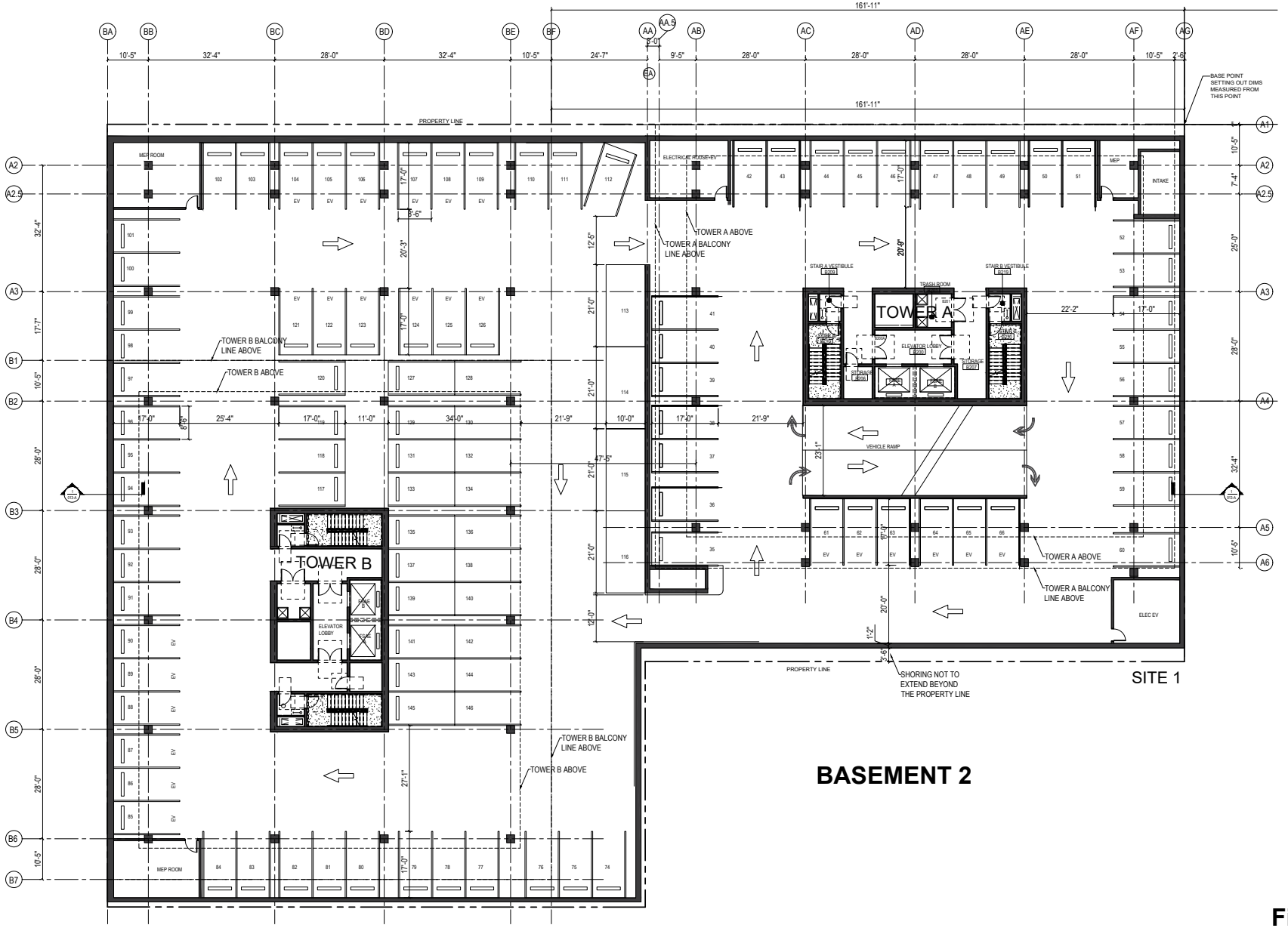


Figure 9
Towers A & B Site Plan

NORTH
Not to Scale

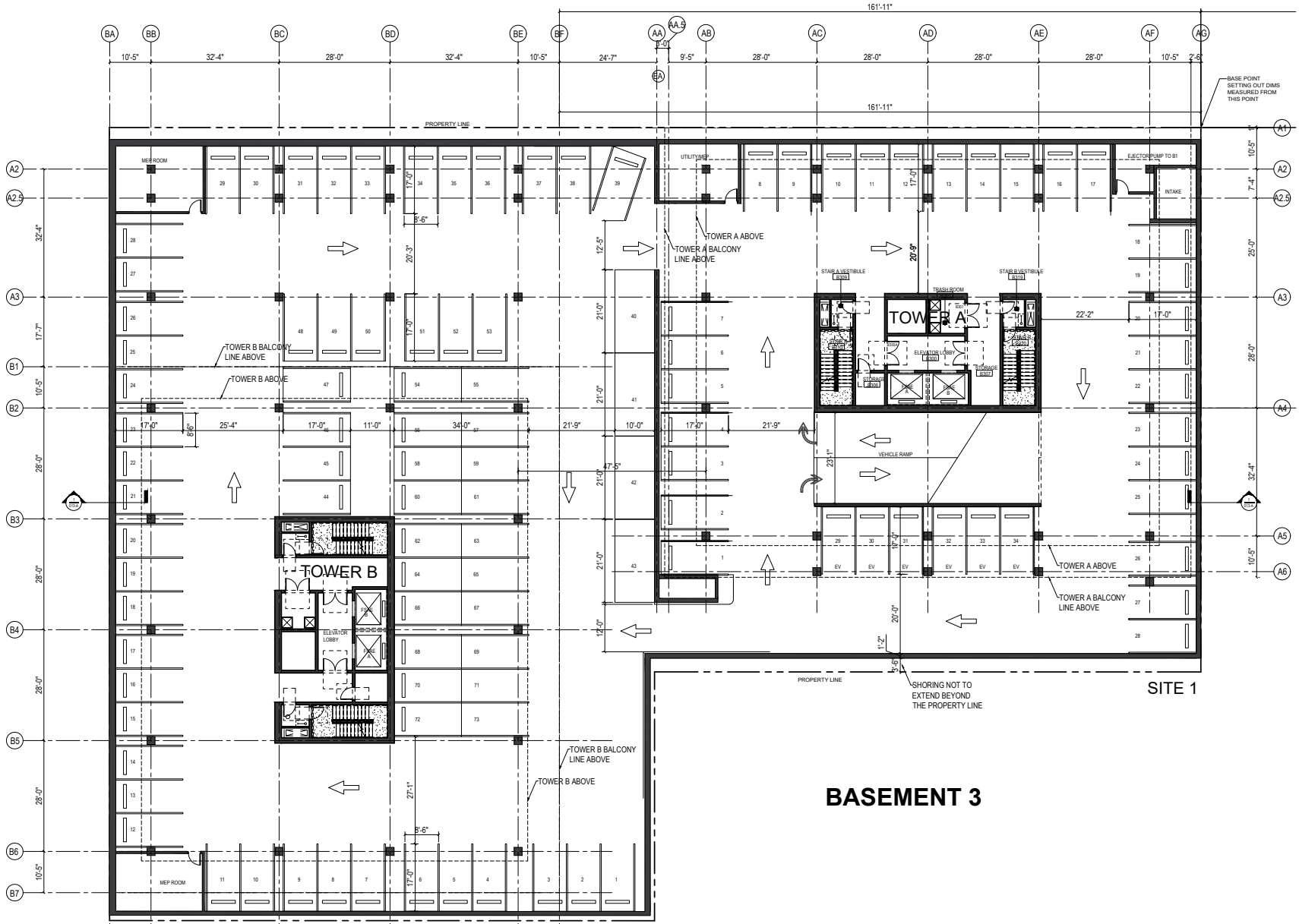


Figure 10
Towers A & B Site Plan

NORTH
Not to Scale

Recommendation: Entry gates should be located a minimum of two car-lengths (50-feet) back from the project driveway sidewalks.

Recommendation: "Resident Parking Only" signage should be posted at the entrance to the garage.

Recommendation: Appropriate visible and/or audible warning signs also should be provided at the project driveway to alert pedestrians and bicyclists along Third Street of vehicles exiting the garage.

Vehicular On-Site Circulation

On-site vehicular circulation was reviewed in accordance with the City of San Jose Zoning Code and generally accepted traffic engineering standards. In general, the proposed site plan would provide vehicle traffic with adequate connectivity throughout the parking garage.

The basement levels of the site plan shows one-way drive aisles throughout the parking garage areas. The site plan shows clockwise circulation in both the parking areas under Tower A and Tower B. The drive aisles allow for continuous circulation of vehicles within the basement and the upper floor levels.

All parking spaces within the garage are shown to be 90-degree stalls in the basement level. All one-way drive aisles within the garage with 90-degree parking along must meet the City's minimum width of 20 feet. The site plan shows mostly 20-foot or wider drive aisles, which meet the minimum drive aisle width required in the San Jose zoning code. The site plan shows a 19.75-foot-wide drive aisle along the north side of the parking area Tower A. The site plan notes that the foundation wall will be moved to accommodate a 20-foot-wide drive aisle. These changes should be incorporated to the site plan before the plans are finalized. The site plan shows approximately 23-foot-wide ramps throughout the underground levels, providing adequate width for simultaneous two-way operation.

Recommendation: The drive aisle adjustments should be incorporated to the site plan before the plans are finalized.

Off-Street Loading

The project proposes to locate one loading space within the ground floor of each tower. The loading dock in Tower A is located adjacent to the garage entry on Third Street. The loading dock in Tower B can be accessed via a driveway along Second Street. The City of San Jose off-street loading standards within the Downtown Area requires residential uses between fifty and two hundred units to provide one off-street loading space (City Code 20.70.435). Both towers will have under two hundred units. Therefore, since each tower provides one off-street loading spaces, the provided loading spaces will meet the City's off-street loading requirements.

Truck and Emergency Vehicle Access

The use of the on-site loading space in Tower A by larger trucks will be restricted due to the limited length of the loading bays. The loading space at Tower A is shown to be 28 feet in length. Per the San Jose Zoning Section 20.90.420, off-street loading spaces should be at least 10 feet wide by 30 feet long by 15 feet in height, providing adequate space for an SU-30 truck. The oversized sidewalk can provide several feet of additional space without affecting the flow of pedestrians along Third Street. The project applicant should coordinate with city staff to determine whether loading activities can extend several feet onto the sidewalk. The loading space in Tower B is shown to be 45 feet in length, providing adequate space for loading activities. Truck turning templates for the loading spaces provided in Towers A and B are attached in Appendix B. Additionally, the City code requires loading spaces to provide a minimum of 15 feet of vertical clearance. The height of the loading area should be indicated on the plans to determine whether the proposed design will meet City standards for loading space height.

It should be noted that the loading docks are directly accessible via public right-of-way along Second and Third Streets. Therefore, trucks reversing into or exiting from the loading docks may temporarily inhibit traffic operations along these roadways. The project should work with the City to determine if truck access should be limited to off-peak hours.

Recommendation: The use of the on-site loading space in Tower A should be restricted to trucks no larger than a typical SU-30 truck. Since the loading area in Tower A is less than 30 feet in length, the project applicant should coordinate with city staff to determine whether trucks will be allowed to extend several feet onto the sidewalk.

Recommendation: Entryways providing access to both loading docks should have a minimum vertical clearance of 15 feet to meet City standards for loading space height.

Recommendation: The project should work with the City to determine if truck access to loading docks should be limited to off-peak hours.

The site plan shows trash rooms located centrally within the basement levels of each tower. Garbage bins will need to be wheeled out to Third Street for trash pick-up since garbage collection vehicles would not be able to access the underground levels. The site plan provides a trash removal plan which details the pickup location of garbage bins. Garbage bins from Tower B will need to be wheeled to Tower A on level B1 before being brought to ground level. Since this would involve wheeling bins through the garage parking areas, it is recommended that trash bin staging activities occur during off-peak hours so that vehicles are not blocked for extended periods of time.

Recommendation: Trash bins will need to be wheeled out from Tower A to Third Street for trash pick-up since garbage trucks cannot access the underground garage levels

Recommendation: Trash staging activities should occur during off-peak hours

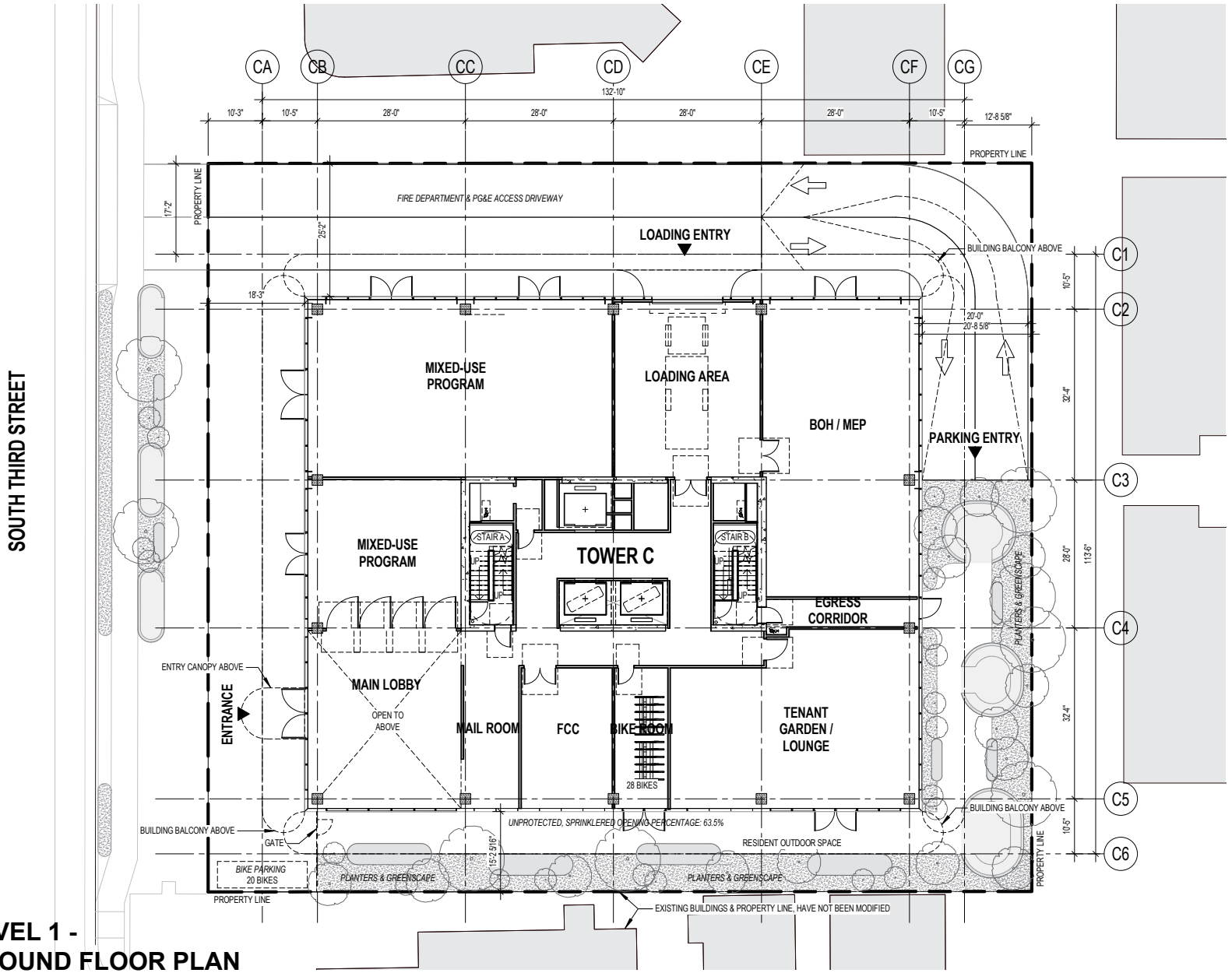
The minimum vertical clearance for fire trucks is at least 13 feet 6 inches. The site plan indicates that of the entrance to the parking garage only has a 12-foot vertical clearance. Therefore, fire trucks will not be able to access the parking garage. However, emergency vehicle access will be provided via the project frontages along Second Street, Third Street, and San Salvador Street.

Tower C

The layout of the basement levels and ground level of Tower C are shown on Figures 11 through 13.

Project Driveway/Site Access Design

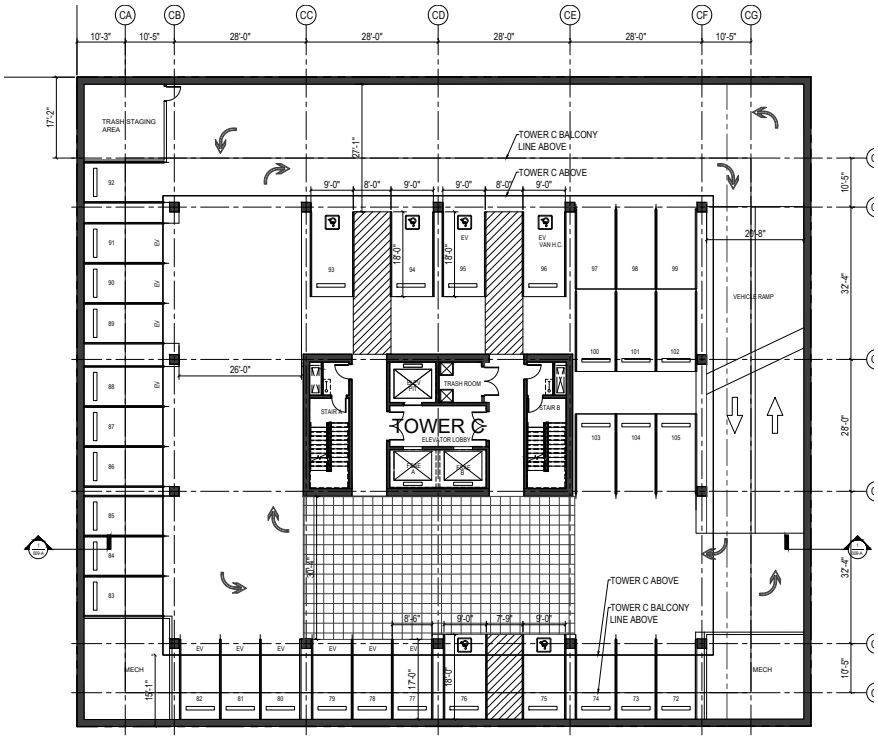
A two-way shared driveway along Third Street will provide ingress and egress for the proposed on-site parking garage for Tower C. The proposed driveway would provide access to the 17’2” wide drive aisle leading to the underground parking garage as well as the neighboring property to the north. The driveway cut that will serve the project drive aisle and the adjacent property is greater than the maximum width described in the City of San Jose Downtown Streetscape Guidelines (as referenced in the City’s Complete Street Standards and Guidelines), which identifies a maximum driveway width of 26 feet for two-lane two-way driveways. The project site plans should be clarified to detail the number of lanes at the proposed driveway.



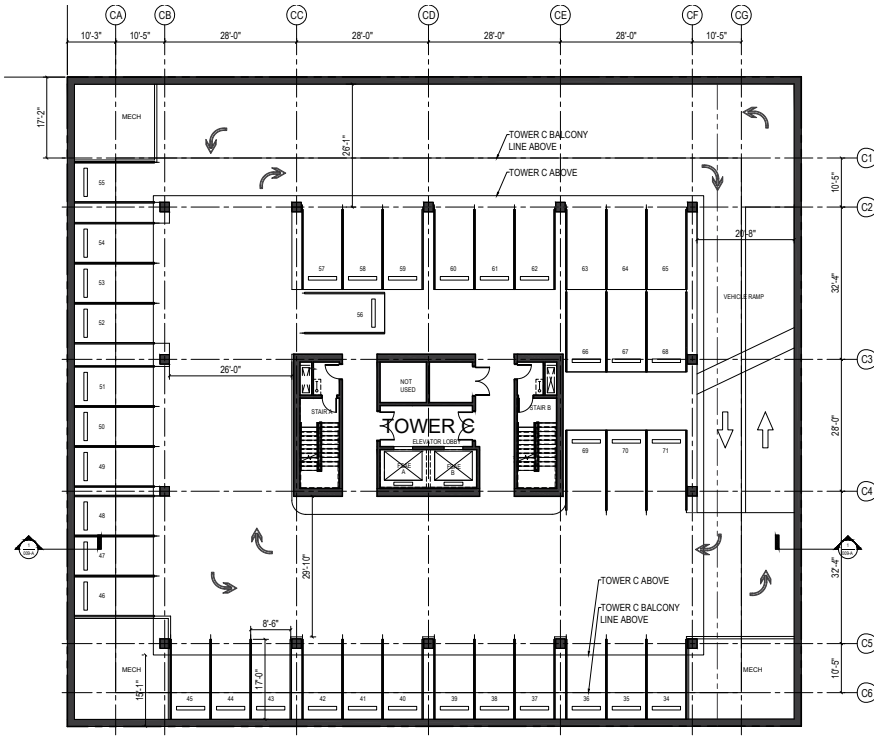
LEVEL 1 - GROUND FLOOR PLAN

Figure 11
Tower C Site Plan

NORTH
Not to Scale



BASEMENT 1

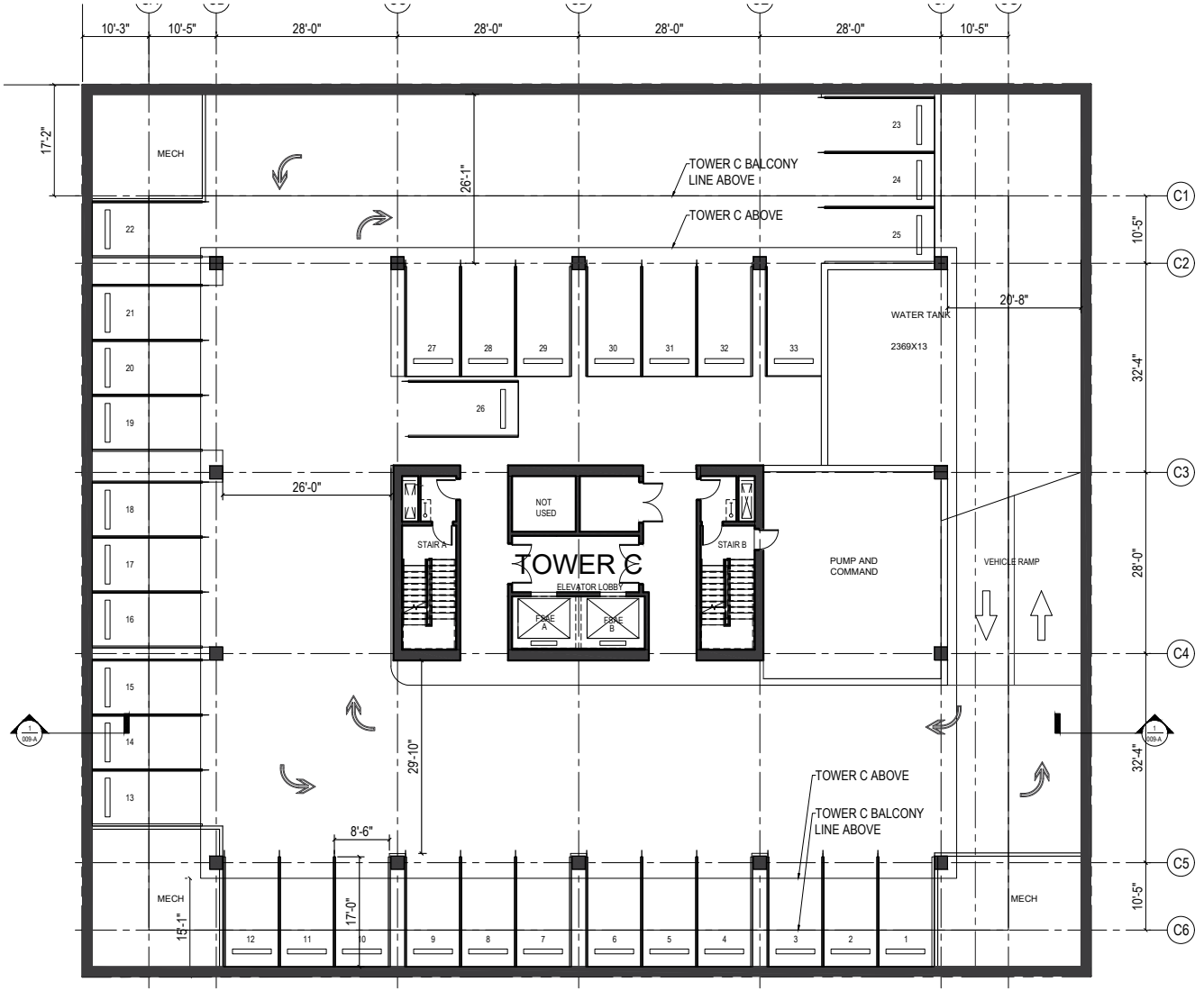


BASEMENT 2

EV PARKING (SJ REACH CODE)

Figure 12
Tower C Site Plan

NORTH
Not to Scale



BASEMENT 3

Figure 13
Tower C Site Plan

Sight Distance at the Driveway Serving the Project

The project access point should be designed to be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Third Street. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site. Egress at the project driveway should be constructed at-grade to allow exiting vehicles to see pedestrians and bicycles crossing the driveway.

The site plan shows small trees that will be planted between the sidewalk and the planned raised bike lane along Third Street on the project frontage. The trees should be maintained so that they do not block the vision of exiting drivers.

Recommendation: The proposed trees along the project frontage on Third Street should be maintained so that they do not obstruct the vision of drivers exiting the project driveway.

Adequate sight distance (sight distance triangles) should be provided at the project driveway in accordance with the *American Association of State Highway Transportation Officials* (AASHTO) standards. Sight distance triangles should be measured approximately 10 feet back from the traveled way. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway and locate sufficient gaps in traffic. The minimum acceptable sight distance is often considered the AASHTO stopping sight distance. Sight distance requirements vary depending on the roadway speeds. Third Street has a speed limit of 30 mph. The AASHTO stopping sight distance for a facility with a posted speed limit of 30 mph is 200 feet. Thus, a driver exiting the proposed project driveway must be able to see 200 feet in both travel directions of Third Street in order to stop and avoid a collision.

Based on the project site plan and observations in the field, vehicles exiting the proposed driveway would be able to see approaching northbound traffic on Third Street at least 200 feet south of the driveway. Drivers would have a clear view of southbound traffic approaching from the San Salvador Street intersection located approximately 150 feet to the north. There also is no roadway curvature on Third Street that would obstruct the vision of vehicles exiting the driveway. Therefore, it can be concluded that the project driveway would meet the AASHTO minimum stopping sight distance standards, and sight distance would be adequate at the project driveway.

Recommendation: Red curb equal to a minimum of one car length north and south of the proposed project garage driveway should be implemented to provide adequate sight distance.

Project Driveway Operations

The project trip assignment at the proposed project driveway for Tower C is shown on Figures 5 and 6. Based on the estimated project trips, it is projected that a maximum of 22 inbound trips (during the PM peak-hour) would enter the parking garage. A maximum of 19 outbound trips would exit the site onto Third Street during the AM and PM peak hours.

As previously mentioned, the proposed project driveway cut would be shared with adjacent single-family home to the north. The project applicant should coordinate with city staff and the neighboring property owner to design an acceptable driveway and drive aisle that would access both properties.

The proposed site plan shows a long drive aisle around the north side of the building providing access to a ramp entering the underground garage running along the east side of the building. The drive aisle would provide adequate space for any queues that may form relating to vehicular ingress or egress.

Exiting vehicles may temporarily block the raised bikeway if exiting drivers notice oncoming vehicles along Third Street.
A sidewalk would be located at the side of the building where the gate would be located, appropriate visible and/or audible warning signs should be provided at the project driveway to alert pedestrians and bicyclists of vehicles exiting the garage.

Recommendation: Appropriate visible and/or audible warning signs also should be provided at the project driveway to alert pedestrians and bicyclists along Third Street of vehicles exiting the garage.

Vehicular On-Site Circulation

On-site vehicular circulation was reviewed in accordance with the City of San Jose Zoning Code and generally accepted traffic engineering standards. In general, the proposed site plan would provide vehicle traffic with adequate connectivity throughout the parking garage.

The basement levels of the site plan shows two-way drive aisles throughout the parking garage areas. All parking spaces within the garage are shown to be 90-degree stalls on each level. The site plan shows 26-foot or wider drive aisles, which meet the minimum drive aisle width for two-way drive aisles with 90-degree parking required in the San Jose zoning code. The drive aisles allow for continuous circulation of vehicles within each of the parking levels.

Off-Street Loading

The project proposes to locate one loading space within the ground floor of Tower C. The loading space can be accessed from the drive aisle running along the north side of the tower building. The City of San Jose off-street loading standards within the Downtown Area requires residential uses between fifty and two hundred units to provide one off-street loading space (City Code 20.70.435). Tower C will have 168 residential units. Therefore, the provided loading space will meet the City's off-street loading requirements.

Truck and Emergency Vehicle Access

Per the San Jose Zoning Section 20.90.420, off-street loading spaces should be at least 10 feet wide by 30 feet long by 15 feet in height, providing adequate space for an SU-30 truck. The proposed loading space dimensions will meet City design standards in terms of width and length. The use of the on-site loading spaces by larger trucks will be restricted due to the limited space provided along the drive aisle to maneuver into and out of the loading space. The project plans showing turning templates for an SU-30 truck can be found in Appendix C. Although the loading area can accommodate a larger truck, larger trucks will have difficulty maneuvering into the loading area, as an SU-30 truck would require several maneuvers to access the loading area. Therefore, it is recommended that the on-site loading space be restricted to trucks no larger than a typical SU-30 truck. Additionally, the City code requires loading spaces to provide a minimum of 15 feet of vertical clearance. The height of the loading area should be indicated on the plans to determine whether the proposed design will meet City standards for loading space height.

Recommendation: The use of the on-site loading space in Tower C should be restricted to trucks no larger than a typical SU-30 truck due to the limited space provided along the drive aisle to maneuver into and out of the loading space.

Recommendation: Entryways providing access to the loading dock should have a minimum vertical clearance of 15 feet to meet City standards for loading space height.

The site plan shows a trash room located in the center of the basement level of the project. Garbage bins will need to be wheeled out to Third Street for trash pick-up since garbage collection vehicles would not be able to access the underground levels. The site plan provides a trash removal plan which details the pickup location of garbage bins. Trash bins would need to be wheeled out of the basement level to the street. This would involve wheeling the bins up the vehicle ramp accessing the garage. It is recommended that trash bin staging activities occur during off-peak hours so that vehicles are not blocked for extended periods of time.

Fire trucks will access the proposed site via the project frontages along Second Street, Third Street, and San Salvador Street.

Recommendation: Trash bins will need to be wheeled out from Tower C to Third Street for trash pick-up since garbage trucks cannot access the underground garage levels

Recommendation: Trash staging activities should occur during off-peak hours

Parking

Projects in the Downtown area are located in close proximity to residences, recreation, and retail services, allowing individuals to live and satisfy their daily needs near their place of employment. The availability of bicycle lanes and sidewalks throughout Downtown and the project's close proximity to major transit services will provide for and encourage the use of multi-modal travel options (bicycling and walking) and reduce the use of single-occupant automobile travel and demand for on-site parking described below.

Vehicle Parking

According to the site plans, 287 parking spaces are proposed within the underground Towers A & B garage. The underground Tower C garage is proposed to provide 105 parking spaces.

According to the City of San Jose Downtown Zoning Regulations (Table 20-140), the project is required to provide 1 parking space per residential unit. The project is not required to provide additional off-street parking for the retail components of the project. Based on the City's off-street parking requirements, a total of 306 off-street parking spaces would be required for Towers A & B and a total of 168 off-street parking spaces would be required for Tower C before any applicable reductions. The proposed 287 parking spaces for the proposed Towers A & B will represent a 6.2% reduction from the required 306 off-street parking spaces. The proposed 105 parking spaces for the proposed Tower C will represent a 37.5% reduction from the required 168 off-street parking spaces.

Reduction in Required Off-Street Parking Spaces

Based on City Code 20.90.220.A.1, the project may receive up to a 50 percent reduction in the required off-street parking spaces with a development permit or a development exception if no development permit is required. For an off-street parking reduction of up to 20 percent, the following provisions must be met:

1. The structure or use is located within two thousand feet of a proposed or an existing rail station or bus rapid transit station, or an area designated as a neighborhood business district, or as an urban village, or as an area subject to an area development policy in the city's general plan or the use is listed in Section 20.90.220.G; and
2. The structure or use provides bicycle parking spaces in conformance with the requirements of Table 20-190.

The project site is located within the Downtown Growth Boundary and will meet the City Bicycle Parking requirements per Table 20-190. Therefore, the project will conform to Code 20.90.220.A.1 Subsections A and B and may be granted up to a 20 percent reduction in off-street parking spaces. With the allowed reduction, the project is required to provide 245 off-street parking spaces for Towers A & B and 134 off-street parking spaces for Tower C. Table 3 summarizes the parking requirements for the proposed sites.

Table 3
Vehicular Parking Requirements

Land Use	Size		Parking Ratio[1]	% Reduction	Required Parking Spaces
Towers A & B					
Residential	306 units	1	space per unit		306
Reduction in Required Off-Street Parking Spaces				20%	-61
Retail	3,100 s.f.		None		0
					245
Tower C					
Residential	168 units	1	space per unit		168
Reduction in Required Off-Street Parking Spaces				20%	-34
Retail	3,000 s.f.		None		0
					134

Notes:
[1]City of San Jose Downtown Zoning Ordinance (Table 20-140): Parking Spaces Required by Land Use
[2]City of San Jose Zoning Ordinance 20.90.220.A.1 allows for up to a 20 percent reduction in required off-street parking spaces provided that the use is within 2,000 feet of an existing rail station and provides bicycle parking spaces in conformance with the requirements of Table 20-190

The proposed 287 parking spaces for Towers A &B will meet the reduced parking requirements. However, the proposed 105 parking spaces proposed for Tower C will not meet the reduced parking requirements. The additional reduction in parking for Tower C can be pursued by implementing a Transportation Demand Management (TDM) program that contains but is not limited to at least three of the measures described in Code 20.90.220.A.1 Subsections C and D. With the implementation of a TDM program, the required number of parking spaces may be reduced by up to 50%. City Code 20.70.330.A also allows for an additional 15% reduction for development projects within the Downtown area which implement a TDM program. Therefore, the project will be required to submit and have approved a TDM program for the Tower C development.

ADA Compliance

Towers A & B proposes to provide 287 parking spaces. The American with Disabilities Act (ADA) requires parking lots providing between 201 to 300 spaces to provide a minimum of seven accessible parking spaces, of which two must be van-accessible. The site plan shows 11 ADA-compliant parking spaces, with two spaces marked as van-accessible, meeting the requirements for ADA parking spaces.

Tower C proposes to provide 105 parking spaces. The American with Disabilities Act requires parking lots providing between 101 to 200 spaces to provide a minimum of five accessible parking spaces, of which one must be van-accessible. The site plan shows six ADA-compliant parking spaces, with one space marked as van-accessible, meeting the requirements for ADA parking spaces.

Bicycle Parking

Based on the project's downtown location, it is likely that employees and residents of the proposed project would be able to live in close proximity to the sites or would be able to quickly access transit to

reach their places of residence or employment. Therefore, the project is required to meet the City's Bicycle Parking requirements. The City Municipal Code (Table 20-190) requires one bicycle parking space per four residential units and one space per 3,000 sf of retail space. Bicycle parking spaces for residential uses shall consist of at least sixty percent long-term and at most forty percent short-term spaces. Thus, Tower A is required to provide a total of 34 bicycle parking spaces: 20 long-term bicycle parking spaces and 14 short-term bicycle parking spaces to meet the City standards. Tower B is required to provide a total of 42 bicycle parking spaces: 25 long-term bicycle parking spaces and 17 short-term bicycle parking spaces. Tower C is required to provide a total of 42 bicycle parking spaces: 25 long-term bicycle parking spaces and 17 short-term bicycle parking spaces. The retail space of each site will require an additional three spaces (one long-term and two short-term). The City's definition of short-term and long-term bicycle parking is described below.

City of San Jose Long-Term and Short-Term Bicycle Parking

Long-term bicycle parking facilities are secure bicycle storage facilities for tenants/employees of a building that fully enclose and protect bicycles and may include:

- A covered, access-controlled enclosure such as a fenced and gated area with short-term bicycle parking facilities,
- An access-controlled room with short-term bicycle parking facilities, and
- Individual bicycle lockers that securely enclose one bicycle per locker.

Short-term bicycle parking facilities are accessible and usable by visitors or guests and may include:

- Permanently anchored bicycle racks,
- Covered, lockable enclosures with permanently anchored racks for bicycles,
- Lockable bicycle rooms with permanently anchored racks, and
- Lockable, permanently anchored bicycle lockers.

The project proposes 22 long-term bicycle parking spaces in Tower A, 27 long-term bicycle parking spaces in Tower B, and 28 long-term bicycle parking spaces in Tower C located within bicycle storage rooms on the ground level of each tower. A total of 34 short-term bicycle parking spaces will be provided in the public space located north of Tower B and west of Tower A. A total of 20 short-term bicycle parking spaces will be provided along the project frontage of Tower C. The proposed bicycle spaces will exceed the City's bicycle parking requirements for bicycle parking. Table 4 summarizes the required number of bicycle parking spaces.

Table 4
Bicycle Parking Spaces

Land Use	Size	Bicycle Parking Ratio[1]	Required Parking Spaces	Provided Parking Spaces
Towers A & B				
Tower A Residential	137 units	1 space per four units	34	
Long Term Bicycle Parking Spaces (60%)			20	22
Short Term Bicycle Parking Spaces (40%)			14	
Tower B Residential	169 units	1 space per four units	42	
Long Term Bicycle Parking Spaces (60%)			25	27
Short Term Bicycle Parking Spaces (40%)			17	
Retail	3,100 s.f.	1 long-term space and two short-term spaces	3	
Total				
Long Term Bicycle Parking Spaces			46	49
Short Term Bicycle Parking Spaces			33	34
Tower C				
Residential	168 units	1 space per four units	42	
Long Term Bicycle Parking Spaces (60%)			25	
Short Term Bicycle Parking Spaces (40%)			17	
Retail	3,100 s.f.	1 long-term space and two short-term spaces	3	
Total				
Long Term Bicycle Parking Spaces			26	28
Short Term Bicycle Parking Spaces			19	20

Notes:
[1]City of San Jose Downtown Zoning Ordinance (Table 20-190)

Pedestrian and Bicycle Access and Circulation

Existing pedestrian and bicycle facilities throughout downtown provide connections to surrounding downtown destinations. Crosswalks are available at all signalized intersections. Wide sidewalks will be provided along all project frontages on Second Street, Third Street, and San Salvador Street.

Pedestrian Circulation

The Downtown Streetscape Master Plan (DSMP) provides design guidelines for existing and future development for the purpose of enhancing the pedestrian experience in the Greater Downtown Area. Per the DSMP and shown in Figure 14, Second and San Salvador Streets are designated Downtown Pedestrian Network Streets (DPNS), which are intended to support a moderate level of pedestrian activity as well as retail and transit connections. The DPNS streets provide a seamless network throughout the downtown that is safe and comfortable for pedestrians and connects all major downtown destinations. Design features of a DPNS create an attractive and safe pedestrian environment to promote walking as the primary travel mode. The DSMP policies state that vehicles crossing the sidewalk are often a safety hazard for pedestrians and measures should be taken within the design for any new project to minimize the number of curb cuts and driveways. As stated previously, the project driveways will be required to comply with the City's maximum requirement of 26 feet in width to minimize the curb cut.

Sidewalks will be provided along each of the site frontages along Second Street, Third Street, and San Salvador Street. Existing sidewalks will be widened to 11 feet along San Salvador Street and 8 feet along Second and Third Streets. High visibility crosswalks and pedestrian signal heads are present on all legs of all signalized intersections within the project vicinity, including the intersections of Second Street/San Salvador Street, Second Street/William Street, Third Street/San Salvador Street, and Third Street/William Street. ADA ramps are also provided at each of the intersections described above.

As part of the City's Protected Bikeway Master Planline for Second and Third Streets, the project will be required to enter into a cost-sharing agreement with the City of San Jose and adjacent project developers to implement full signal modifications, raised bulbouts, and pedestrian/ADA and bike ramps at the Second Street/San Salvador Street intersection. Figure 15 presents the preliminary design of the intersection improvements that has been prepared by the project applicant.

Bicycle Circulation

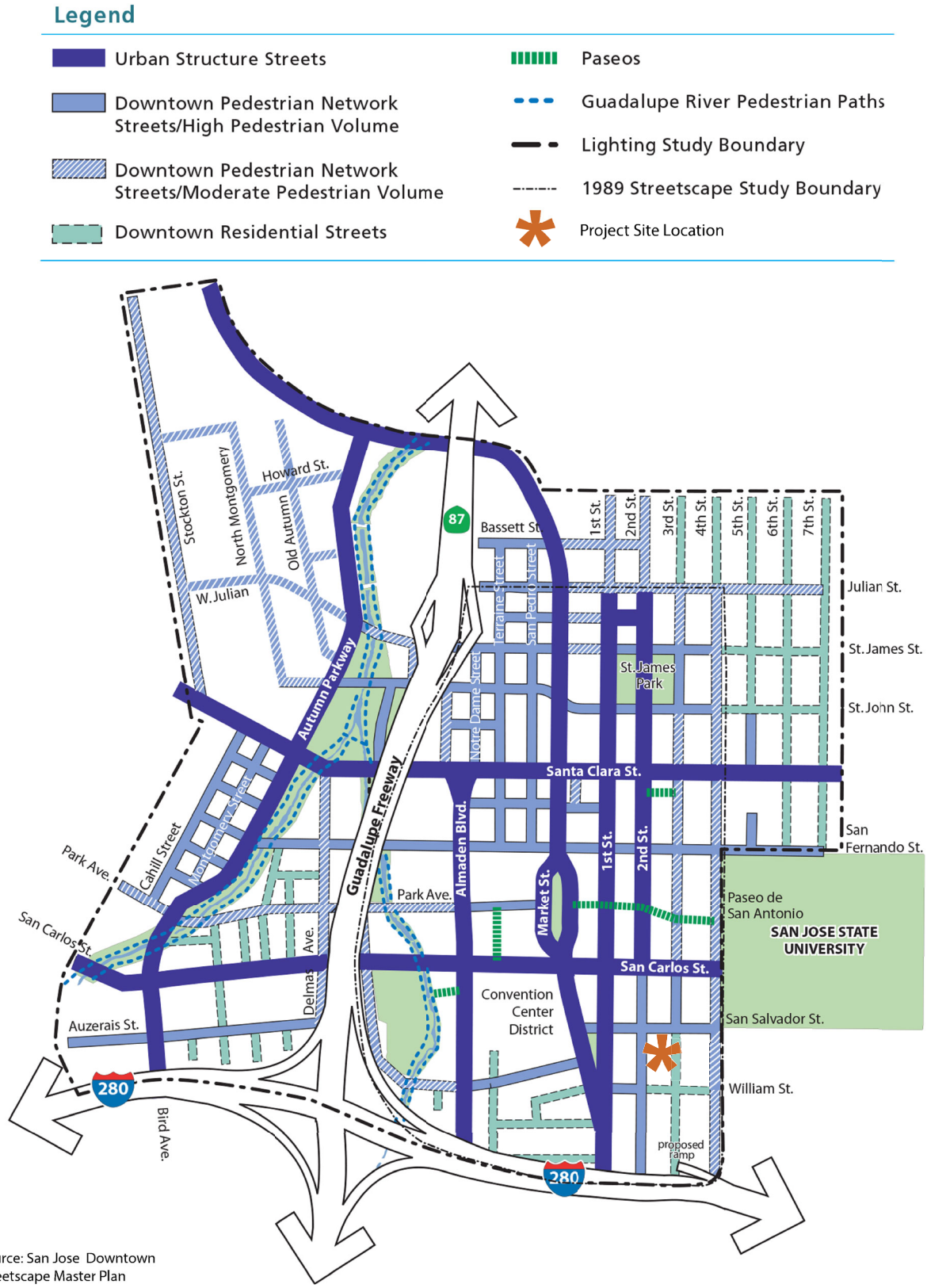
Class IV bicycle facilities (separated bike lanes) are provided on Third Street and Fourth Street. Class II bike lanes are provided along San Salvador Street between Market Street and 10th Street. Class III bicycle facilities (bike routes with "sharrow" pavement markings) are present on William Street and San Carlos Street. The Guadalupe River Park Trail, a Class I pedestrian and bicycle trail, is accessible to the west on either Woz Way or Santa Clara Street, with the former being just 750 feet west of the project site.

As part of the City's planned one-way to two-way operations conversion plan for Second and Third Streets, the City is proposing raised bikeways along both sides of Second and Third Streets in the project area, in an effort to enhance safety and increase accessibility of the protected bike lanes along Second and Third Streets. The existing buffered bike lane along the east side of Second Street is currently separated from travel lanes by striped pavement markings. The conceptual improvement plans provided by the city can be found in Appendix D. The planned improvements will provide for a raised bike lane with on-street parking spaces along both Second and Third Streets from Reed Street to north of the San Salvador Street intersection. Raised bikeways would separate bicyclists from vehicular traffic along Second and Third Streets. Green bike lane pavement markings and corner safety islands also will be installed adjacent to crosswalks at signalized intersections in the vicinity of the project site, including the Second Street/San Salvador Street and Third Street/San Salvador Street intersections. The conceptual improvement plans also show direct off-street connections to other separated bicycle facilities on San Salvador Street. The City will require the project to complete improvements along its Second and Third Street frontages per the Second and Third Streets plan lines.

Overall, the planned improvements will improve the safety and accessibility of the bicycle and pedestrian networks along roadway corridors and intersections that surround the project site.

Transit Facilities

The project is in proximity to major transit services that will provide the opportunity for multi-modal travel to and from the project site. VTA light rail services are available at the San Antonio LRT station, approximately ¼ -mile away. Several VTA bus services, described earlier, run on First Street and Second Street. Furthermore, several bus routes run along Santa Clara Street, approximately 0.6-mile away. The San Jose Diridon Station is located along the Green (Winchester-Old Ironsides) LRT line and serves as a transfer point to Caltrain, ACE, and Amtrak services. The pedestrian and bicycle facilities located along streets adjacent to the project site provide access to major transit stations and provide for a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies.



Source: San Jose Downtown Streetscape Master Plan

Figure 14
Downtown Pedestrian Street Network

NORTH
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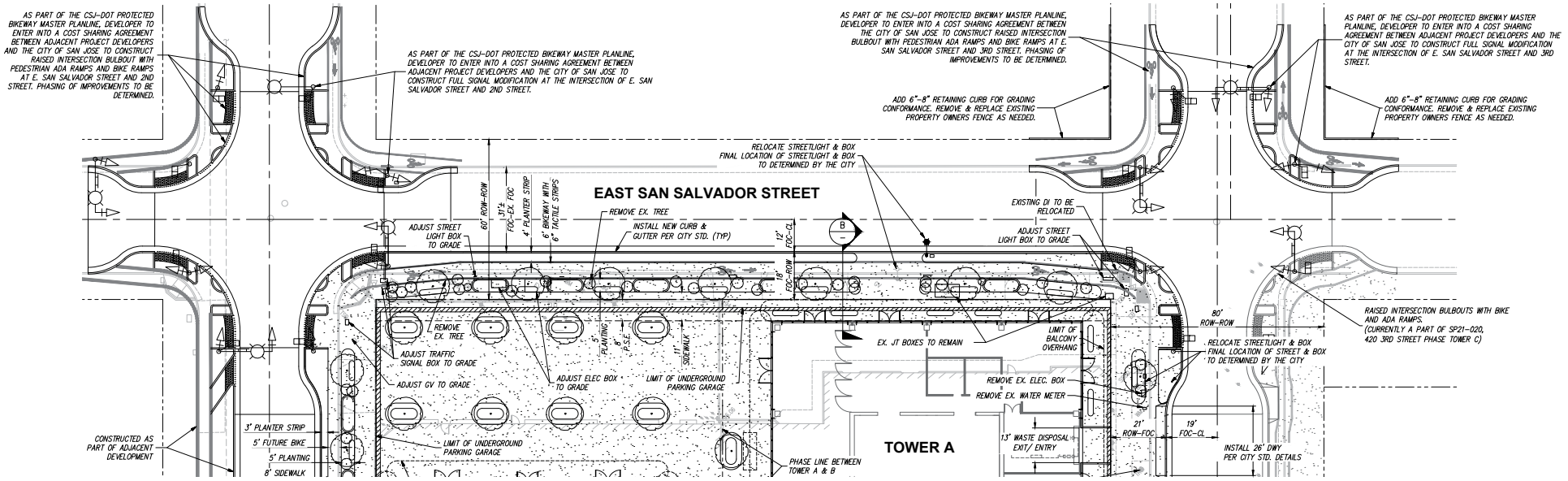


Figure 15
Preliminary Intersection Improvements

NORTH
Not to Scale

Vehicular Queuing Analysis

Vehicle queues were estimated using TRAFFIX, which is based on the HCM 2000 methodology. The basis of the analysis is as follows: the estimated maximum queue length obtained from TRAFFIX is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections. The analysis reports the 95th percentile queue, as calculated by TRAFFIX. The results of the queue analysis are summarized in Table 3.

The queuing analysis indicates that the projected 95th percentile queues would exceed capacity for the northbound left and northbound right movements at Third Street & San Salvador Street under existing and background conditions during the AM peak hour. The addition of project traffic would increase the projected maximum queue lengths at nearby intersections by at most one vehicle. With the proposed conversion of Second and Third Streets to two-way operation, it is expected a portion of the existing and future traffic would utilize Second Street instead of Third Street and vice-versa. This would help reduce the northbound queues and Third Street & San Salvador Street to not exceed capacity.

Table 5
Vehicle Queuing

	Second Street & San Salvador Street		Second Street & William Street		Third Street & San Salvador Street				Third Street & William Street			
	WBL		SBL		NBL		NBR		EBL		WBR	
Scenario	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing	4	6	2	6	21	7	21	7	3	5	7	3
Background	6	8	3	8	23	7	23	7	4	6	8	3
Background (Two-Way Conversion)	4	9	2	12	16	6	16	6	2	4	4	2
Capacity	10	10	20	20	20	20	20	20	10	10	10	10

Notes:

All intersection do not have left turn pockets. The reported capacity is based on the shared through-turn or shared left-through-right movements.
Northbound movement at Third Street & San Salvador Street under background (two-way conversion) will consist of a single shared left-through-right lane.

Construction Operations

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk and pedestrian crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (e.g., closure and detour signs) must be provided to ensure vehicles, pedestrians and bicyclists are able to adequately reach their intended destinations safely. Per City standard practice, the project would be required to submit a construction management plan for City approval that addresses the construction schedule, street closures and/or detours, construction staging areas and parking, and the planned truck routes.

Conclusions

The proposed residential development will contain 474 residential units and 6,100 s.f. of retail space. Parking will be provided below grade within the three towers on the sites.

The project site is located within the Downtown Growth Area Boundary, for which an Environmental Impact Report (EIR), *Downtown San Jose Strategy Plan 2040 (DTS 2040)*, has been completed and approved. With adoption of DTS 2040, this project is covered under DTS 2040 and no CEQA transportation analysis is required.

A summary of the site access and circulation review along with recommended adjustments is provided below.

Recommendations

Towers A & B

- The proposed trees along the project frontage on Third Street should be maintained so that they do not obstruct the vision of drivers exiting the project driveway.
- Entry gates should be located a minimum of two car-lengths (50-feet) back from the project driveway sidewalks.
- "Resident Parking Only" signage should be posted at the entrance to the garage.
- Appropriate visible and/or audible warning signs also should be provided at the project driveway to alert pedestrians and bicyclists along Third Street of vehicles exiting the garage.
- The drive aisle adjustments should be incorporated to the site plan before the plans are finalized.
- The use of the on-site loading space in Tower A should be restricted to trucks no larger than a typical SU-30 truck. Since the loading area in Tower A is less than 30 feet in length, the project applicant should coordinate with city staff to determine whether trucks will be allowed to extend several feet onto the sidewalk.
- Entryways providing access to both loading docks should have a minimum vertical clearance of 15 feet to meet City standards for loading space height.
- The project should work with the City to determine if truck access to loading docks should be limited to off-peak hours.
- Trash bins will need to be wheeled out from Tower A to Third Street for trash pick-up since garbage trucks cannot access the underground garage levels
- Trash staging activities should occur during off-peak hours

Tower C

- The proposed trees along the project frontage on Third Street should be maintained so that they do not obstruct the vision of drivers exiting the project driveway.
- Appropriate visible and/or audible warning signs also should be provided at the project driveway to alert pedestrians and bicyclists along Third Street of vehicles exiting the garage.
- The use of the on-site loading space in Tower C should be restricted to trucks no larger than a typical SU-30 truck due to the limited space provided along the drive aisle to maneuver into and out of the loading space.
- Entryways providing access to the loading dock should have a minimum vertical clearance of 15 feet to meet City standards for loading space height.
- Trash bins will need to be wheeled out from Tower C to Third Street for trash pick-up since garbage trucks cannot access the underground garage levels
- Trash staging activities should occur during off-peak hours

420 Second Street and 420 Third Street
Local Transportation Analysis

Technical Appendices

Appendix A

San Jose VMT Evaluation Tool Output

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: MVP Mixed Use
Location: 420 S. 2nd Street and 3rd Street
Parcel: 46747048 Parcel Type: Central City Urban

Tool Version: 2/29/2019
Date: 4/22/2022

Proposed Parking Spaces Vehicles: 392 Bicycles: 131

LAND USE:

Residential:		
Single Family	0	DU
Multi Family	474	DU
Subtotal	474	DU
Office:	0	KSF
Retail:	6100	KSF
Industrial:	0	KSF

Percent of All Residential Units

Extremely Low Income (≤ 30% MFI)	0	% Affordable
Very Low Income (> 30% MFI, ≤ 50% MFI)	0	% Affordable
Low Income (> 50% MFI, ≤ 80% MFI)	0	% Affordable

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density

Existing Density (DU/Residential Acres in half-mile buffer)	22
With Project Density (DU/Residential Acres in half-mile buffer)	24

Increase Development Diversity

Existing Activity Mix Index	0.81
With Project Activity Mix Index	0.86

Integrate Affordable and Below Market Rate

Extremely Low Income BMR units	0 %
Very Low Income BMR units	0 %
Low Income BMR units	0 %

Increase Employment Density

Existing Density (Jobs/Commercial Acres in half-mile buffer)	62
With Project Density (Jobs/Commercial Acres in half-mile buffer)	103

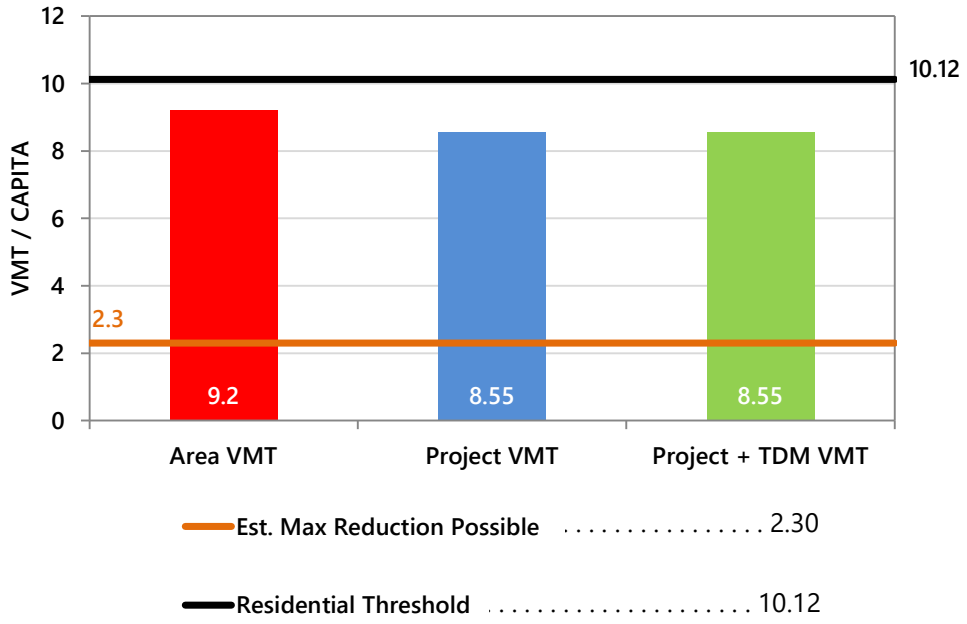
Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

Tier 4 - TDM Programs

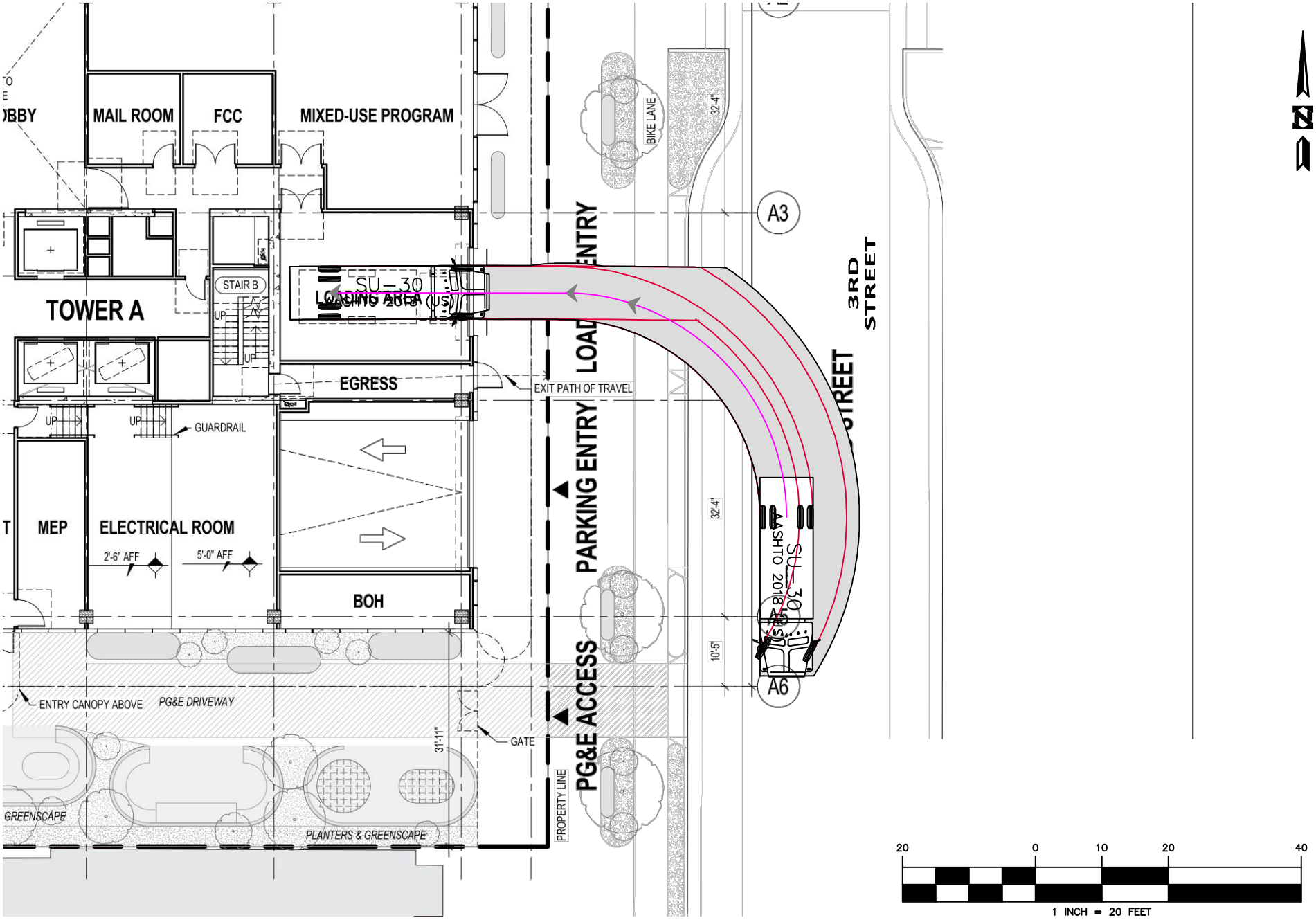
RESIDENTIAL ONLY

The tool estimates that the project would generate per capita VMT below the City's threshold.

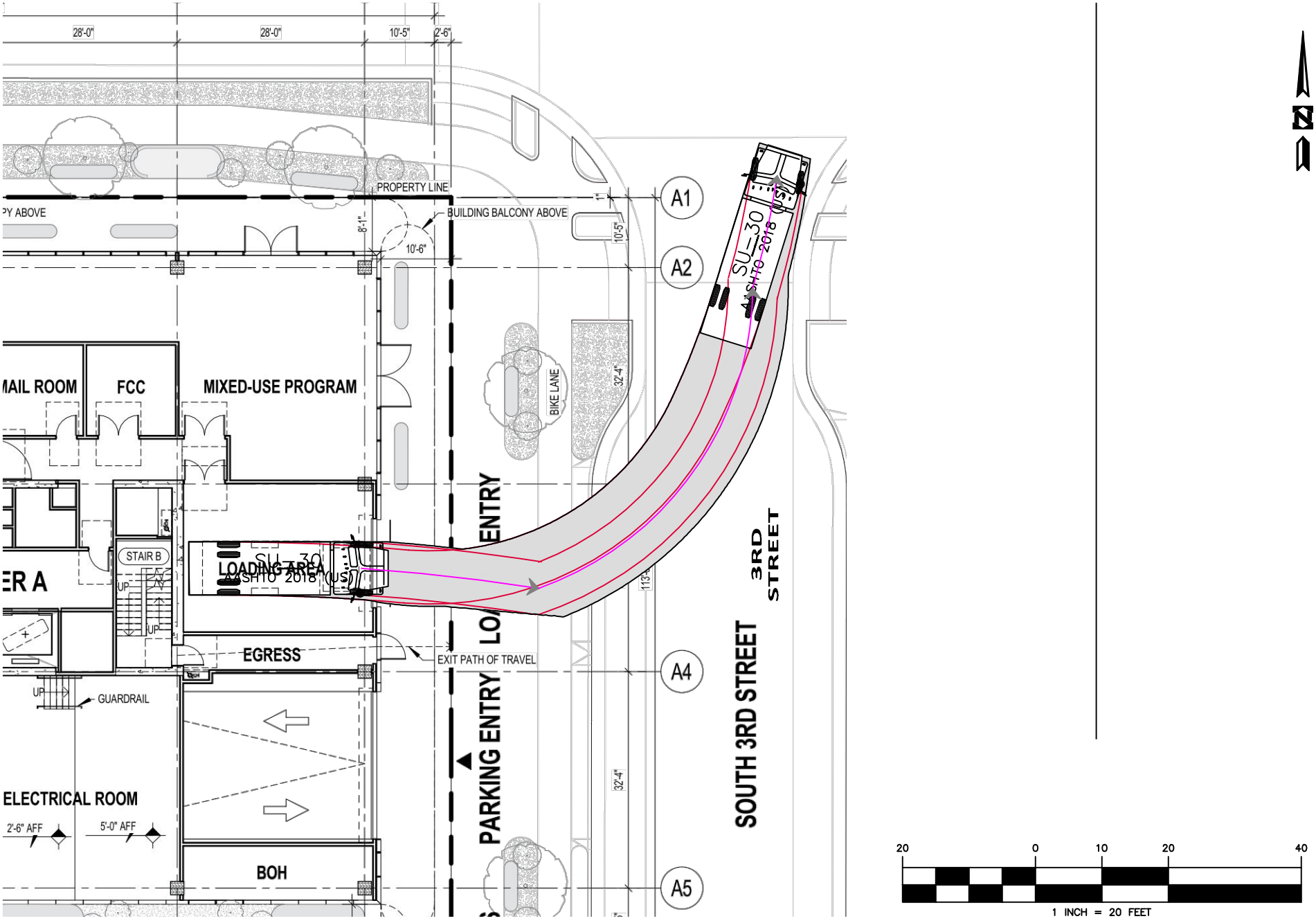


Appendix B

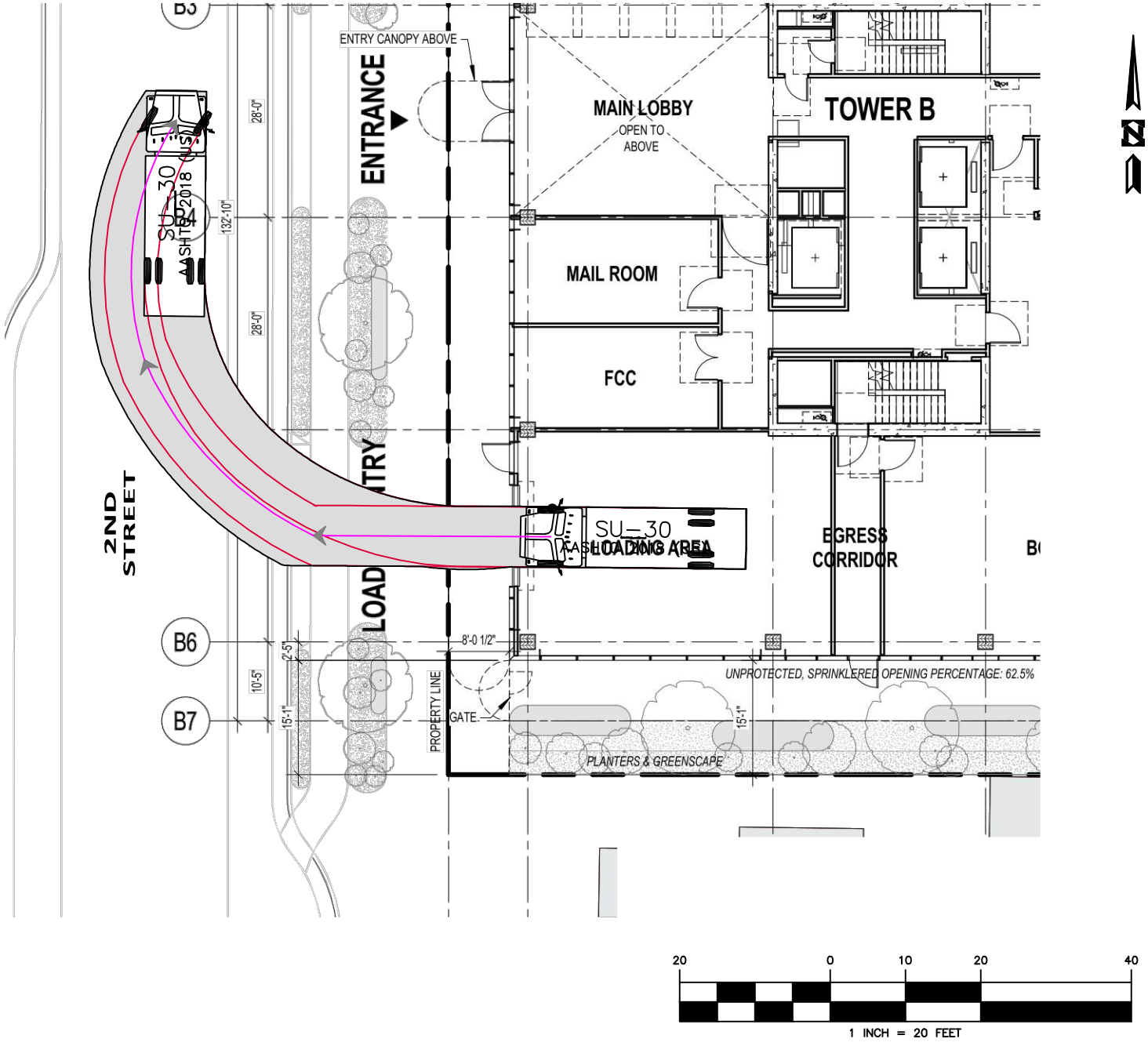
Towers A & B Truck Turning Templates



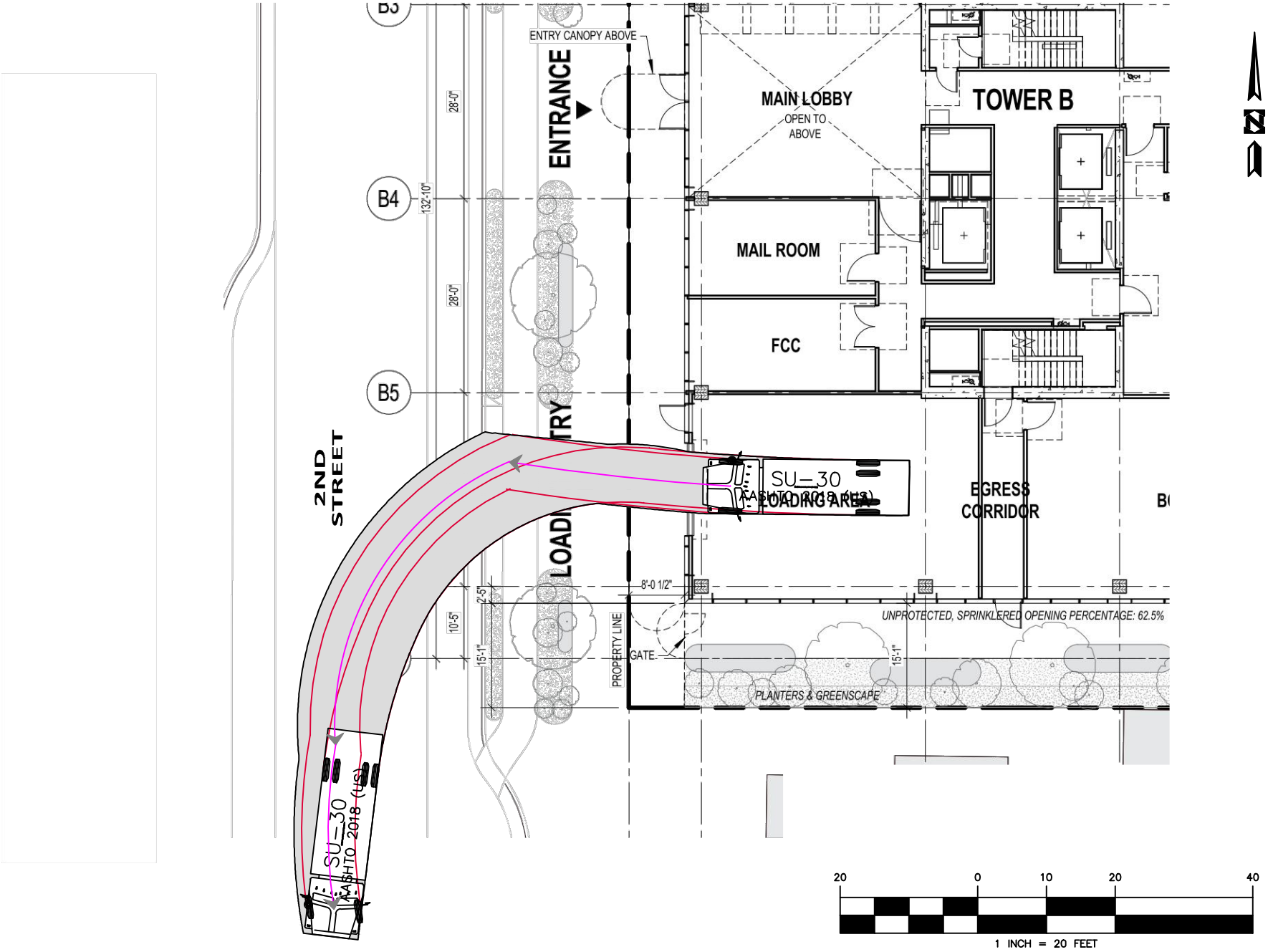
DRAWN J. CHANG	SCALE 1" = 20'	HEXAGON TRANSPORTATION CONSULTANTS, INC. 100 Century Center Court, Suite 501 San Jose, California 95112 Ph: (408) 971-6100 www.hextrans.com	**CITY OF SAN JOSE**	FIGURE NO.
CHECKED R. RODRIGUEZ	DATE 4/25/2022		420 SECOND STREET TOWER A LOADING BAY TRUCK TURNING TEMPLATE	1



DRAWN J. CHANG	SCALE 1" = 20'	HEXAGON TRANSPORTATION CONSULTANTS, INC. 100 Century Center Court, Suite 501 San Jose, California 95112 Ph: (408) 971-6100 www.hextrans.com	**CITY OF SAN JOSE**	FIGURE NO.
CHECKED R. RODRIGUEZ	DATE 4/25/2022		420 SECOND STREET TOWER A LOADING BAY TRUCK TURNING TEMPLATE	2



DRAWN J. CHANG	SCALE 1" = 20'	HEXAGON TRANSPORTATION CONSULTANTS, INC. 100 Century Center Court, Suite 501 San Jose, California 95112 Ph: (408) 971-6100 www.hextrans.com	**CITY OF SAN JOSE**	FIGURE NO.
CHECKED R. RODRIGUEZ	DATE 4/25/2022		420 SECOND STREET TOWER B LOADING BAY TRUCK TURNING TEMPLATE	3



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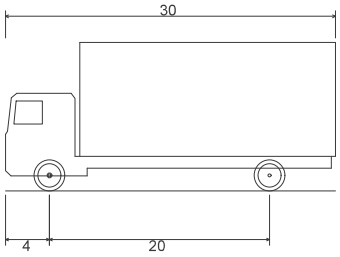
CHECKED R. RODRIGUEZ	DATE 4/25/2022		420 SECOND STREET TOWER B LOADING BAY TRUCK TURNING TEMPLATE	4

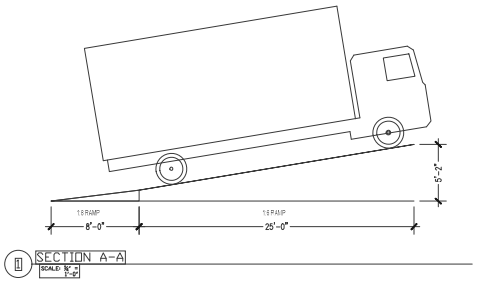
Appendix C

Tower C Truck Turning Templates



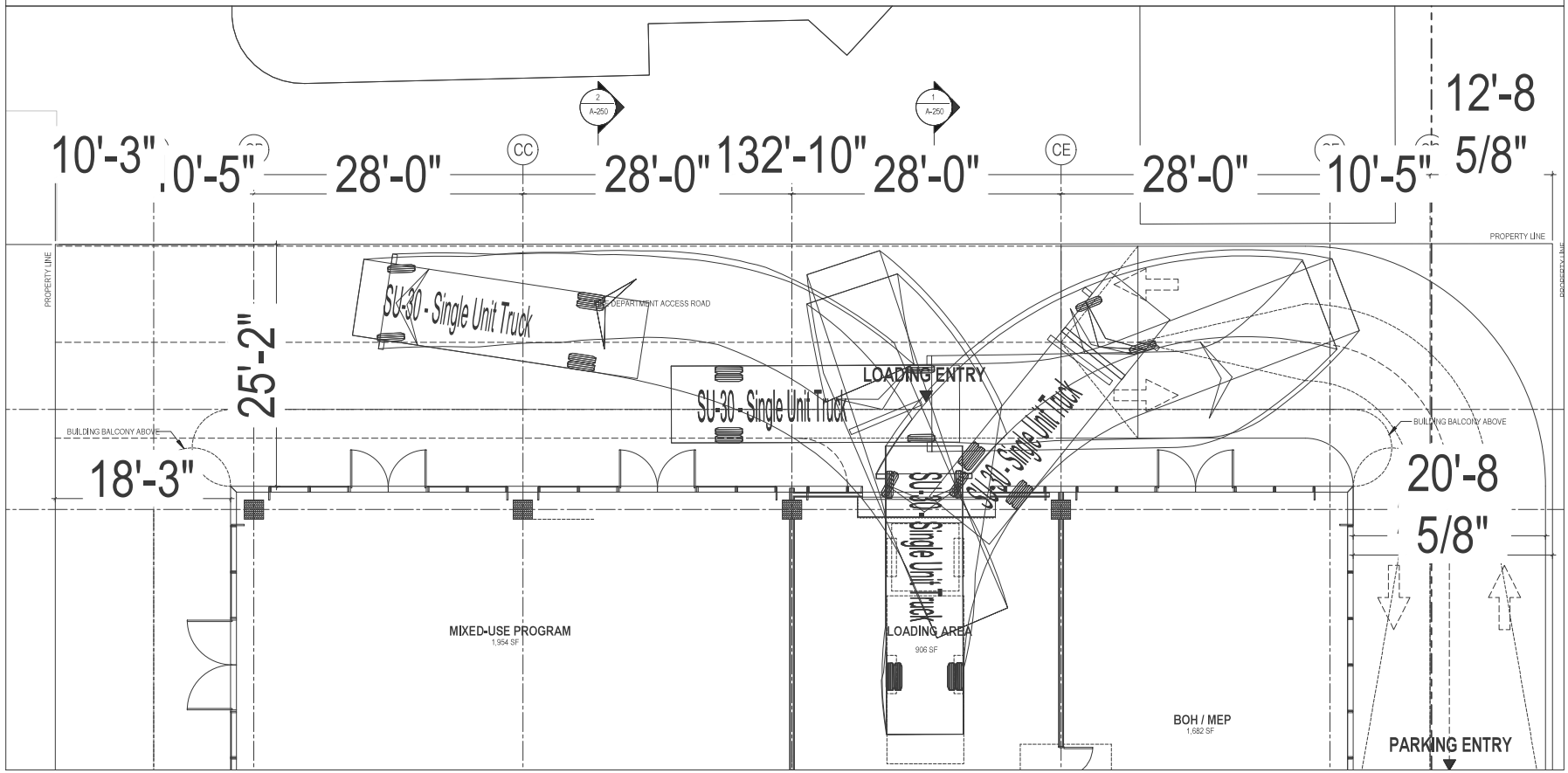
SU-30 - Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°



GENERAL NOTES:

1. ANY DESIGNS OR DESIGN SOLUTIONS PRESENTED IN THIS DRAWING OR SPECIFICATION, WHICH ARE DIRECT OR IMPLIED, INCLUDING NARRATIVES, DRAWINGS, OR DIAGRAMS, ARE HEREBY CLARIFIED AS EXAMPLES AND SHALL NOT BE CONSIDERED COMPLETE DESIGNS OR DESIGNS SUITABLE FOR CONSTRUCTION.
2. OMISSIONS FROM DRAWINGS OR SPECIFICATIONS, OR THE INACCURATE DESCRIPTION OF DETAILS OF WORK, WHICH ARE MANIFESTLY NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, OR WHICH ARE CUSTOMARILY PERFORMED, SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH OMITTED OR INACCURATELY DESCRIBED DETAILS OF THE WORK; WORK SHALL BE PERFORMED AS IF FULLY AND CORRECTLY SET FORTH AND DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS.
3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO START OF CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ALL EXISTING FIELD CONDITIONS AND ANY DISCREPANCIES OR INCONSISTENCIES.



LOADING AREA- SU30 MANEUVER

RAW
Architecture
Interiors
30 E. Santa Clara St.
Suite 200
San Jose
California 95113
Office
408 294-8000
Fax
415 294-1747
raw.com

AMERICAN TRASH MANAGEMENT

CLIENT:
URBANcommunity

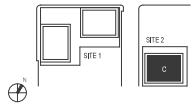
PROJECT NAME & ADDRESS:
420 S. 2ND ST
SAN JOSE, CA 95113

FILE NO. SP21-019

ISSUE:
ISSUE DATE:

REVISIONS:

	DESCRIPTION	DATE
1	ISSUE FOR SITE DEVELOPMENT PERMIT	05.28.21
2	ISSUE FOR SUP PLAN CHECK RESUBMITTAL #1	08.30.21
3	ISSUE FOR SUP PLAN CHECK RESPONSE #2	01.31.22



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DRAWN BY: PK
CHECKED BY: SB

STAMP:

SHEET NAME:
LOADING AREA-
SU30 MANEUVER

SHEET NUMBER:
TR1.1

1/5/2023 1:41:12 PM

Appendix D

Conceptual Two-Way Conversion Planline

DRAFT

SECOND STREET
TWO-WAY
CONCEPTUAL IMPROVEMENTS

	REVISIONS	DATE
6		
5		
4		
3		
2		
1		

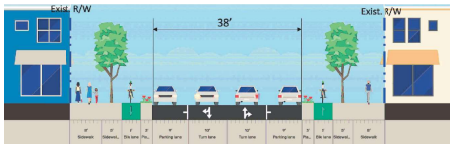
CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

DEPARTMENT OF TRANSPORTATION
SAN JOSE, CALIFORNIA

DESIGNED BY:
CHECKED BY:
PROJ MGR:
DATE:
SCALE: 1" = 30'
SHEET NO. 7 OF

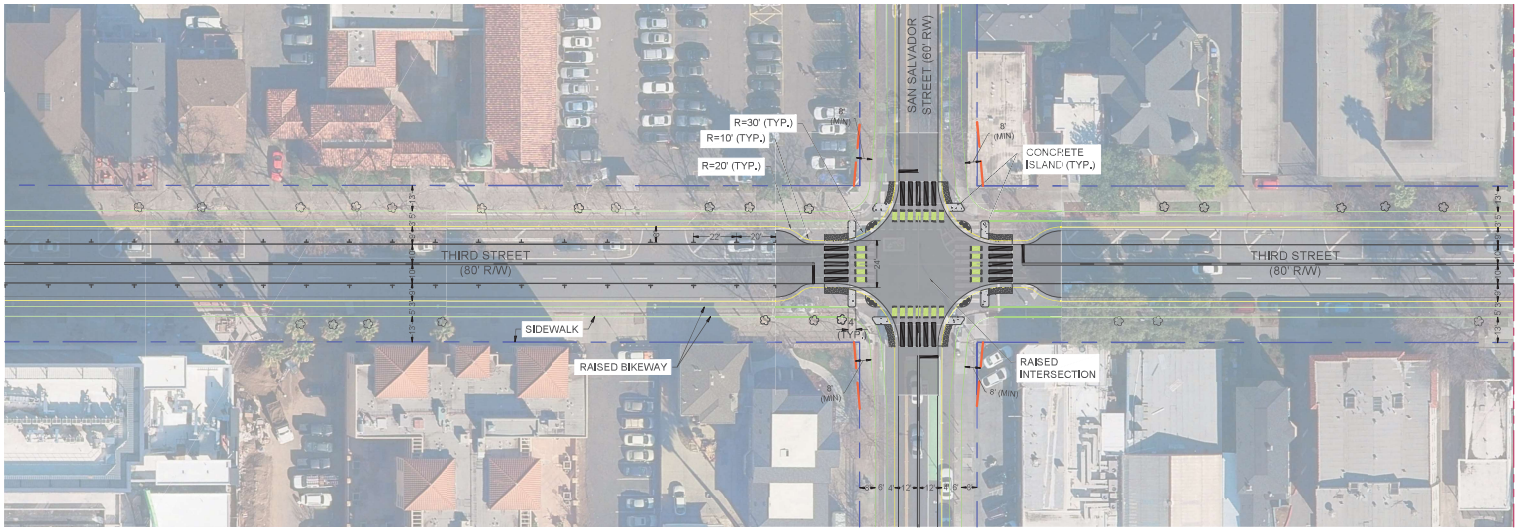
JOHN RISTOW
DIRECTOR

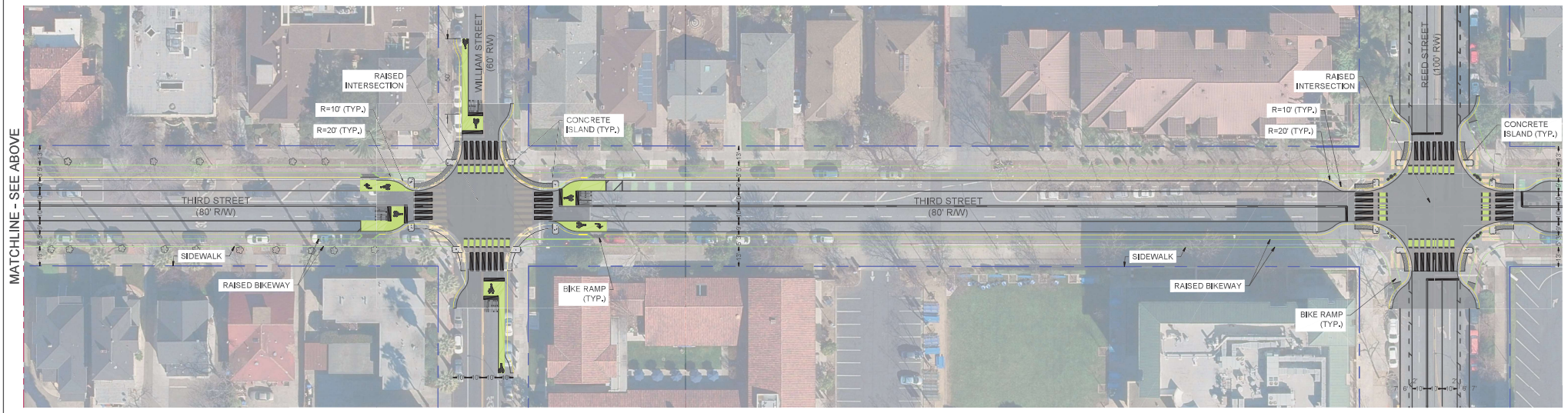
FILE NO.



THIRD STREET CROSS SECTION
NTS

LEGEND:
- PROPOSED FACE OF CURB
- RAISED BIKEWAY
- RAISED INTERSECTION
- EASEMENT
- EXISTING RIGHT OF WAY





0 15 30 60 90
SCALE FEET

DRAFT

THIRD STREET
TWO-WAY
CONCEPTUAL IMPROVEMENTS

	REVISIONS	DATE
6		
5		
4		
3		
2		
1		

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

DEPARTMENT OF TRANSPORTATION
SAN JOSE, CALIFORNIA

DESIGNED BY:
CHECKED BY:
PROJ MGR:
DATE:
SCALE: 1" = 30'
SHEET NO. 8 OF

JOHN RISTOW
DIRECTOR

FILE NO.