5 Development Standards and Design Guidelines

This chapter describes all the standards for street design, site planning, and building design. These are the regulations that govern new construction, as well as alterations and additions, in the Transit Area. The development standards are "form-based" standards. They have been prepared and evaluated in terms of the three dimensional form and design character that the City seeks to achieve in each of the subdistricts. The standards represent an integrated package of requirements for street design, land use, building height, and building setbacks, in order to establish the unique character and form of each district. These standards will be implemented through revisions to the Zoning Code.

5.1 STREET DESIGN AND BUILDING TO STREET RELATIONSHIPS

This section outlines the design requirements for existing and new streets within the Transit Area and also defines the relationships of streets to buildings. The street design standards are specifically tailored to the type of street, the land use, and the building massing established in the overall plan. Figure 5-1 shows the different street designs to be established in the Transit Area, specifying the type of street design for each street segment. The drawing also provides the key to the section drawings, Figures 5-2 through 5-18, that establish the street design requirements and the relationship of buildings to streets.

The street section drawings in Figures 5-2 through 5-18 specify the following street design standards.

- Travel Lanes Number and Dimensions
- Parking Lanes and Dimensions
- Street Trees—Location, Placement, Spacing, and Type
- Planter Strips separating curbs and sidewalks
- Landscape Setbacks along Streets – Dimensions and Planting
- Sidewalks Location and Dimensions
- Street Trees and Landscaping to be added to Existing Streets
- Building Setbacks
- Lighting
- Relationships to Existing Transit Infrastructure
- Elevated Pedestrian Bridges

The standards are requirements that must be followed as part of any new construction project or any alteration to curbs or front yard areas on existing properties. Standards for street trees and lighting are shown in Figures 5-19 and 5-20. Minor modifications to these standards may be approved by City staff; any significant modifications must be reviewed by the Planning Commission.

Policy 5.1: Street trees shall generally be spaced at approximately 30 feet on center. Spacing should be closer for small trees.

Refer to the City's Streetscape Master Plan for details related to street tree planting and installation requirements.

Policy 5.2: For projects with frontage on Montague Expressway, dedication of right-of-way for the widening of Montague Expressway is required. In addition, a minimum setback of 45 ft. is required between the future curb (of the widened expressway) and buildings, for landscaping and sidewalk in the configuration shown in Figures 5-2 through 5-5. Figures 5-2 through 5-5 provide estimates of right-of-way dedication requirements, based on drawings prepared by the County for the Montague Expressway Improvement Project in 1997, and the the EIR for the project prepared in 2005.

Policy 5.3: All streets (public & private) shall be consistent with the street sections in Chapter 5 and shall meet any additional Milpitas Fire Department fire apparatus design requirements for access and firefighting operations.

- Landscaped Parkway - Montague Expressway
- Retail Mixed Use Street - Wide Sidewalks
- Retail Boulevard (with Frontage Road)
- Landscaped Setbacks on Arterial Streets, along the BART Site, and fronting parking lots
- Typical Residential Street
- Residential Parkway - McCandless Drive
- Milpitas Boulevard Extension
- Falcon Drive
- Existing Street with no change
- 5-9 Figure Numbers and Section Cuts for Drawings Showing Building to Street Relationship - Chapter 5

10 acres

0 300 600 1200
FEET

Figure 5-1
Street Design and Character

STREET SECTION DRAWINGS

These drawings were prepared by Freedman Tung & Bottomley (FTB) in collaboaration with Dyett & Bhatia and Field Paoli Architects.

Montague Corridor

Piper Montague

Typical Residential Street

Milpitas Boulevard

Capitol Avenue

Trade Zone Boulevard

McCandless/Centre Point Subdistrict

Great Mall

Street Trees and Lighting Standards

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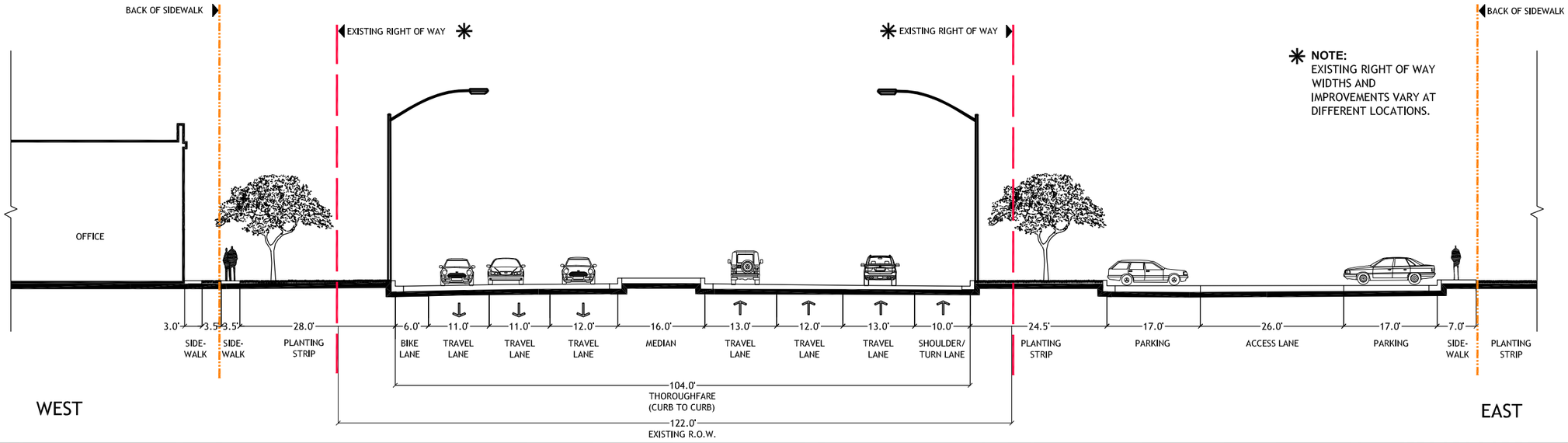
EXISTING CONDITION

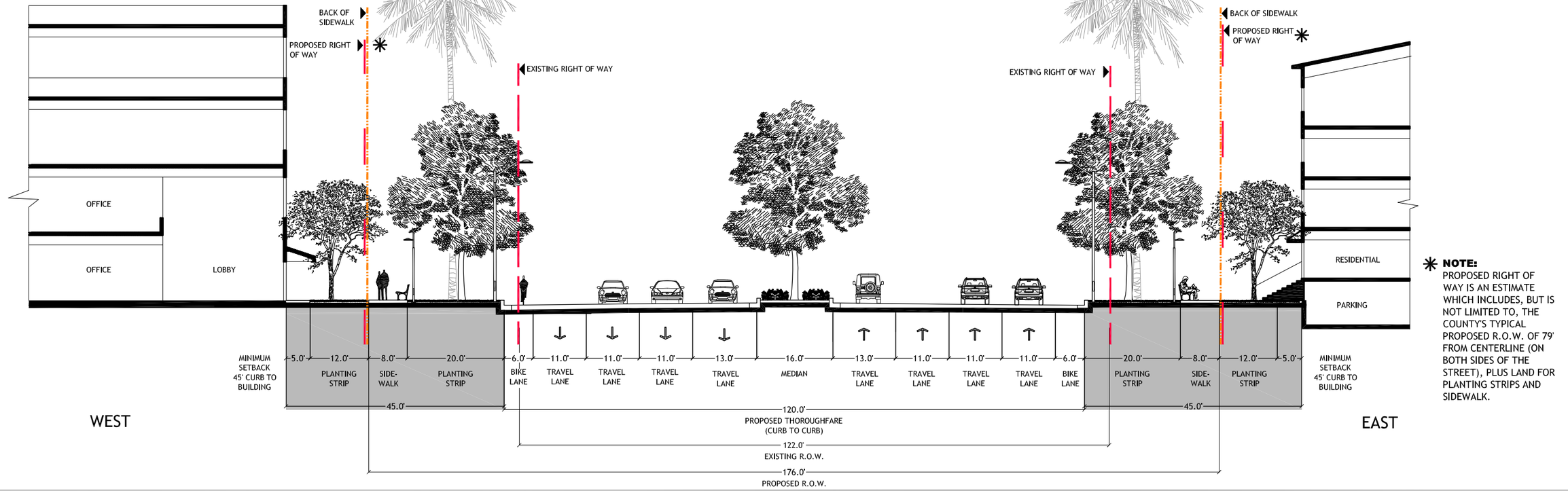


PROPOSED CONDITION

- ADD OPEN-HABIT DECIDUOUS TREES TO PLANTING STRIP
- ADD PALM TREES
- ADD ORNAMENTAL TREES TO PRIVATE FRONTAGE
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD BENCHES
- ADD TRASH RECEPTACLES

- ADD OPEN-HABIT DECIDUOUS TREES TO MEDIAN
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN

- ADD OPEN-HABIT DECIDUOUS TREES TO PLANTING STRIP
- ADD PALM TREES
- ADD ORNAMENTAL TREES TO PRIVATE FRONTAGE
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD BENCHES
- ADD TRASH RECEPTACLES

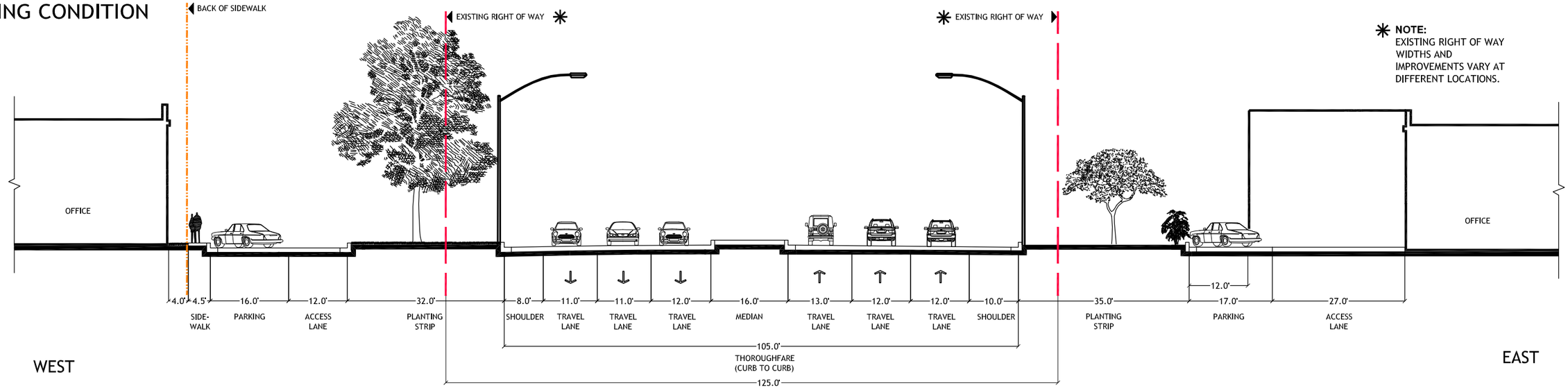


NOTE:
PROPOSED RIGHT OF WAY IS AN ESTIMATE WHICH INCLUDES, BUT IS NOT LIMITED TO, THE COUNTY'S TYPICAL PROPOSED R.O.W. OF 79' FROM CENTERLINE (ON BOTH SIDES OF THE STREET), PLUS LAND FOR PLANTING STRIPS AND SIDEWALK.

Figure 5-2: Montague Expressway near Trade Zone Boulevard

0' 5' 10' 20'

EXISTING CONDITION



PROPOSED CONDITION

- ADD BENCHES
- ADD ORNAMENTAL TREES
- ADD PALM TREES
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD TRASH RECEPTACLES

- ADD OPEN-HABIT DECIDUOUS TREES TO MEDIAN
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN
- ADD PEDESTRIAN BRIDGE:
  - WEST RAMP ON PUBLIC PARK/COMMUNITY FACILITIES SITE
  - EAST RAMP ON OR NEXT TO DRAINAGE RIGHT OF WAY

- ADD BENCHES
- ADD ORNAMENTAL TREES
- ADD PALM TREES
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD TRASH RECEPTACLES

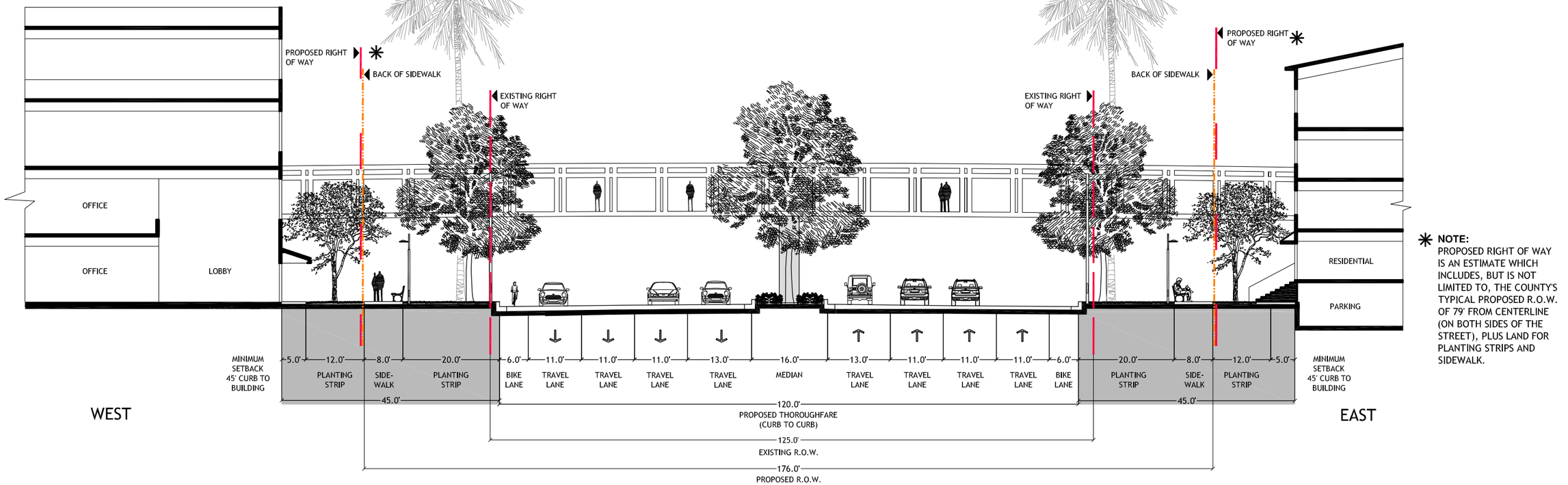
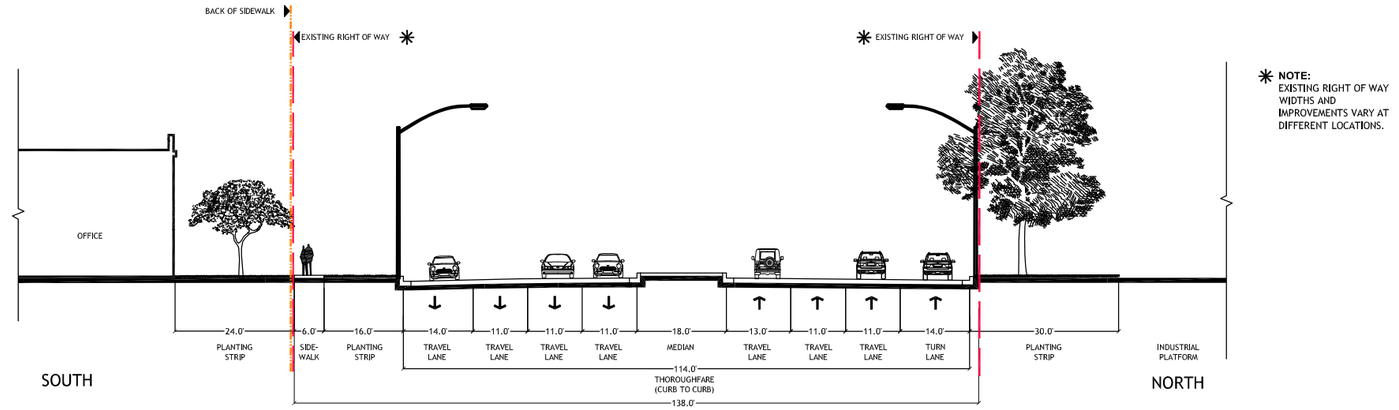


Figure 5-3: Montague Expressway at Penitencia Creek East

0' 5' 10' 20'

EXISTING CONDITION



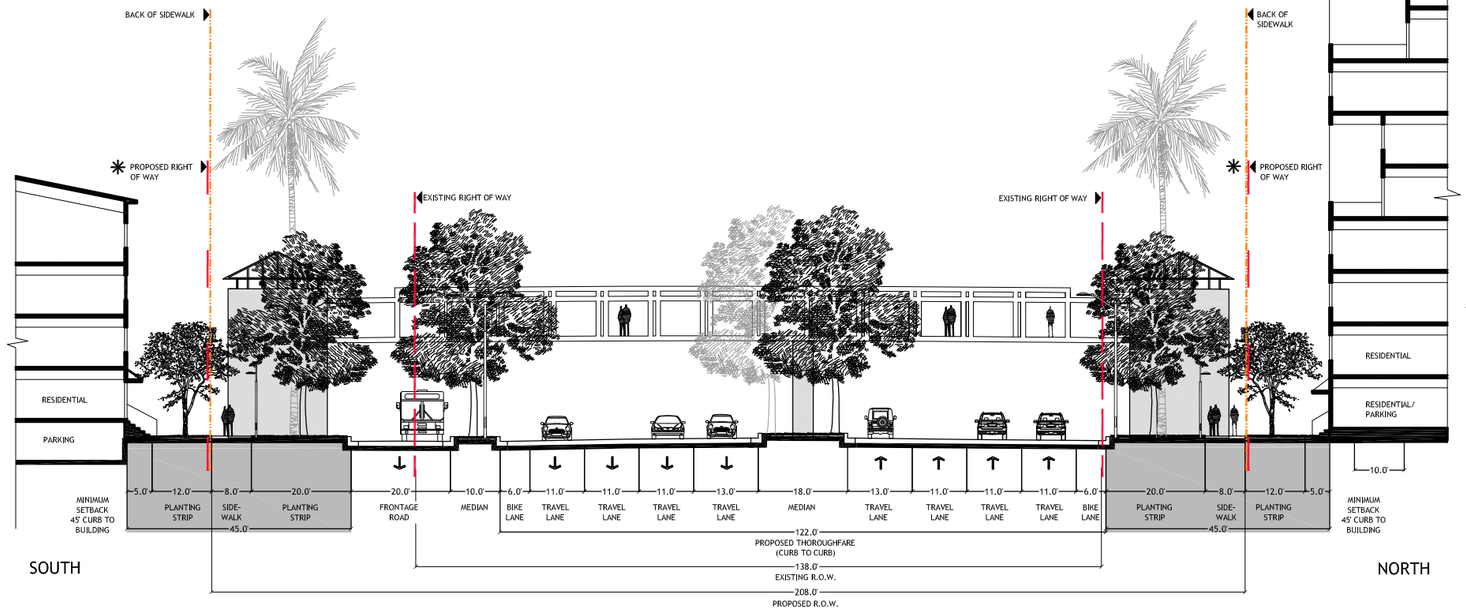
NOTE:
EXISTING RIGHT OF WAY WIDTHS AND IMPROVEMENTS VARY AT DIFFERENT LOCATIONS.

PROPOSED CONDITION

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD PALM TREES
- ADD ORNAMENTAL TREES TO PROMOTE FRONTAGE
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD BENCHES
- ADD TRASH RECEPTACLES
- ADD BIKE RACKS

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN
- ADD PEDESTRIAN BRIDGE WITH ELEVATOR TOWERS AT EACH END IN THE MONTAGUE RIGHT-OF-WAY

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD PALM TREES
- ADD ORNAMENTAL TREES TO PROMOTE FRONTAGE
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD BENCHES
- ADD TRASH RECEPTACLES
- ADD BIKE RACKS

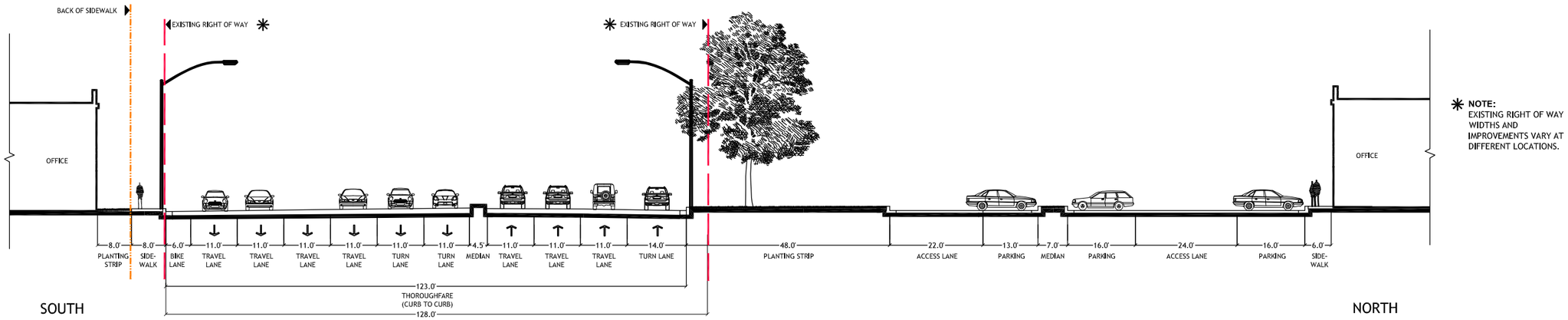


NOTE:
PROPOSED RIGHT OF WAY IS AN ESTIMATE WHICH INCLUDES, BUT IS NOT LIMITED TO, THE COUNTY'S TYPICAL PROPOSED R.O.W. OF 79' FROM CENTERLINE (ON BOTH SIDES OF THE STREET), PLUS LAND FOR PLANTING STRIPS AND SIDEWALK.

Figure 5-4: Montague Expressway Near Future BART Station

0' 5' 10' 20'

EXISTING CONDITION



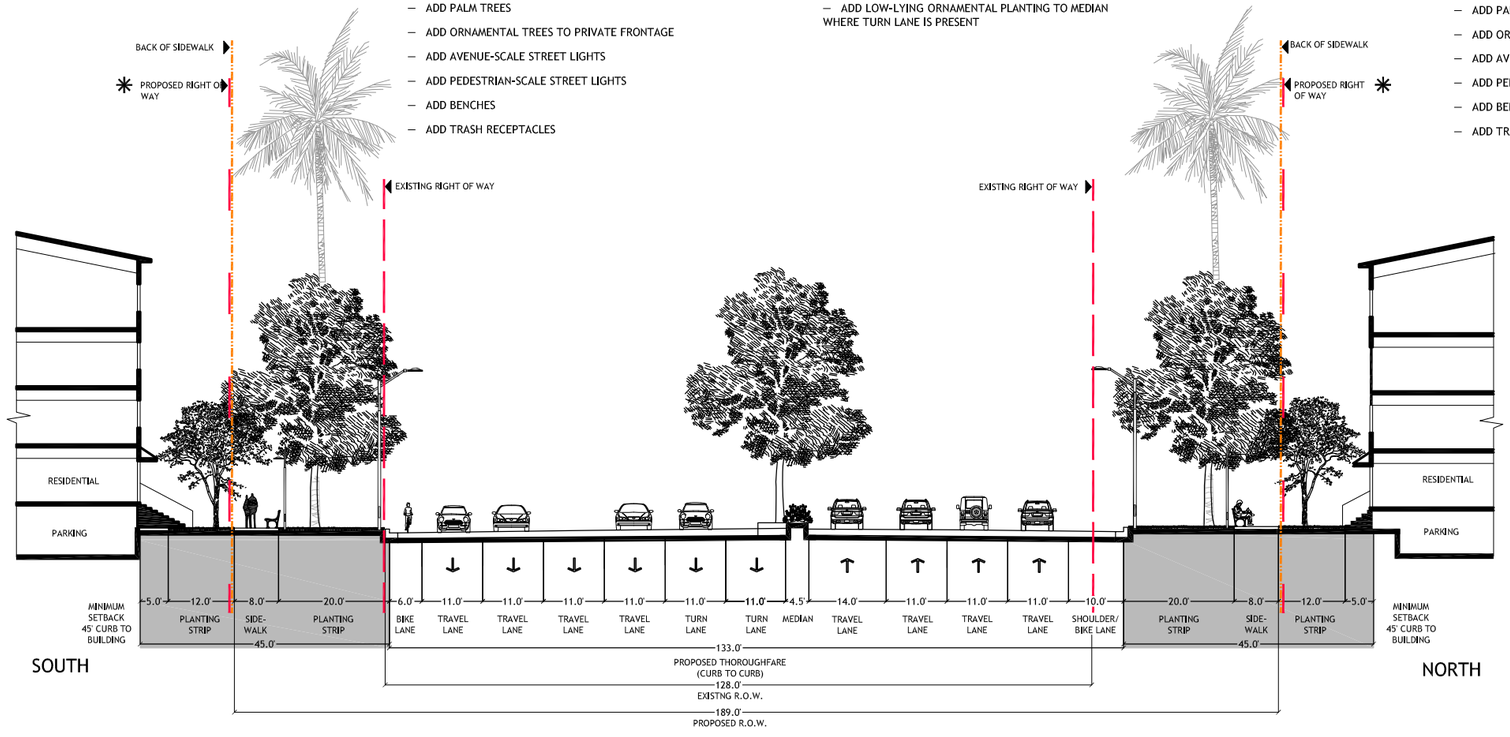
NOTE:
EXISTING RIGHT OF WAY WIDTHS AND IMPROVEMENTS VARY AT DIFFERENT LOCATIONS.

PROPOSED CONDITION

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD PALM TREES
- ADD ORNAMENTAL TREES TO PRIVATE FRONTAGE
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD BENCHES
- ADD TRASH RECEPTACLES

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN WHERE TURN LANE IS PRESENT

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD PALM TREES
- ADD ORNAMENTAL TREES
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD BENCHES
- ADD TRASH RECEPTACLES

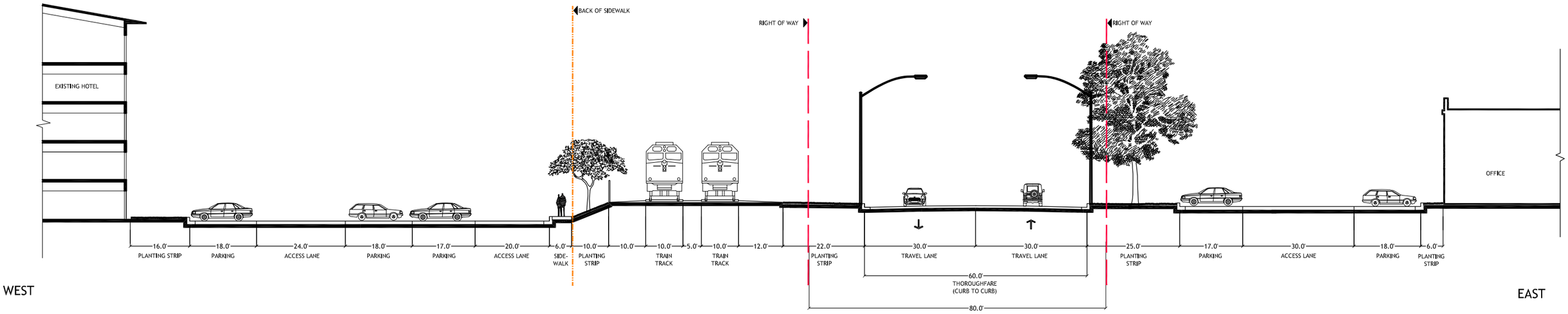


NOTE:
PROPOSED RIGHT OF WAY IS AN ESTIMATE WHICH INCLUDES, BUT IS NOT LIMITED TO, THE COUNTY'S TYPICAL PROPOSED R.O.W. OF 79' FROM CENTERLINE (ON BOTH SIDES OF THE STREET), PLUS LAND FOR PLANTING STRIPS AND SIDEWALK.

Figure 5-5: Montague Expressway near Milpitas Boulevard

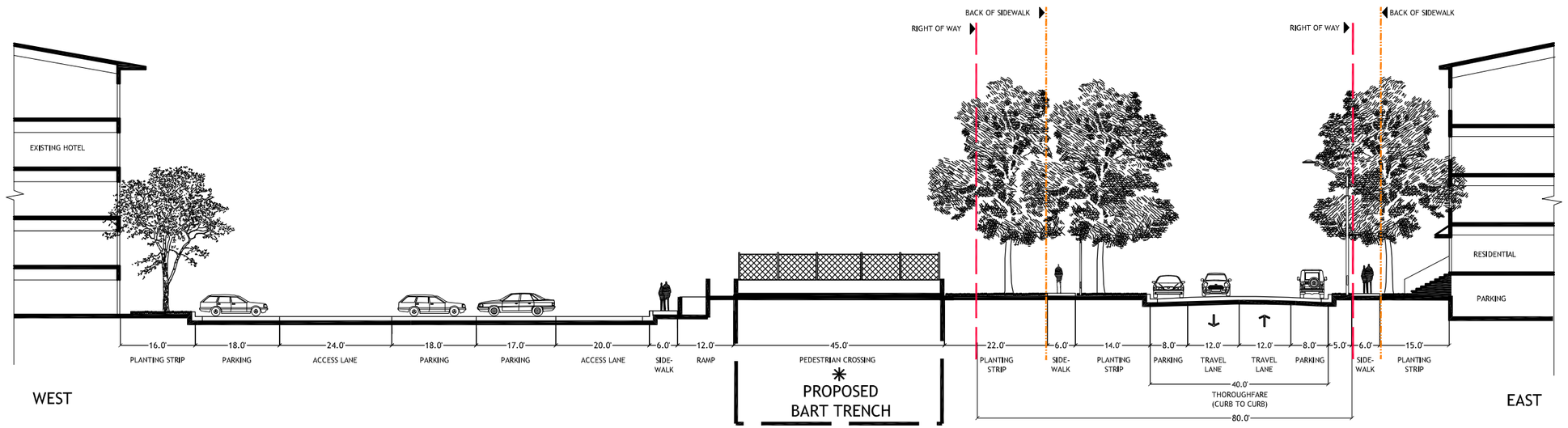
0' 5' 10' 20'

EXISTING CONDITION



PROPOSED CONDITION

- ADD ORNAMENTAL TREES
- ADD OPEN-HABIT DECIDUOUS TREES
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- MAINTAIN EXISTING OPEN-HABIT DECIDUOUS TREES
- CREATE PEDESTRIAN CONNECTION FROM PIPER DRIVE (ACROSS BART TRENCH, TRAIN TRENCH AND LANDSCAPING) TO THE GREAT MALL
- ADD AVENUE AND PEDESTRIAN-SCALE STREET LIGHTS



✳ **NOTE:**
FINAL LOCATION AND HEIGHT OF PEDESTRIAN CROSSING TO BE DETERMINED BASED ON BART TRENCH DESIGN, SPUR TRACK LOCATION, AND CONDITIONS ON ADJOINING PROPERTIES TO THE WEST OF SECTION LOCATION.

Figure 5-6: Piper Drive

0' 5' 10' 20'

– PEDESTRIAN R.O.W. TO INCLUDE :

- DECIDUOUS STREET TREES
- PEDESTRIAN STREET LIGHTS

– SETBACK AREA TO BE LANDSCAPED AND MAY HAVE LOW WALL OR FENCE AT BACK OF WALK

– PARKING ON ONE SIDE - LOCATE ON ALTERNATE SIDES OF STREET FOR DIFFERENT BLOCKS

– PERMEABLE PAVING AND/OR DECORATIVE PAVERS IN PARKING AISLE

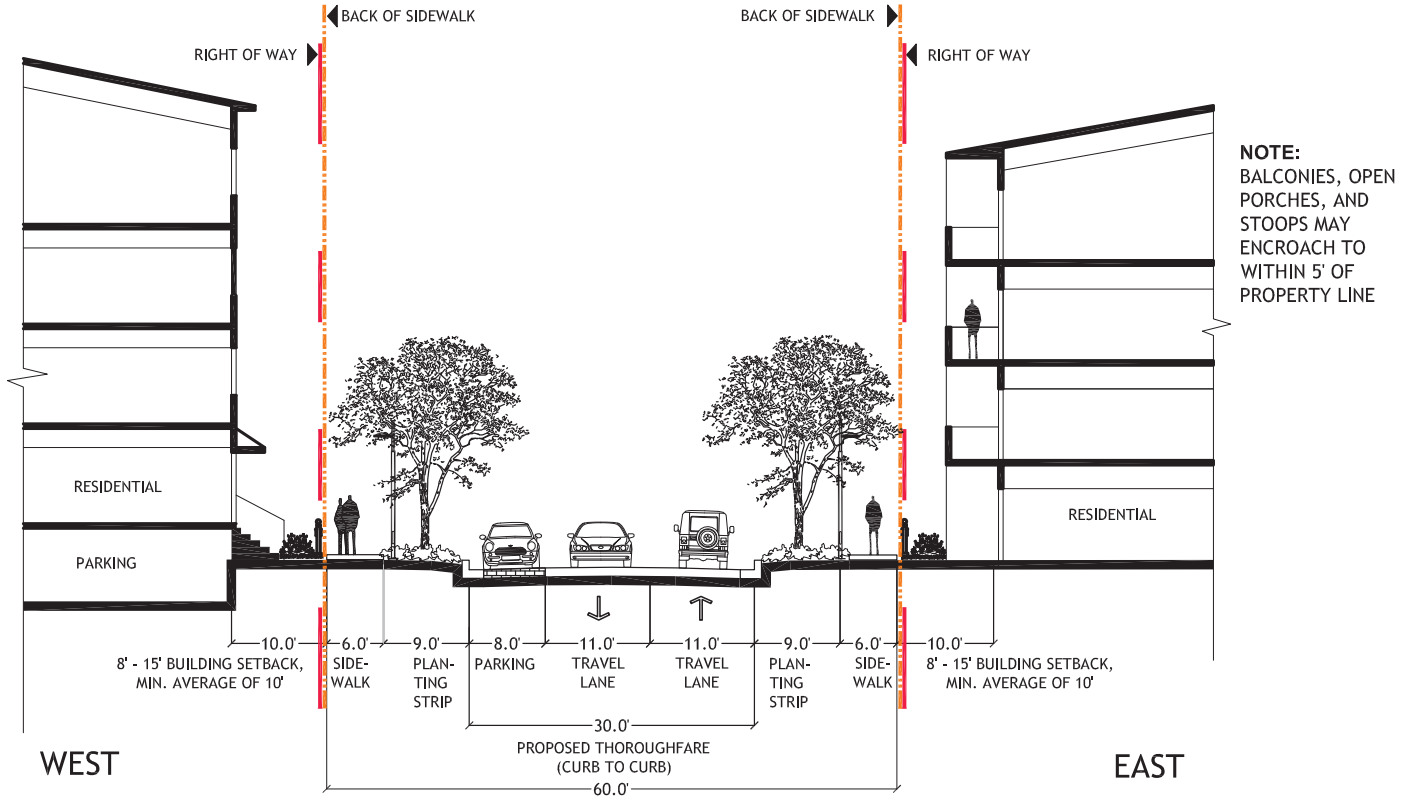
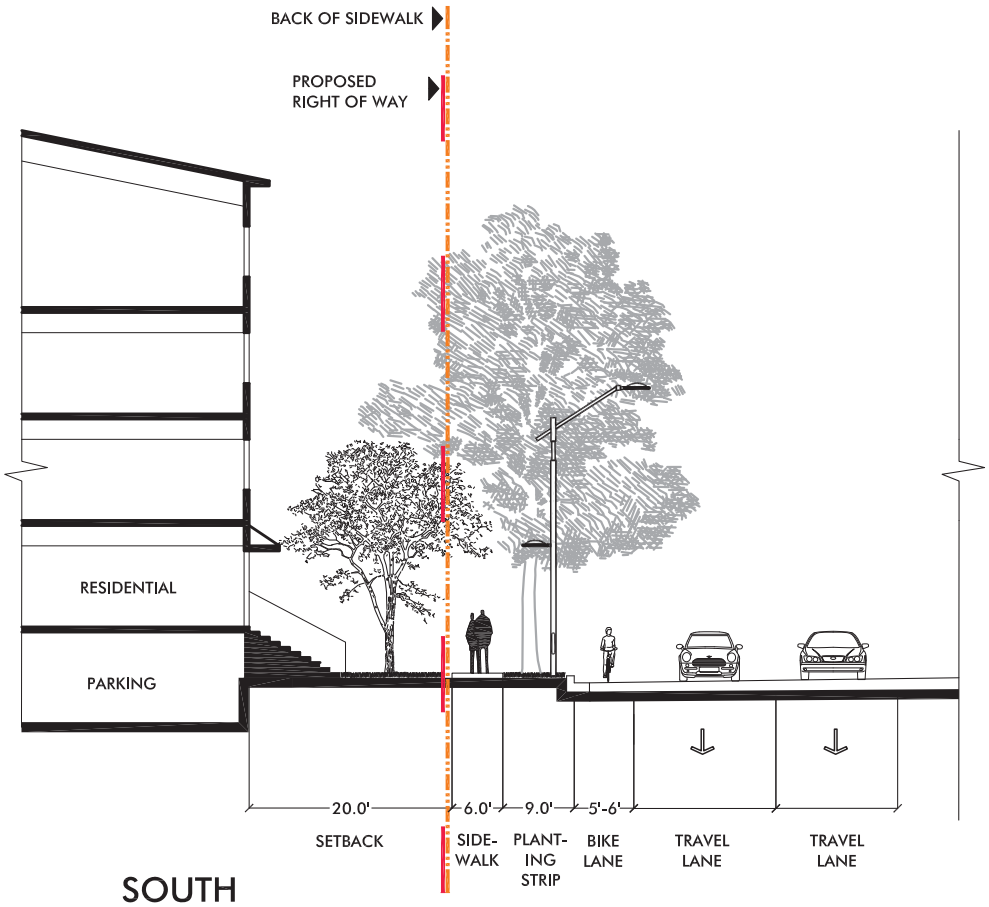


Figure 5-7
East West Street: Piper Drive to Milpitas Boulevard

PROPOSED CONDITION

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD ORNAMENTAL TREES TO PRIVATE FRONTAGE
- ADD AVENUE AND PEDESTRIAN-SCALE STREET LIGHTS

NOTE:
DEDICATE RIGHT-OF-WAY FOR SIDEWALK AND PLANTER STRIP IF EXISTING RIGHT-OF-WAY DOES NOT HAVE 15' FOR SIDEWALK AND PLANTER STRIP.



SOUTH

0' 5' 10' 20'

Figure 5-8
Milpitas Boulevard-Piper Montague Subdistrict

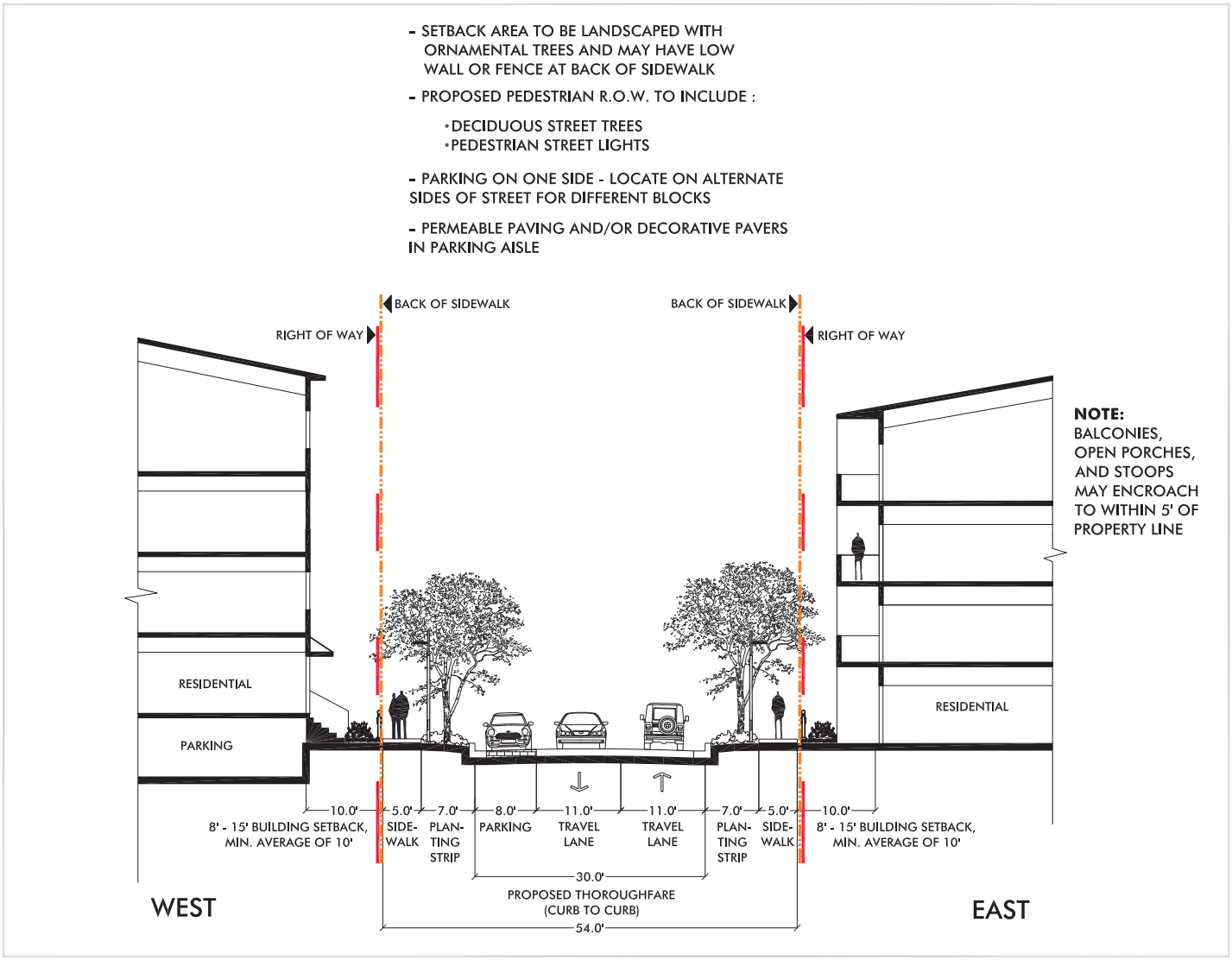
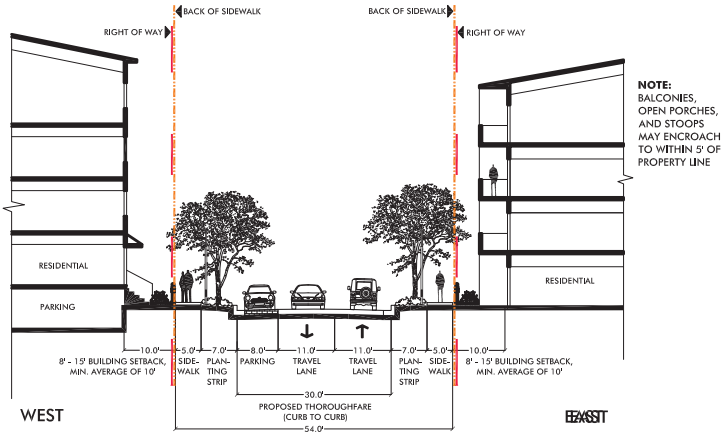
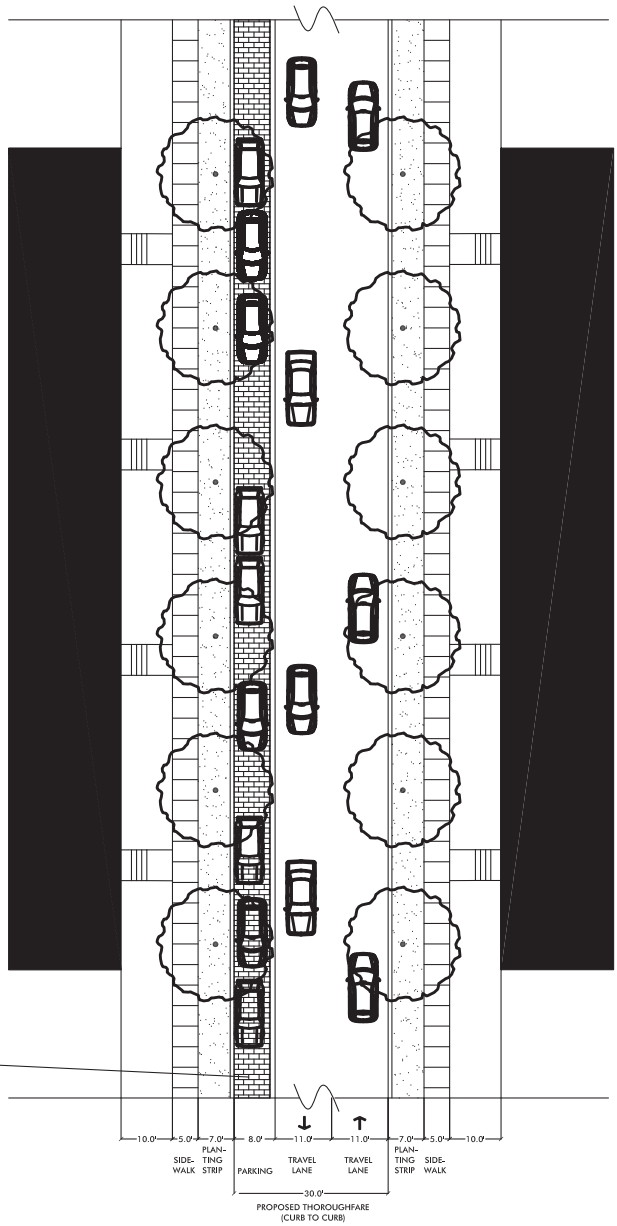


Figure 5-9
New Local Streets

- SETBACK AREA TO BE LANDSCAPED WITH ORNAMENTAL TREES AND MAY HAVE LOW WALL OR FENCE AT BACK OF SIDEWALK
- PROPOSED PEDESTRIAN R.O.W. TO INCLUDE :
  - DECIDUOUS STREET TREES
  - PEDESTRIAN STREET LIGHTS
- PARKING ON ONE SIDE - LOCATE ON ALTERNATE SIDES OF STREET FOR DIFFERENT BLOCKS
- PERMEABLE PAVING AND/OR DECORATIVE PAVERS IN PARKING AISLE





Signifies different (non-specific) paving treatment to encourage traffic calming.

Figure 5-9a
New Local Streets: Plan View

PROPOSED CONDITION

- PROPOSED SIDEWALK AND PEDESTRIAN REALM INCLUDES:
  - OPEN HABITAT DECIDIOUS TREES
  - MINIMUM 6' x 4' TREE POCKETS
  - AVENUE AND PEDESTRIAN SPACE STREET LIGHTS

- PROPOSED MEDIAN INCLUDES:
  - OPEN HABITAT DECIDIOUS TREES
  - LOW-LYING ORNAMENTAL PLANTING
  - TREES IN MEDIAN AT TURN POCKETS

- PROPOSED SIDEWALK AND PEDESTRIAN REALM INCLUDES:
  - OPEN HABITAT DECIDIOUS TREES
  - MINIMUM 6' x 4' TREE POCKETS
  - AVENUE AND PEDESTRIAN SPACE STREET LIGHTS

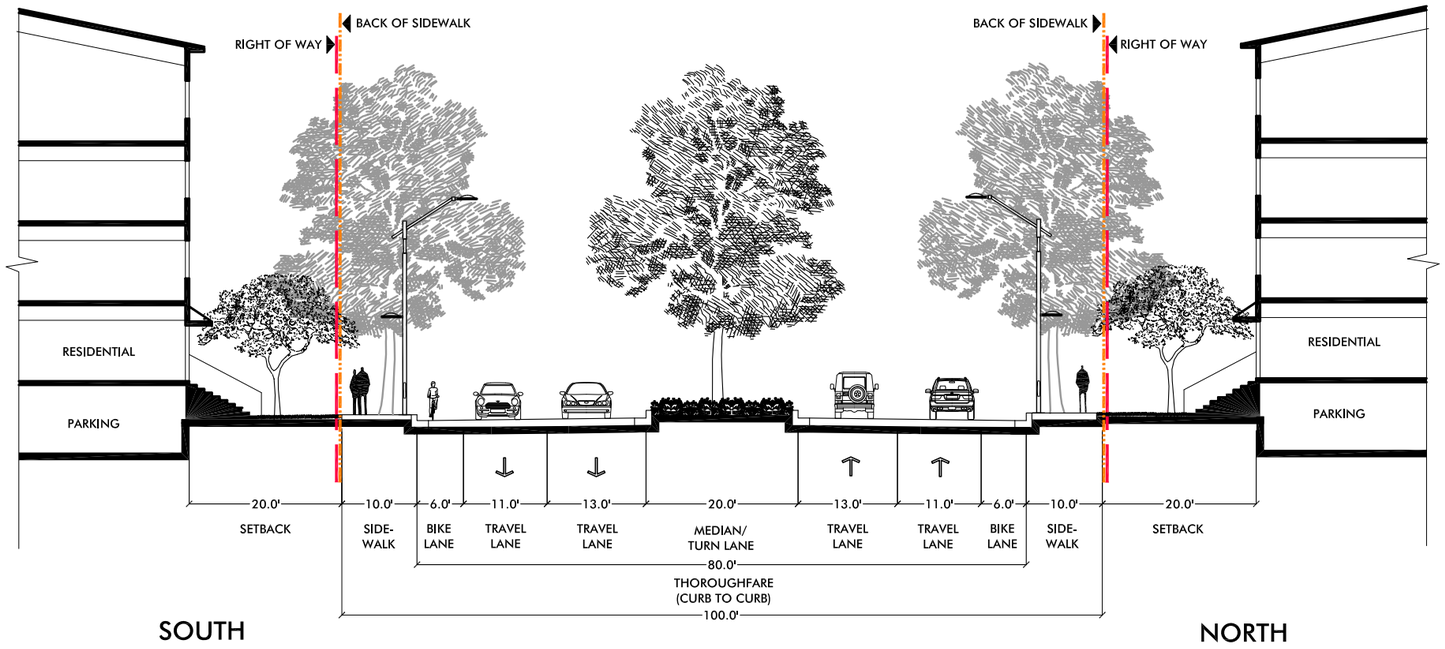
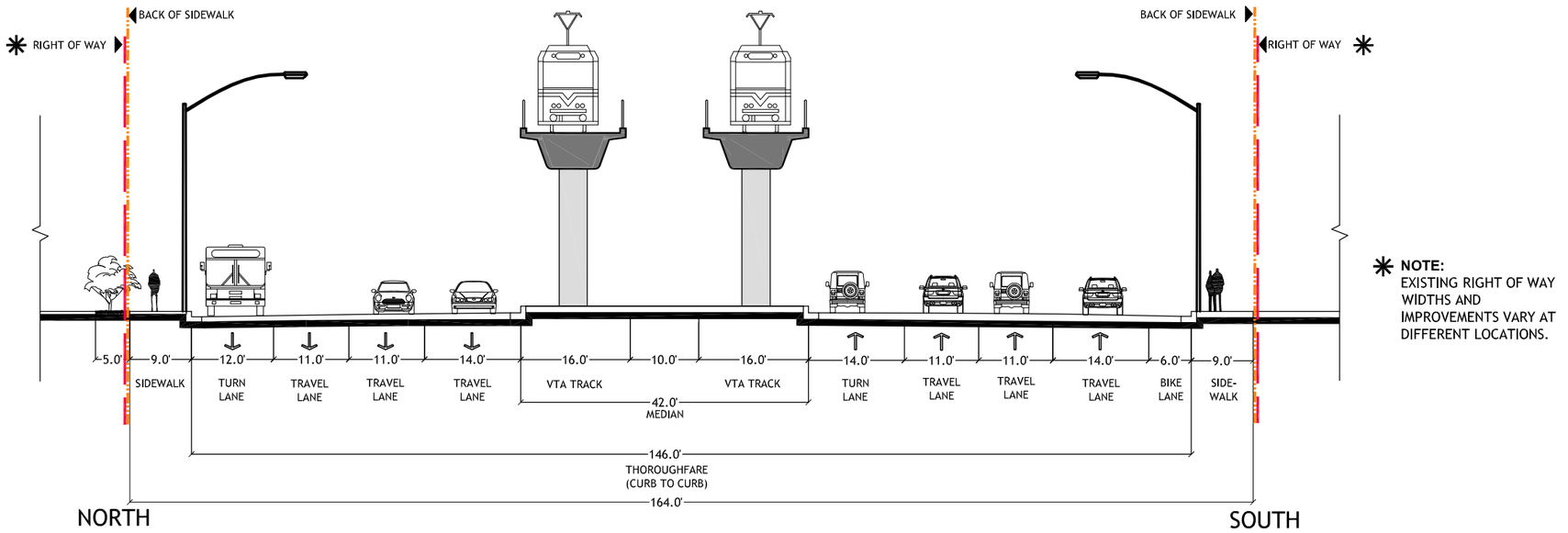


Figure 5-10: Milpitas Boulevard Extension

0' 5' 10' 20'

EXISTING CONDITION



NOTE:
EXISTING RIGHT OF WAY WIDTHS AND IMPROVEMENTS VARY AT DIFFERENT LOCATIONS.

PROPOSED CONDITION

- ADD STAGGERED ROW OF OPEN-HABIT DECIDUOUS TREES
- ADD ORNAMENTAL TREES
- ADD AVENUE AND PEDESTRIAN-SCALE STREET LIGHTS
- RESTRIPE LANES TO INSTALL 5' BIKE LANE
- ADD BENCHES
- ADD TRASH RECEPTACLES
- ADD ORNAMENTAL STREET TREES TO MEDIAN
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN
- ADD STAGGERED ROW OF OPEN-HABIT DECIDUOUS TREES
- ADD ORNAMENTAL TREES TO PRIVATE FRONTAGE
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- ADD BENCHES
- ADD TRASH RECEPTACLES

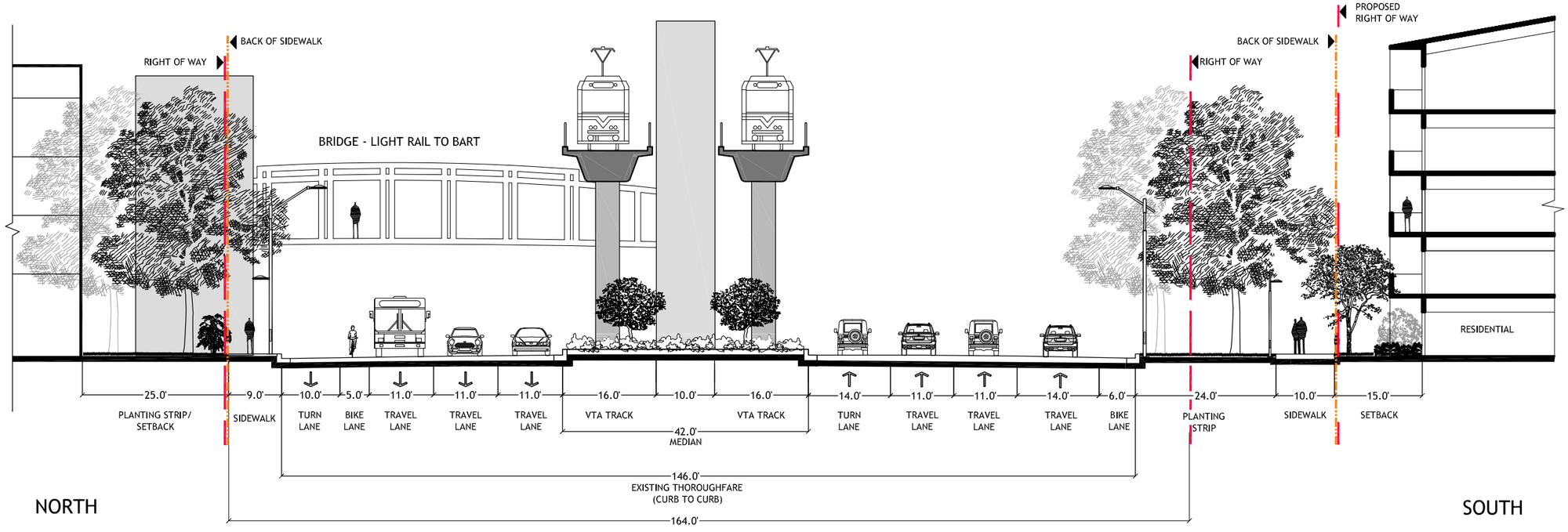
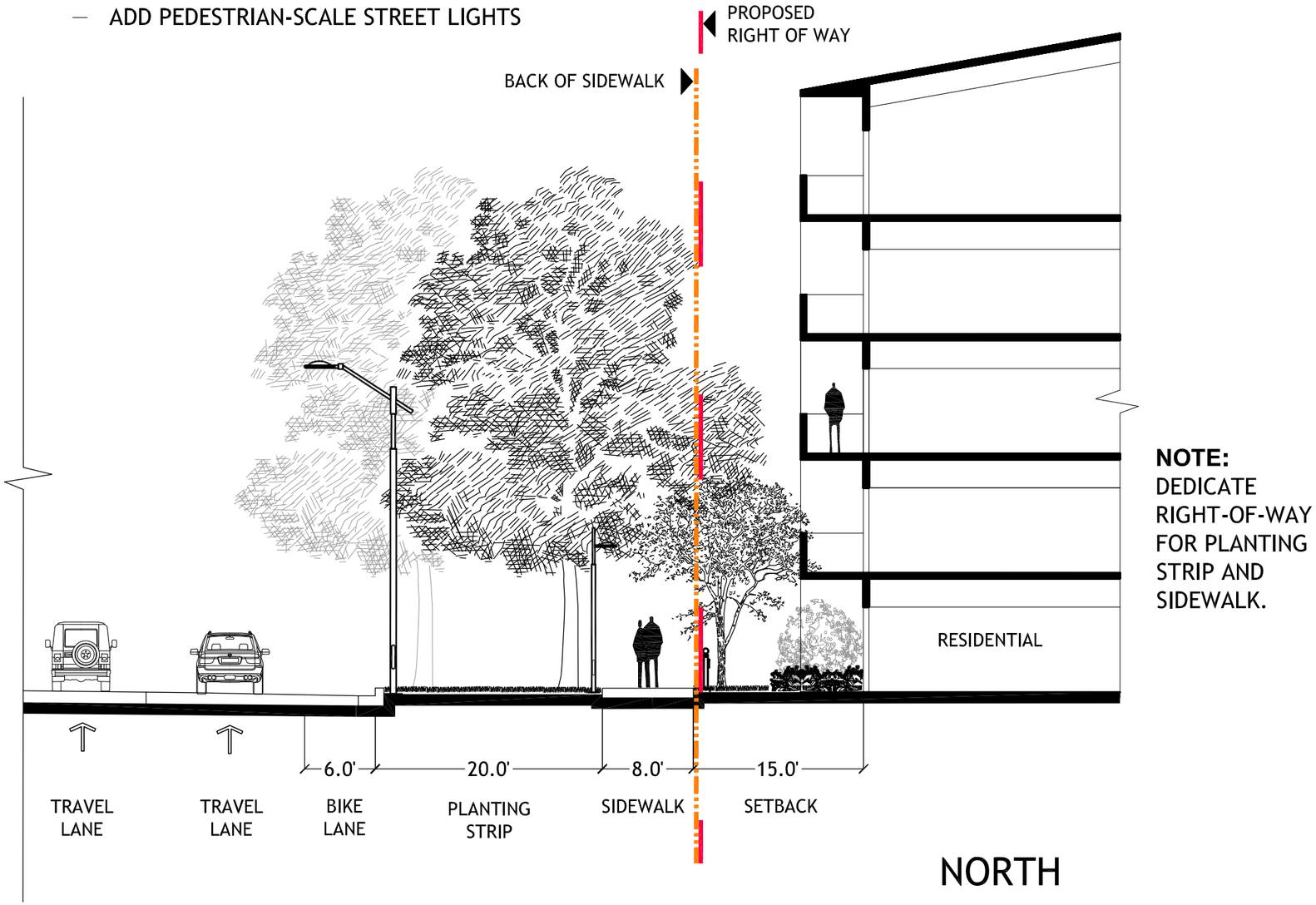


Figure 5-11: Capitol Avenue at Milpitas Boulevard

0' 5' 10' 20'

PROPOSED CONDITION

- ADD STAGGERED ROW OF OPEN-HABIT DECIDUOUS TREES
- ADD ORNAMENTAL TREES TO PRIVATE FRONTAGE
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS

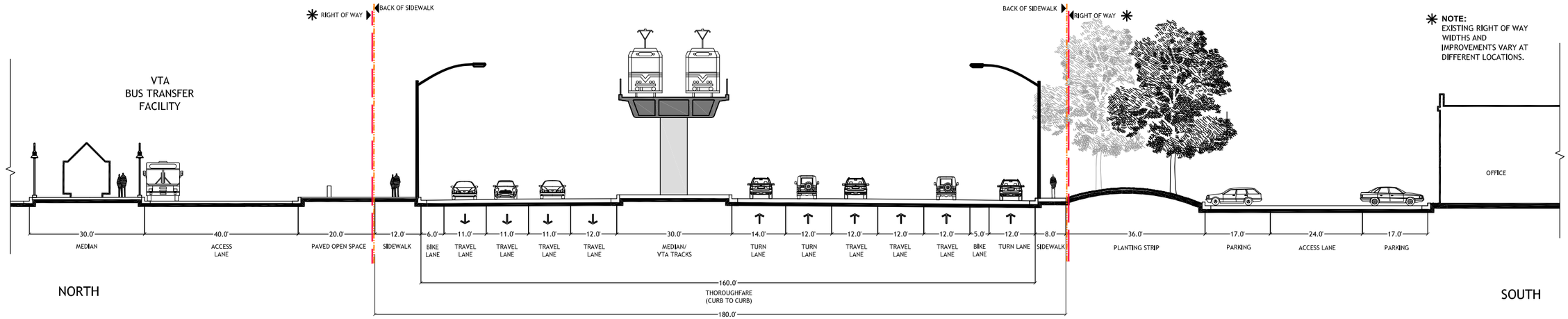


NOTE:
DEDICATE RIGHT-OF-WAY FOR PLANTING STRIP AND SIDEWALK.

Figure 5-12: Trade Zone Boulevard

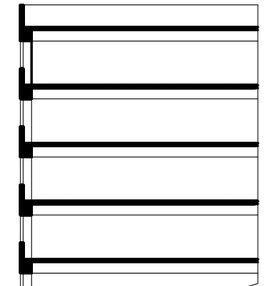
0' 5' 10' 20'

EXISTING CONDITION



PROPOSED CONDITION

- ADD AVENUE AND PEDESTRIAN-SCALE STREET LIGHTS
- ADD OPEN-HABIT DECIDUOUS TREES
- ADD BENCHES
- ADD TRASH RECEPTACLES
- ADD ORNAMENTAL STREET TREES TO MEDIAN
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN
- ADD AVENUE AND PEDESTRIAN-SCALE STREET LIGHTS
- MAINTAIN PLANTER STRIP AND TREES
- NEW PUBLIC FRONTAGE CONDITIONS TO SERVE ADJACENT DEVELOPMENT MAY INCLUDE:
  - ACCESS LANE
  - ON STREET PARKING
  - ENHANCED SIDEWALK AND PEDESTRIAN REALM
- BUILDING MAY BE LOCATED CLOSE TO PLANTER STRIP. MUST ADD MINIMUM 10' SIDEWALK BETWEEN PLANTER STRIP AND BUILDING.



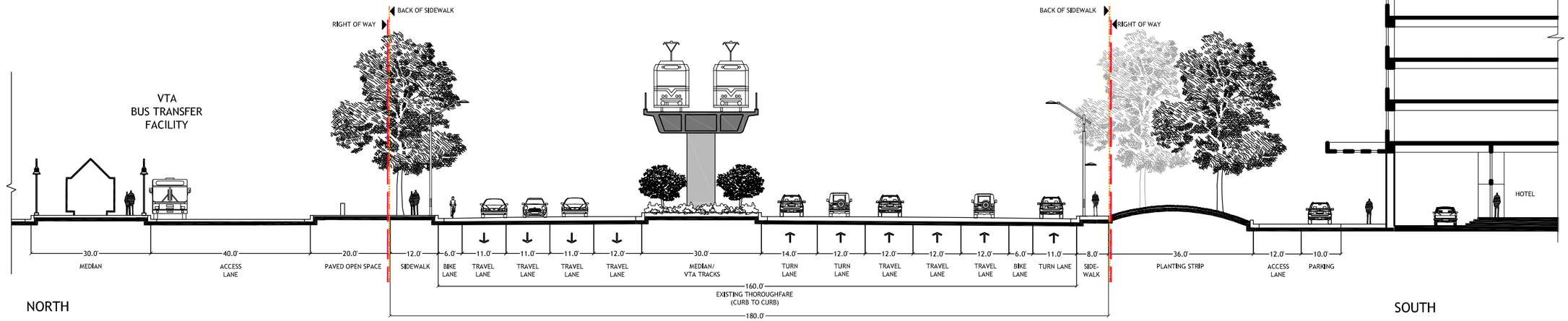
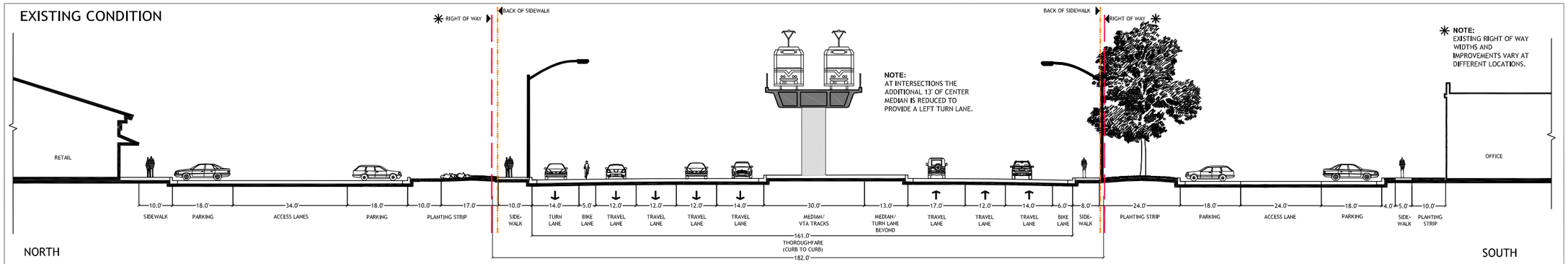


Figure 5-13: Great Mall Parkway North of McCandless

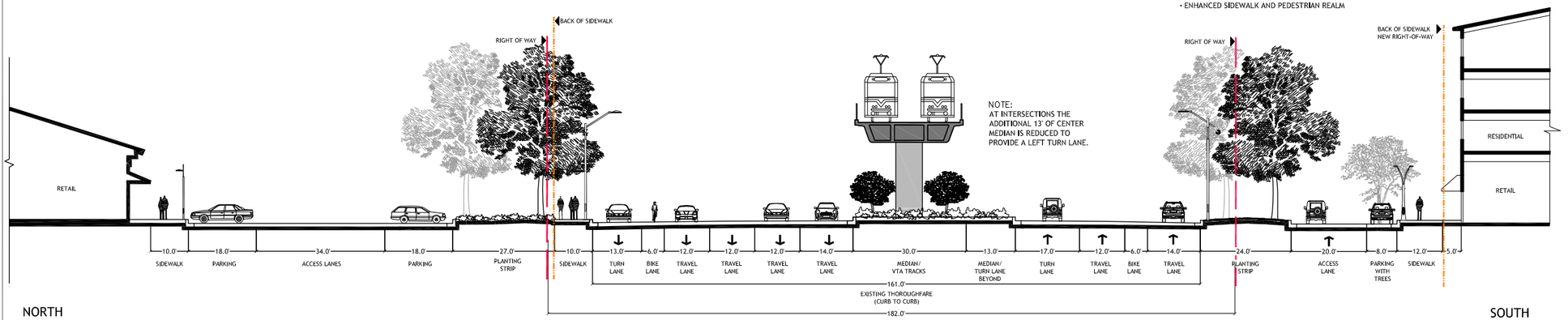
0' 5' 10' 20'

EXISTING CONDITION



PROPOSED CONDITION
Option A

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD AVENUE AND PEDESTRIAN-SCALE STREET LIGHTS
- MAINTAIN EXISTING GROUND COVER
- ADD BENCHES
- ADD TRASH RECEPTACLES
- ADD ORNAMENTAL STREET TREES TO MEDIAN
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN
- MAINTAIN EXISTING OPEN-HABIT DECIDUOUS TREES
- ADD OPEN-HABIT DECIDUOUS TREES
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- FRONTAGE CONDITIONS TO SERVE ADJACENT RETAIL DEVELOPMENT INCLUDE:
  - ACCESS LANE
  - ON-STREET PARALLEL PARKING
  - DECIDUOUS TREES LOCATED IN PARKING LANE
  - ENHANCED SIDEWALK AND PEDESTRIAN REALM



PROPOSED CONDITION
Option B

- ADD OPEN-HABIT DECIDUOUS TREES
- ADD AVENUE AND PEDESTRIAN-SCALE STREET LIGHTS
- MAINTAIN EXISTING GROUND COVER
- ADD BENCHES
- ADD TRASH RECEPTACLES
- ADD ORNAMENTAL STREET TREES TO MEDIAN
- ADD LOW-LYING ORNAMENTAL PLANTING TO MEDIAN
- MAINTAIN EXISTING OPEN-HABIT DECIDUOUS TREES
- ADD OPEN-HABIT DECIDUOUS TREES
- ADD AVENUE-SCALE STREET LIGHTS
- FRONTAGE CONDITIONS TO SERVE ADJACENT RETAIL DEVELOPMENT INCLUDE:
  - PEDESTRIAN-SCALE STREET LIGHTS
  - ENHANCHED PUBLIC SIDEWALK AND PEDESTRIAN REALM
  - LOW FENCE OR WALL AT BACK OF SIDEWALK

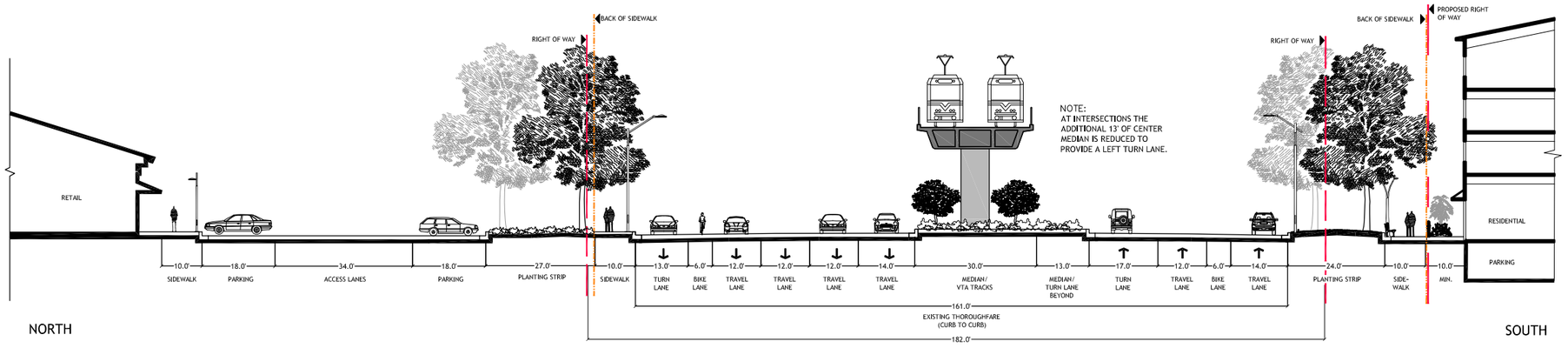


Figure 5-14: Great Mall Parkway - McCandless to Centrepoint

0' 5' 10' 20'

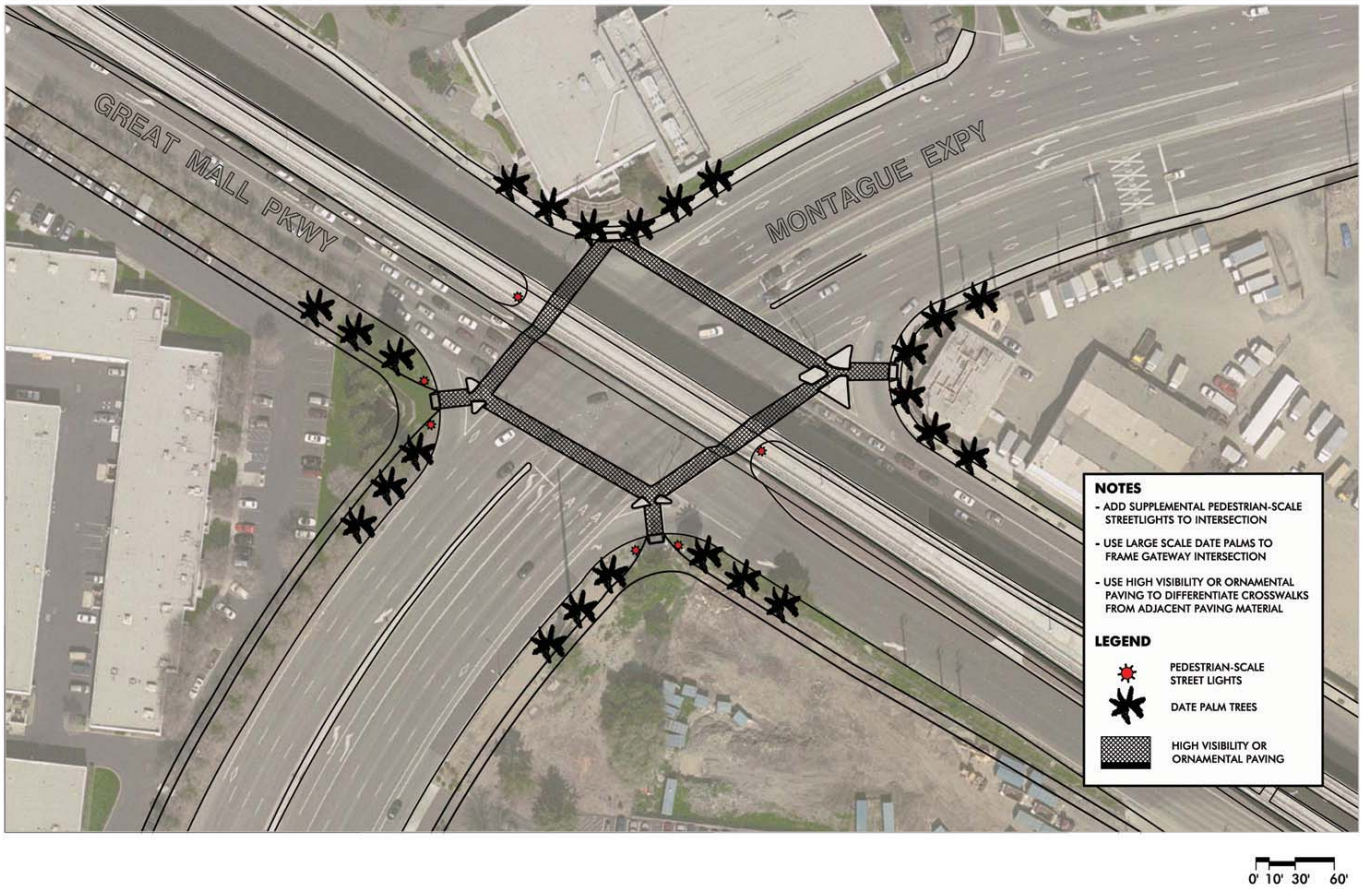


Figure 5-14a
Great Mall Parkway at Montague Expressway

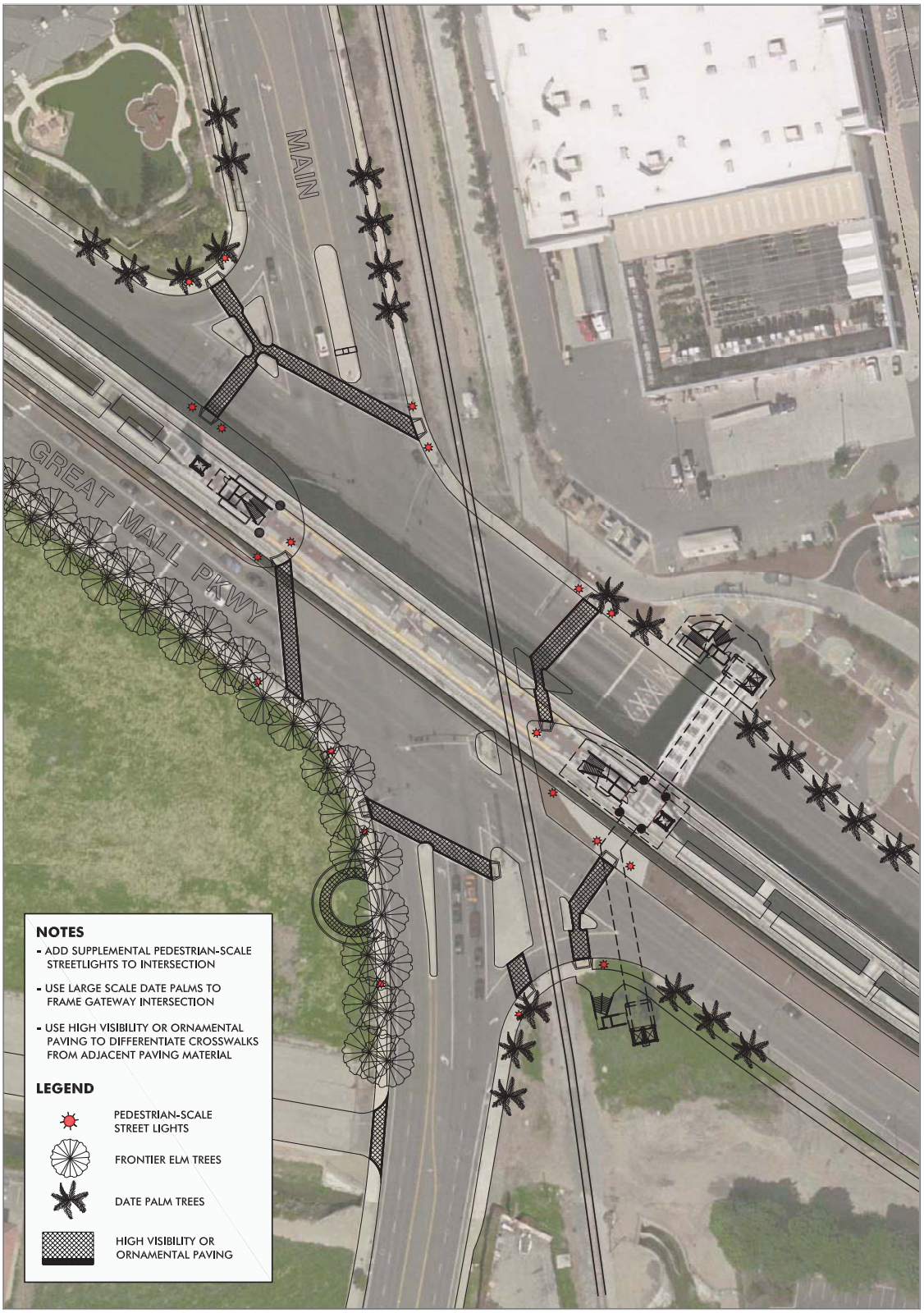
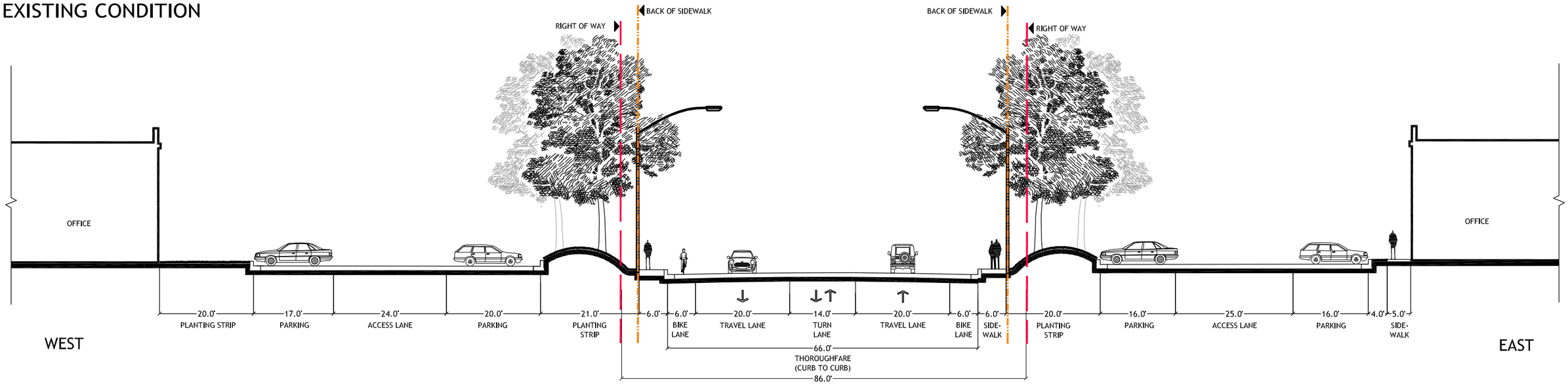
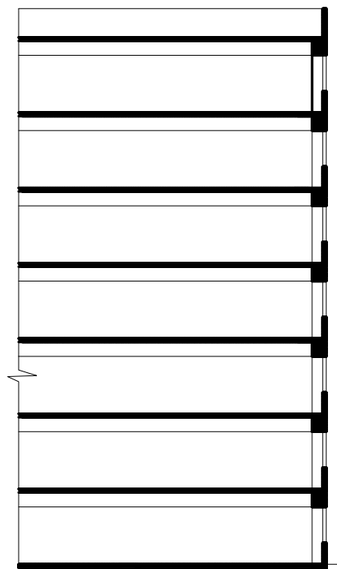


Figure 5-14b
Great Mall Parkway at South Main

EXISTING CONDITION



PROPOSED CONDITION



- MAINTAIN EXISTING TREES
- ADD AVENUE-SCALE STREET LIGHTS
- PRIVATE FRONTAGE TO SERVE ADJACENT DEVELOPMENT
- BUILDING MAY ALSO BE LOCATED CLOSE TO PLANTER STRIP; MUST ADD MIN. 10' SIDEWALK BETWEEN PLANTING STRIP AND BUILDING
- ADD MEDIAN WITH OPEN-HABIT DECIDUOUS TREES

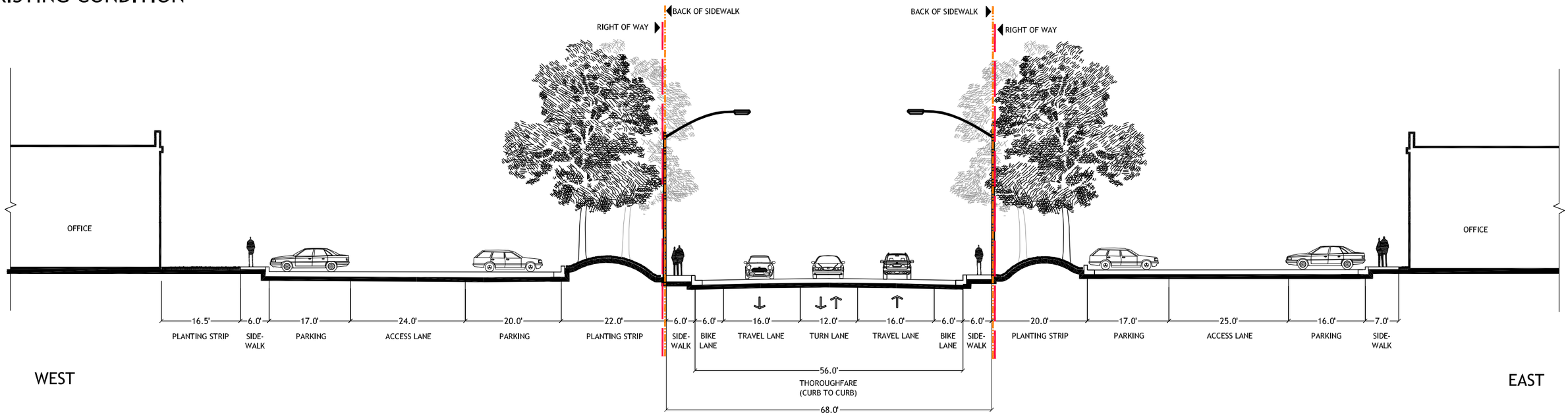
NOTE:
THE LENGTH OF THE MEDIANS WILL NEED TO BE LIMITED TO ACCOMMODATE LEFT TURN MOVEMENTS AND EMERGENCY VEHICLE ACCESS.

- MAINTAIN EXISTING TREES
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN SEATING AREAS
- ENHANCED PEDESTRIAN REALM TO SERVE ADJACENT RETAIL ENVIRONMENT INCLUDES:
  - WIDE SIDEWALK TO ACCOMMODATE OUTDOOR DINING
  - SEATING AREA
  - ORNAMENTAL PLANTING
  - TRASH RECEPTACLES

Figure 5-15: McCandless Drive in Pedestrian Retail Area

0' 5' 10' 20'

EXISTING CONDITION



PROPOSED CONDITION

- MAINTAIN EXISTING TREES
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- LOW WALL OR FENCE AT BACK OF SIDEWALK
- ADD BENCHES
- ADD TRASH RECEPTACLES
- ADD MEDIAN WITH ORNAMENTAL TREES

NOTE:
THE LENGTH OF THE MEDIANS WILL NEED TO BE LIMITED TO ACCOMMODATE LEFT TURN MOVEMENTS AND EMERGENCY VEHICLE ACCESS.

- MAINTAIN EXISTING TREES
- ADD AVENUE-SCALE STREET LIGHTS
- ADD PEDESTRIAN-SCALE STREET LIGHTS
- LOW WALL OR FENCE AT BACK OF SIDEWALK
- ADD BENCHES
- ADD TRASH RECEPTACLES

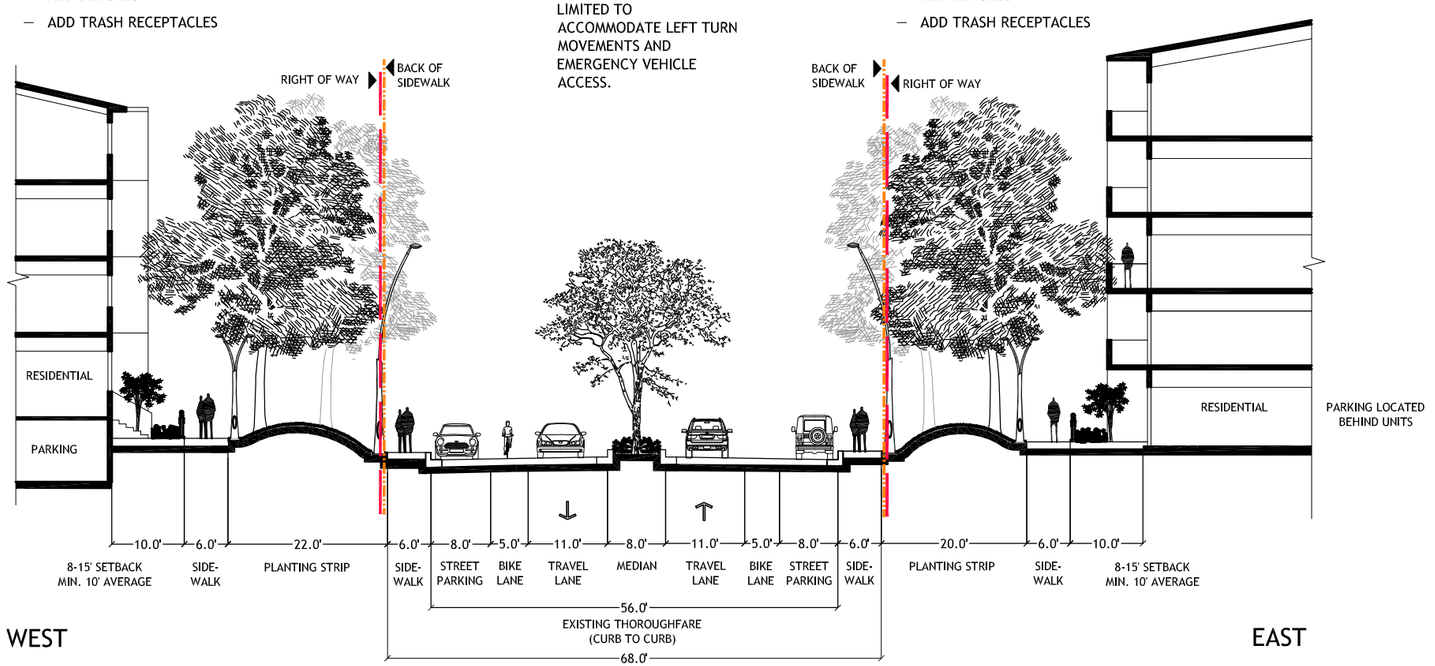
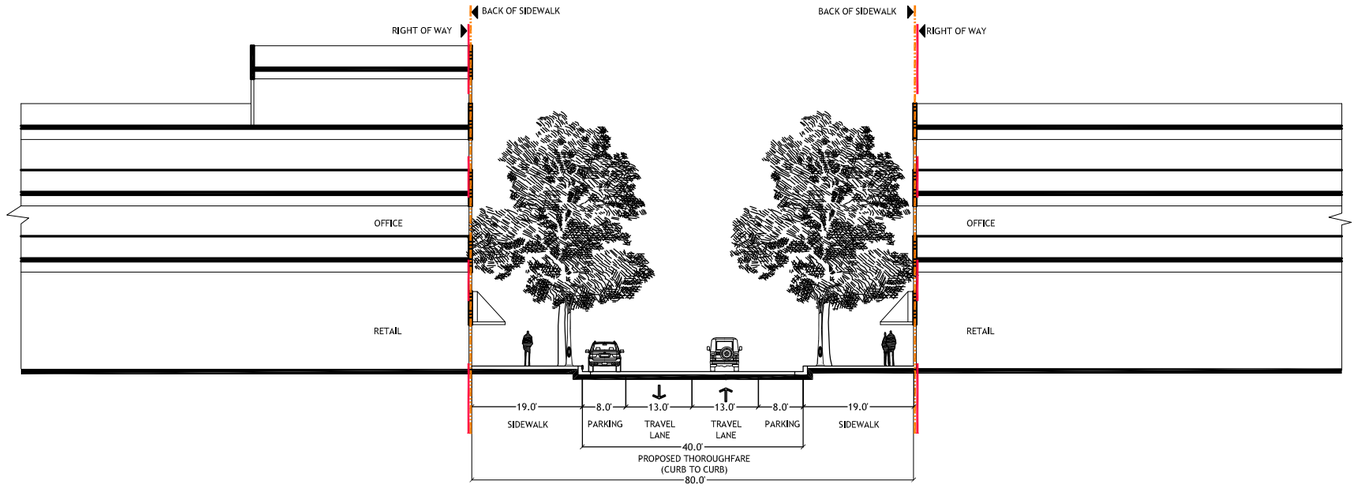


Figure 5-16: McCandless Drive in Residential Area

0' 5' 10' 20'

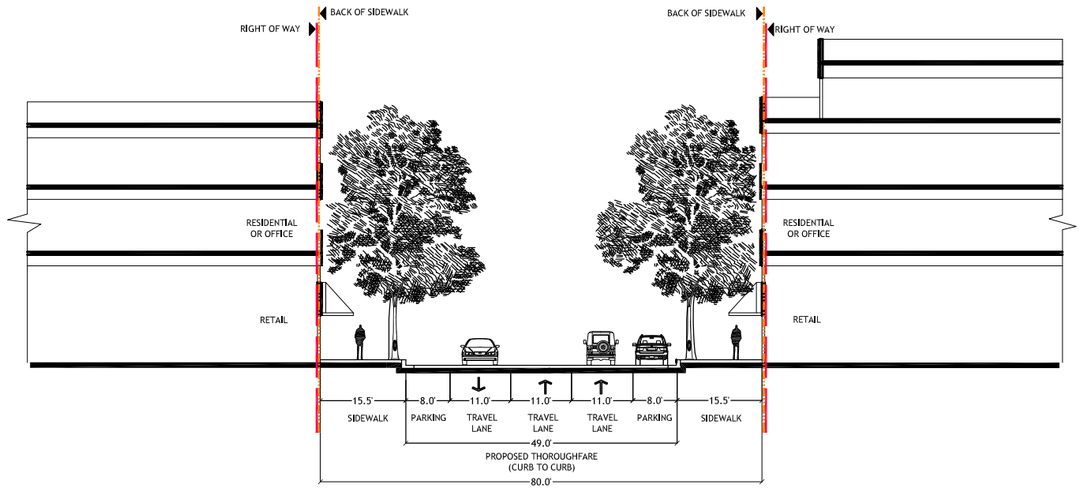
PROPOSED CONDITION
Option A



ALL SIDEWALKS TO INCLUDE:

- SHADE TREES
- PEDESTRIAN-SCALE STREET LIGHTS
- BENCHES
- TRASH RECEPTACLES
- BIKE RACKS
- FLOWER POTS OR ORNAMENTAL PLANTINGS

PROPOSED CONDITION
Option B



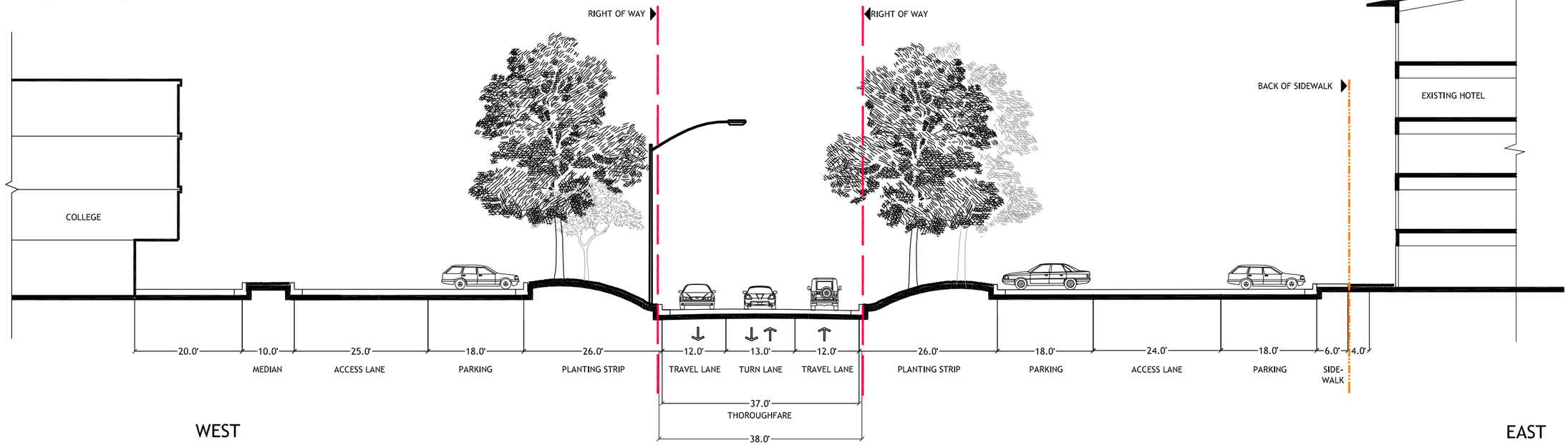
ALL SIDEWALKS TO INCLUDE:

- SHADE TREES
- PEDESTRIAN-SCALE STREET LIGHTS
- BENCHES
- TRASH RECEPTACLES
- BIKE RACKS
- FLOWER POTS OR ORNAMENTAL PLANTINGS

Figure 5-17: McCandless/Centrepoint - Pedestrian Retail Streets

0' 5' 10' 20'

EXISTING CONDITION



PROPOSED CONDITION

- ADD SIDEWALKS AND PLANTING STRIPS THROUGH USE OF LOW ORNAMENTAL WALL TO RETAIN BERMS AND CREATE PEDESTRIAN REALM
- ADD OPEN-HABIT DECIDUOUS TREES TO PLANTING STRIP
- ADD PEDESTRIAN-SCALE STREET LIGHTS

- ADD SIDEWALKS AND PLANTING STRIPS THROUGH USE OF LOW ORNAMENTAL WALL TO RETAIN BERMS AND CREATE PEDESTRIAN REALM
- ADD OPEN-HABIT DECIDUOUS TREES TO PLANTING STRIP
- ADD PEDESTRIAN-SCALE STREET LIGHTS

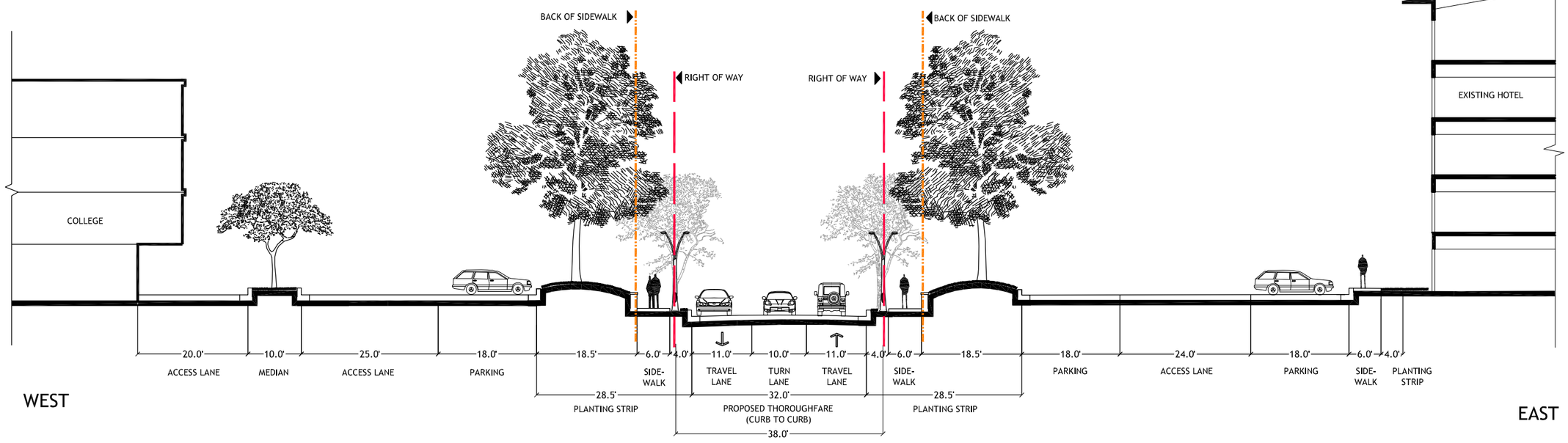
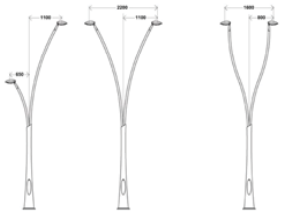


Figure 5-18: Falcon Drive

0' 5' 10' 20'

Thylia
(Schreder)



Citea+Nun'Alvares
(Schreder)

Citea Luminaire is available in threes sizes: Mini, Midi and Maxi.

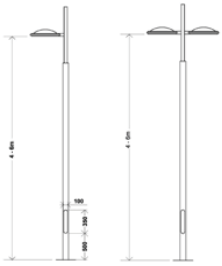


Figure 5-19
Street Lights

Thylia
(Schreder)

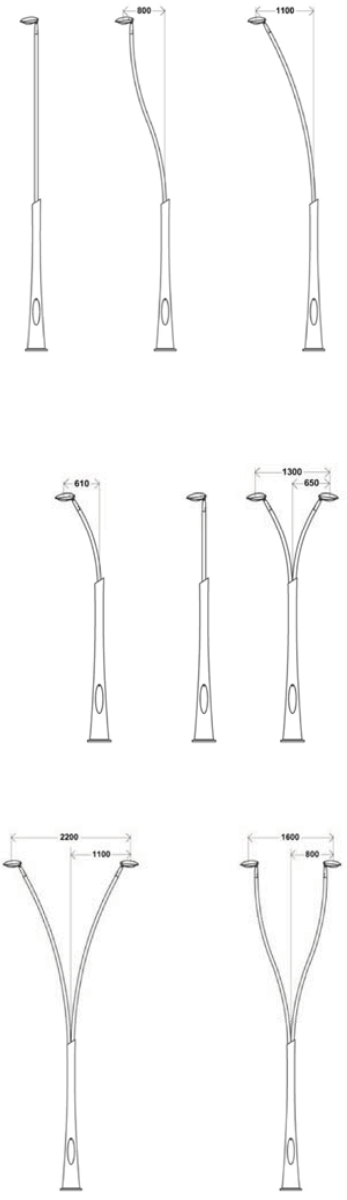


Figure 5-19a
Street Lights

Citea+Nun'Alvares (Schreder)

Citea Luminaire is available in threes sizes: Mini, Midi and Maxi.

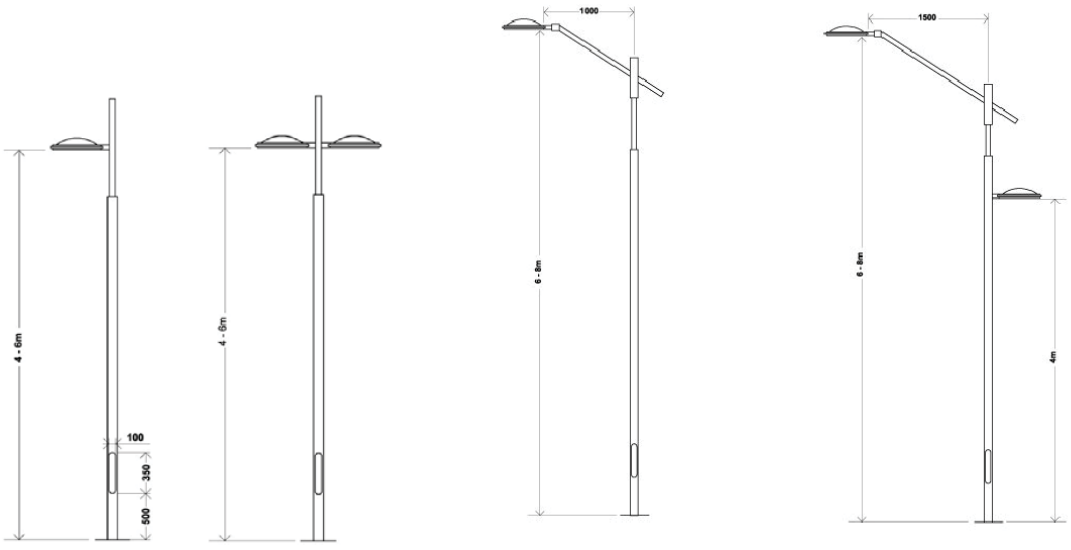


Figure 5-19b
Street Lights

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OPEN HABIT DECIDUOUS TREES

Used in Figures:

5-2 5-6 5-11 5-15
5-3 5-8 5-12 5-16
5-4 5-9 5-13 5-17
5-5 5-10 5-14 5-18

Crape Myrtle
(Lagerstroemia indica)

London Plane
(Platanus x acerifolia)

PALM TREES

Used in Figures:

5-2 14a
5-3 14b
5-4
5-5

Canary Island Date Palm
(Phoenix canariensis)

California Fan Palm
(Washingtonia filifera)

Figure 5-20
Street Trees

5.2 ZONING REGULATIONS

ZONING DISTRICTS AND DEVELOPMENT STANDARDS

The Milpitas Transit Area Plan is implemented through policies in this Specific Plan, amendments to the Milpitas Zoning Code and development standards listed in this Specific Plan. Tables 5-1 and 5-2 outline the specific development standards for each zoning district. A map of the zoning districts within the Transit Area Specific Plan is shown in Figure 5-21 and is implemented through changes in the City of Milpitas Zoning Map. The Building heights strategy is schematically shown in Figure 5-22. Building setback requirements are indicated in Figure 5-23 A-G. Following the tables and figures is additional material that elaborates on the key development standards. Design guidelines for development within the Plan area are included as an Appendix.

Land Uses: Permitted, conditionally permitted and prohibited uses for zoning districts are included within applicable sections of the Milpitas Zoning Code by district.

Development standards not listed: When standards are not listed within the specific plan, development will be regulated by applicable sections of the Milpitas Zoning Code.

PROJECT REVIEW PROCESS

All projects proposed within the Transit Area Specific Plan are subject to a Site and Architectural Review, (S-Zone Review), in accordance with Chapter 42 of the City's Zoning Ordinance. In addition to the usual S-Zone process of reviewing projects for conformance to the City's General Plan and Zoning Ordinance, projects shall have to demonstrate compliance with the Specific Plan – including the Development Standards and Design Guidelines. No S-Zone approval shall be issued by the City without the decision-making body making the following findings:

> "The proposed project conforms to the intent and the specific requirements of the Transit Area Specific Plan, including the Development Standards and Design Guidelines."

Exceptions to the standards may be approved by the Planning Commission upon review of a use permit, in accordance with the requirements of Chapter 57 of the Zoning Code. This process may not be used to vary from the density requirements, allowable uses, or public and private park land requirements contained within the standards or the Zoning Code. In addition to the required finding under Chapter 57, the Planning Commission must be able to make the following two additional findings:

"The deviation from the Transit Area Specific Plan Standard meets the design intent identified within the Specific Plan and does not detract from the overall architectural, landscaping and site planning integrity of the proposed development."

"The deviation from the Transit Area Specific Plan Standard allows for a public benefit not otherwise obtainable through the strict application of the Zoning Standard."

The City is consciously choosing to apply the use permit process rather than the variance process when allowing exceptions to the Design Standards in order to allow for the maximum flexibility in meeting the intent of the Specific Plan.

GROUND FLOOR DESIGN

The design of the ground floor is of utmost importance in the Transit Area, in order to provide an attractive, comfortable, and safe environment for pedestrians. Good design establishes an attractive image and character for the area that makes it desirable for businesses and residents. A number of standards are established to ensure that goals for pedestrian orientation are achieved. Buildings must face the street, and primary building entrances must be oriented towards the street. On major arterials, primary front door access may need to be located off the arterial on other streets. However the facades facing major streets shall not have blank walls, service entrances, or other features that make the façade look like the back side of a building.

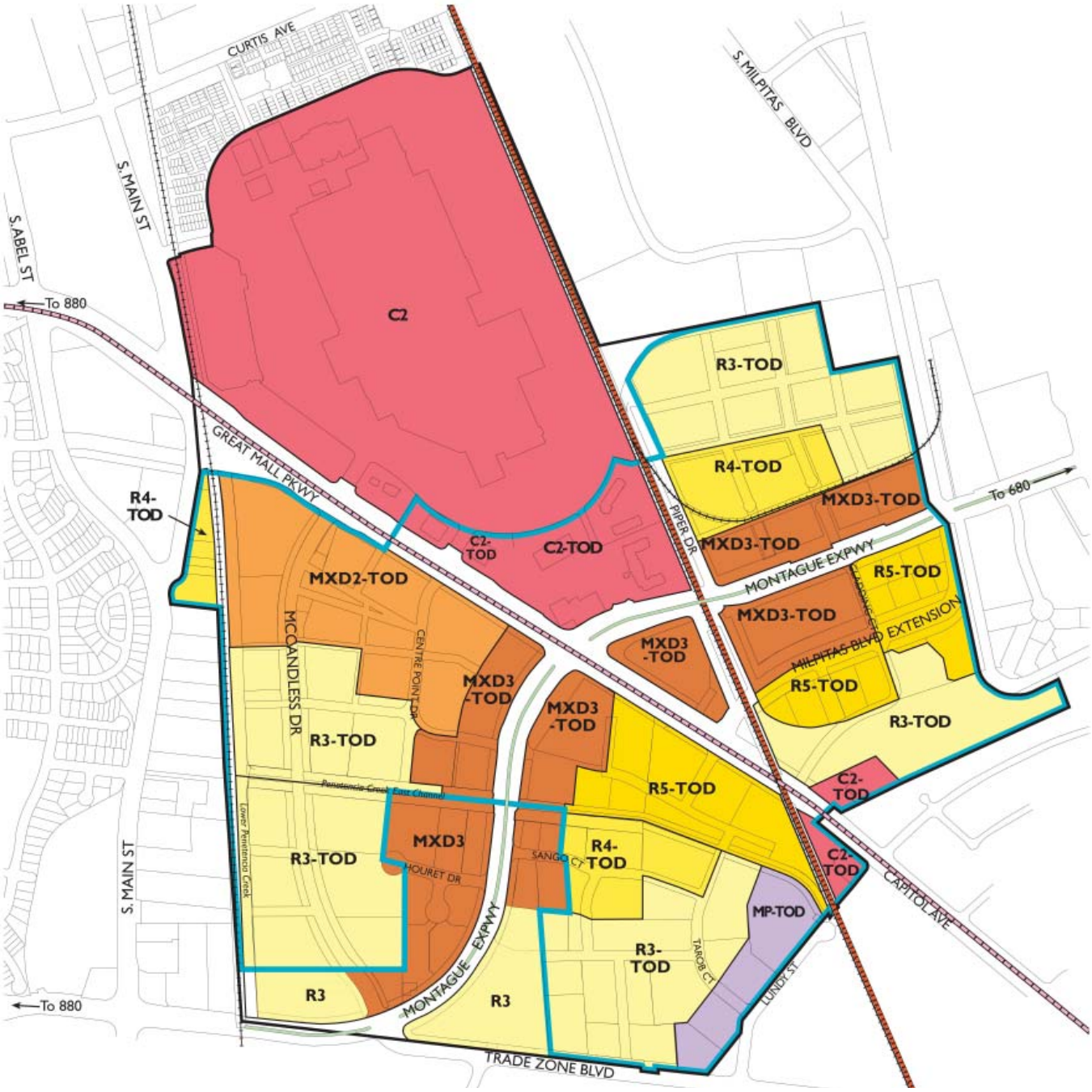
Special standards are established for the design of buildings with ground floor commercial space. Minimum floor to ceiling heights ensure that the space will serve the needs of retail and restaurant uses that may locate in the space at some point during the lifetime of the building. The ground floor must be lined with windows; a minimum of 60 percent of the area between 3 ft and 8 ft above the sidewalk shall be windows. Blank walls are limited to no more than 30 percent of the linear frontage and a maximum of 25 feet in length. A building entrance must be located at least every 100 feet. The best quality materials must be used along the ground floor so that the pedestrian realm is attractive, and so that the walls can withstand the constant pedestrian and loading traffic. Wall planes at the ground floor must have recesses and projections of 6-18 inches, again to create an attractive and interesting pedestrian realm.

Most importantly, floor elevations of buildings need to be at the sidewalk level. Where that is not feasible due to storm drainage and flooding requirements, a maximum two foot grade differential is established, which must be achieved through a gradual and well-designed combination of steps and ramps.

Quality ground floor design (Pasadena, CA)

Best quality material must be used at the ground floor: tile, store, brick, concrete, etc. (San Jose, CA)

Wall planes must have recesses and projections 6-18 inches (Oakland, CA)

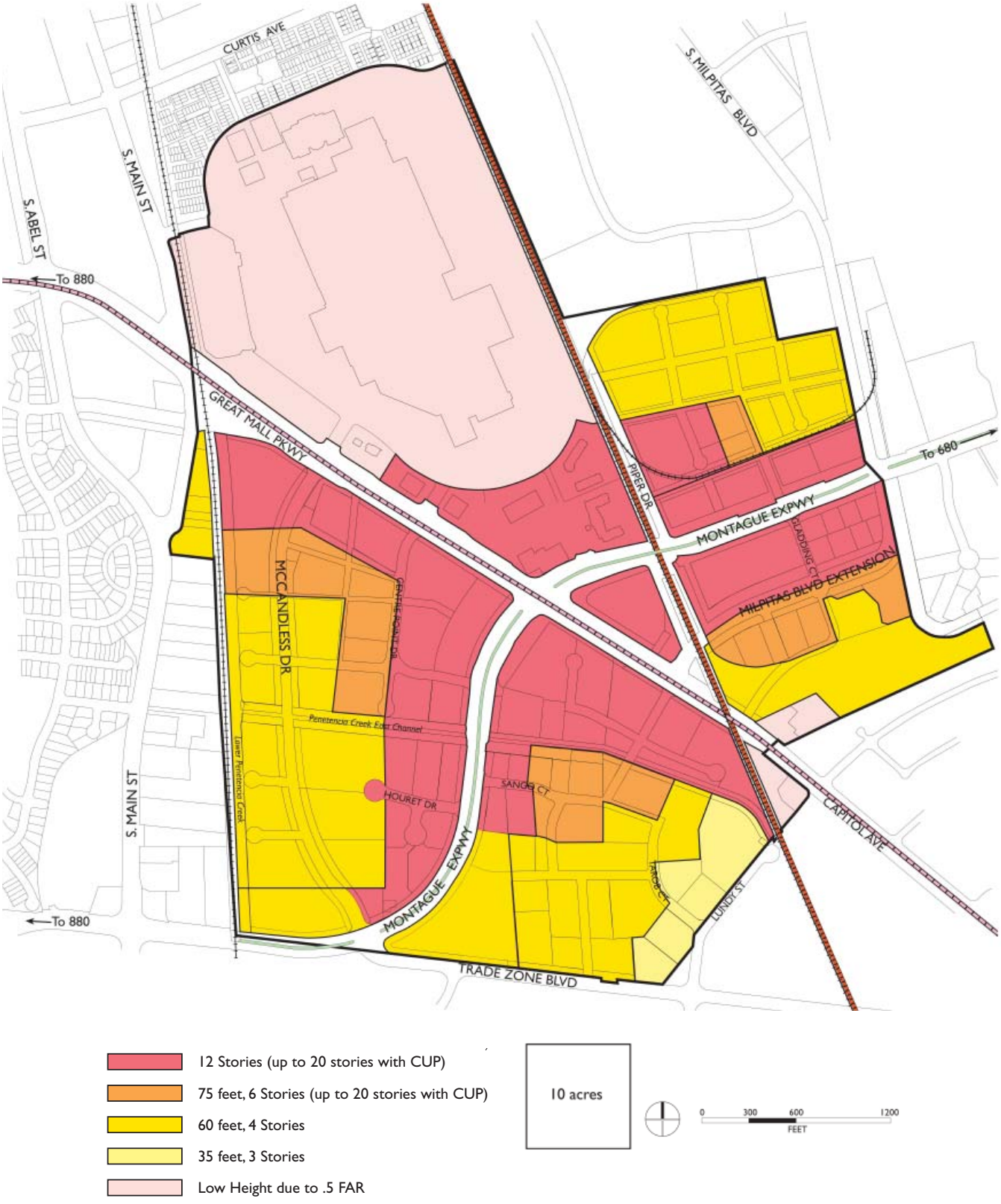


	C2	General Commercial
	MXD 2	Mixed Use - High Density with Retail
	MXD 3	Mixed Use - Boulevard
	R5	Urban Residential
	R4	Multiple Family - Very High Density
	R3	Multiple Family - High Density
	MP	Industrial Park
	TOD	Transit Oriented Development Overlay

10 acres

0 300 600 1200
FEET

Figure 5- 21
Zoning Districts



Note: Standards in Table 5-1 establish height regulations
This diagram depicts desired building height.

Figure 5- 22
Building Height Strategy

TABLE 5-1: DEVELOPMENT STANDARDS - Residential and Mixed Use Zones					
Land Use Category	Boulevard Very High Density Mixed Use	Residential - Retail High Density Mixed Use	Very High Density Transit Oriented Residential	High Density Transit Oriented Residential	High Density Residential
Proposed Zoning District	***MXD3 and MXD3 -TOD***	***MXD2 - TOD***	***R4-TOD and R5-TOD***	***R3-TOD***	***R3***
Special Land Use Requirements					
Required Commercial	None	200 square feet of retail, restaurant, or pedestrian-oriented commercial required per unit, using the minimum density.			
Depth for Ground Floor Commercial Space	75' Typical; 60' Minimum; 1-2 small tenant spaces with 25' depth permitted.				
Density + Block Size[1,2,& 3]					
Density	Maximum FAR: 2.5 with CUP. MXD3 41-60 du/gross acre MXD3-TOD 41-75 du/gross acre Max. FAR: 1.88	31-50 du/gross acre (minimum number of du may be reduced for existing parcels less than 20,000 s.f. with approval). Max. FAR: 1.88	R4-TOD 41-60 du/gross acre R5-TOD 41-75 du/gross acre	21-40 du/gross acre	12-20 du/ gross acre
Transit-Oriented Density Bonus	MXD3-TOD Up tp 25% additional density increase with Use Permit.	Up to 25% additional density increase with Use Permit.	R5-TOD Up to 25% additional density increase with Use Permit.	None	
Block Size	min 2.0 acres max 4 acres				
Block Dimension	Maximum 500 feet between publicly accessible paths of travel.				
Building Height (See Figure 5-22)					
Maximum Building Height	12 Stories on sites with frontage on Montague Expressway and Great Mall Parkway. Greater height up to 20 stories allowed with a Use Permit.	75 feet. 12 stories on sites with frontage on Great Mall Parkway. Greater heights up to 20 stories allowed with a Use Permit.	75 feet. 12 stories on sites with frontage on Capitol Avenue, Montague, Piper Drive, and Milpitas Boulevard Extension. Greater heights up to 20 stories allowed with a Use Permit.	75 feet.	60 feet. Up to 75 feet with a Conditional Use Permit.

TABLE 5-1: DEVELOPMENT STANDARDS - Residential and Mixed Use Zones					
Land Use Category	Boulevard Very High Density Mixed Use	Residential - Retail High Density Mixed Use	Very High Density Transit Oriented Residential	High Density Transit Oriented Residential	High Density Residential
Proposed Zoning District	***MXD3 and MXD3 -TOD***	***MXD2 - TOD***	***R4-TOD and R5-TOD***	***R3-TOD***	***R3***
Setbacks (See Street Section Drawings 5-2 through 5-20 and Setback Drawings, Figures 5-23A-G)					
Front setbacks on Major Streets ***(See Figures 5-2 through 5-20)***	45 ft. landscape setback from the curb on Montague Expressway. On Trade Zone Blvd. and Milpitas Blvd., new sidewalks and planter strips, plus 15-20 ft. setback from back of sidewalk.	Per Section Drawings for McCandless and Great Mall Parkway. 0-5 ft. on Pedestrian Retail Streets; Minimum 15 ft. sidewalks.	Per Section Drawings for Piper Dr., Montague Expressway, Milpitas Blvd., Capitol Ave.	Per Section Drawings for Trade Zone, Milpitas Boulevard, Piper Drive, Capitol Avenue	
Other Street Facing Yards	12-20 ft. from back of sidewalk	8-15 ft. from back of sidewalk	12-20 ft. from back of sidewalk	8-15 ft. from back of sidewalk	
Side yard minimum	10 ft., and Minimum 15 ft. when abutting residential use and 20 ft. for portions of buildings over 60 ft. or 4 stories tall.	0 ft.; however minimum 10 ft. when abutting residential use and for portions of buildings over 60 ft. or 4 stories tall.	15 ft., 20 ft. over three stories when abutting residential (See diagram.)	15 ft., 20 ft. over three stories when abutting residential (See diagram.)	
Rear yard minimum	15 ft., Minimum 20 ft. when abutting residential use, Minimum 30 ft. for portions of buildings over 60 ft. or 4 stories tall.	10 ft., and Minimum 15 ft. when abutting residential use and 20 ft. for portions of buildings over 60 ft. or 4 stories tall.	15 ft., 20 ft. over three stories when abutting residential (See diagram.)	15 ft., 20 ft. over three stories when abutting residential (See diagram.)	
Projections into Required Yards	Porches, stairs, balconies, bay windows, and awnings may project up to six feet into required setbacks.				
Setbacks Adjacent to Creeks and Drainage Channels	Minimum 25 feet from top of bank, or from a maintenance road if one exists (in addition to required rear or side yard setbacks). See Figure 5-23G.				
Special Conditions	Minimum 30 feet building setback adjacent to BART or rail lines for residential buildings, minimum 20 feet landscaped. Double row of trees required.				
Building Location and Placement					
Building Orientation and Entrances	Buildings must face the street; and primary building entrances must be oriented toward the street.				

TABLE 5-1: DEVELOPMENT STANDARDS - Residential and Mixed Use Zones					
Land Use Category	Boulevard Very High Density Mixed Use	Residential - Retail High Density Mixed Use	Very High Density Transit Oriented Residential	High Density Transit Oriented Residential	High Density Residential
Proposed Zoning District	***MXD3 and MXD3 -TOD***	***MXD2 - TOD***	***R4-TOD and R5-TOD***	***R3-TOD***	***R3***
Parking & Auto Access					
Off-street parking for commercial uses	See Table 5-3. Where no standard is listed for specific use, then a 20 percent reduction from City Zoning Code parking requirements is allowed.				
Parking for residential uses	See Table 5-3.				
Maximum Parking	See Table 5-3. Where no standard is listed for a specific use, then no more than 100 percent of Regular City Parking Requirements listed in the City Zoning Code for parking requirements shall apply.				
Bicycle Parking	Residential: One Space per 4 housing units, exempting those with private garages; on-street guest racks equivalent to 5 percent of parking requirement. For non-residential uses, 5 percent of the Parking Requirement. Provide showers and lockers in non-residential buildings over 50,000 sq. ft.		One Space per 4 housing units, exempting those with private garages; on-street guest racks equivalent to 5 percent of parking requirement. If any non-residential uses are provided on-site, then the bicycle parking requirement for non-residential uses shall apply.		
Parking Structure and Parking Lot Location	Parking must be located so that it is not visible from streets. At least 70 percent of the street facing perimeter shall be wrapped with habitable space. Exceptions may be allowed through the architectural review process if the design quality of the garage is equivalent to habitable space, and the ground level is either wrapped with habitable space or screened with landscaping.				
Parking Garages attached to individual units.	Garages may not occupy more than 50 percent of Ground Level Frontage Facing the Street.				
Parking Access and Curb Cuts	Maximum two curb cuts per lot per street frontage . Exceptions may be allowed through the architectural review process.				
Preferential Parking for Carpools-Non-Residential Uses	Required - Minimum 1 percent of Parking Spaces		N/A		
Tandem Parking	Tandem parking may be allowed pursuant to Section 53, Off-Street Parking Regulations of the City's Zoning Ordinance.				

TABLE 5-1: DEVELOPMENT STANDARDS - Residential and Mixed Use Zones					
Land Use Category	Boulevard Very High Density Mixed Use	Residential - Retail High Density Mixed Use	Very High Density Transit Oriented Residential	High Density Transit Oriented Residential	High Density Residential
Proposed Zoning District	***MXD3 and MXD3 -TOD***	***MXD2 - TOD***	***R4-TOD and R5-TOD***	***R3-TOD***	***R3***
Parks and Open Space					
Park Acreage Requirements (same as Midtown Specific Plan requirements)	3.5 acres of parkland per 1000 population. Up to 1.5 of each 3.5 park acres may be satisfied by the provision of private recreational areas. The remaining 2.0 acres per 1,000 requirement must be satisfied by either dedication of land to the City for public parks and open space or payment of an in-lieu fee.				
Additional Transit Area Plan Requirements	Provide parks and trails in locations and acreage amounts as shown in Transit Area Plan. In addition, 20 percent of landscape buffers count towards park requirements, if they include trails or wide sidewalks connected to the Citywide Trail System.				
Design of Buildings with Ground Floor Commercial Space					
Floor to Ceiling Height	Minimum 18 ft. for Retail; 15 ft. for office				
Ground Floor Windows	Minimum 60 percent of Ground Floor Wall Area, between 3' and 8' above sidewalk.				
Limits on Blank Walls	Maximum 30 percent of Linear Frontage per Street; Maximum 25 feet in length				
Building Entrances	Minimum one entrance per 100 feet of frontage; Building Entrances must face the street.				
Ground Floor Exterior Materials	Must be tile, stone, brick, glass and other durable quality materials.				
Wall Plane Articulation	Wall Plane Recesses minimum 6-18 inches.				
Ground Floor Elevations Relative to the Public Sidewalk	Floor elevations no more than two feet from sidewalk level.				

Notes for Tables 5-1 and 5-2:

1. Policy 3.8, allows contiguous developments to building at higher or lower residential densities, so long as their average density falls between the designated minimum and maximum and provided that legal instruments are executed for individual parcels.

2. An FAR of 2.5 may be permitted on individual sites (where noted in Table 5-1) with approval of a Use Permit by the Planning Commission. Special criteria would need to be met, including the following: (1) the proposed uses include a hotel or office uses that create substantial new jobs, and do not include residential uses; (2) the design of the project is of extremely high quality and is compatible with the scale of surrounding buildings; (3) there are no adverse traffic impacts beyond those studied in the Transit Area Plan EIR or the project will be required to mitigate such impacts individually; and (4) buildings do not shade public parks or plazas more than 30% between 10AM and 3PM as measured on March 15.

3. For commercial projects, FAR shall be useds as the measure of density. The density of residential projects shall be measured in units per gross acre. Ground floor retail, restaurant, and service uses do not count when calculating FAR.

   When office, residential, and retail are combined in a single project, density shall be measured using FAR.

TABLE 5-2: DEVELOPMENT STANDARDS - Commercial Zones			
Land Use Category	General Commercial	Transit-Oriented General Commercial	Industrial Park
Zoning District	***C-2***	***C-2 TOD***	***MP-TOD***
Density + Block Size[1,2,3]			
Density (Max)	0.5 FAR	1.0 FAR; and allow up to 2.5 FAR on individual sites with a use permit	0.5 FAR
Block Size		min 2.0 acres max 4 acres	
Block Dimension		Maximum 500 feet between publicly accessible paths of travel.	
Building Height (See Building Height Map, Figure 5-22)			
Maximum Building Height	No height limit	12 Stories on arterial streets, including Montague Expressway and Great Mall Parkway; up to 20 stories allowed with a Use Permit.	No height limit.
Setbacks (See Street Section Drawings and Setback Drawings)			
Front setbacks on Major Streets	Per Section Drawings for Great Mall Parkway and Montague Expressway	Per Section Drawings for Great Mall Parkway and Montague Expressway	Front Yard - 35 ft.
Other Street Facing Yards	Per base zoning district.	Per base zoning district.	Per base zoning district.
Side yard minimum	15 ft. if abutting residential district.	15 ft. if abutting residential district.	10 ft., 35 ft. for industrial buildings next to residential zone property line.
Rear yard minimum	15 ft. if abutting residential district.	15 ft. if abutting residential district.	20 ft., 35 ft. for industrial buildings next to residential zone property line.
Setbacks Adjacent to Creeks and Drainage Channels	Minimum 25 feet from top of bank, or from a maintenance road if one exists (in addition to required rear or side yard setbacks). See Figure 5-23G.		
Parking & Auto Access			
Off-street parking for commercial uses:	See Zoning Code.	20 percent reduction from C-2 parking requirements	20 percent reduction from MP parking requirements
Maximum Parking	Not applicable.	100 percent of Regular City Parking Requirements for C-2 district	100 percent of Regular City Parking Requirements for MD district

TABLE 5-2: DEVELOPMENT STANDARDS - Commercial Zones			
Land Use Category	General Commercial	Transit-Oriented General Commercial	Industrial Park
Zoning District	***C-2***	***C-2 TOD***	***MP-TOD***
Bicycle Parking		5 percent of non-residential Parking Requirement. Provide showers and lockers in non-residential buildings over 50,000 sq. ft. At least 30% of required bike parking must be long-term and at least 30% must be short-term in nature. Bike parking must be provided on the same site as the use it serves.	5 percent of Commercial Parking Requirement. Provide showers and lockers in commercial buildings over 50,000 sq. ft.
Parking Structure and Parking Lot Location		Parking must be located behind or to the side of buildings, and cannot occupy more than 70 percent of linear street frontage. Exceptions may be allowed through the architectural review process if the design quality of the garage is equivalent to habitable space, and the ground level is either wrapped with habitable space or screened with landscaping.	
Preferential Parking for Carpools	Minimum 1 percent of Parking Spaces		
Special Transit Area Plan Requirements			
Pedestrian Connections	Direct pedestrian connections required from public sidewalk to building entrances-special materials, protected from traffic circulation.		
Design of Buildings with Ground Floor Commercial			
Floor to Ceiling Height		Minimum 18 ft. for Retail; 15 ft. for office	
Ground Floor Windows		Minimum 60 percent of Ground Floor Wall Area, between 3' and 8' above sidewalk.	
Limits on Blank Walls		Maximum 30 percent of Linear Frontage per Street; Maximum 25 feet in length	
Building Entrances		Minimum one entrance per 100 feet of frontage; Building Entrances must face the street.	
Ground Floor Exterior Materials		Must be tile, stone, brick, glass and other durable quality materials.	
Wall Plane Articulation		Wall Plane Recesses minimum 6-18 inches.	
Ground Floor Elevations Relative to the Public Sidewalk		Floor elevations no more than two feet from sidewalk level.	

Garage wrapped with retail and office space (Boulder, CO)

Garage with ground floor retail (Denver, CO)

SETBACKS

Figures 5-23 A-G illustrate the setback requirements described in Tables 5-1 and 5-2.

PARKING

Parking Requirements

Off-street parking requirements are reduced by 20 percent from the standards in the Zoning Code. This standard applies to the entire Transit Area. This reduction is based on an analysis of the trip reduction that occurs in a mixed use transit area. Many journeys became walking trips rather than automobile trips because restaurants, stores, and entertainment are within walking distance of residences, offices and hotels. Trips will also be taken by transit using light rail, and BART once it is operational. Also, a small percentage of trips will be bike trips due to the availability of bike lanes throughout the area. Carpools also become easier to arrange with many people living in close proximity and headed to South Bay work destinations.

Maximum parking requirements are established in addition to minimums, equivalent to 100 percent of existing City parking requirements in base-zoning districts or specific uses, unless otherwise specified in Table 5-3. This is to ensure that the amount of parking provided is not so ample that it encourages people to drive who might otherwise be able to walk or take transit.

Table 5-3: Minimum Parking Requirements

Residential Uses	**Min. Required**	**Max Allowed**
Studio	0.8 covered	1.0 covered
1 Bedroom	1.2 covered	1.5 covered
2-3 Bedrooms	1.6 covered	2.0 covered
4+ Bedrooms	2.6 plus 1.0 per each additional bedroom (2 covered min.)	Depends on min. required
Guest Parking	Projects with Parking Structures 15 percent of required total Projects with Private Garages 20 percent of required total	
Commercial Uses		
Retail	0.8 uses per 250 s.f.	1.0 per 250 sq. ft.
Office	0.8 spaces per 303 s.f.	1.0 per 303 sq. ft.
All Other Uses	Refer to zoning code and reduce by 20 percent	
Preferential Parking for Carpools	1 percent of required total	

1. Fifteen percent (15%) guest parking is considered legal and conforming for projects entitled prior to March 17, 2009.

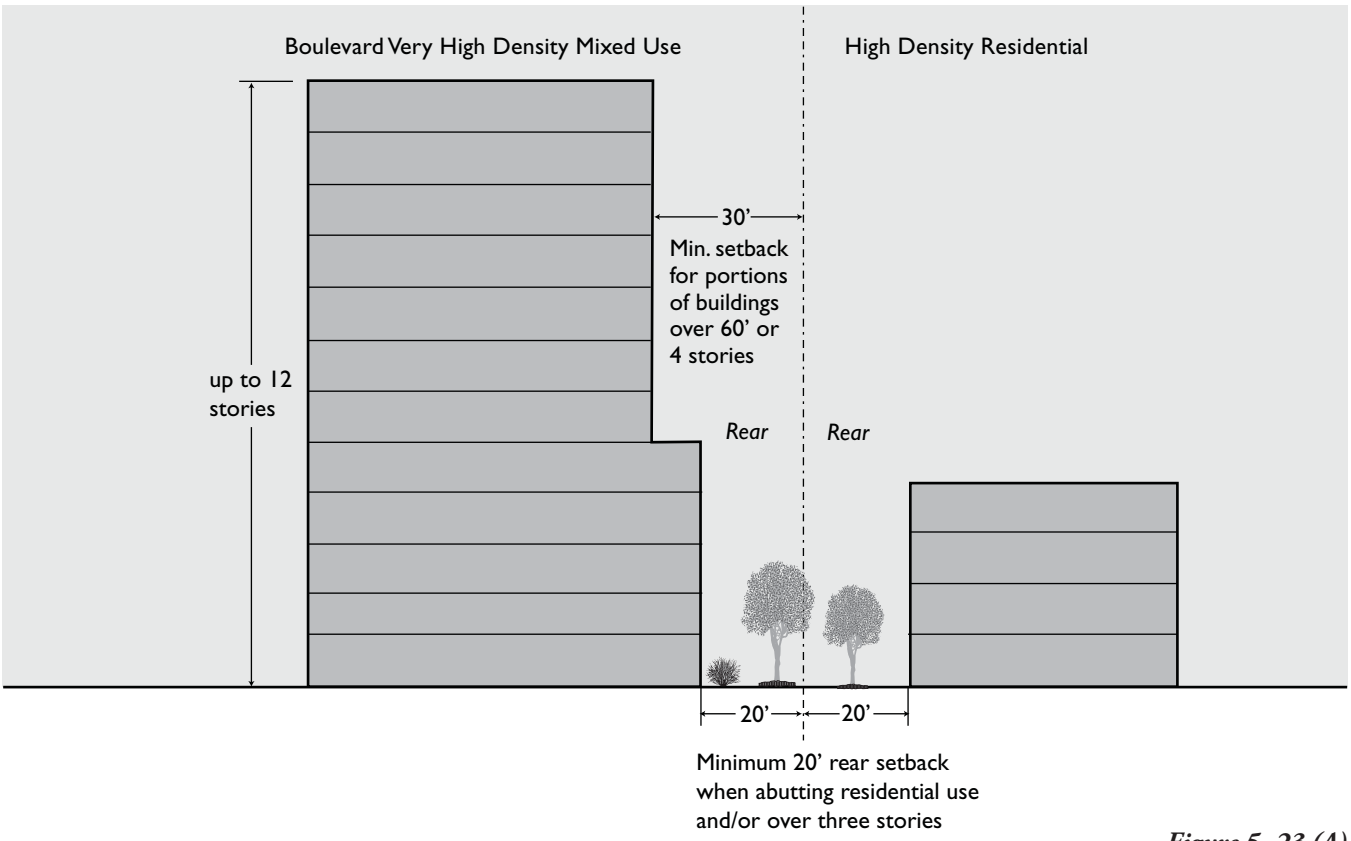


Figure 5- 23 (A)
Setbacks

Boulevard Very High Density Mixed Use
Rear Yard Seback

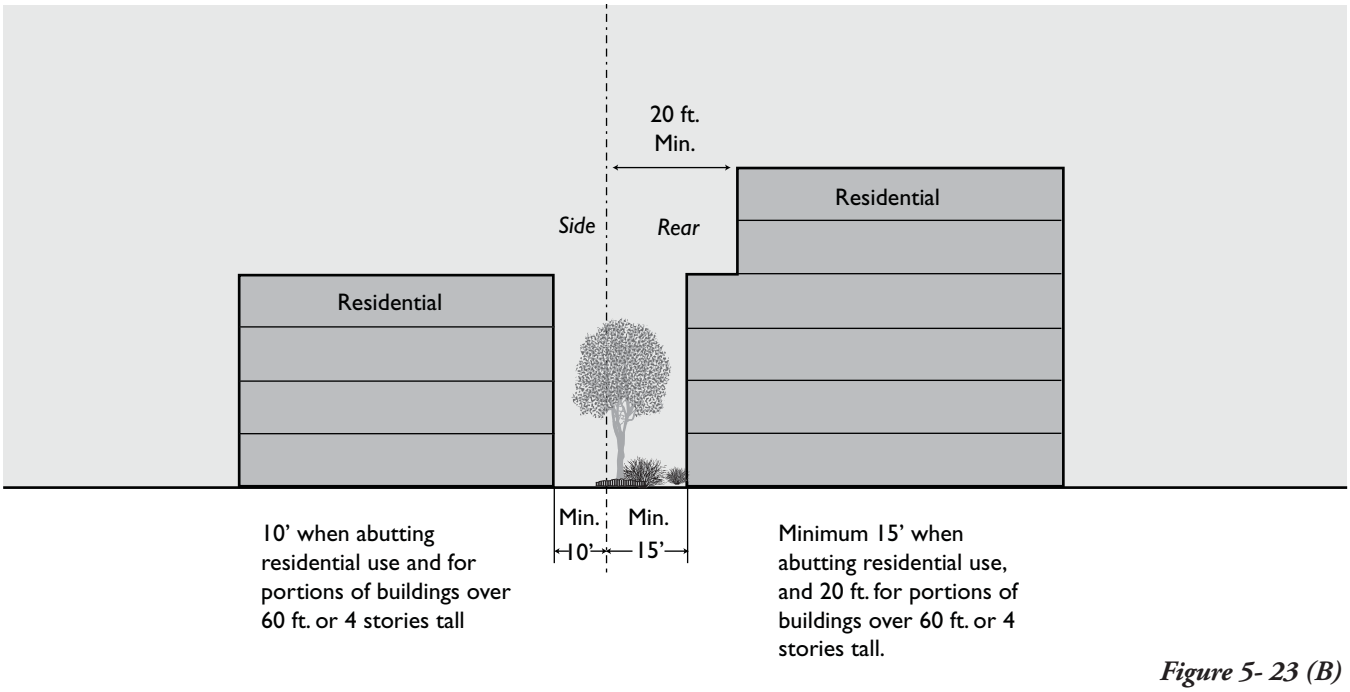
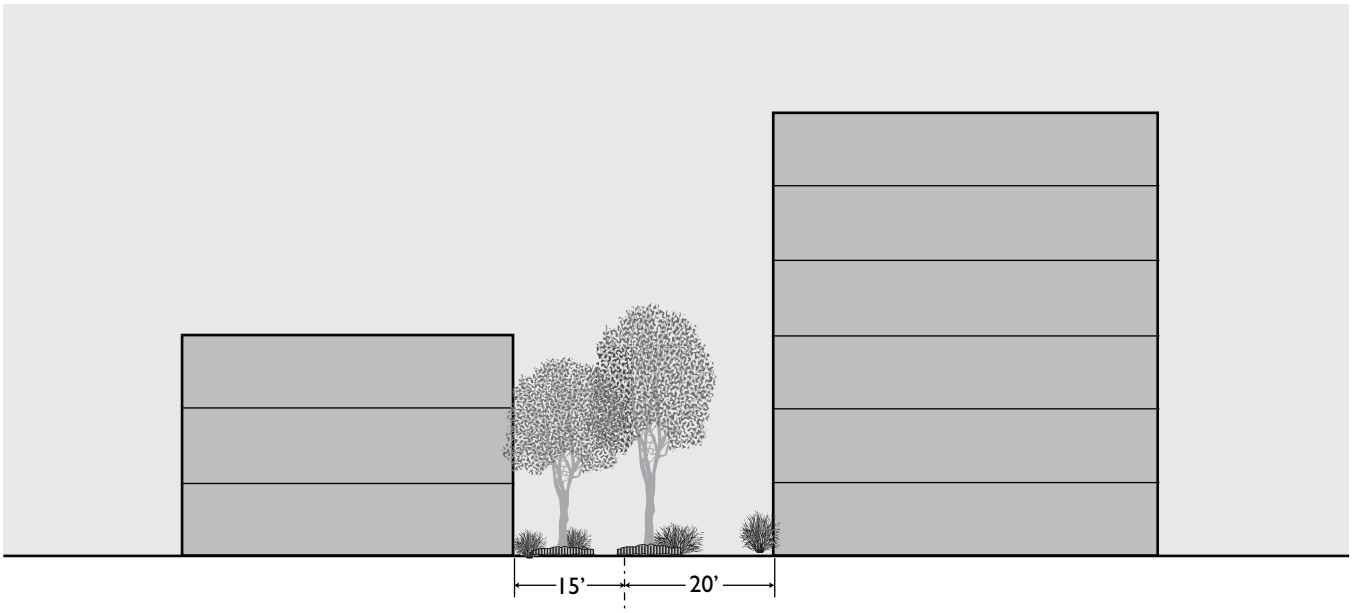


Figure 5- 23 (B)
Setbacks

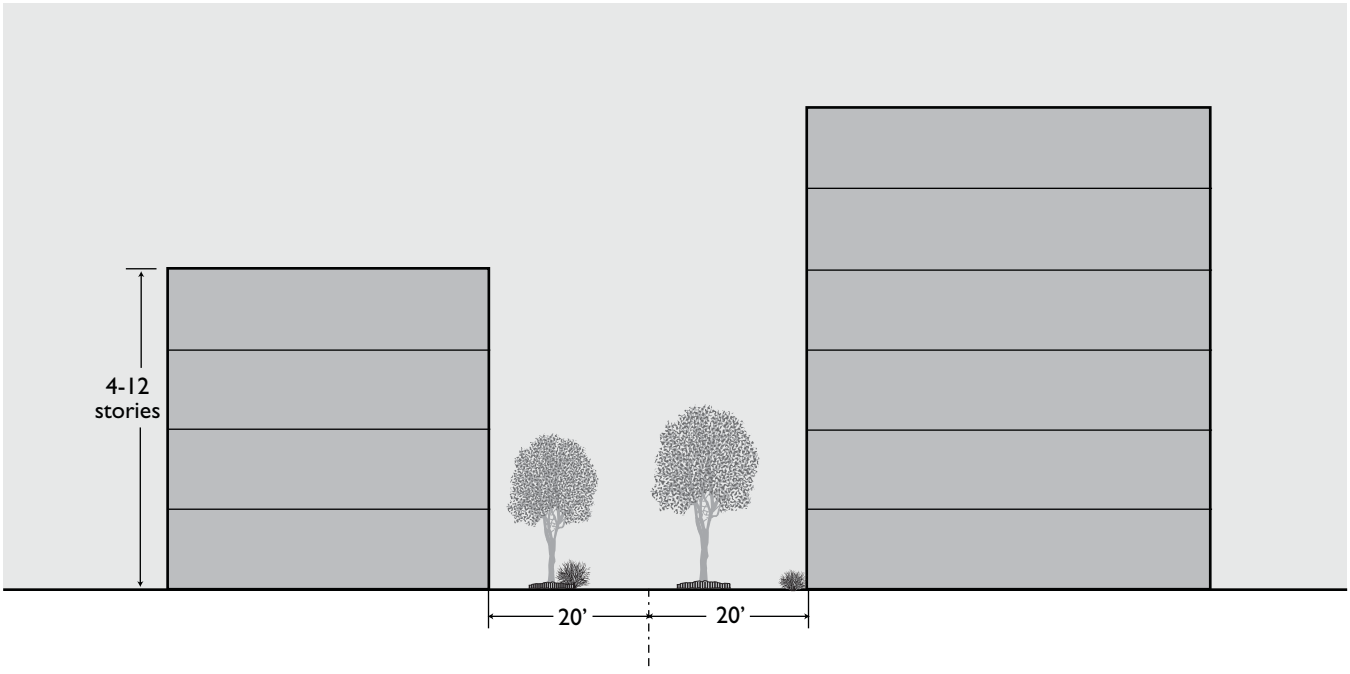
Residential-Retail High Density Mixed Use
Side and Rear Yard Setbacks



Rear and Side Setbacks:
Minimum 15 feet. 20 feet
when over 3 stories
and/or abutting residential.

Figure 5- 23 (C)
Setbacks

Very High Density Transit Oriented Residential Areas
Side and Rear Yard Setbacks



Rear and Side Setbacks:
Minimum 20’ when over
3 stories

Figure 5- 23 (D)
Setbacks

Very High Density Transit Oriented Residential Areas
Side and Rear Yard Setbacks

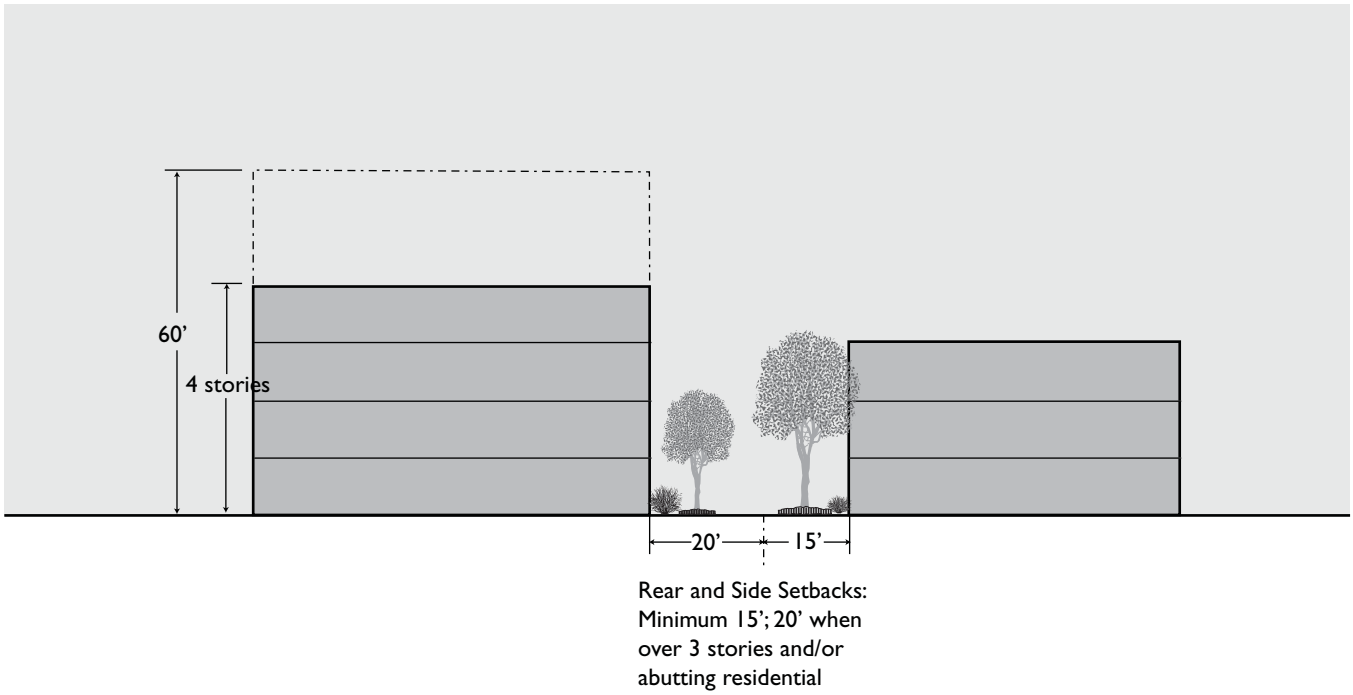


Figure 5- 23 (E)
Setbacks

High Density Transit Oriented Residential Areas
Side and Rear Yard Setbacks

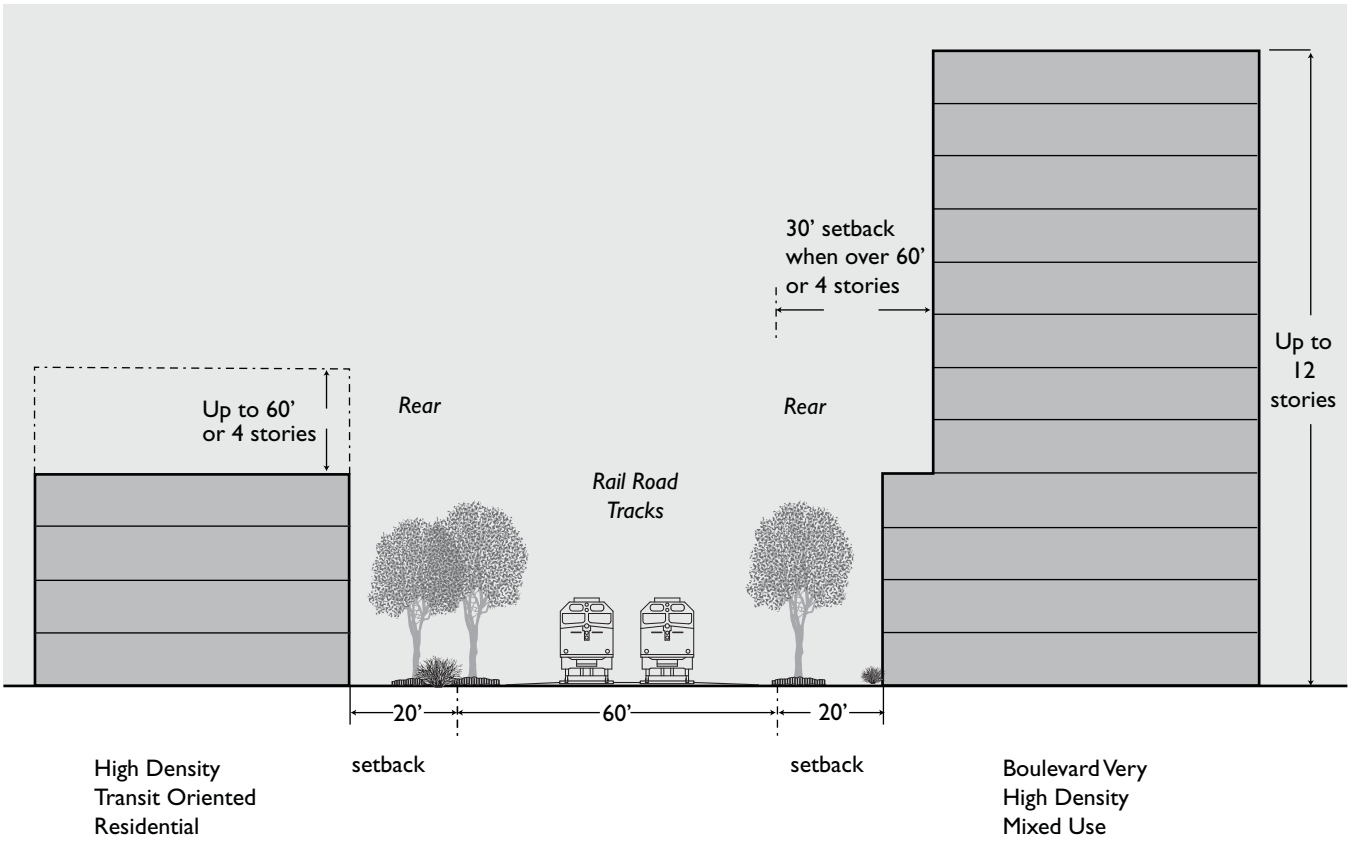


Figure 5- 23 (F)
Setbacks

Rear Setbacks Adjacent to BART Line or Railroad Tracks

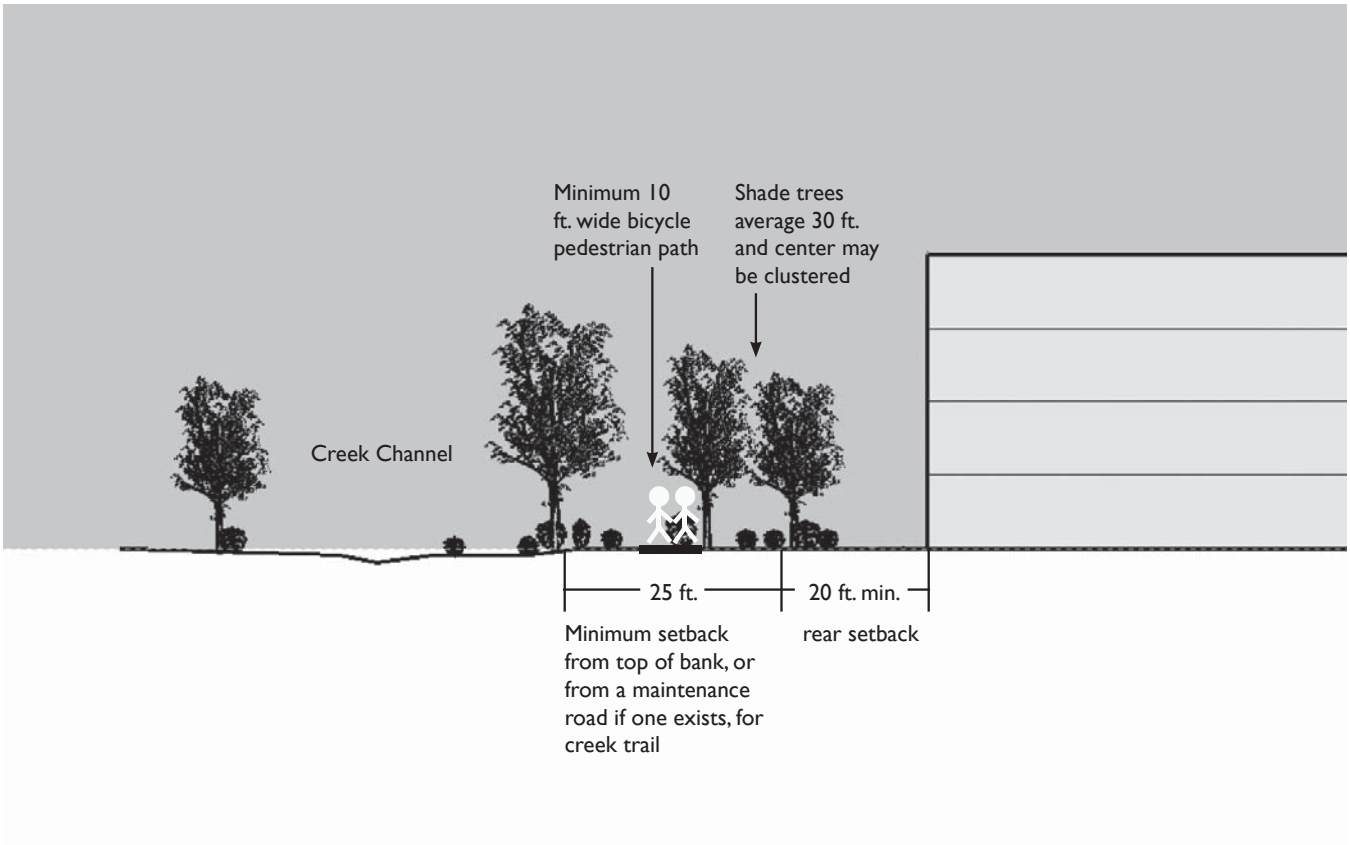


Figure 5- 23 (G)
Setbacks

Setbacks Adjacent to Creeks and Drainage Channels

Parking garage-ventilation openings designed similar to windows (Denver, CO)

Parking Location and Access

Parking location and access must be carefully planned so that parking structures do not detract from the pedestrian street character, and so that parking access does not interfere with pedestrian access and safety.

Development Standards

Parking shall be located underground or behind buildings to the maximum extent feasible.

1. Surface parking may not be located between the street and building entrances, except for pick-up an drop-off access in situations where that cannot be provided on the street.
2. At least 70 percent of the street facing perimeter of a parking lot or garage must be wrapped with habitable space. Limited exceptions may be allowed with design review; if the design quality of the parking garage is equivalent to habitable space and the ground level is either wrapped with habitable space or screened with landscaping.
3. Garage facades fronting streets would need to include punched open-

ings similar to window openings, cornice or other details at the top of the building; and any sloping floors must be concealed.

4. Parking may also be designed so that it is partially above ground along the street, provided that no more than five feet is above grade, and the above grade area is wrapped with continuous landscaping that screens the parking garage openings.
5. In order to promote continuous and safe pedestrian access, a maximum of two curb cuts are allowed per lot on each street frontage.
6. The width of parking garage entrances must be minimized (20-25 ft.) and the parking access point set back from the curb so that cars can pull up to the entry gate or ticket machine without blocking the sidewalk.
7. Parking garage entrances must be designed with quality materials surrounding the opening, so they have an attractive appearance that contributes to the pedestrian street environment.

Parking located partially underground and screened with landscaping (Mountain View, CA)

Quality design of garage entrances (Mountain View, CA)

Minimize width of garage entrances (Dublin, CA)

For segments of the garage not wrapped with habitable space,integrate landscaping and public art (Hayward, CA)

Bike Parking

Bicycle parking is required in all new developments in the Transit Area.

Non-Residential Development Standards

For non-residential uses, bike parking shall be provided at the rate of at least one space for every 20 of the project's automobile parking requirement (equivalent to 5 percent of the total parking requirement.) At least 30 percent of required bike parking must be long-term and at least 30 percent must be short-term in nature. Bike parking must be provided on the same site as the use it serves.

Long-term bike parking for all uses shall be in a lighted, high visibility, covered area protected from the elements. Short-term bike parking for commercial uses shall be located within 50 feet of an entrance to the building it serves, with good visibility from the street. Non-residential developments with more than 50,000 SF are required to provide showers and lockers for bike riders. The showers and lockers must be available to all on-site employees and maintained in a sanitary and safe condition.

Residential Development Standards

For residential uses, bike parking shall be provided at the rate of one space for every four housing units, exempting units which have a private garage. In addition, residential developments must provide short-term bike parking spaces equivalent to 5 percent of the automobile spaces required. Short-term bike parking for residential uses shall be located on a public street within sight of a front door and spaced evenly throughout the development, as much as possible. In residential developments with structured parking, the required long-term bike parking should be located within the parking structure.

UTILITIES AND SERVICES

Requirements for utilities and services are summarized here; other requirements in the Municipal Code will also apply. Many of the standards in this section are taken from the Midtown Specific Plan.

Service and Loading Areas

Service and loading areas must be strategically located and screened so as not to impact the attractiveness and safety of the pedestrian realm. They must be located to the side or rear of buildings, away from primary pedestrian areas. Loading requirements may be met through curbside loading zones for smaller buildings. For larger buildings that require a loading dock, the dock shall be interior to the building or parking garage.

Garbage Truck Access and Trash/Recycling Enclosures

Access for garbage and recycling trucks must be considered early in the design process, and shall not be the basis for exceptions to design standards and guidelines. Access must be provided in a way that provides customer service and yet does not detract from the pedestrian realm. City staff and project applicants will need to work with the garbage service provider to establish design standards that meet operational requirements and still achieve the design standards and guidelines of the Transit Area Specific Plan.

- Larger refuse and recycling containers used by the multifamily and mixed-use buildings shall not be visible from a public or private street. Such containers shall be stored either within the parking facility of the building or within a vehicular accessway with appropriate screening.
- Trash receptacle pads shall be integrated within the design of the residential lanes (private streets).
- All enclosure walls shall incorporate the building materials and colors to match the architecture of the building, additionally, they shall include appropriate landscaping for screening.

Access for Emergency Vehicles

The street layout and street standards of the Transit Area Specific Plan have been carefully designed to provide emergency access for fire engines and other emergency vehicles. Primary access for emergency vehicles shall be from public streets; streets shall not be eliminated because this will compromise emergency access. Detailed provisions for fire prevention and emergency access will need to be resolved on a project by project basis. Early consultation with the Milpitas Fire Department, in conjunction with Planning, Engineering and other departments is essential.

Utilities and Related Equipment

Reasonable access to the following facilities and the careful placement and design of the following facilities will be necessary:

Utilities

The following standards shall apply for utilities:

1. Utilities shall be underground or in subsurface conduits and accessible.
2. All mechanical equipment, ground transformers, and meters shall be located to minimize visual impacts, particularly from public views, and shall be adequately screened with planting, berms or with an enclosure.
3. Roof-mounted mechanical equipment shall be concealed from ground-level views through a roof design that is architecturally integrated with the buildings, such as equipment wells and parapets.
4. Public utility distribution meters, vaults, and similar installations shall be consolidated in a single area whenever possible and located away from highly visible areas such as street corners and public open spaces. Their locations shall be coordinated with lighting and street trees to minimize impacts to street landscaping.
5. Equipment and its enclosures shall be adequately screened with landscaping and blend with surroundings.

Utilities boxes decorated with whimsical public art (Clayton, MO)

Utilities boxes painted to blend in with the landscaping (Clayton, MO)

Backflow Preventors

The following standards shall apply for backflow preventers:

1. Backflow preventors shall be located within landscaped setback areas and painted black or dark green to minimize visual appearance. They must also be adjacent to water meters, as required by State law.
2. Where no landscaped setback areas exist, backflow preventors shall be incorporated into the front of buildings to minimize visual obtrusiveness into sidewalks and pedestrian promenades.
3. Exterior mounted utility equipment should be painted to blend with its surroundings.

Telecommunication Facilities

The following standards shall apply for telecommunication facilities:

1. All antennas for cellular and telecommunication uses shall be building facade or roof mounted and screened appropriately. The smallest available antennas shall be used in the Transit Area.

Lighting

The following standards shall apply for lighting:

1. Lighting shall be designed and placed to direct lighting to appropriate surfaces and minimize glare onto adjacent areas. All external signs and lighting should be lit from the top and shine downward except where up-lighting is required for safety or security purposes. The lighting should be shielded to prevent direct glare and/or light trespass and directed to the focus area.
2. The light source used in outdoor lighting should provide a white light for better color representation and to create a more pedestrian-friendly environment.
3. Low pressure sodium lamps are prohibited.
4. To reinforce the pedestrian character of the area, light standards along sidewalks should be approximately 12 to 16 feet in height.
5. The use of uplighting to accent interesting architectural features or landscaping is encouraged.

5-3 DESIGN GUIDELINES

MIDTOWN/TRANSIT AREA SPECIFIC PLANS DESIGN GUIDELINES

The design guidelines laid out in the Midtown Milpitas Specific Plan will be shared and applied to new development within the entire Transit Area Specific Plan, including the Piper/Montague subdistrict. In many ways the guidelines are similar with the exception of references to Transit Area locations and the addition of mid-rise and high-rise guidelines reflecting the vision of the Transit Area Specific Plan. They are included in Appendix A for easy reference. These design guidelines cover:

- Site Planning
    - Street Pattern
    - Site Configuration
    - Parking Areas
    - Garage Frontage
    - Service Areas

- Building Design (both general and by building type)
  - Massing and Articulation
  - Fenestrations
  - Materials
  - Colors
  - Roof Design
- Landscaping, Signage, and Lighting

In the case of a conflict between the design and development standards and policies in the Transit Area Specific Plan and those in the Midtown Plan, the guidelines in this Plan take precedence.

5-4 OTHER CONSTRUCTION STANDARDS

GREEN BUILDING

Policy 5.4: New commercial or institutional buildings, or tenant improvements to commercial, industrial or institutional buildings shall follow the provisions of the City's future Green Building Ordinance. In the absence of any ordinance, all new projects should be encouraged to incorporate green building measures.

Policy 5.5: Coordinate with Santa Clara County and other regional agencies to establish and implement new local regulations and standards related to greenhouse gas emissions simultaneously across the region.

By working together at the regional level, no one jurisdiction would bear the burden of being the first to adopt new regulations.

Policy 5.6: Require the use of Energy Star appliances and equipment in new residential and commercial development, and new City facilities.

Policy 5.7: Require at least 50 percent of all new residential development to be pre-wired for optional photovoltaic roof energy systems and/or solar water heating.

Policy 5.8: Incorporate cost-effective energy conservation measures into all buildings being constructed by the City in the Transit Area, including construction, operations and maintenance. These measures can include but are not limited to:

- Energy efficient light fixtures, including solar powered systems, for streetscapes, parks, and public buildings which have limited glare and spillover;
- Automatic lighting systems in public buildings and offices; and
- Life-cycle costing of capital projects so that the environmental, societal, and economic costs are evaluated over the project's long-term operation.

Policy 5.9: Establish a program to support energy efficiency in new private development and facilitate environmentally sensitive construction practices by:

- Establishing an incentive program for projects with energy-efficient design, such as expedited permit processing;
- Promoting use of products that are durable and allow efficient end-of-life disposal (recyclable);
- Requiring demolition permits for structures and/or pavement exceeding 7,500 square feet to submit a report on recycled materials;
- Promoting the purchase of locally or regionally available materials; and
- Promoting the use of cost-effective design.

BUILDING DESIGN TO ADDRESS NOISE AND VIBRATION

Existing Noise Levels

As in most urban areas, vehicular traffic along major arterials is the principal noise source in the Transit Area, with the site's railways—Union Pacific freight rail and the future BART system—producing noise at irregular but short intervals.

Other existing uses whose activities also contribute to the noise environment in the Transit Area are primarily light industrial (manufacturing, distribution, storage), research & development (R&D), and retail uses. Mechanical equipment is used extensively in buildings to provide heating, cooling, air circulation, and water supply. Mechanical equipment that produces noise includes motors, pumps, and fans. Frequently, this equipment includes components of pure tone noise from the rotational frequency of motors. Although noise levels from these sources are generally low at nearby properties, the fact that such sources may operate continuously and may include pure tones that make them audible at a substantial distance makes them a potentially important noise source.

To quantify the existing noise environment, five short-term measurements were taken across the planning area. The locations of the noise measurements and a summary of the measurement results are presented in Table 5-4.

Table 5-4: Existing Noise Measurements, dBA

Location	Time	L_{eq}	L_{max}	Noise Sources
Location #1 – ST1 (~25 feet from centerline of McCandless Dr)	1:22 PM	60	78	Traffic on McCandless Dr, overhead planes, pedestrians, birds
Location #2 – ST2 (~25 feet from centerline of Tarob Ct)	1:37 PM	54	71	Occasional car on street, distant noise, birds
Location #3 – ST3 (~25 feet from Gibraltar Dr centerline)	1:56 PM	61	76	Occasional car on street, pedestrians, birds
Location #4 – ST4 (northern edge of site, adjacent to cinema)	2:15 PM	55	61	Mall traffic
Location #5 – ST5 (~25 feet from centerline of Great Mall Parkway)	2:42 PM	72	86	Traffic on Great Mall Parkway

1. All noise measurements were collected using a Metrosonics dB308 sound level meter that was calibrated for the measurements using a Metrosonics CL304 calibrator.
2. All short-term measurements were taken on October 10, 2005.

Source: Environmental Science Associates, 2005.

Vehicle Traffic

The Transit Area lies between major vehicular routes that include I-880, I-680, State Route (SR) 237, and the Montague Expressway at the southern edge of the City of Milpitas. Traffic noise depends primarily on traffic speed (high frequency tire noise increases with speed) and the proportion of truck traffic, which generates engine, exhaust and wind noise. The proximity of freeways and major streets, and the large amount of truck traffic serving industrial, commercial, warehousing, and freight uses in the area make Milpitas susceptible to traffic noise.

Railway Noise

Railroad tracks run adjacent to the western edge of the study area and along a freight-serving spur through the eastern portion of the planning area in the Piper-Montague subarea. According to the Santa Clara Valley Transportation Authority (VTA), approximately 578 trains used the freight spur tracks in 2003; 557 train cars used the tracks in 2004; and approximately 564 train cars used the tracks in 2005 (VTA, 2006). Freight operation noise levels are in excess of 70 dBA DNL immediately adjacent to the tracks, decreasing to 60 dBA DNL at 300 feet.

Residences located within 300 feet of the rail lines (generally, those west of McCandless Drive and in the Piper/Montague subdistrict) would be exposed to noise levels of 60 to 70 DNL, which would be considered "conditionally acceptable" with respect to the land use noise compatibility guidelines of the City of Milpitas General Plan. The General Plan requires new construction proposed within this noise exposure category to only be undertaken after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the design.

Light rail, which runs along Capitol Avenue, generates noise levels of 54 to 56 dBA DNL at a distance of 285 feet from the tracks. The most intrusive noise rail-related noise is the train whistle, which typically ranges from 90 dB to 100 dB at 140 feet.

Future Noise Levels

The development of the Transit Area will result in land uses, notably housing, that will be more sensitive to the existing noise levels in the area. In addition, the new uses will generate increased traffic volumes on arterial roadways; construction activities will result in loud if temporary noises, and the operation of the BART train will create a new noise source. The Union Pacific spur rail line is also a noise source, however it may be removed in the future. Future roadway and BART noise levels were estimated and mapped to gauge their impact on the Transit Area as were existing noise levels on the freight rail lines. These decibel levels are shown on Figures 5-24 A, B, and C.

Vehicle Traffic

To assess the impact of traffic from development envisioned under the Specific Plan on roadside noise levels, noise levels were projected using the Federal Highway Administration (FHWA) noise prediction model for all intersections analyzed in the traffic study.

The addition of traffic from Transit Area development would increase noise levels on local roadways by greater than 3 dBA[1] in 10 locations, along segments of Alder Drive, Centre Point Drive, Great Mall Parkway, and McCandless Drive, with noise increases ranging from 3.1 to 6.3 dBA. Existing and approved residential developments along Great Mall Parkway between Main and Abel streets may be impacted by the noise generated by the Plan. In addition, Great Mall Parkway between Centre Point Drive and Montague Expressway may have noise levels considered normally unacceptable for multi-family residential uses and hotels, but these can be mitigated by the following policies, as well as adherence to General Plan policies. Otherwise, no other existing or future uses are expected to experience an unacceptable noise level.

Noise levels along Montague Expressway are projected to be 69 dBA, Leq at locations 120 feet from the roadway center. These peak-hour noise levels would correspond to a DNL of between 65 and 70 dBA, which would put the proposed residences in an area considered "conditionally acceptable" with respect to the land use noise compatibility guidelines of the City of Milpitas General Plan.

1 The criteria set in the City's General Plan for residential uses. dBA stands for A-weighted decibels.

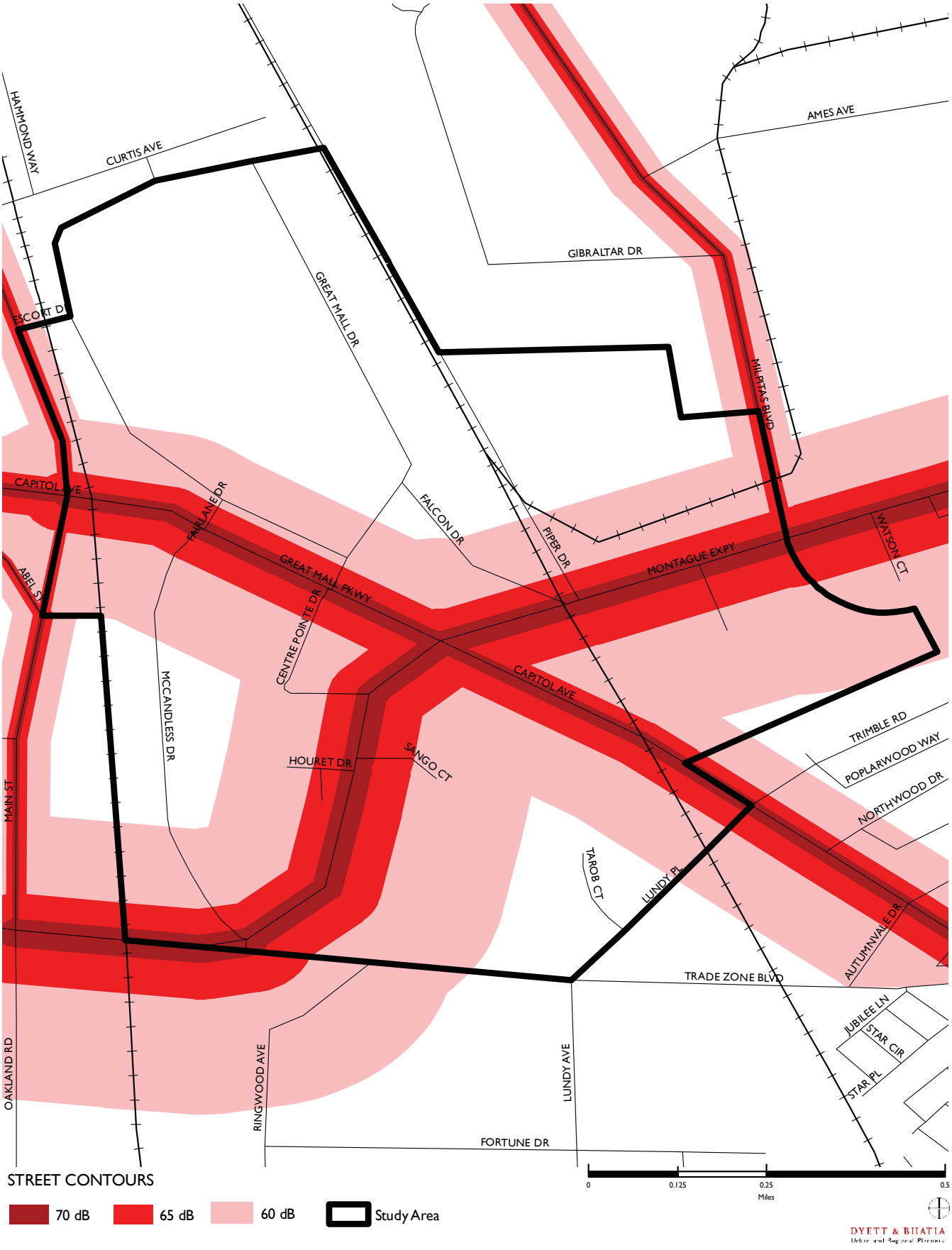


Figure 5-24 A

Noise Contours-Streets

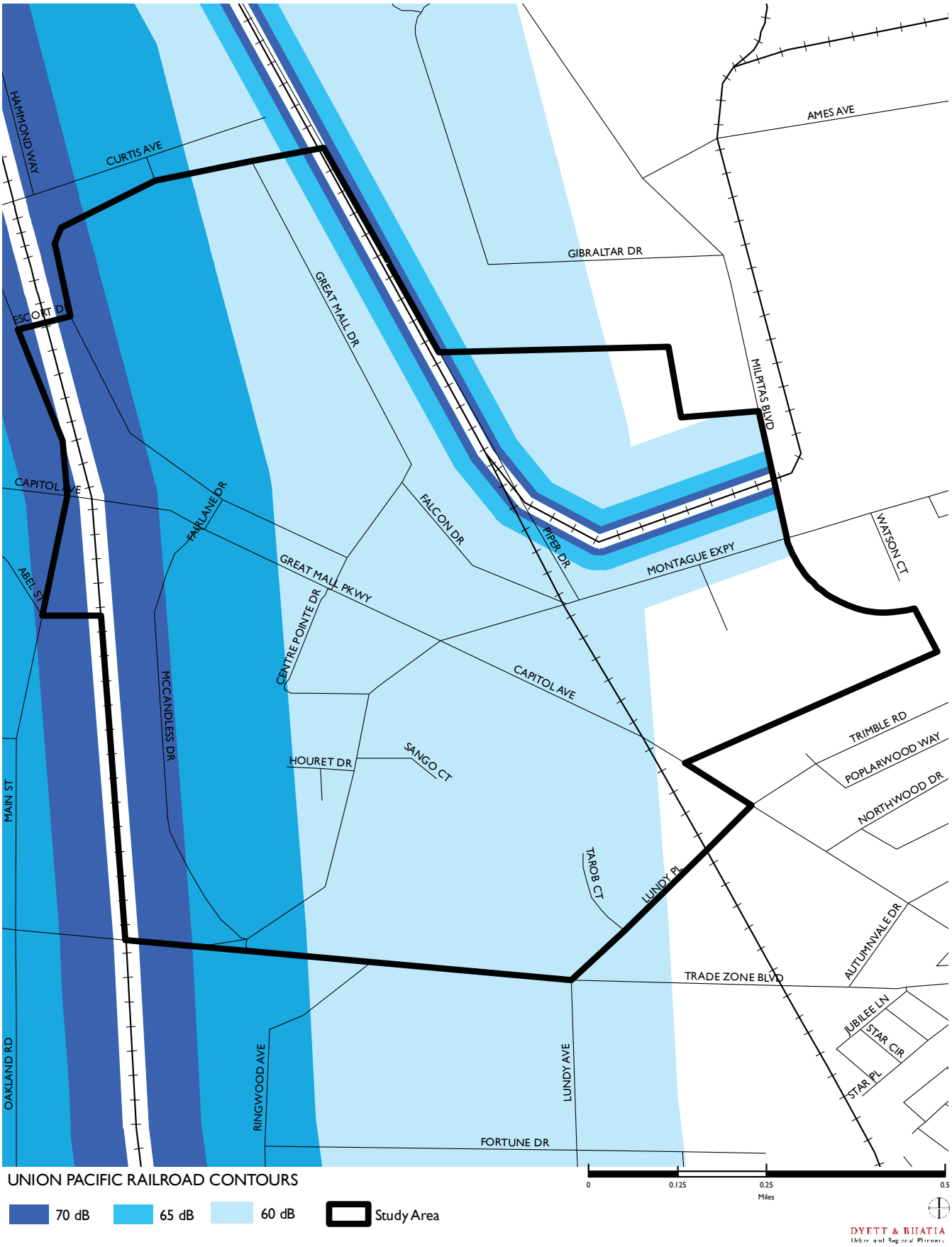


Figure 5-24 B
Noise Contours – Union Pacific Railroad
(future condition)

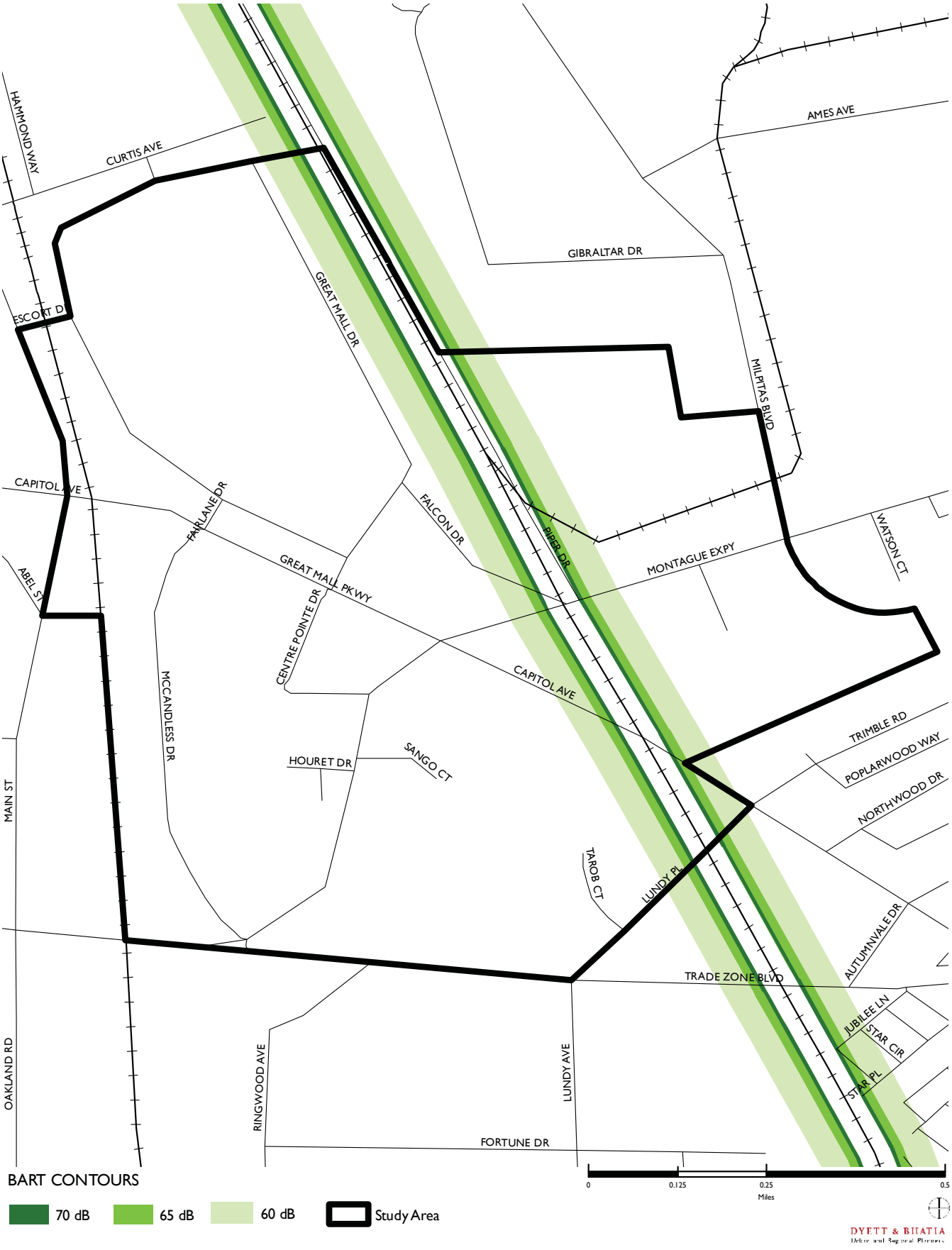


Figure 5-24 C
Noise Contours-BART Line

Railway Noise

In areas where proposed residences would be impacted by both rail noise of 68 to 70 DNL and future vehicle traffic-generated noise levels of 65 to 70 DNL, a worst-case cumulative LDN of 70 to 73 dBA, could result. Such noise environments are considered "normally unacceptable" with respect to the land use noise compatibility guidelines of the City of Milpitas General Plan. The General Plan generally discourages new construction in this category, but if undertaken, requires a detailed analysis of noise reduction requirements to be made and needed noise insulation features included in the design.

The proposed BART extension would also represent a future noise source that would impact new multi-family residences proposed by the Specific Plan. Addition of noise from BART train operations to residences proposed along this corridor in the Piper/Montague subarea could be expected to result in a noise environment that would be considered "conditionally acceptable" for residential uses with respect to the General Plan. The Supplemental EIR for the BART Extension to Milpitas, San José and Santa Clara indicates that the proposed noise walls will mitigate noise impacts to the ground floor residences in the planning area. However, there will be impacts on residences above ground level. While Santa Clara Valley Transportation Authority (VTA) plans to mitigate noise impacts to existing above-ground level residences with insulation upgrades, any residential and other sensitive uses proposed for development in the future under the Specific Plan would need to incorporate adequate insulation features and other engineering mitigations into the design to reduce the impact of BART noise and to achieve an interior noise level of 45 Ldn (VTA, 2007).

Vibration

Development in the Transit Area could also be exposed to groundborne vibration, specifically from freight trains and BART trains. Vibration analysis conducted for Santa Clara Valley VTA's BART Expansion SEIR indicated that vibration impacts at existing receptors approximately 100 feet from the centerline of the proposed tracks in the planning area would be mitigated by either using a floating slab track or by using tire derived aggregate under ballasted track. As this mitigation would reduce vibration at the source, future residential uses proposed along the BART alignment would not experience significant vibration.

Policies

The Milpitas General Plan has a series of policies and guiding principals that govern acceptable noise levels for different types of uses. These policies are implemented through the City's Noise Ordinance. The noise levels anticipated in the Transit Area do not exceed levels that preclude development, although they will require insulation to ensure that interior noise levels in residential uses attain no higher than 45 dB DNL (day-night average sound level).

Policy 5.10: New development in the Transit Area shall adhere to the standards and guidelines in the Milpitas General Plan that govern noise levels.

The particular policies of note are Policies 6-I-1 through 6-I-16.

Policy 5.11: Construct masonry walls to buffer residential uses from BART and UPRR train tracks.

These walls will be constructed by residential developers. They may be located within the landscaped buffer along the tracks.

Policy 5.12: The City shall offer to pay for sound walls, sound absorptive material, and additional sound insulation for residential uses located along Great Mall Parkway, between South Main and Abel streets, if interior noise levels rise above permitted levels by the year 2030.

Policy 5.13: Apply the FTA groundborne vibration criteria (presented in Table 5-5) as review criteria for development projects in the vicinity of vibration sources such as BART trains and heavy rail trains.

Table 5-5: FTA Groundborne Vibration Criteria, VdB

	Groundborne Vibration Impact Limits		
Receiving Land Use Category	Infrequent Events [a]	Occasional Events [b]	Frequent Events [c]
Category 1 Buildings where low ambient vibration is essential for interior operations	65 [d]	65 [d]	65 [d]
Category 2 Residences and buildings where people normally sleep	80	75	72
Category 3 Institutional land uses with primary daytime use	83	78	75

a. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail systems.

b. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.

c. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.

d. This limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research should always require detailed evaluation to define the acceptable vibration limits. Ensuring low vibration levels in a building requires special design of HVAC systems and stiffened floors.

Source: U.S. Department of Transportation, Federal Transit Administration, May 2006.

Policy 5.14: Project applicants shall conduct a vibration impact analysis for any sites adjacent to or within 300 feet of active UPRR and BART alignments to demonstrate that interior vibration levels within all new residential development (single family and multifamily) and lodging facilities would be at acceptable levels. If needed, require mitigation measures to reduce vibration to acceptable levels.

CONSTRUCTION PRACTICES – NOISE AND DUST

Policy 5.15: Prior to issuance of building permits, applicants shall demonstrate that noise exposure to sensitive receptors from construction activities has been mitigated to the extent feasible pursuant to the City's Noise Abatement Ordinance.

Mitigation may include a combination of techniques that reduce noise generated at the source, increase the noise insulation of the receptor or increase the noise attenuation rate as noise travels from the source to the receptor.

Policy 5.16: During review of specific development proposals made to the City, sponsors of individual development projects under the Specific Plan shall implement the BAAQMD's approach to dust abatement.

This calls for "basic" control measures that should be implemented at all construction sites, "enhanced" control measures that should be implemented in addition to the basic control measures at construction sites greater than four acres in area, and "optional" control measures that should be implemented on a case-by-case basis at construction sites that are large in area, located near sensitive receptors or which, for any other reason, may warrant additional emissions reductions (BAAQMD, 1999).

NEW BUILDINGS ADJACENT TO INDUSTRIAL USES

Policy 5.17: In all rental and sale agreements, provide disclosures to future residents about all surrounding industrial uses, including UPRR train tracks and operations, and the permanent rights of such industrial uses to remain. Describe potential impacts including but not limited to: noise, groundborne and airborne vibration, odors, and use of hazardous materials.

Policy 5.18: Day care facilities, schools, nursing homes, and other similar sensitive receptors shall be located away from sites which store or use hazardous materials, in accordance with State and City standards. Adequate buffers to protect occupants of these sensitive uses shall be provided, including but not limited to walls, fences, landscaping, large building setbacks, and additional exit routes over and above minimum code requirements.

Policy 5.19: Require the installation of temporary buffers—fences, walls, or vegetation— when residential uses are developed adjacent to existing industrial uses. The type of buffer must be reviewed and approved by the City Planning Department. The temporary buffers may be removed if and when an adjacent site is redeveloped as a non-industrial use.

HAZARDOUS MATERIALS REMEDIATION

Historical land uses in the project area have released contaminants affecting soils and groundwater. Seven of these instances are considered "open cases," indicating that remediation activities have not been completed and/or the concentrations of contaminants are above regulatory thresholds. These conditions could expose individuals to hazardous conditions resulting from ongoing or historical activities at the site or on neighboring properties that involve the use of hazardous materials or hazardous wastes. Disturbance of a previously contaminated area through grading or excavation operations could expose the public to health hazards from physical contact with contaminated materials or hazardous vapors. If buildings are erected over contaminated materials, volatile contaminants, such as benzene, could potentially migrate from soil and groundwater via soil gases, and enter indoor air spaces through foundation cracks, posing a potential health risk to future site workers, employees, and residents.

Furthermore, existing structures that would be demolished in the Transit Area could potentially include hazardous building materials such as asbestos, PCBs, or lead-based paint. If not properly removed and handled, these materials could pose a significant threat to human health and the environment.

The following policies are intended to prevent impacts to human health and the environment associated with site contamination and hazardous building materials:

Policy 5.20: Property owners shall work with the City of Milpitas Fire Department, the Santa Clara County Department of Environmental Health (SCCDEH), the California Department of Toxic Substances Control (DTSC), and/or the State Water Resources Control Board (SWRCB), whichever has jurisdiction, to resolve issues related to contamination that could potentially impact future land uses in the project area. The lateral and vertical extent of contamination shall be determined, remediation activities completed, and land use restrictions implemented, as necessary, prior to the issuance of development permits on parcels with known contamination.

For parcels with known contamination, appropriate human health risk assessments (HHRAs) shall be conducted based on proposed land uses by a qualified environmental professional. The HHRAs shall compare maximum soil, soil gas, and groundwater concentrations to relevant environ-

mental screening levels (ESLs[2]) and evaluate all potential exposure pathways from contaminated groundwater and soil. Based on the findings of the HHRAs, if appropriate, engineering controls and design measures shall be implemented to mitigate the potential risk of post-development vapor intrusion into buildings.

For parcels with no identified contamination, a Phase I study shall be completed to review potential for ground water, soil, or other contamination related to previous land uses. If any potential for contamination is determined to exist that could adversely affect human health for residential uses, a Phase II level analysis shall be conducted per City, State, and Federal requirements. If contamination is found to exist, procedures for contaminated sites as described in the paragraph above shall be followed.

Policy 5.21: Project applicants shall submit information to the City regarding the presence of asbestos-containing building materials, PCBs, and lead-based paint in existing buildings proposed for demolition, additions, or alterations. The information shall be verified prior to the issuance of demolition permits by the City of Milpitas Building Inspection Division for any existing structures or buildings in the project area. If it is found that painted surfaces contain lead-based paint and/or the structures contain asbestos-containing building materials, measures to ensure the safe demolition of site structures shall be incorporated into the project Demolition Plan. The Demolition Plan shall address both onsite and offsite chemical and physical hazards. Prior to demolition, hazardous building materials associated with lead-based paint and asbestos-containing building materials shall be removed and appropriately disposed of in accordance with all applicable guidelines, laws, and ordinances. The demolition of buildings containing asbestos would require retaining contractors who are licensed to conduct asbestos abatement work and notifying the Bay Area Air Quality Management District (BAAQMD) ten days prior to initiating construction and demolition activities. Regarding lead-based paint, Cal-OSHA regulates all worker exposure during construction activities associated with lead-based paint. The Cal-OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, and training.

Policy 5.22: At sites with known contamination issues, a Risk Management Plan (RMP) shall be prepared to protect the health and safety of construction workers and site users adjacent to construction activities. The RMP shall include engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction site and to reduce hazards outside of the construction site. The RMP shall address the possibility of

2 ESLs are conservative risk-based concentrations developed for use in screening laboratory data to determine if additional investigation or radiation is necessary.

encountering subsurface hazards and include procedures to protect workers and the public. The RMP shall also include procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed of in accordance with applicable regulations and permits. Protocols for the handling, transport, and disposal of both known and previously unidentified hazardous materials that may be encountered during project development shall be specified. If prescribed exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with OSHA regulations. Finally, the RMP shall also include procedures for the use, storage, disposal, of hazardous materials used during construction activities to prevent the accidental release of these materials into the environment during construction.

AIR QUALITY

Policy 5.23: Require project sponsors to inform future and/or existing sensitive receptors (such as day care facilities, schools, nursing homes) of any potential health impacts resulting from nearby sources of dust, odors, or toxic air contaminants, and where mitigation cannot reduce these impacts.

Policy 5.24. Allow only natural gas fireplaces, pellet stoves or EPA-Certified wood-burning fireplaces or stoves. Conventional open-hearth fireplaces shall not be permitted.

Policy 5.25: For new residential development that is proposed within 500 feet of active rail lines where vehicles emit diesel exhaust, or roadways where total daily traffic volumes from all roadways within 500 feet of such location exceed 100,000 vehicles per day, will, as part of its CEQA review, include an analysis of toxic air contaminants (which includes primarily diesel particulate matter (DPM)). If the results show that the carcinogenic human health risk exceeds the 10 people in a million standard for carcinogenic human health impacts established by the BAAQMD, the City may require upgraded ventilation systems with high efficiency filters, or other equivalent mechanisms, to minimize exposure of future residents.

The above standard shall also apply to other sensitive uses such as schools, daycare facilities, and medical facilities with inpatient services.

HABITAT PROTECTION

Proposed development in the Transit Area would result in the removal of landscaping and disturbance to habitat, which could affect wildlife including burrowing owl, nesting birds and common wildlife species. The burrowing owl is a California Species of Special Concern and protected under California Fish and Game Code Section 3503.5 as well as guiding principle 4.b-G-2 of the Milpitas General Plan. In addition, nesting habitat for special-status raptor species oc-

curs on and near the Transit Area, as Raptors could potentially utilize the large trees on site for nesting. Raptors and their nests and eggs are also protected under CDFG Code 3503.5. As a result, development projects must follow policies to avoid damaging these species:

Policy 5.26: For any project sites that are either undeveloped or vacant and support vegetation, or project sites which are adjacent to such land, a pre-construction survey shall be conducted by a qualified biologist within 30 days of the onset of construction. This survey shall include two early morning surveys and two evening surveys to ensure that all owl pairs have been located. If preconstruction surveys undertaken during the breeding season (February 1st through July 31st) locate active nest burrows, an appropriate buffer around them (as determined by the project biologist) shall remain excluded from construction activities until the breeding season is over. During the non-breeding season (August 15th through January 31st), resident owls may be relocated to alternative habitat. The relocation of resident owls shall be according to a relocation plan prepared by a qualified biologist in consultation with the California Department of Fish and Game (CDFG). This plan shall provide for the owl's relocation to nearby lands possessing available nesting habitat. Suitable development-free buffers shall be maintained between replacement nest burrows and the nearest building, pathway, parking lot, or landscaping. The relocation of resident owls shall be in conformance with all necessary state and federal permits.

Policy 5.27: To mitigate impacts on non-listed special-status nesting raptors and other nesting birds, a qualified biologist will survey the site for nesting raptors and other nesting birds within 14 days prior to any ground-disturbing activity or vegetation removal. Results of the surveys will be forwarded to the U.S. Fish and Wildlife Service (USFWS) and CDFG (as appropriate) and, on a case-by-case basis, avoidance procedures adopted. These can include construction buffer areas (several hundred feet in the case of raptors) or seasonal avoidance. However, if construction activities occur only during the non-breeding season between August 31 and February 1, no surveys will be required.

The Tree and Planting Ordinance of the City of Milpitas protects significant trees, as defined by the Ordinance, including heritage trees, throughout the city. A tree removal permit is required to remove any protected tree and compensation for lost trees may be requested by the City (Ord. 201.1, 3/1/88).

In particular, within the Transit Area the large rows of trees that run along McCandless Drive and the immediate vicinity provide habitat for birds and contribute to community identity. These large trees shall be retained for both aesthetic and biological value. Limited exceptions will be permitted in the areas along McCandless Drive with retail on the ground floor, close to Great Mall Parkway.

Policy 5.28: Development under the Specific Plan shall, to the maximum extent feasible (and with exceptions such as removal for emergency, health, or fire hazard purposes), retain the corridor of trees along McCandless Drive and corridors of trees in the vicinity both as a potential resource for habitat and as an important visual resource.

Policy 5.29: Per Figure 5-23 G and Tables 5-1 and 5-2, a minimum 25 foot setback from the top of bank of any creek or drainage channel, or from a maintenance road if one exists, shall be provided.

Policy 5.30: Prior to new development in areas that border creeks and with potential riparian habitat, applicants will be required to coordinate with the CDFG, as required by law. Coordination will include evaluation of existing riparian habitat and development of avoidance, minimization, and/or compensatory measures sufficient to procure a Streambed Alteration Agreement with the CDFG.

PROPERTIES ADJACENT TO A WATERWAY

Policy 5.31: For properties adjacent to any waterway in the study area, the following requirements shall apply:

- ***Any plans for construction over the Santa Clara Valley Water District (SCVWD) fee or easement lands require review and issuance of a permit.***
- ***The SCVWD's Milpitas Pipeline, located at the north end of the study area and adjacent and parallel to the rail line continuing south onto Capital Avenue at the southern end of the study area, shall be shown on all future plans.***
- ***Projects should generally be consistent with the recommendations developed by the Water Resources Protection Collaborative in the "Guidelines and Standards for Land Use Near Streams."***

Policy 5.32: Consistent with current City practice, all new development located on or adjacent to Penetentia and Berryessa Creek will be required to comply with the standards and guidelines for land uses near streams, as adopted by the City of Milpitas. Any development or construction activity to be conducted on or adjacent to SCVWD property or easements, such as creek crossings, shall be required to obtain applicable permits from the SCVWD prior to such construction activity.

CULTURAL RESOURCES

Cultural resources include: archaeological resources, historic resources, contemporary Native American resources, and paleontological resources. Certain cultural resources are protected and must be conserved. Policies below establish the procedures and requirements for protection of cultural resources. The primary impact that could occur would be disturbance of cultural resources during grading and/or development of property. There are no identified historic resources within the Transit Area. However, based on an evaluation of the environmental setting and features associated with known sites, there is a strong possibility of uncovering and identifying additional archaeological deposits in the Transit Area. Paleontological resources have also been documented to occur in Milpitas in the vicinity of the Transit Area. There is the potential to encounter unidentified fossils during construction of new development in the Transit Area, as Pleistocene alluvium is considered sensitive for vertebrate fossils, which are considered a significant paleontological resource.

Policy 5.33: Consider any potential impacts to historic and cultural resources during the review of any proposed alteration or demolition projects on the Great Mall property.

Policy 5.34: Any future ground disturbing activities, including grading, in the Transit Area shall be monitored by a qualified archaeologist to ensure that the accidental discovery of significant archaeological materials and/or human remains is handled according to CEQA Guidelines § 15064.5 regarding discovery of archeological sites and burial sites, and Guidelines § 15126.4(b) identifying mitigation measures for impacts on historic and cultural resources. (Reference CEQA §§ 21083.2, 21084.1.) In the event that buried cultural remains are encountered, construction will be temporarily halted until a mitigation plan can be developed. In the event that human remains are encountered, the developer shall halt work in the immediate area and contact the Santa Clara County coroner and the City of Milpitas. The coroner will then contact the Native American Heritage Commission (NAHC) which will in turn contact the appropriate Most Likely Descendent (MLD). The MLD will then have the opportunity to make a recommendation for the respectful treatment of the Native American remains and related burial goods.

Policy 5.35: All grading plans for development projects involving ground displacement shall include a requirement for monitoring by a qualified paleontologist to review underground materials recovered. In the event fossils are encountered, construction shall be temporarily halted. The City's Planning Department shall be notified immediately, a qualified paleontologist shall evaluate the fossils, and steps needed to photo-document or to recover the fossils shall be taken. If fossils are found during construction activities, grading in the vicinity shall be temporarily suspended while the fossils are evaluated for scientific significance and fossil recovery, if warranted.

STORM DRAINAGE

Construction and grading within the Transit Area would require temporary disturbance of surface soils. During the construction period, grading and excavation activities would result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment in runoff. Soil stockpiles and excavated areas would be exposed to runoff and, if not managed properly, the runoff could cause erosion and increased sedimentation in storm drains or water courses within or adjacent to the Transit Area. The accumulation of sediment could result in blockage of flows, potentially resulting in temporarily-increased localized ponding or flooding.

There is also a potential for release of chemicals such as fuels, oils, paints, and solvents from construction sites. These chemicals could be transported to nearby surface waterways and/or groundwater in stormwater runoff, wash water, and dust control water, potentially reducing the quality of receiving waters. Preparation of a Stormwater Pollution Prevention Plan and following guidelines laid out in the Santa Clara County National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges will reduce the chance and impact of these runoffs. The State of California periodically amends the City's NPDES permit; projects seeking approval will be required to meet all requirements in place at the time of application.

Policy 5.36: Require construction projects that disturb one or more acres to prepare a Stormwater Pollution Prevention Plan (SWPPP) that, when properly implemented, would reduce or eliminate impacts on surface water quality during construction.

Construction projects that disturb one or more acres are required to obtain a Construction General Permit under the General Permit for Discharges of Stormwater Associated with Construction Activity. As part of the requirements for the permit, the developer must develop a SWPPP containing site maps that show the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. None of the water courses adjacent to the Planning Area are listed on the 303(d) list for sediment, so this requirement is not required. (2002 CWA Section 303(d) List of Water Quality Limited Segment, San Francisco Bay Regional Water Quality Control Board, approved July 2003)

The San Francisco Bay Regional Water Quality Control Board (Regional Board) administers permitting for the SWPPP. A Notice of Intent (NOI) must be filed with the Regional Board signaling the intent of the developer or construction contractor to prepare a SWPPP prior to construction activities.

Policy 5.37: Require construction projects to comply with the Santa Clara County National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges.

The City of Milpitas is included in the Santa Clara County NPDES permit for stormwater discharges. The permit currently requires redevelopment projects that add or replace a minimum of 10,000 square feet of impervious surface to develop a Stormwater Control Plan. The Stormwater Control Plan requires the implementation of BMPs to control both stormwater peak flows and pollutant levels. BMPs for flow control can include a decrease in impervious area (as will occur in the Planning Area) or construction of flow detention ponds and/or mechanical filtration. The City of Milpitas provides the Stormwater C.3 Guidebook (2005) to developers for assistance in developing a Stormwater Control Plan. The State of California periodically amends the City's NPDES Permit; projects seeking approval will be required to meet all requirements in place at the time of project application.

INFASTRUCTURE CAPACITY

Policy 5.38: The issuance of building permits will be suspended if necessary to stay within (1) available water supplies, or (2) the safe or allocated capacity at the San Jose/Santa Clara Water Pollution Control Plant, and will remain suspended until water and sewage capacity are available. No vested right to the issuance of a building permit is acquired by zoning approval for a land development.