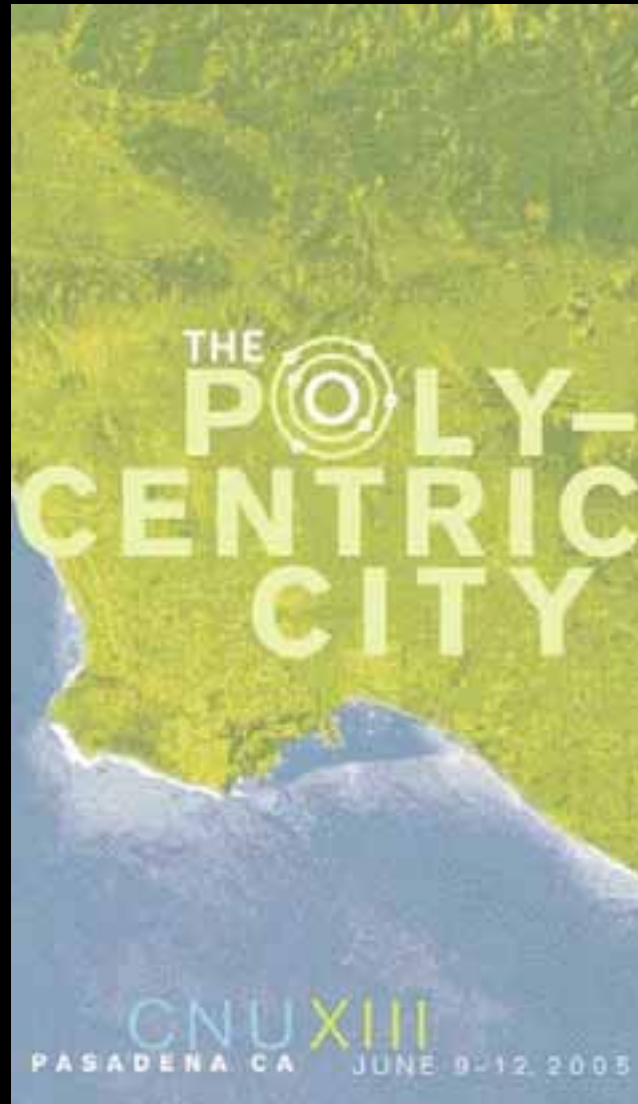


The Architecture and Urbanism of Transit Oriented Development



Stefanos Polyzoides,
Moule & Polyzoides, Architects and Urbanists

The Architecture and Urbanism of Transit Oriented Development

- 1 Engineering of System
- 2 Station Planning
- 3 Architectural Criteria

The Architecture and Urbanism of Transit Oriented Development

1 Engineering of System

Accommodating Transit Throughout the Region

Courtesy of Reconnecting America

| | Urban Downtown | Urban Neighborhood | Suburban Town Center | Suburban Neighborhood | Commuter Town Center | Neighborhood Transit Zone |
|--|-------------------|-----------------------|----------------------------|--------------------------|----------------------------|------------------------------|
| Subway | XXX | XXX | XXX | | | |
| Segregated Guideway: At Grade | XXX | XXX | XXX | XXX | XXX | |
| Segregated Guideway: Elevated | XXX | XXX | | | XXX | |
| Segregated Guideway: Freeway | | | XXX | | XXX | |
| Street Running: Center | XXX | XXX | XXX | XXX | | XXX |
| Street Running: Either side alignment | XXX | | XXX | | | |
| Street Running: One side | | XXX | XXX | XXX | | XXX |



Urban Subway

- Suitable for downtown areas, very expensive
- Entrance is just a stairway on the street
- Can be integrated into buildings

Segregated Guideway At Grade

- Separated from traffic, can be faster, less conflict
- More expensive
- Less accessible, less suited for local circulation -- usually railroad ROW -- may not be in dense areas
- Works well in suburban locations, and where rail right of way is available





ARAPAHOE STATION

11-26-02

Freeway Alignment

- Faster running time
- Cheaper land
- Freeways not very compatible with town centers, pedestrians
- Most suitable for commuter rail, suburban access



Elevated Guideway

- Elevated guideways are an intrusion into the urban form
- Stations can be seamless: just another storefront
- Urban, inner suburb.



Street Running in Center Alignment

- Allows creation of station areas, requires a lot of street width
- Pedestrians must cross through traffic to get to stop
- Downtown to suburban



Street Running, Curb Side Alignment

- Better transit-pedestrian interface
- Most suitable for downtown urban circulation where access trumps speed



Street Running, One Side Only

- May reduce confusion with
- Simplifies pedestrian crossing
- Works well to increase speed outside downtown, amounts to separated guideway

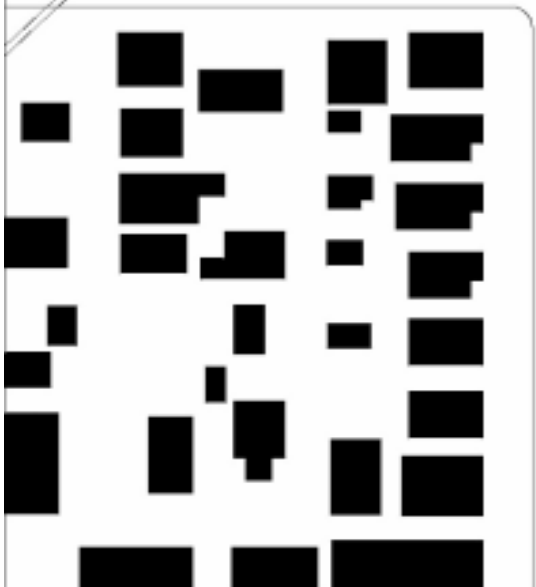
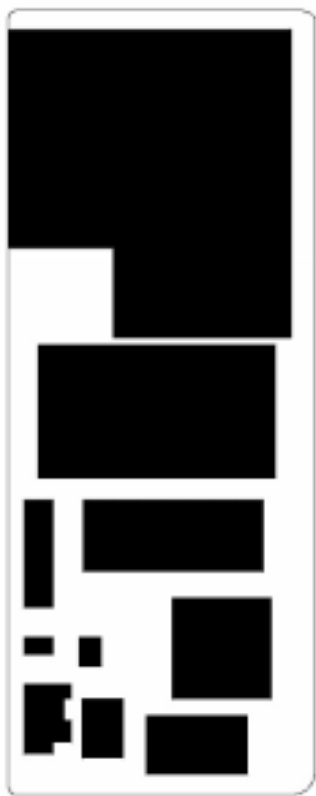
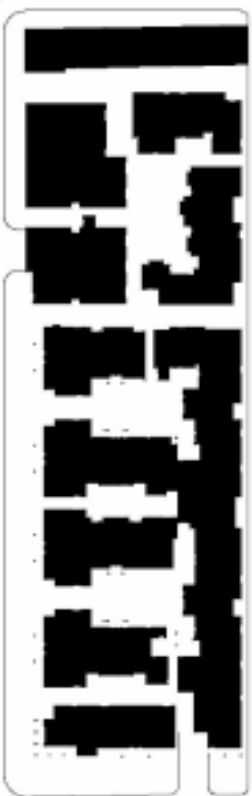
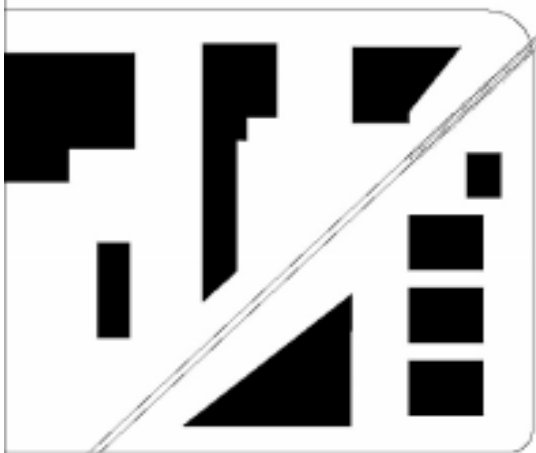
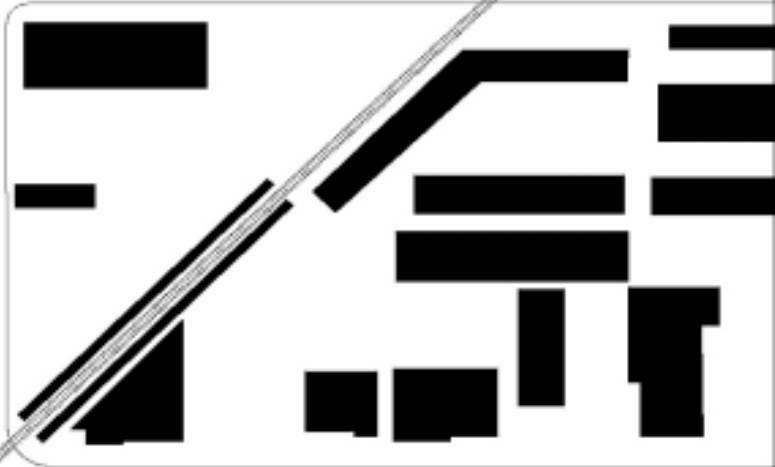
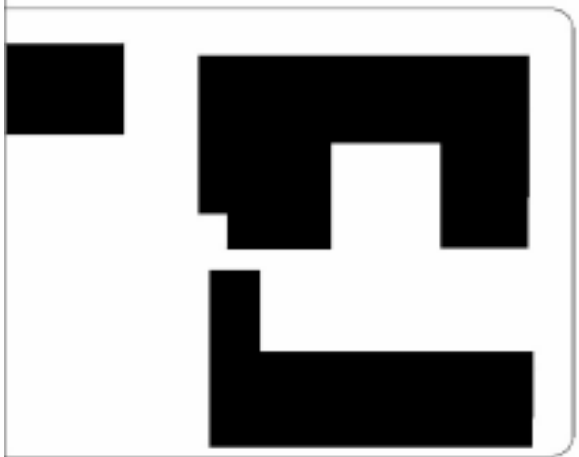


The Architecture and Urbanism of Transit Oriented Development

- 1 Engineering of System
- 2 Station Planning

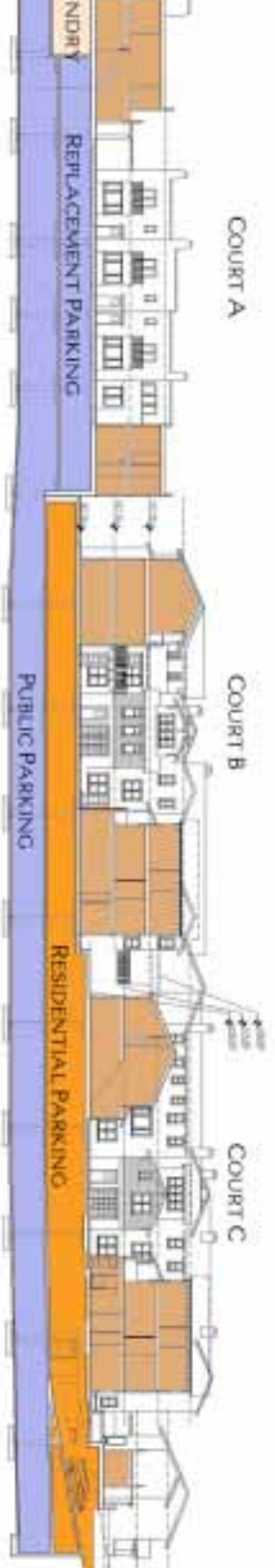






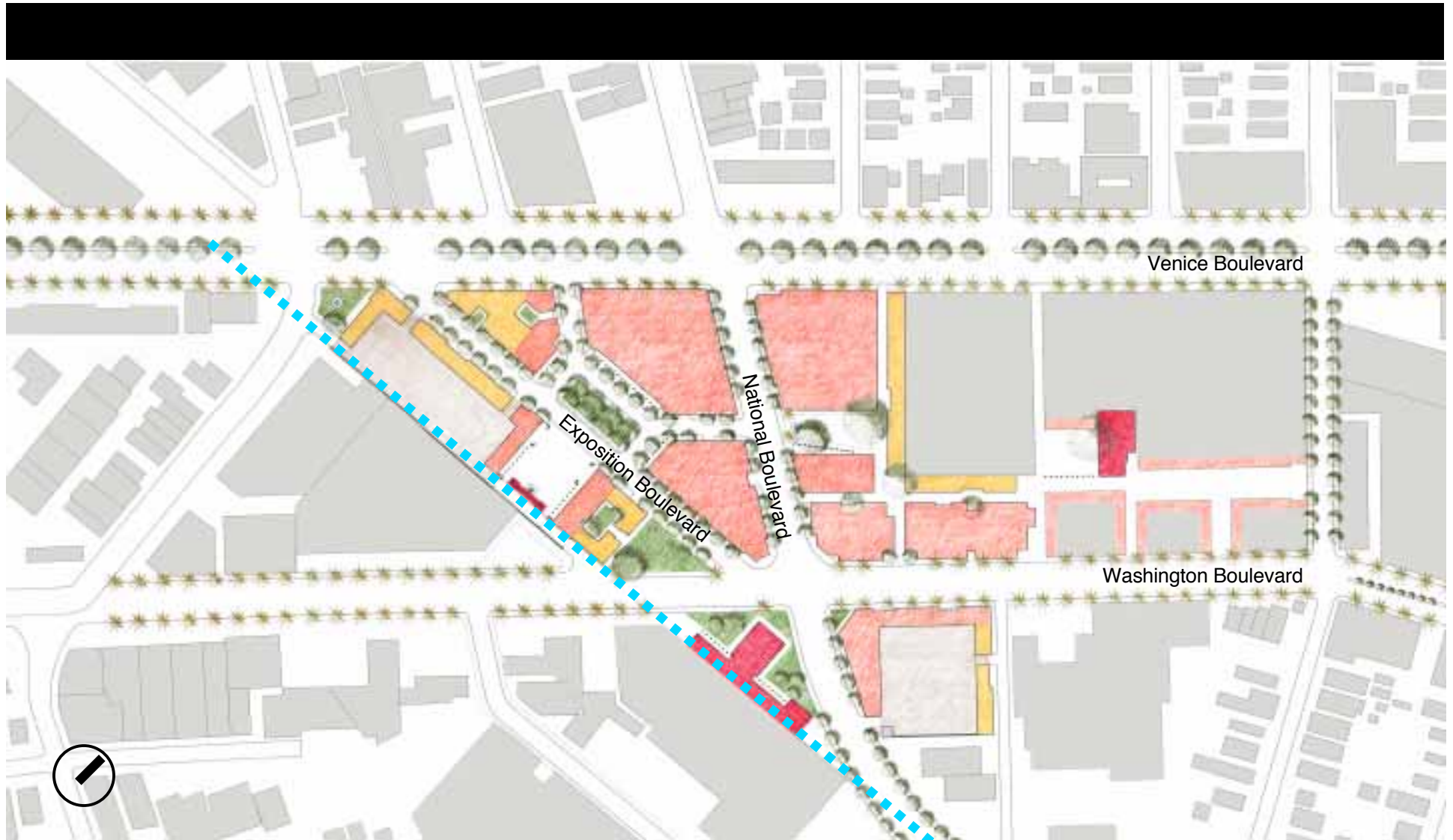






BUILDING SECTION





Civi
c



Retai
l



Residential
with
flex ground
floor



Parks/Garden
s

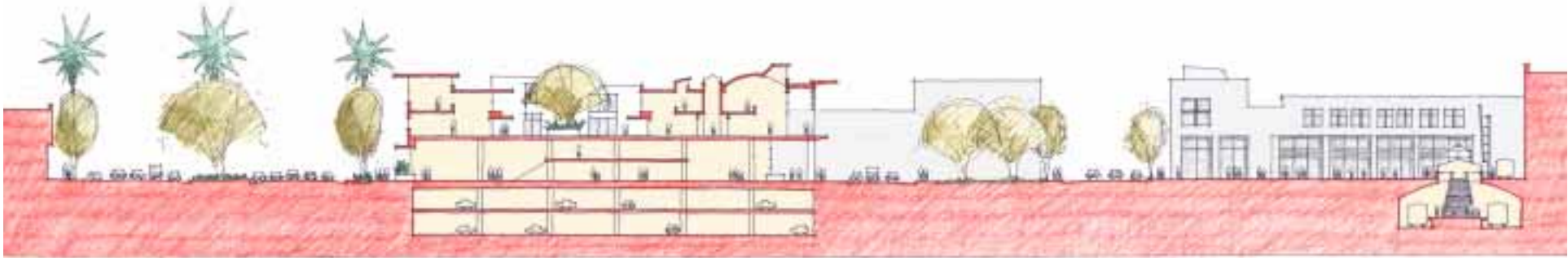


Parkin
g

Ground Level Plan



Aerial View of Culver Crossings Model Looking North



VENICE
BOULEVARD

Block A
Mixed-use Building

Culver Crossings
Park

EXPOSITION
BOULEVARD

Transit
Plaza

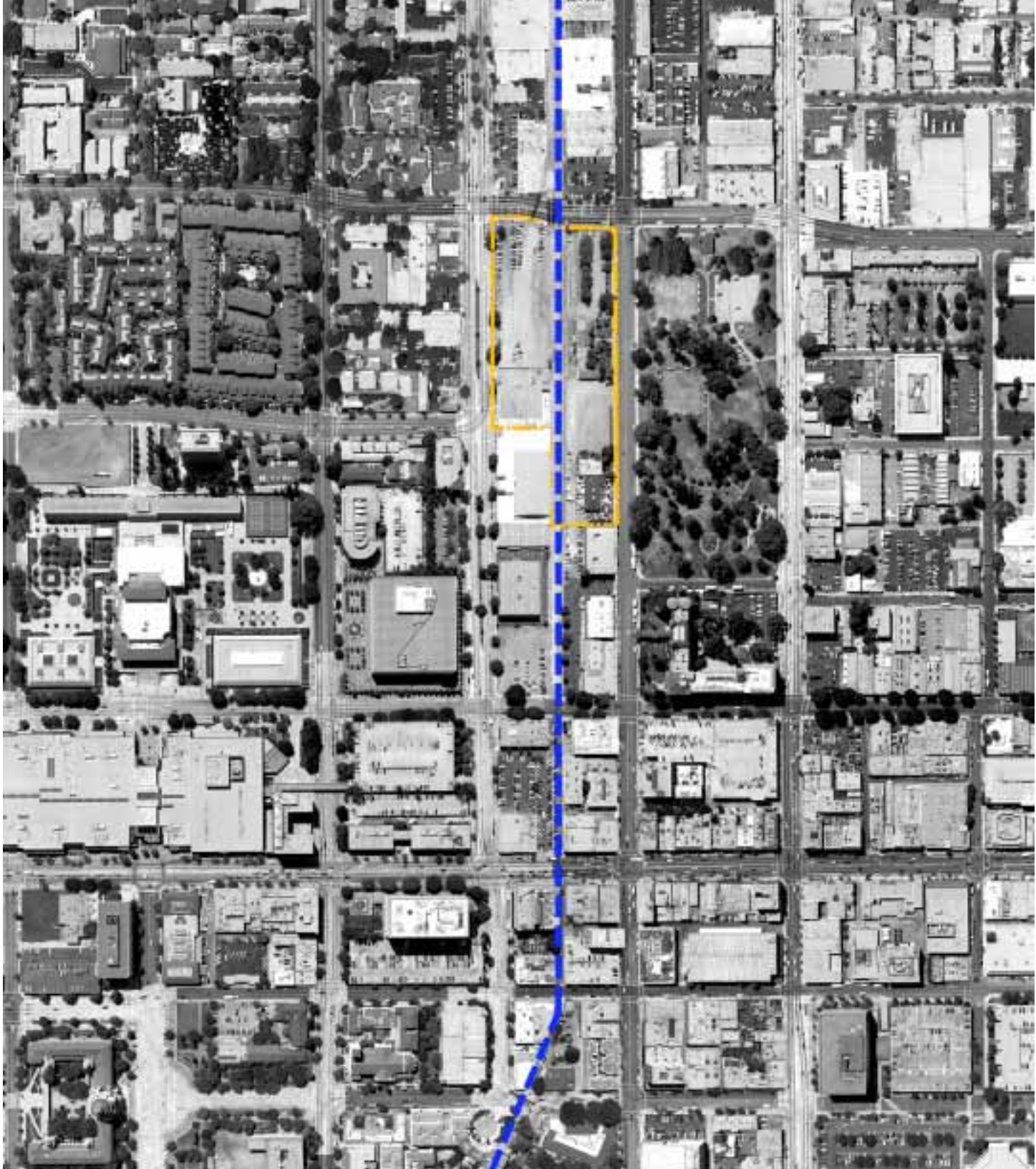
Exposition
Line



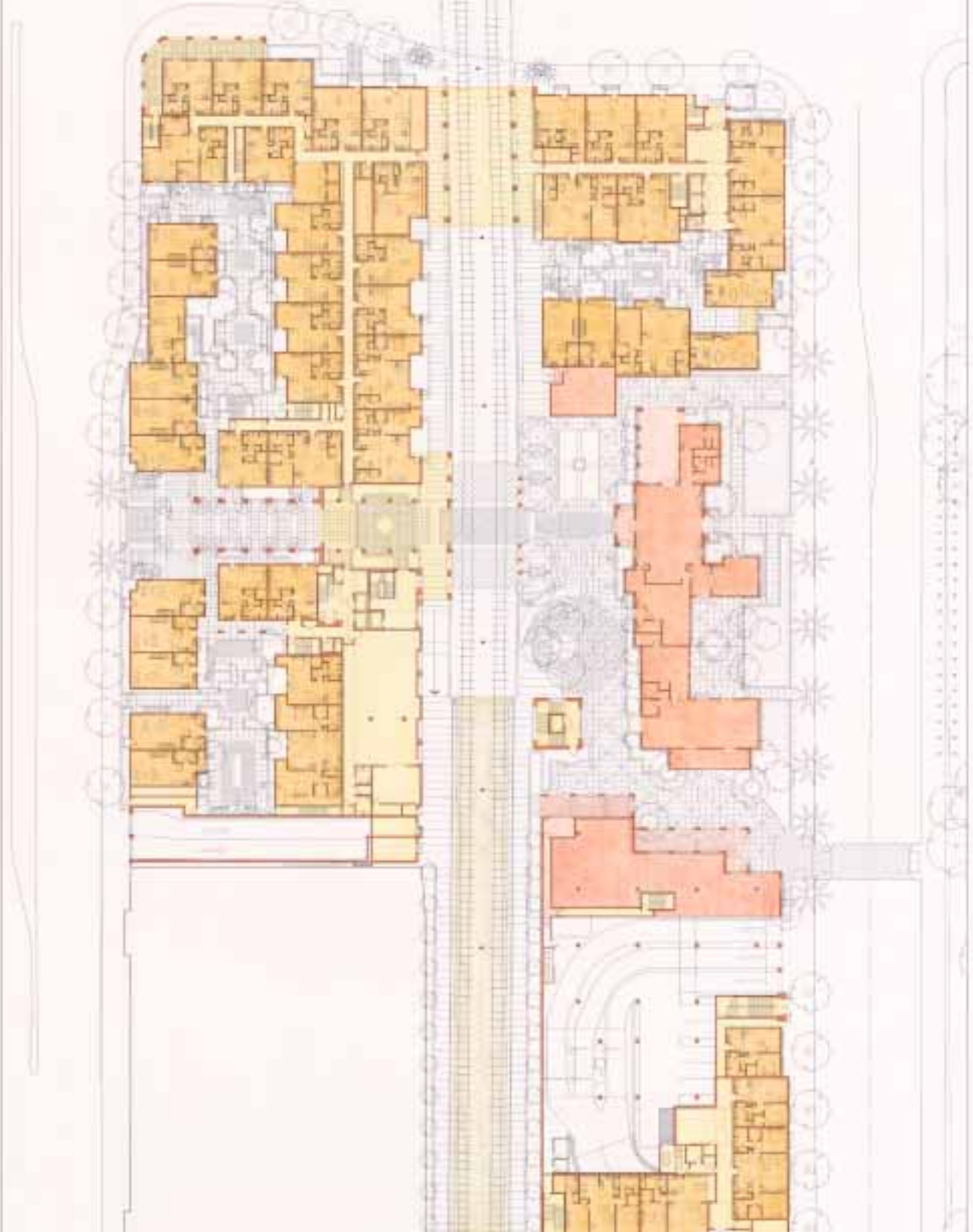
Section Through Transit Plaza And Park



Transit Plaza Looking At Park And Mixed Use Beyond













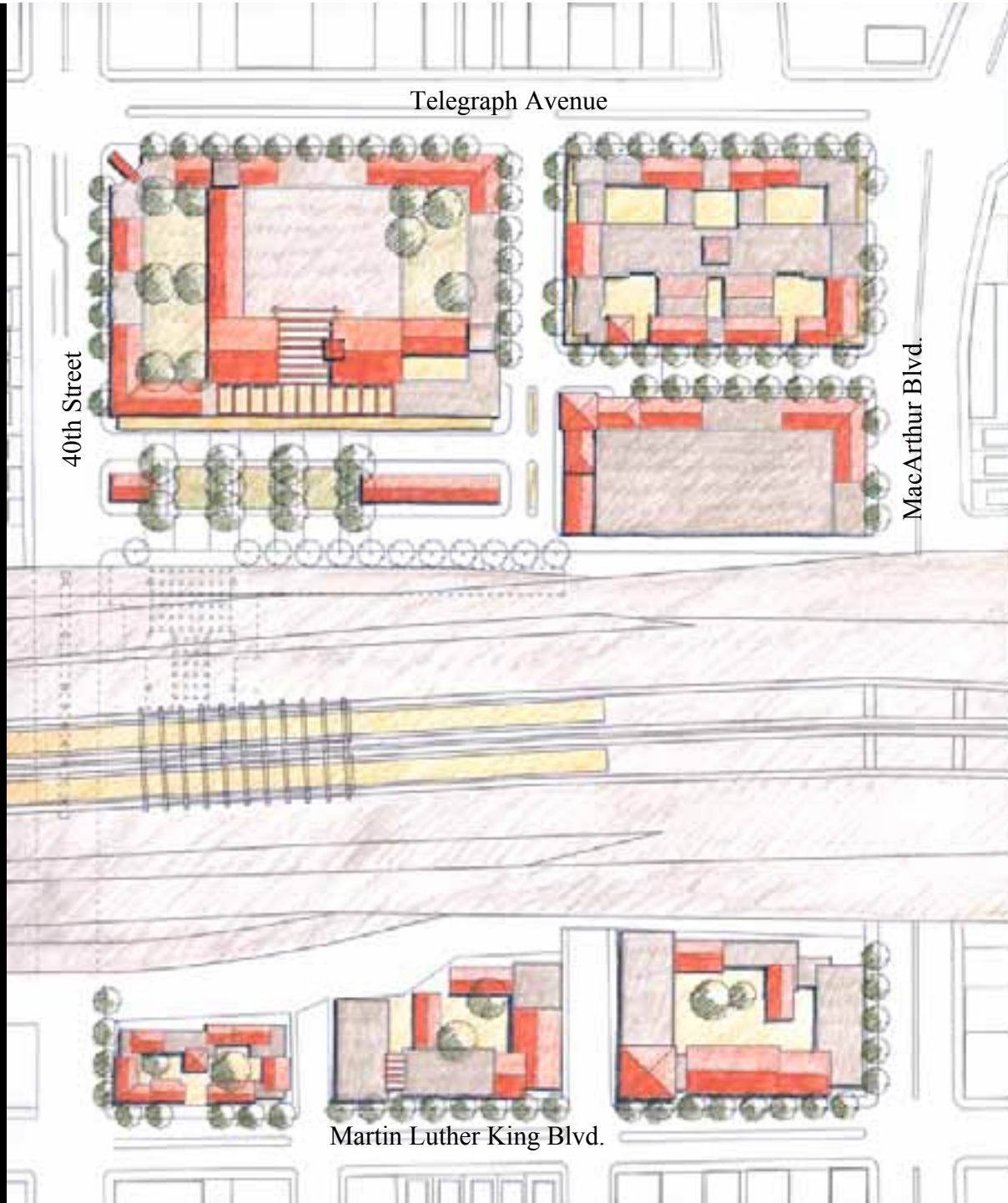


Telegraph Avenue

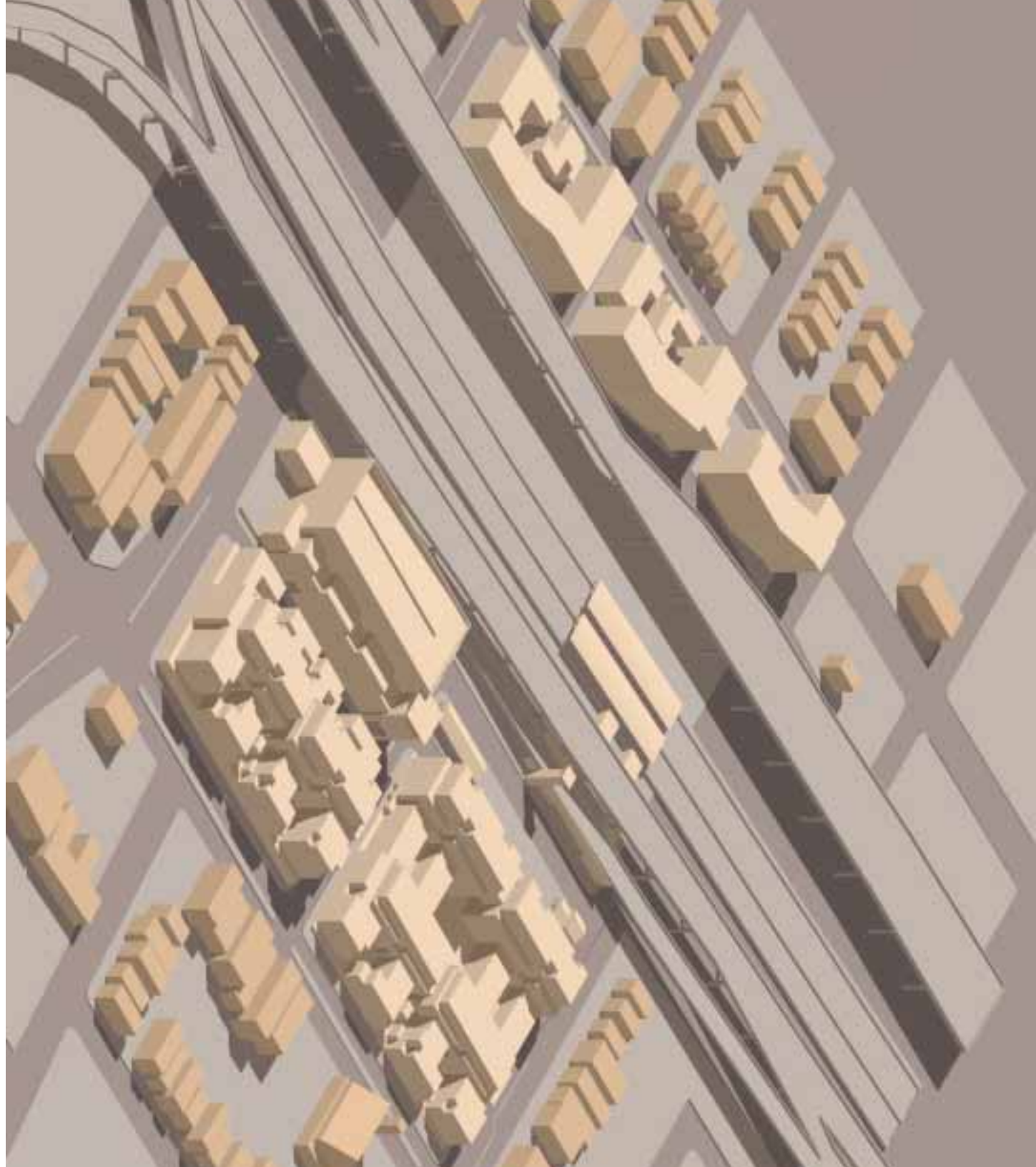
40th Street

MacArthur Blvd.

Martin Luther King Blvd.

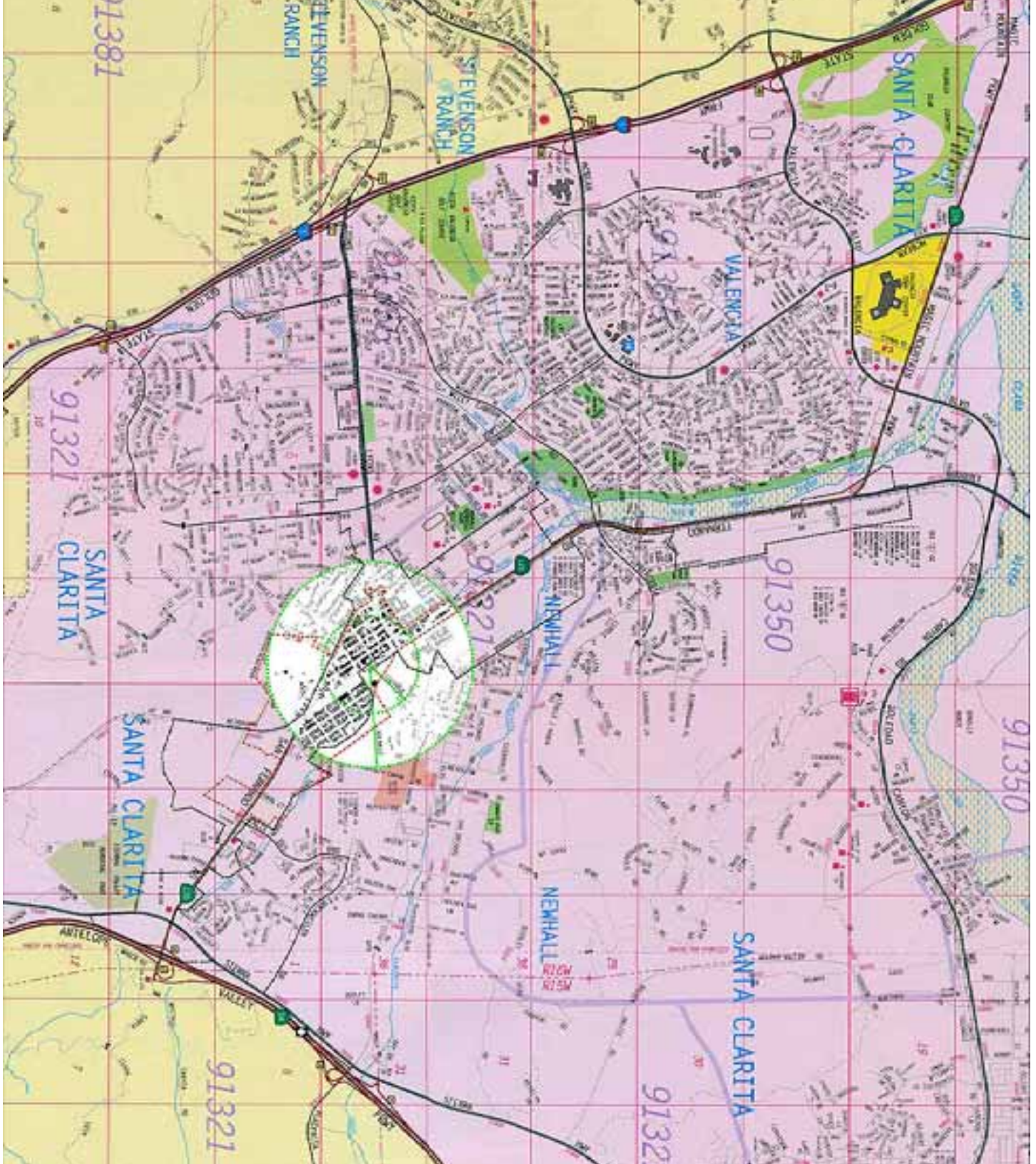


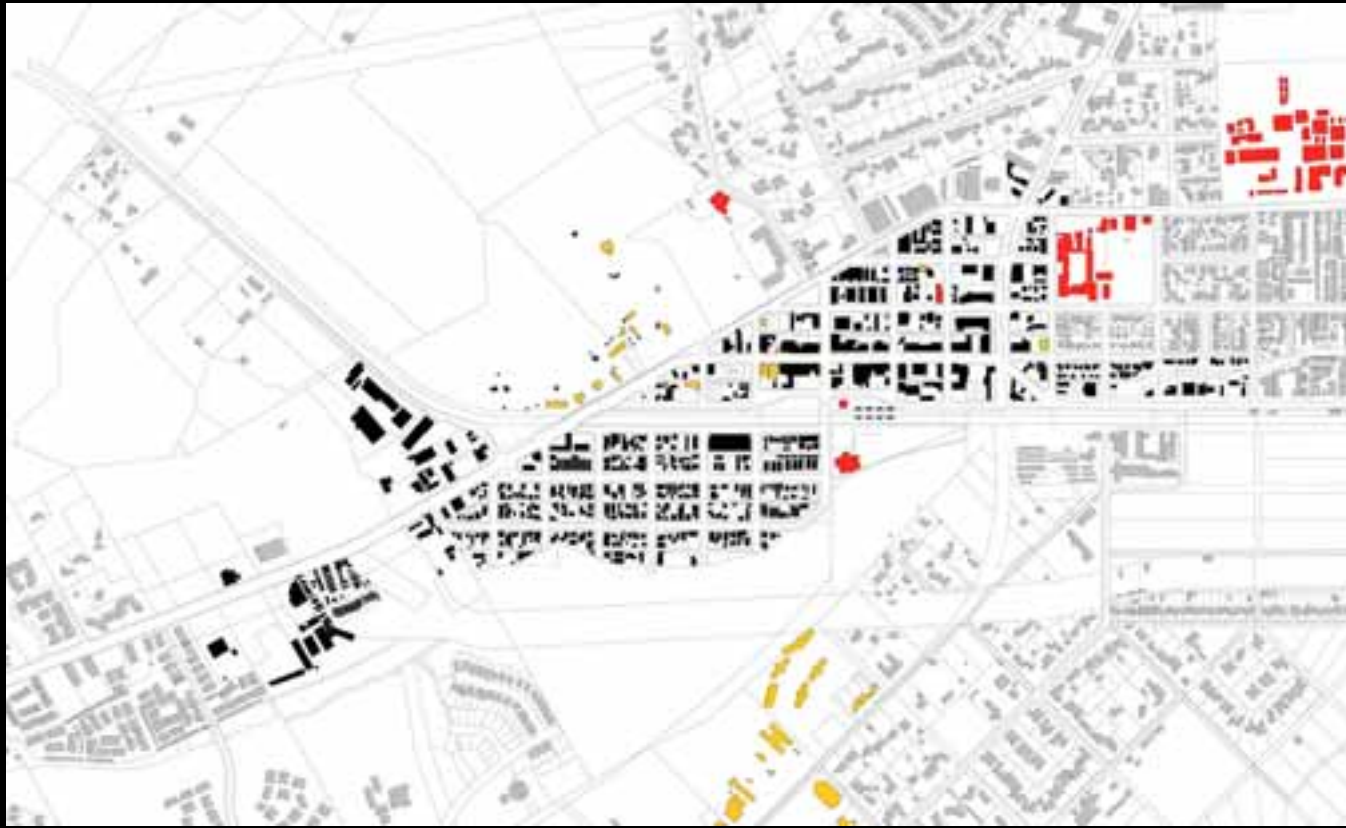


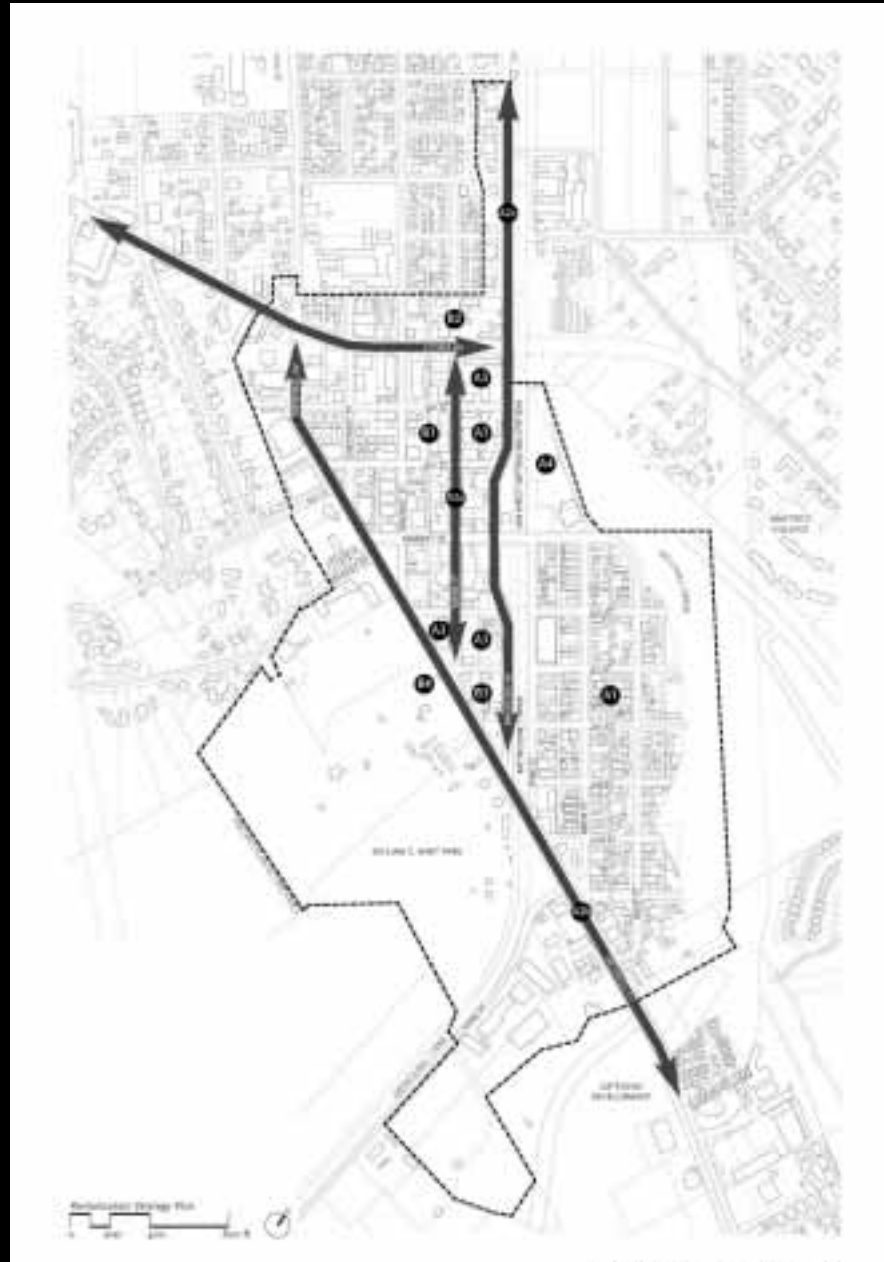


The Architecture and Urbanism of Transit Oriented Development

A Station in T4







Development Strategy







Kennedy Drive Kennedy Road

...the form and character of the neighborhood. The form and character of the neighborhood is defined by the building form, the street form, the public space, and the landscape. The form and character of the neighborhood is defined by the building form, the street form, the public space, and the landscape. The form and character of the neighborhood is defined by the building form, the street form, the public space, and the landscape.

...the form and character of the neighborhood. The form and character of the neighborhood is defined by the building form, the street form, the public space, and the landscape. The form and character of the neighborhood is defined by the building form, the street form, the public space, and the landscape. The form and character of the neighborhood is defined by the building form, the street form, the public space, and the landscape.







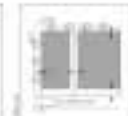




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J. Court

Courts are an extension of the building's footprint. Like lots, they are subject to the same lot coverage requirements, setbacks from the front, side and rear yards. There are special provisions for a side or rear driveway, whether a shared type that is jointly or solely owned by the owner.

K. Lot Width

(a) Minimum: 100 ft.

M. Access

(a) Driveways

1. The maximum width of a paved front driveway shall be double the minimum required width of the lot.

2. Access to a paved front driveway shall be through an open or locked gate serving as a driveway.

3. Driveway access shall be provided between the driveway and public way through a driveway gate and the gate shall be automatic through the entry of a vehicle through the gate and the gate shall be closed.

4. On a corner lot, where access to the driveway and driveway gate is automatic from the driveway, the gate shall be provided and be automatic from the driveway.

N.A.

P. Parking

(a) Standards

1. Minimum parking shall be as set forth in the table below.

2. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

3. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

4. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

5. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

6. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

7. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

8. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

9. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

10. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

11. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

12. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

13. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

14. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

15. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

16. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

17. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

18. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

19. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

20. Where an alternative parking arrangement is proposed, the applicant shall demonstrate that the proposed arrangement is equivalent to the minimum required parking.

R. Screening

(a) Standards

1. The maximum height of a screen shall be as set forth in the table below.

2. The maximum height of a screen shall be as set forth in the table below.

3. The maximum height of a screen shall be as set forth in the table below.

4. The maximum height of a screen shall be as set forth in the table below.

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17. The maximum height of a screen shall be as set forth in the table below.

18. The maximum height of a screen shall be as set forth in the table below.

19. The maximum height of a screen shall be as set forth in the table below.

20. The maximum height of a screen shall be as set forth in the table below.

S. Building Sign and Marking

(a) Standards

1. The maximum height of a sign shall be as set forth in the table below.

2. The maximum height of a sign shall be as set forth in the table below.

3. The maximum height of a sign shall be as set forth in the table below.

4. The maximum height of a sign shall be as set forth in the table below.

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18. The maximum height of a sign shall be as set forth in the table below.

19. The maximum height of a sign shall be as set forth in the table below.

20. The maximum height of a sign shall be as set forth in the table below.



Initiation of Community-Wide Synthesis

Project community, they discuss their role in project and other members of a task force. Community leaders are invited to participate in a series of meetings to discuss the project. Community leaders are invited to participate in a series of meetings to discuss the project. Community leaders are invited to participate in a series of meetings to discuss the project.

A. Library
Location: South of town near highway 101
Project Summary: The new library building and parking lot will be built on a site that is currently vacant. The project will include a new building, parking lot, and landscaping. The project will be completed by the end of 2010. The project will be completed by the end of 2010. The project will be completed by the end of 2010.

Budget Estimate: \$100,000
Funding Source:
 1. Local Property Tax
 2. State Grants
 3. Federal Grants
 4. Local Government
 5. Private Industry
 6. Other Sources

Timeline: 2008
B. Municipal Plaza
Location: North of town near highway 101
Project Summary: The new municipal plaza will be built on a site that is currently vacant. The project will include a new building, parking lot, and landscaping. The project will be completed by the end of 2010. The project will be completed by the end of 2010. The project will be completed by the end of 2010.

Budget Estimate: \$200,000
Funding Source:
 1. Local Property Tax
 2. State Grants
 3. Federal Grants
 4. Local Government
 5. Private Industry
 6. Other Sources



COMMUNITY DEVELOPMENT PLAN
 2008-2010

C. TOD Housing east of Town Square

Location: East of town near highway 101
Project Summary: The new TOD housing project will be built on a site that is currently vacant. The project will include a new building, parking lot, and landscaping. The project will be completed by the end of 2010. The project will be completed by the end of 2010. The project will be completed by the end of 2010.

Budget Estimate: \$300,000
Funding Source:
 1. Local Property Tax
 2. State Grants
 3. Federal Grants
 4. Local Government
 5. Private Industry
 6. Other Sources

Timeline: 2008
D. Sports / Medical Center Development
Location: East of town near highway 101
Project Summary: The new sports and medical center development will be built on a site that is currently vacant. The project will include a new building, parking lot, and landscaping. The project will be completed by the end of 2010. The project will be completed by the end of 2010. The project will be completed by the end of 2010.

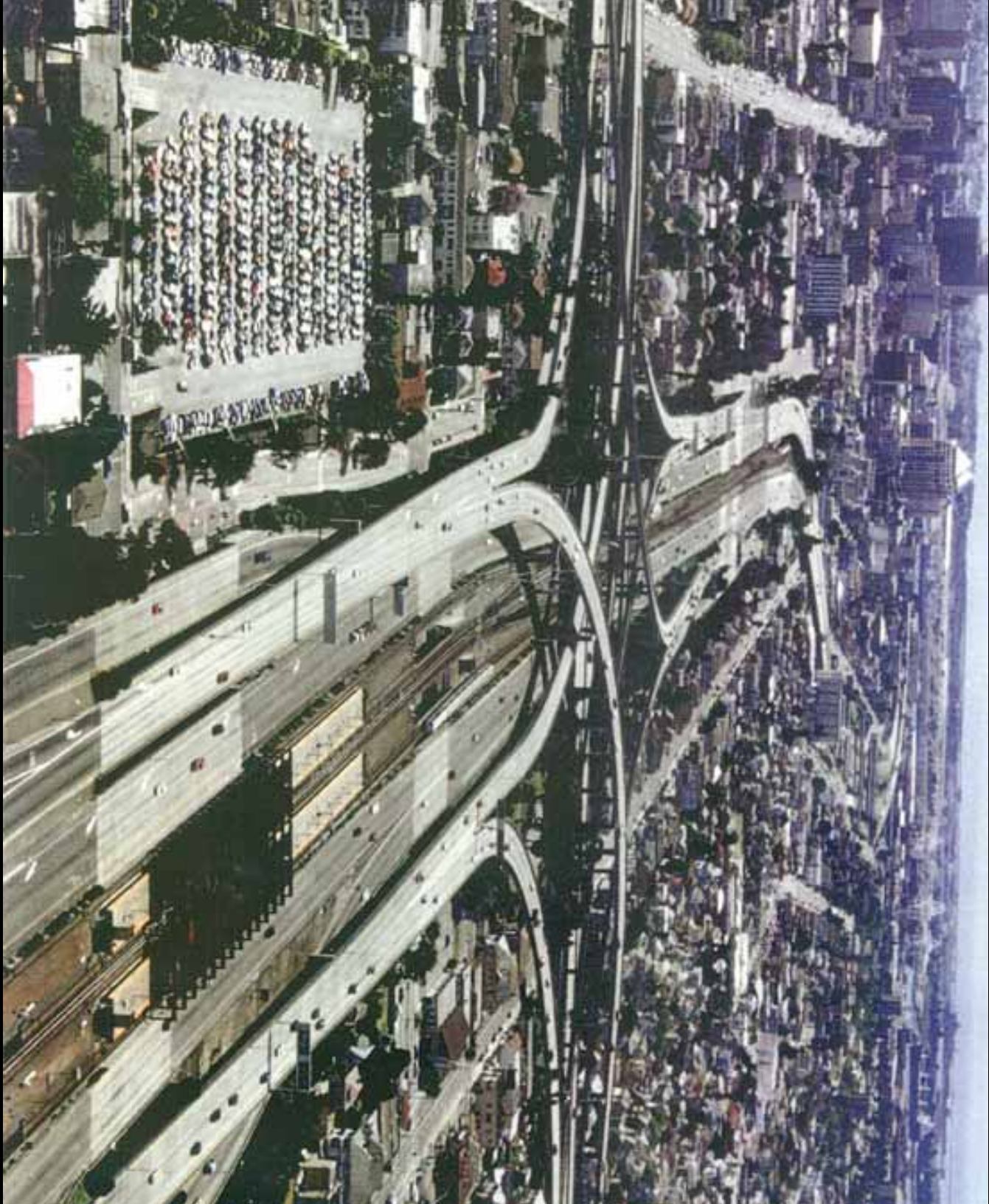
Budget Estimate: \$400,000
Funding Source:
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 2. State Grants
 3. Federal Grants
 4. Local Government
 5. Private Industry
 6. Other Sources

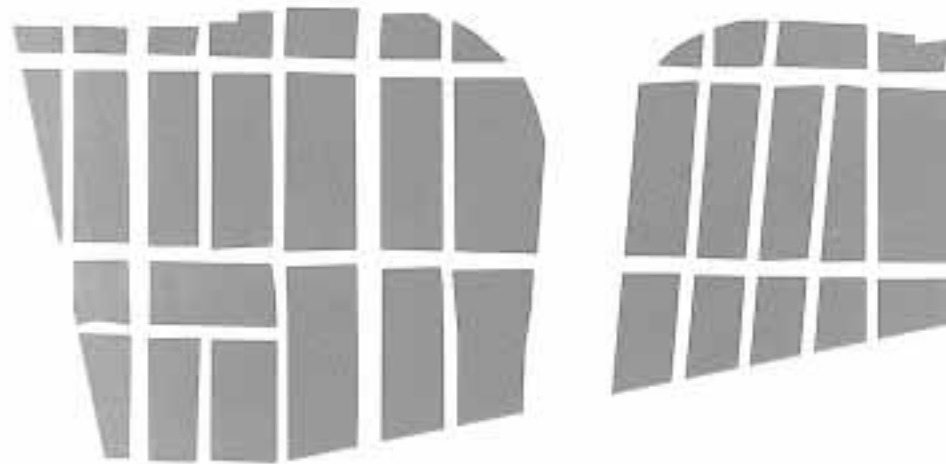
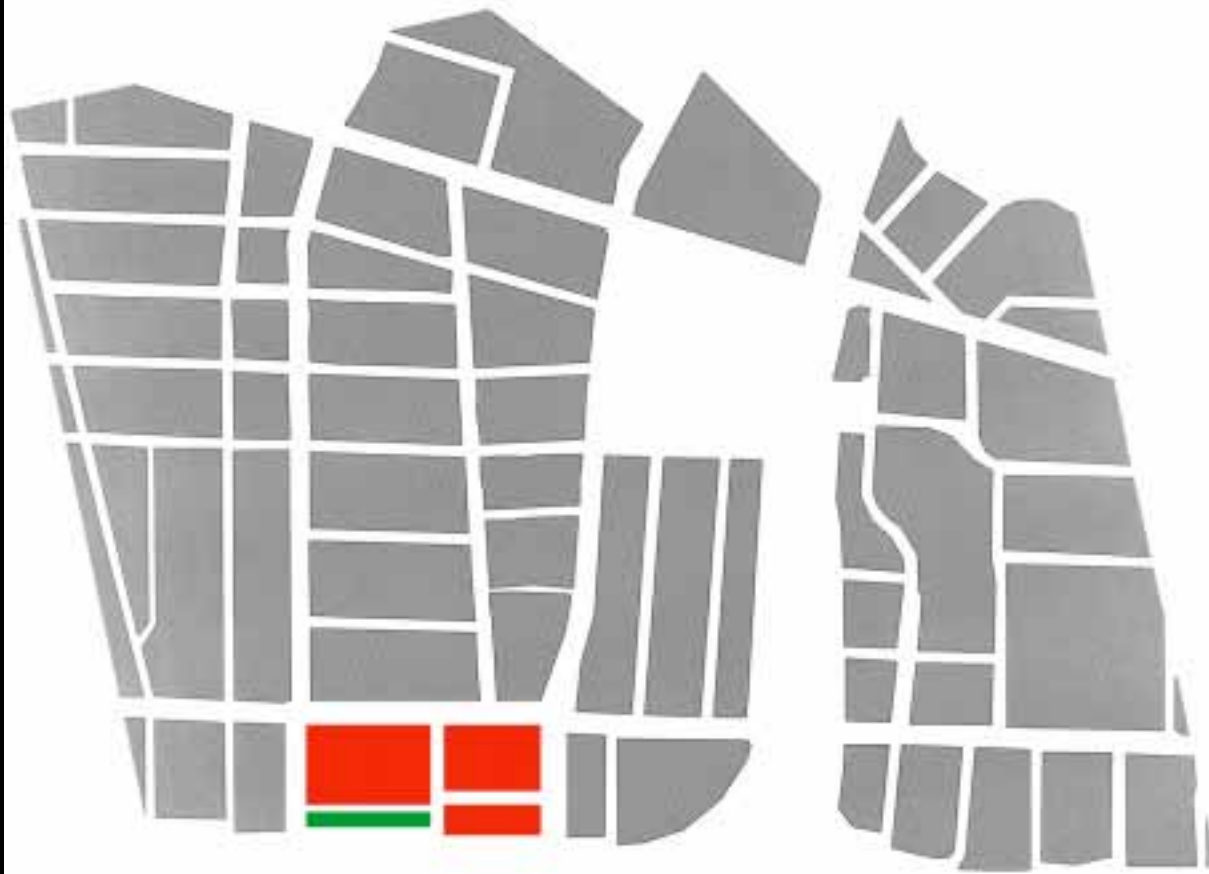


COMMUNITY DEVELOPMENT PLAN
 2008-2010

The Architecture and Urbanism of Transit Oriented Development

A Station in T5







40th Street

Proposed Target

Housing

Public Parking

MacArthur Blvd.

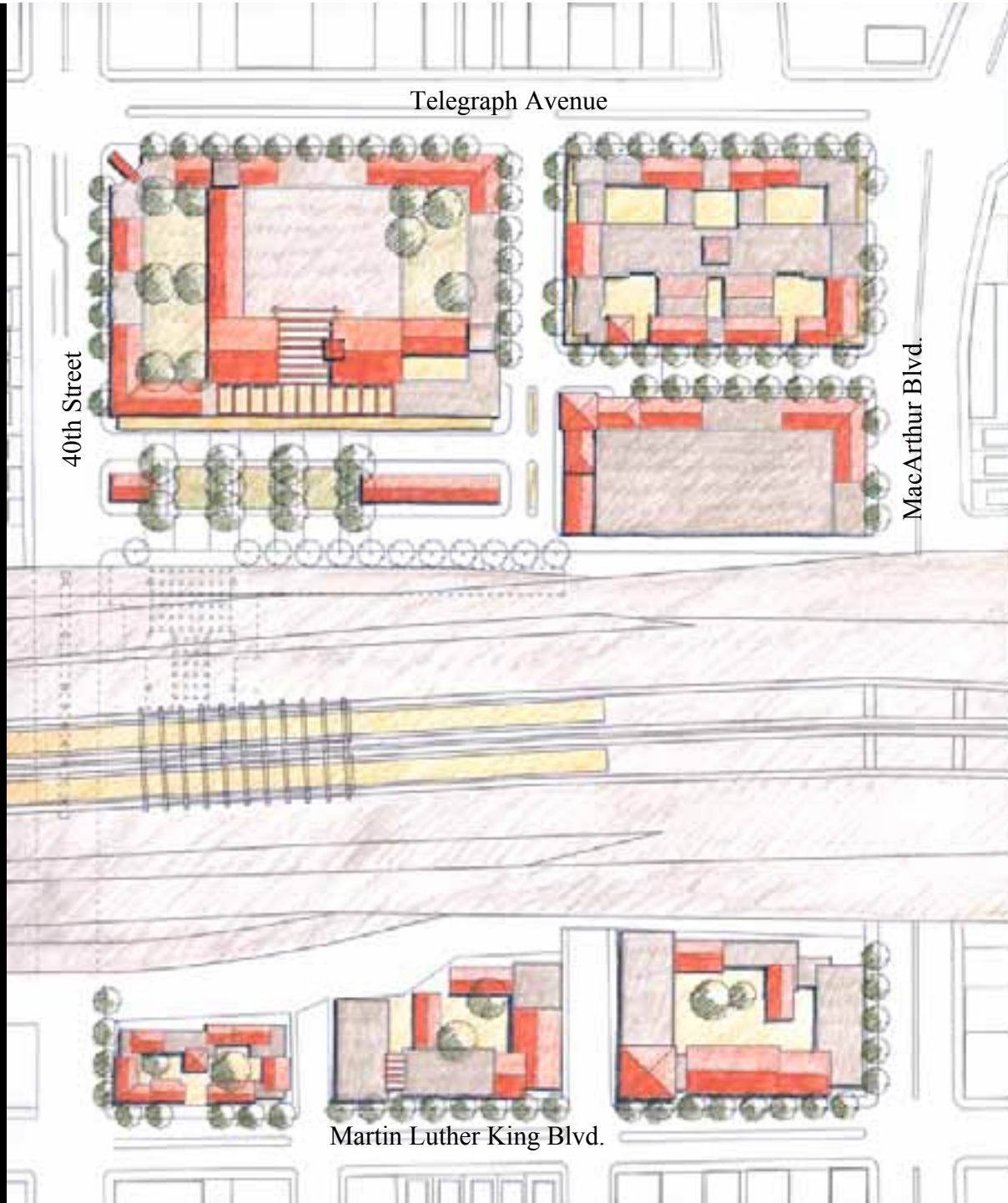
Housing

Telegraph Avenue

40th Street

MacArthur Blvd.

Martin Luther King Blvd.



Telegraph Avenue

750 cars - 2 levels

192 cars - 1 level

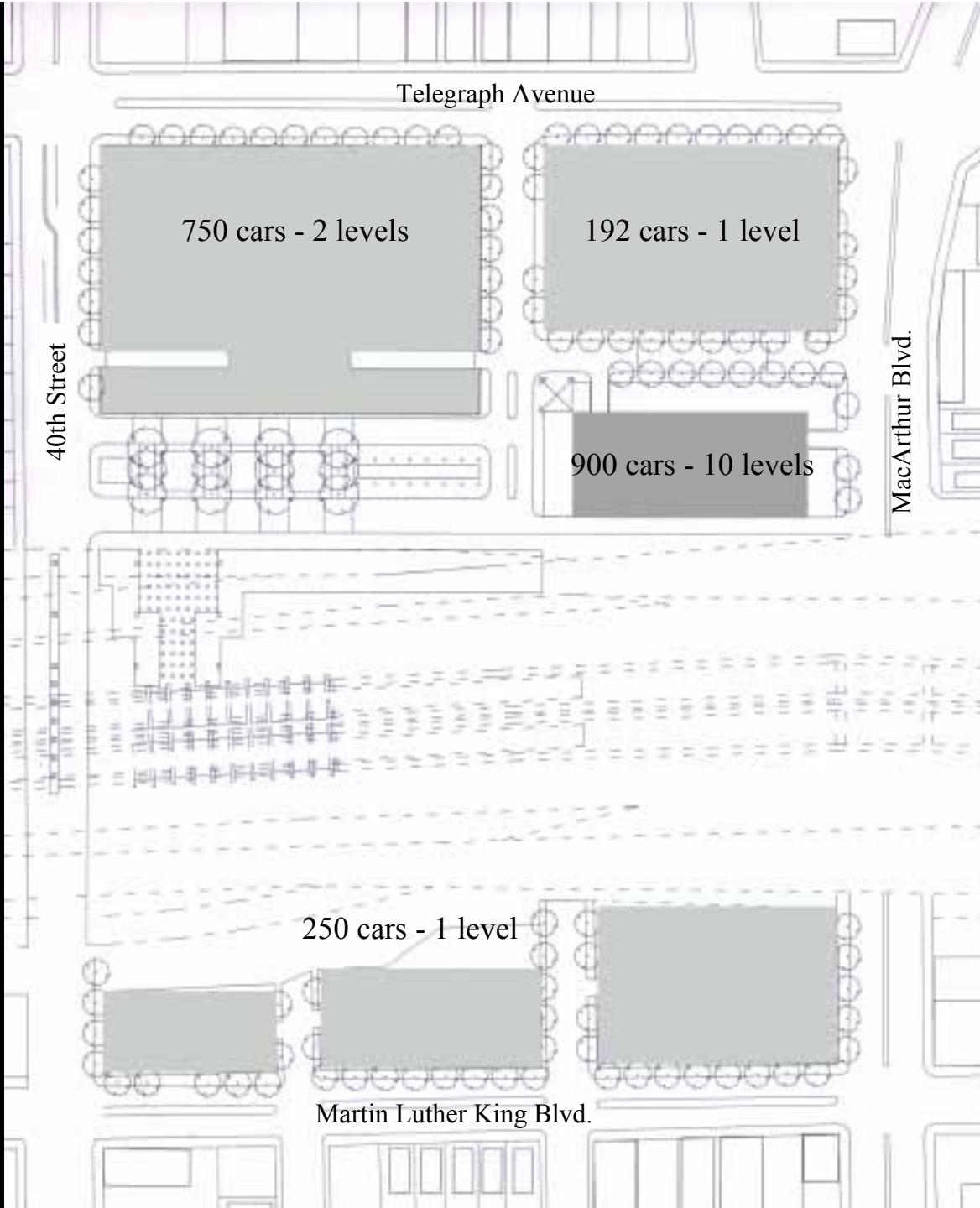
40th Street

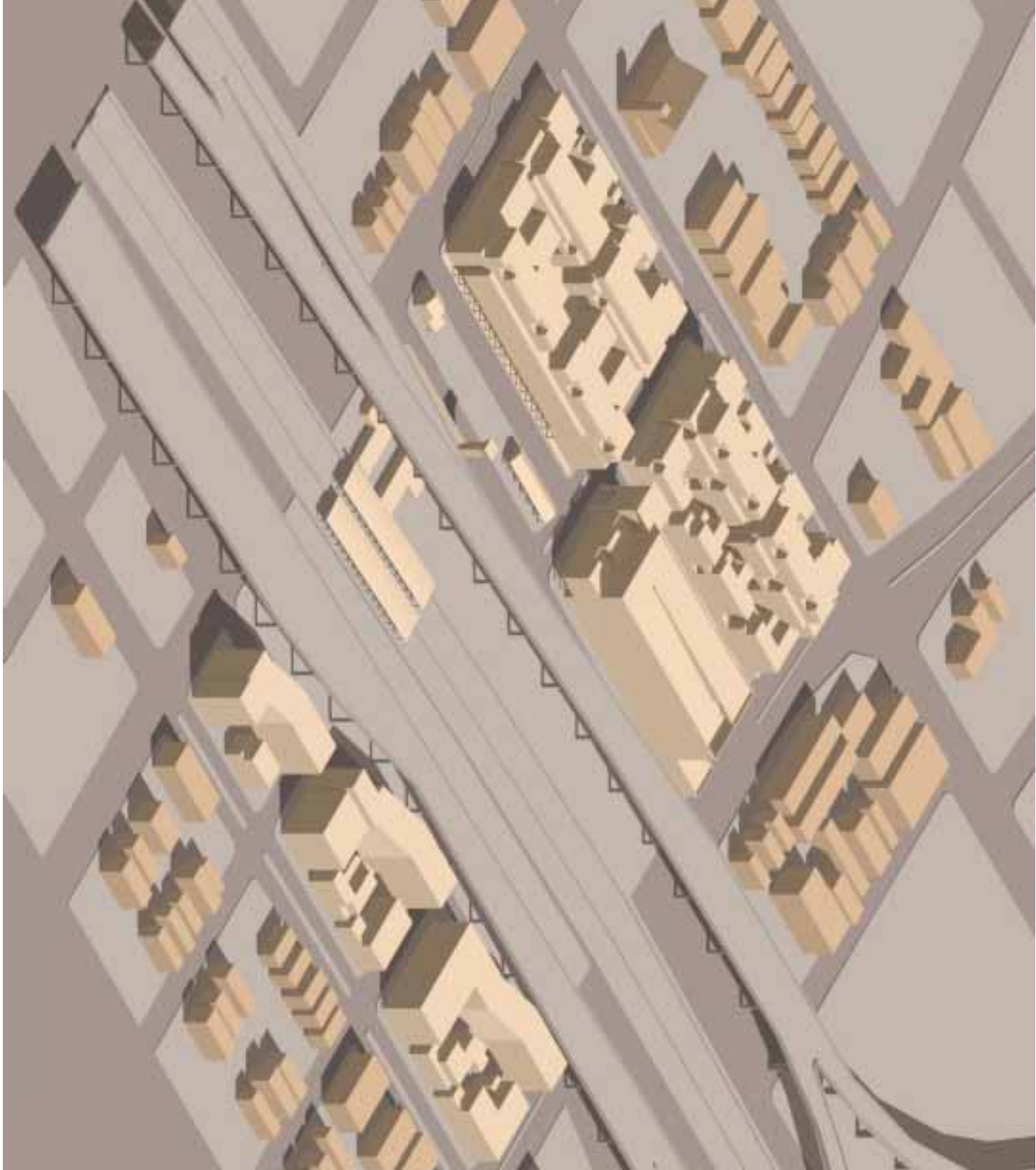
900 cars - 10 levels

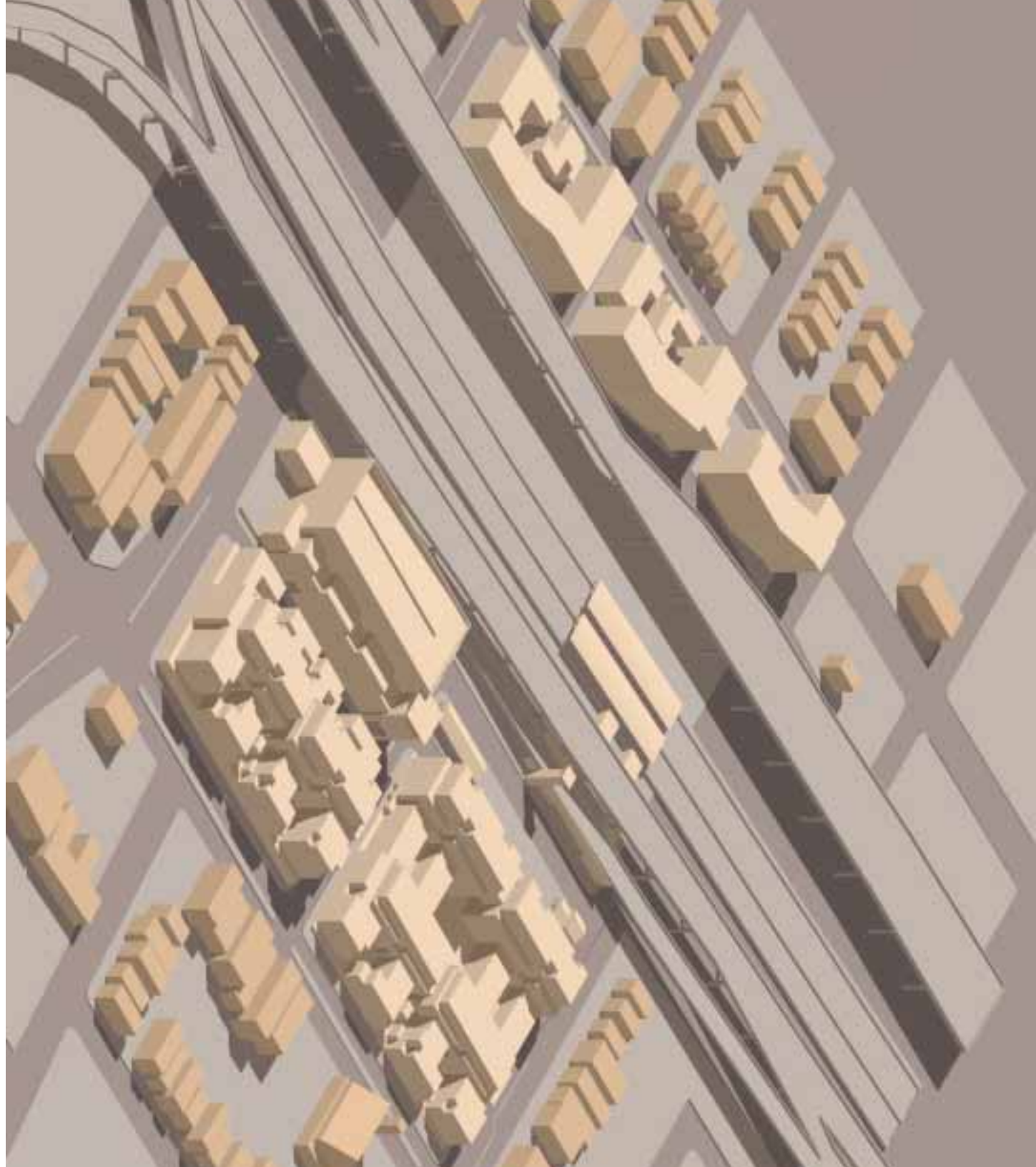
MacArthur Blvd.

250 cars - 1 level

Martin Luther King Blvd.









BART Station

Transit Plaza

Target, Retail, Lofts

SECTION EAST-WEST 1











The Architecture and Urbanism of Transit Oriented Development

- 1 Engineering of System
- 2 Station Planning
- 3 Architectural Criteria

Is parking concealed from the public/private realm ?



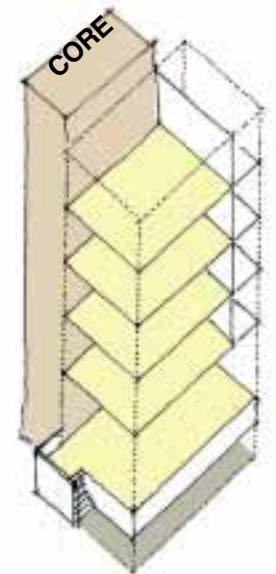
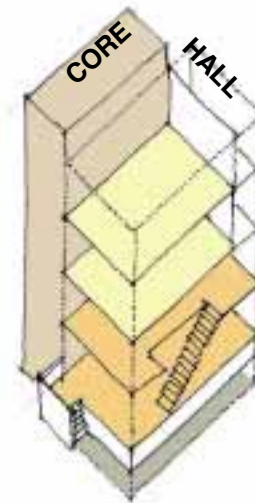
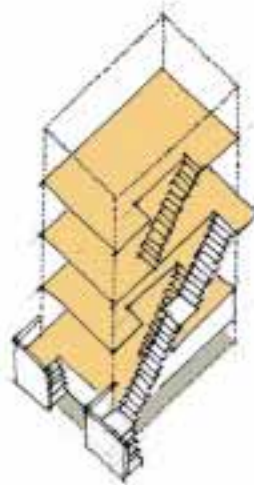
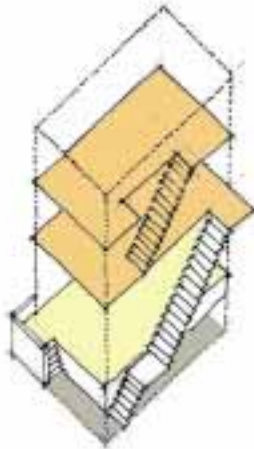
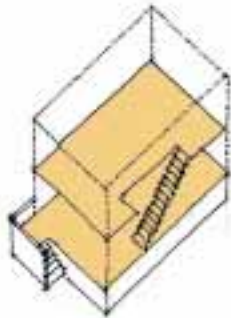
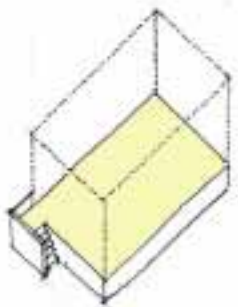
Does blended density promote project diversity & proper street form ?



Have a variety of transect-consistent architectural types been considered?



Are a variety of unit types included?



Flat/Loft

Townhouse

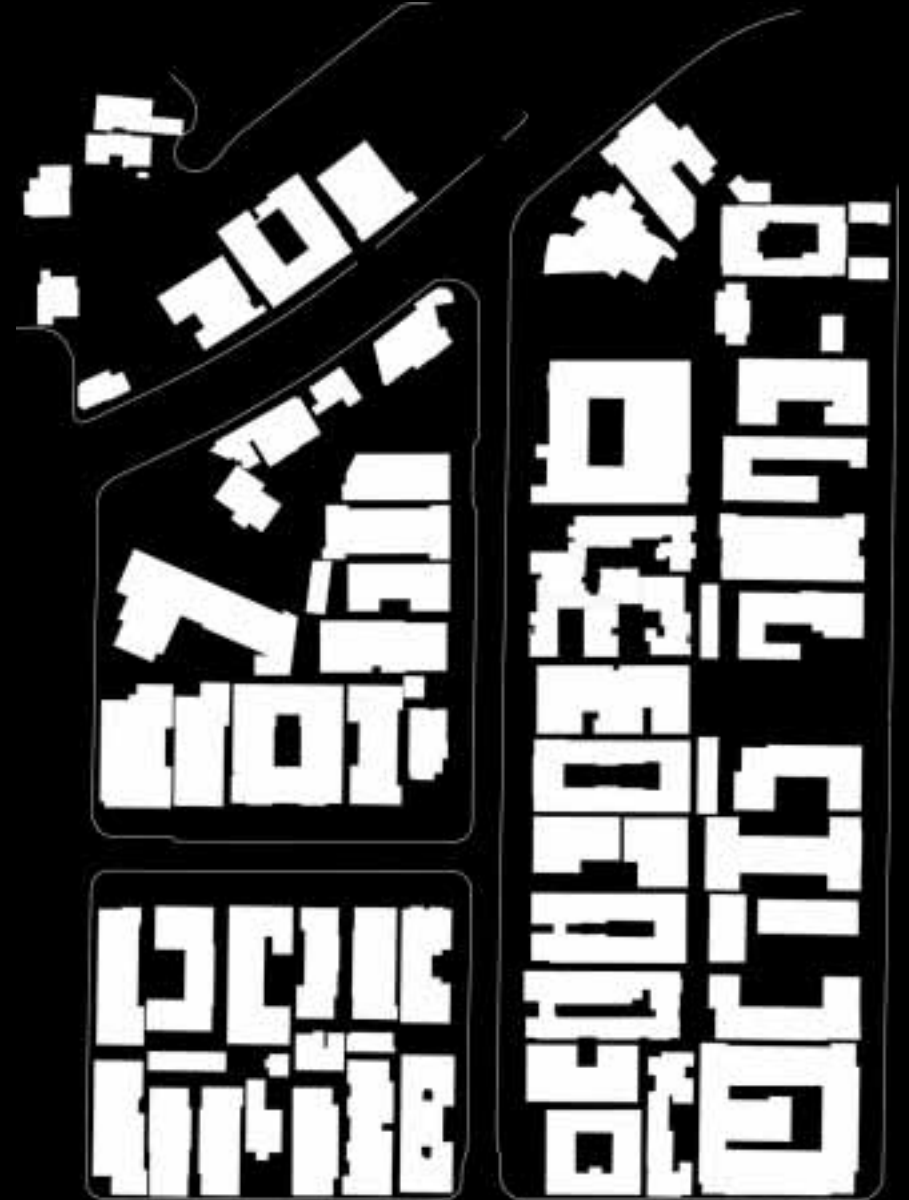
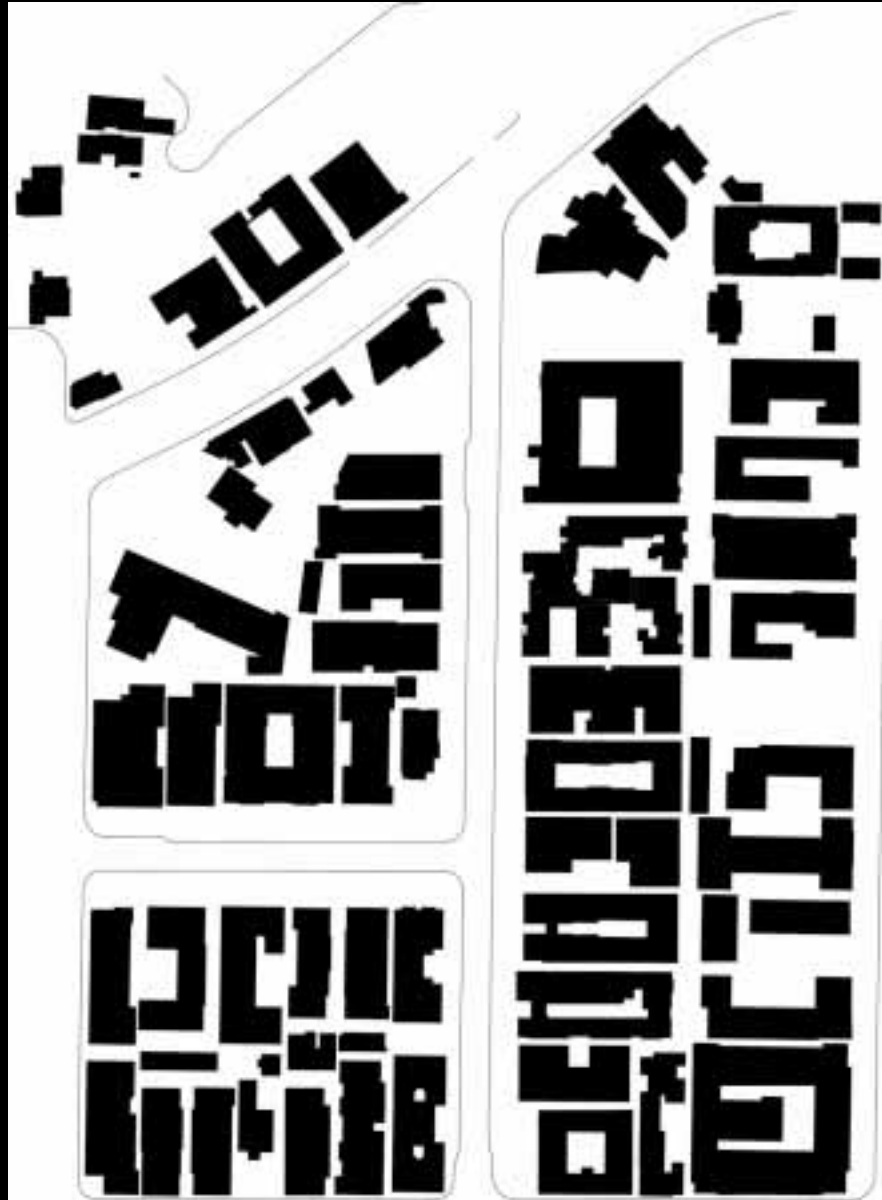
Townhouse over
Flat/Loft

Townhouse over
Townhouse

Flats over
Townhouse

Flats over
Flat/Loft

**Is there a clear integration of the solid (building)
and the void (open space)?**



Has the ground floor been activated?



Are building fronts (entries) and backs (services) properly located?



Have industry efficiencies been utilized without being normative?



Has sustainability been considered at the building scale?



Have multiple building styles or at least a 'kit of parts' been adopted?





Houston, Texas







