

Langstaff Gateway Urban Design and Streetscape Guidelines - June 2010

Langstaff Gateway Urban Design and Streetscape Guidelines

This document was approved by the Council of the Town of Markham in June 2010, and it may only be amended by the Council of the Town of Markham.

The Langstaff Gateway Urban Design and Streetscape Guidelines is comprised of extracts from the Calthorpe/Ferris Langstaff Land Use & Built Form Master Plan*, dated October 2009, including the Master Plan, Development Guidelines (Chapter 5) and the Street Sections from Chapter 4.

These Urban Design and Streetscape Guidelines are intended to further refine the urban design principles and guidelines established by the Langstaff Gateway Planning District Secondary Plan. The Guidelines consider matters such as:

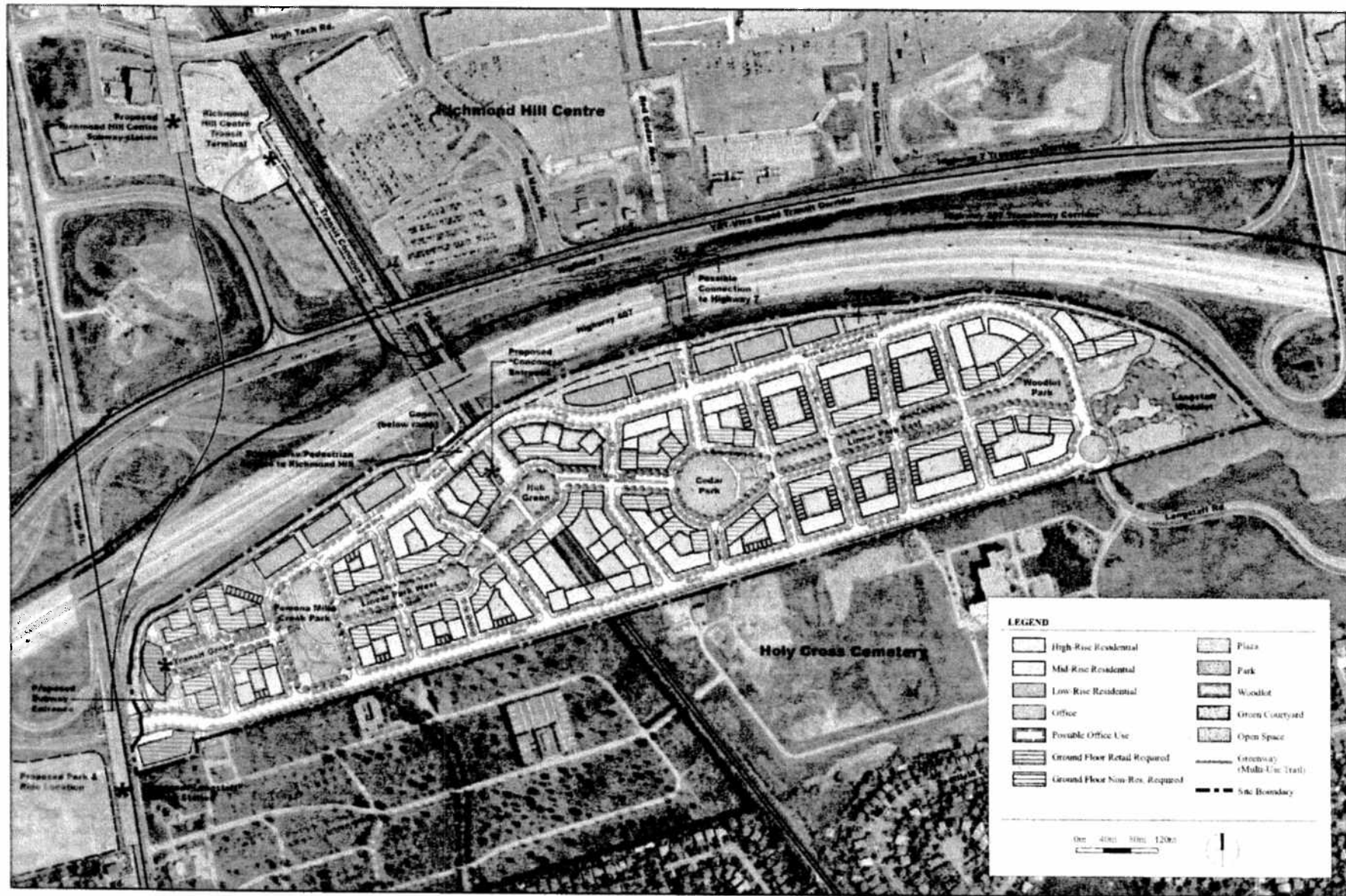
- development blocks;
- heights;
- building front, side and rear setbacks;
- pedestrian entry points and locations;
- building massing;
- parking, loading, circulation and access;
- exterior design;
- maximum floorplate for high-rise buildings;
- tower placement; and
- street sections.

As a condition of development approval, the applicant will be required to engage the services of a qualified architect, acceptable to the Town, who shall review all development plans and certify their consistency with the Langstaff Gateway Urban Design and Streetscape Guidelines.

*The Land Use & Built Form Master Plan was endorsed as the basis for amendments to the Town's Official Plan and a new Secondary Plan for the Langstaff Gateway area of Thornhill by Development Services Committee and Markham Council in December 2009.

JUNE 2010

LAND USE & BUILT FORM MASTER PLAN



The Langstaff Land Use and Built Form Master Plan (above) is a true mixed-use plan that focuses density, office and retail at the two transit nodes that access the subway and rail stations.

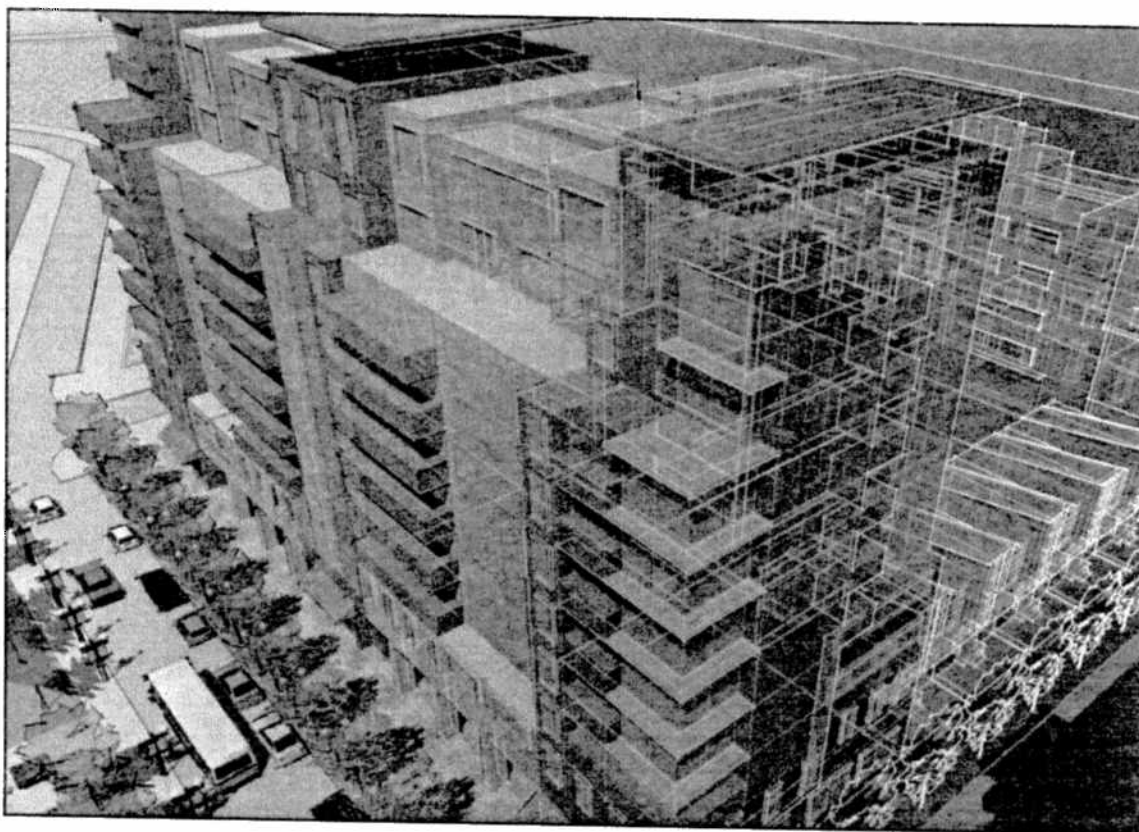
5 DEVELOPMENT GUIDELINES

Allowable Uses

Design Controls

Landscape & Open Space

Parking & Loading





ALLOWABLE USES

Section 5.01 - Types of Use

Section 5.02 - Use Categories

Section 5.03 - Conditional Use

Section 5.04 - Accessory Use or Structure

Section 5.05 - Temporary Use

ALLOWABLE USES

SECTION 5.01 - TYPES OF USE

Use categories are listed in Table 5.05 - Permitted Land Uses per Building Type. The following serve as a key to Table 5.05 and indicate treatment for each use according to Building Type.

Permitted Uses

"P" indicates that a specific use is permitted by right within the given Building Type. "G" indicates that a specific use is permitted by right in the ground floor only within the given Building Type. Such uses must meet all other appropriate requirements of these Guidelines.

Conditional Uses

"C" indicates that a use is permitted provided that the project appropriately responds to additional criteria. "CG" indicates that a use is permitted in the ground floor only, provided that the project appropriately responds to the additional criteria. Conditional uses must meet all other appropriate requirements of these Guidelines and must be approved by the Town of Markham.

Accessory Uses

"A" indicates the use as accessory to the primary use on a given site. An Accessory Use is permitted by right assuming that additional requirements established in Section 5.04 - Accessory Use or Structure, are met.

Uses Not Allowed

A "-" indicates that a particular use is not permitted within a given Building Type.



ALLOWABLE USES

SECTION 5.02 - USE CATEGORIES

Classification

Use categories classify land uses and activities based upon a similar function, product or physical characteristics. Characteristics include the type and amount of activity, the type of customers or residents, how goods or services are sold or delivered, likely impact on surrounding properties, and site conditions.

Determination of Use

In the event that a use is not listed or classification is otherwise required, the Town of Markham shall classify the use as appropriate. Following are criteria for determining classification:

- A. Actual or Anticipated characteristics of the activity.
- B. Approximate size of site area or floor space.
- C. Amounts of sales and customer type generated.
- D. Number and character of employees.
- E. Hours of operation.
- F. Building and site arrangement.
- G. Vehicles used and parking requirements.
- H. Number of vehicle trips generated.
- I. Required signage.
- J. Advertisement of use.
- K. Likely impact on surrounding properties.
- L. Ability to operate independently of other activities on a site.
- M. Any other criteria which the Town of Markham deems relevant.

SECTION 5.03 - CONDITIONAL USE

Criteria for Approval

Approval of a use in a given Building Type is conditional if the use can be made compatible assuming specific criteria have been met to address negative impacts upon the surrounding area. Following are variables for consideration of approval of a Conditional Use:

- A. Conformity and compatibility with the approved Langstaff Land use and Built Form Master Plan.
- B. The proposed Conditional Use will not adversely impact the surrounding area or the overall development of Langstaff.
- C. The location, size, intensity, and accessibility of the use will not adversely impact the marketability of surrounding uses or reduce the anticipated standard of living.
- D. The size, floor, area, mass, and general appearance of the proposed structure are to be compatible with surrounding structures.
- E. Adjacent streets and utilities have sufficient capacity to meet infrastructure requirements of the Use.
- F. Traffic operations and access to the site is deemed appropriate by the Town of Markham.
- G. Appropriate parking will be available and in accordance with criteria established by these Guidelines.
- H. Impacts such as night lighting and noise have been successfully addressed.

ALLOWABLE USES

SECTION 5.04 - ACCESSORY USE OR STRUCTURE

Criteria for Approval

A use or structure shall be considered an Accessory Use or Accessory Structure if it meets the following criteria:

- A. The use or structure serves the primary use and its inhabitants or principal structure.
- B. The use is subordinate in area, extent, or purpose to the primary use.
- C. The use is located on the same lot as the primary use.
- D. The use is included in calculation of maximum built up area.

Permitted Accessory Uses

Following are permitted Accessory Uses and Accessory Structures in Langstaff.

- A. Home Occupation and Caretakers quarters as noted in Table 5.01 as well as in the Home Occupation Section of these Guidelines.
- B. Storage structures not exceeding 10 percent of the maximum lot coverage and maintaining compatibility of scale, materials and design with the principal structure.
- C. Commercial or Institutional uses such as cafes or post offices for the exclusive use of employees associated with commercial or office use.
- D. Solar panels and similar features, awnings, canopies, carports, and other amenities attached or directly related to the primary structure.
- E. Recycling storage and enclosures.
- F. Radio, television or other telecommunications antennas.
- G. Temporary uses associated with construction sites.

Prohibited Accessory Uses

The following uses are prohibited in Langstaff.

- A. Open storage of loaded and unloaded vehicles.
- B. Open storage of any kind (i.e. materials, supplies or equipment).
- C. Outdoor display for sale of items such as automobiles, furniture, appliances or other large-scale materials.
- D. Any other use not expressly provided for within these guidelines which the Town of Markham deems as a prohibited accessory use.



ALLOWABLE USES

Home Occupations

Conditions

Where a Home Occupation is permitted in any given Building Type, the Home Occupation:

- A. Shall clearly be a secondary to the residential use of the dwelling.
- B. Shall be conducted entirely within the dwelling unit in the main building on the lot.
- C. Shall be conducted by at least one of the residents of a dwelling unit on the same lot.
- D. Shall not occupy more than 25 percent of the gross floor area of the dwelling unit and any associated accessory buildings on the same lot.
- E. May be carried out in an accessory building if the accessory building complies with the required yards for the main building.
- F. Shall not create noise, vibration, fumes, odour, dust, glare or radiation which is evident outside the dwelling unit.
- G. Shall not employ more than one employee, in addition to members of the household.
- H. Shall not involve the outdoor storage or outdoor display of materials or finished products.
- I. Shall not consist of an occupation that involves the sale of commodity not produced on the premises, except that telephone or mail order sales of goods are permitted.
- J. If involving instructional activity, shall not be occupied by more than four students at any one time for such an activity.
- K. Shall not require receipt or delivery of merchandise, goods or equipment by other than a passenger motor vehicle or by parcel or letter carrier mail services using motor vehicles typically employed in residential deliveries.

Prohibited Home Occupations

Notwithstanding the above, the following uses are not Home Occupations for the purposes of these Guidelines:

- A. Any use involving the storage, repair, maintenance and/or towing of motor vehicles or other machinery or equipment.
- B. Medical offices, except as set out in the following Section, Special Provision for Medical Offices.
- C. Any use involving the treatment, care, and/or grooming of any animal.
- D. Any use involving the sale of prepared food for human consumption.
- E. Dating bureaus/escort services.
- F. Contractor's yards.
- G. Taxi services.
- H. Retail stores.

Special Provision for Medical Offices

A medical office may be located within the dwelling unit of a physician provided the dwelling unit is located on the ground floor, on a lot that has a front lot line that abuts a Provincial Highway, a major or minor arterial road or a major collector road as shown on the schedule to the Town of Markham Official Plan.

The permission for a Home Occupation in any given Building Type does not constitute any sort of guarantee or warranty that the relevant authorities will recognize the building / premises as an appropriate place for a business license / for the undertaking of business. In all respects, the relevant purchaser should comply with the law and the rules of the relevant competent authorities.

Accessory Use Development Standards

The following standards shall apply to all accessory structures:

- A. The combination of all structures on a property, including the primary structure and all accessory structures, shall not exceed any requirements established in this chapter for the given Building Type.
- B. No accessory structure shall be constructed upon a property prior to completion of the primary structure.

ALLOWABLE USES

SECTION 5.05 - TEMPORARY USE

Permitted Temporary Uses

Unless otherwise prohibited by these Guidelines, the following temporary uses and structures may be permitted provided that they do not adversely affect surrounding properties nor disrupt the normal activity associated with Permitted Uses:

- A. Contractor's office, construction equipment sheds and lay down areas, haul roads, access roads, borrow/fill sites and other construction related uses.
- B. A real estate office.

Duration of Temporary Use

- A. A temporary use may be granted for a maximum time duration determined by the Town of Markham. An extension of time for continuance of a temporary use may be granted by the Town of Markham upon request and review.
- B. Within 30 days following expiration of the granted time duration, the lot shall be cleared of all debris and all temporary structures. A guarantee or signed contract with a disposal firm may be required as part of approval of any Temporary Use Permit.

Temporary Use Development Standards

The following standards shall apply to all temporary uses and structures, unless otherwise noted:





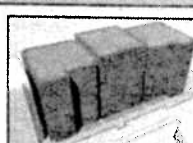
- A. Temporary sanitary facilities must be approved by the Town of Markham.
- B. Temporary uses shall meet all landscaping, fencing and sign requirements established for the given Building Type.
- C. Parking for the temporary use may be required, including a stabilized drive to the parking area.
- D. Temporary uses must provide appropriate mitigation methods approved by the Town of Markham to minimize noise, storm water runoff, construction dust and pollution.

Storage of Materials and Equipment

No materials, supplies, tools, or equipment, including trucks and other vehicles of the developer, shall at any time be placed or stored in any area within Langstaff other than the specified lot. Storage shall occur inside a closed, temporary building, or behind a visual barrier or fence of such design and construction to screen the storage area from public view. Such temporary structures, fences and visual barriers shall require approval by the Town of Markham and shall not extend over the designated boundary.



ALLOWABLE USES

TABLE 5.05 - Permitted Land Uses per Building Type	HIGH-RISE RESIDENTIAL (15-50 stories)	MID-RISE RESIDENTIAL TYPE 1 (8-10 stories)	MID-RISE RESIDENTIAL TYPE 2 (4-6 stories)	LOW-RISE RESIDENTIAL (3-4 stories)	EMPLOYMENT (8-10 stories)
					
Residential					
Townhome	-	-	-	P	-
Apartment	P	P	P	P	-
Home Occupation	P	P	P	P	-
Recreational Facilities	PG	PG	PG	-	P
Civic					
Place of Worship	PG	PG	PG	-	P
Library/Cultural Centre	PG	PG	PG	-	P
Hospital	PG	PG	PG	-	P
Medical Office, Clinics	PG	PG	PG	-	P
Day-care/Nursery	PG	PG	PG	-	P
School	P	P	P	-	P
Municipality Services	PG	PG	PG	-	-
Post Office	PG	PG	PG	-	P
Commercial					
Office, General	C	C	C	-	P
Retail					
Indoor Restaurant	PG	PG	PG	-	P
Outdoor Cafe	PG	PG	PG	-	P
General Sales	PG	PG	PG	-	P
Personal Services	PG	PG	PG	P	PG
Hotel	C	C	C	-	C
Parking Structure	P*	P*	P*	P*	P*

(Reference Diagram 5.05.01 - Ground Floor Uses Control)

LEGEND

P: Use permitted by right within given parcel type

G: Use permitted by right in ground floor only

C: Use permitted provided the project appropriately responds to additional criteria

PG: Permitted Ground Floor only

CG: Use permitted in ground floor only, provided the project appropriately responds to the additional criteria

A: Indicates the use as accessory to the primary use on a given site

- : Particular use is not permitted

* : No street frontage allowed (Parcels W-12 and E-01 are exceptions).

DESIGN CONTROLS

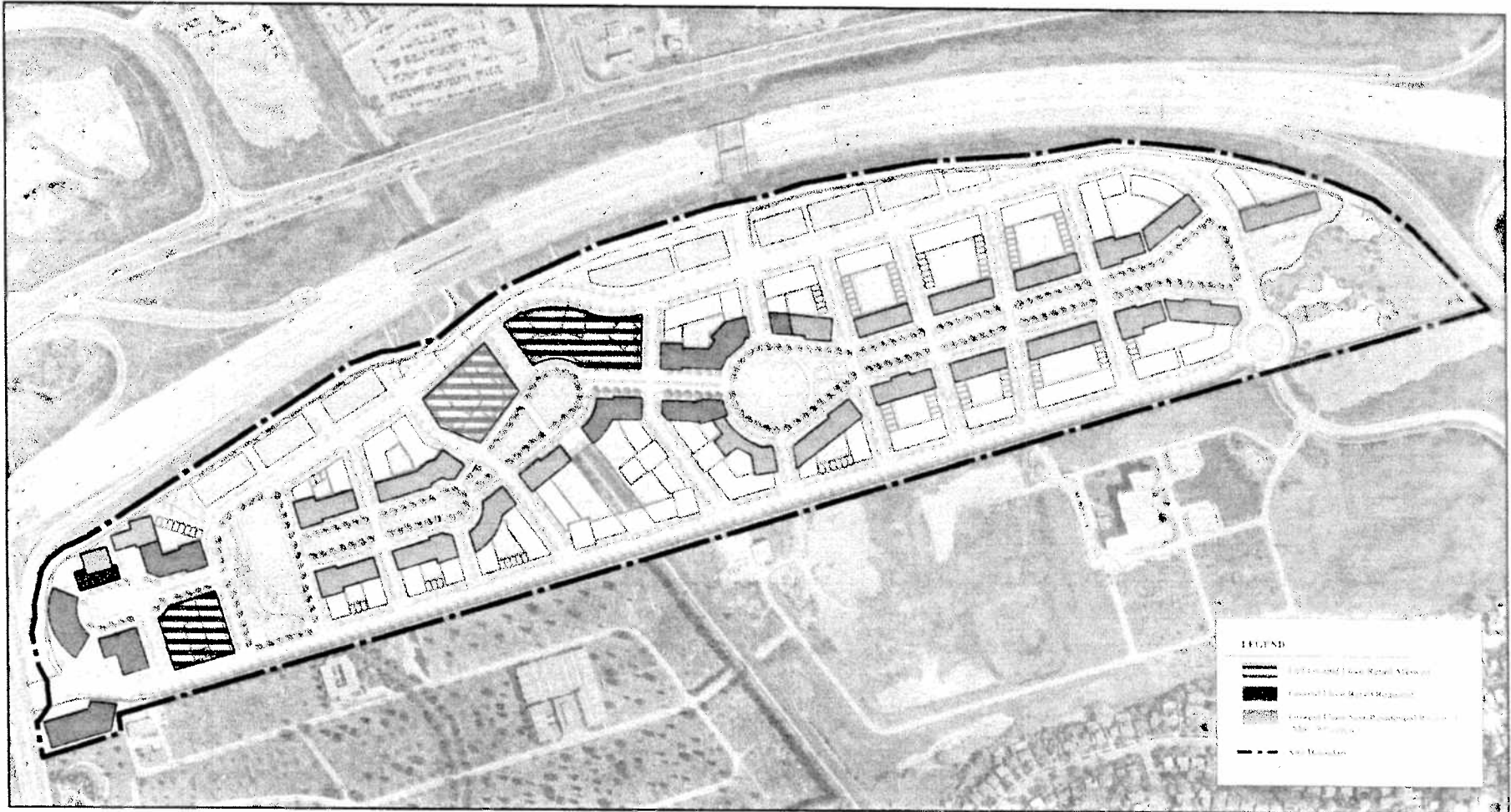


DIAGRAM 5.05.01 - Ground Floor Uses Control

This diagram shows the required ground floor uses. In general the retail is clustered along the East Main Street, West Main Street and the Transit Green. The Non Residential and Civic uses line the central parks. See Section 5.07 for definitions of ground floor uses and sizes.



DESIGN CONTROLS

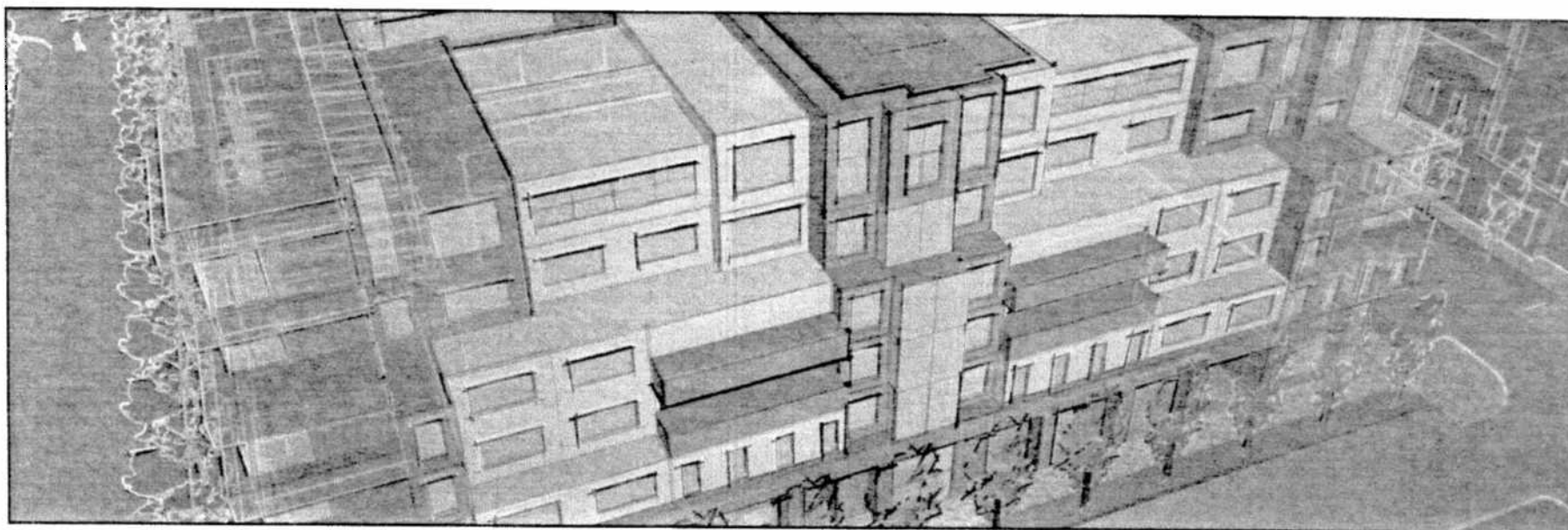
Section 5.06 - General

Section 5.07 - Urban Design Controls by Parcel

Section 5.08 - Urban Design Controls by Building Type

Section 5.09 - Building Prototypes

DESIGN CONTROLS



SECTION 5.06 - GENERAL

Applicability

Design requirements established in the following Section, Design Controls, shall be applicable to all sites and structures throughout the site.

Relationship to Design Principles and Master Plan

Development requirements regarding urban form are incorporated into these Guidelines as a means of implementing design criteria established in the overall Master Plan design principles, ensuring a high quality of life and minimizing the opportunity for adverse impacts on the functionality of the community.

Subdivision of Property

Subject to the approval of the Town of Markham, parcels may be subdivided if each of the lots created by the subdivision meets all requirements of these Guidelines for the area in which they are located.

SECTION 5.07 - URBAN DESIGN CONTROLS BY PARCEL

The following definitions refer to the categories in Table 5.07 - Urban Design Controls per Parcel and also to the different Design Control Diagrams in this Section. Diagrams 5.07.01 through 5.07.05 illustrate additional requirements for each parcel.

Property Line

A piece, parcel or plot is land occupied by or to be occupied by one principal building, its accessory buildings and frontage on a street. A Property Line is any line bounding a parcel herein defined. And on each parcel the primary ground plane will be clearly identified.

Parcel Number

See Diagram 5.07.01 for identification of each Parcel. For use in the guidelines, a Parcel and a Block will be equivalent. Subdivisions of Property is allowed as per Section 5.06.

Parcel Size

All parcel sizes are approximate and may be adjusted by the Town as a result of minor Right-Of-Way (ROW) adjustments.

DESIGN CONTROLS

Primary Use

The primary use is either Residential or Employment with other uses allowed as per Table 5.07 - Urban Design Controls per Parcel (West Side). Special ground floor uses are required on some parcels. The location of such ground floor uses is shown on Diagram 5.05.01.

Maximum Dwelling Units

The maximum number of dwelling units is listed for each parcel. Within the prescribed building envelope of heights and setbacks, the developer may build up to this limit of housing subject to phasing and benchmark targets. It will be at the developer's discretion the size and makeup of each unit provided the mix of unit types meets the Town of Markham's approval. A unit shall be no smaller than 50 square meters and is defined by having at least one bathroom and one kitchen.

Employment Allowed

For non-residential parcels a gross maximum of office space is stipulated. Within the prescribed building envelope of heights, floor plates, and setbacks, the developer may build up to this limit of office and related uses as per Table 5.07. The Developer may choose to reduce but not exceed this number.

Retail Required

On certain parcels retail is required on the ground floor oriented to specific 'main streets' and shopping areas. A minimum and maximum gross area is stipulated in Table 5.07 and the location on the parcel is shown in Diagram 5.05.01.

Non-Residential Required

On certain parcels non-residential uses of civic, neighbourhood serving retail, health clubs, local services, residential lobbies, and professional offices are required on the ground floor oriented to specific streets and parks. A minimum and maximum gross area is stipulated in Table 5.07 and location is shown on the parcel by Diagram 5.05.01. Any mix of these uses is allowable but at a minimum 30% of the ground floor shall be reserved for civic uses (i.e. child care, community recreation center, library, post office and schools).

Maximum Parking Spaces

In order to maximize transit and walking on the site total parking shall be limited by parcel. If a parcel is subdivided for development the sum of parking shall not exceed this number and shall be proportional in each subdivision. Further parking requirements are shown on Diagram 5.07.05 and in Section 5.15 through Section 5.19.



DESIGN CONTROLS

TABLE 5.07 - Urban Design Controls per Parcel (West Side)

PARCEL NUMBER	PARCEL SIZE (sqm)	PRIMARY USE	MAXIMUM DWELLING UNITS (du)	EMPLOYMENT ALLOWED (sqm)		RETAIL REQUIRED* (sqm)		NON-RESIDENTIAL REQUIRED* (MIN. 30% CIVIC) (sqm)		MAXIMUM PARKING SPACES
				Max.	Min.	Max.	Min.	Max.	Min.	
Parcel 'W-01'	4,209	Employment		61,230	51,025	2,000	1,185			1,085
Parcel 'W-02'	5,755	Residential	675			2,460	1,770	1200	950	355
Parcel 'W-03'	4,903	Residential	745			4,825	1,690			400
Parcel 'W-04'	4,439	Employment		24,400	19,520	2,440	1,500			445
Parcel 'W-05'	5,872	Employment		42,000	33,600					590
Parcel 'W-06'	4,049	Residential	285					2,040	1,360	215
Parcel 'W-07'	7,005	Residential	565					2,950	2,080	305
Parcel 'W-08'	4,432	Residential	305					2,040	1,360	230
Parcel 'W-09'	4,314	Residential	395					2,010	1,340	290
Parcel 'W-10'	5,684	Residential	480					2,230	1,415	250
Parcel 'W-11'	7,052	Residential	730					1,755	1,170	380
Parcel 'W-12'	6,789	Residential***	920			5,650	2,900			470
Parcel 'W-13'	4,658	Residential	485			1,725	1,473			250
Parcel 'W-14'	4,233	Residential	470			980	800	900	600	245
Parcel 'W-15'	3,122	Employment		21,000	16,800					290

* RETAIL: Restricted to the ground floor of designated parcels (Refer to Diagram 5.05.01 - Ground Floor Uses Control).

**NON-RESIDENTIAL: Restricted to the ground floor of designated parcels (Refer to Diagram 5.05.01 - Ground Floor Uses Control). Uses include Civic, Professional Offices, Neighbourhood Retail, Health Clubs, Local Services, and Residential Lobbies.

*** Employment allowed within parcel. Employment Allowed is 87,890 sqm (Max.)

DESIGN CONTROLS

TABLE 5.07 - Urban Design Controls per Parcel (East Side)

PARCEL NUMBER	PARCEL SIZE (sqm)	PRIMARY USE	MAXIMUM DWELLING UNITS (du)	EMPLOYMENT ALLOWED (sqm)		RETAIL REQUIRED* (sqm)		NON-RESIDENTIAL REQUIRED* *(MIN. 30% CIVIC) (sqm)		MAXIMUM PARKING SPACES
				Max.	Min.	Max.	Min.	Max.	Min.	
Parcel 'E-01'	8,393	Residential***	1,320			7340	4,525			690
Parcel 'E-02'	7,527	Residential	880			3,390	2,330			480
Parcel 'E-03'	9,702	Residential	1,125			2285	1580			585
Parcel 'E-04'	8,887	Residential	1,070			1960	1315	1935	1635	555
Parcel 'E-05'	5,533	Residential	410			990	455	1410	940	310
Parcel 'E-06'	8,002	Employment		43,430	34,745					615
Parcel 'E-07'	8,533	Employment		58,850	47,080					975
Parcel 'E-08'	6,901	Residential	270					1920	1280	200
Parcel 'E-09'	8,180	Residential	320					2190	1460	300
Parcel 'E-10'	7,626	Residential	340					2250	1500	310
Parcel 'E-11'	9,911	Residential	950					3690	2460	855
Parcel 'E-12'	5,553	Residential	540					2670	1780	485
Parcel 'E13'	5,554	Residential	350					2620	1750	260
Parcel 'E-14'	5,949	Residential	210					1920	1280	200
Parcel 'E-15'	5,686	Residential	190					1925	1280	180
Parcel 'E-16'	7,929	Residential	260					2520	1680	245
Parcel 'E-17'	9,861	Residential	885					4080	2720	792

* RETAIL: Restricted to the ground floor of designated parcels (Refer to Diagram 5.05.01 - Ground Floor Uses Control).

**NON-RESIDENTIAL: Restricted to the ground floor of designated parcels (Refer to Diagram 5.05.01 - Ground Floor Uses Control). Uses include Civic, Professional Offices, Neighbourhood Retail, Health Clubs, Local Services, and Residential Lobbies.

*** Employment allowed within parcel. Employment Allowed is 126,400 sqm (Max.)

DESIGN CONTROLS

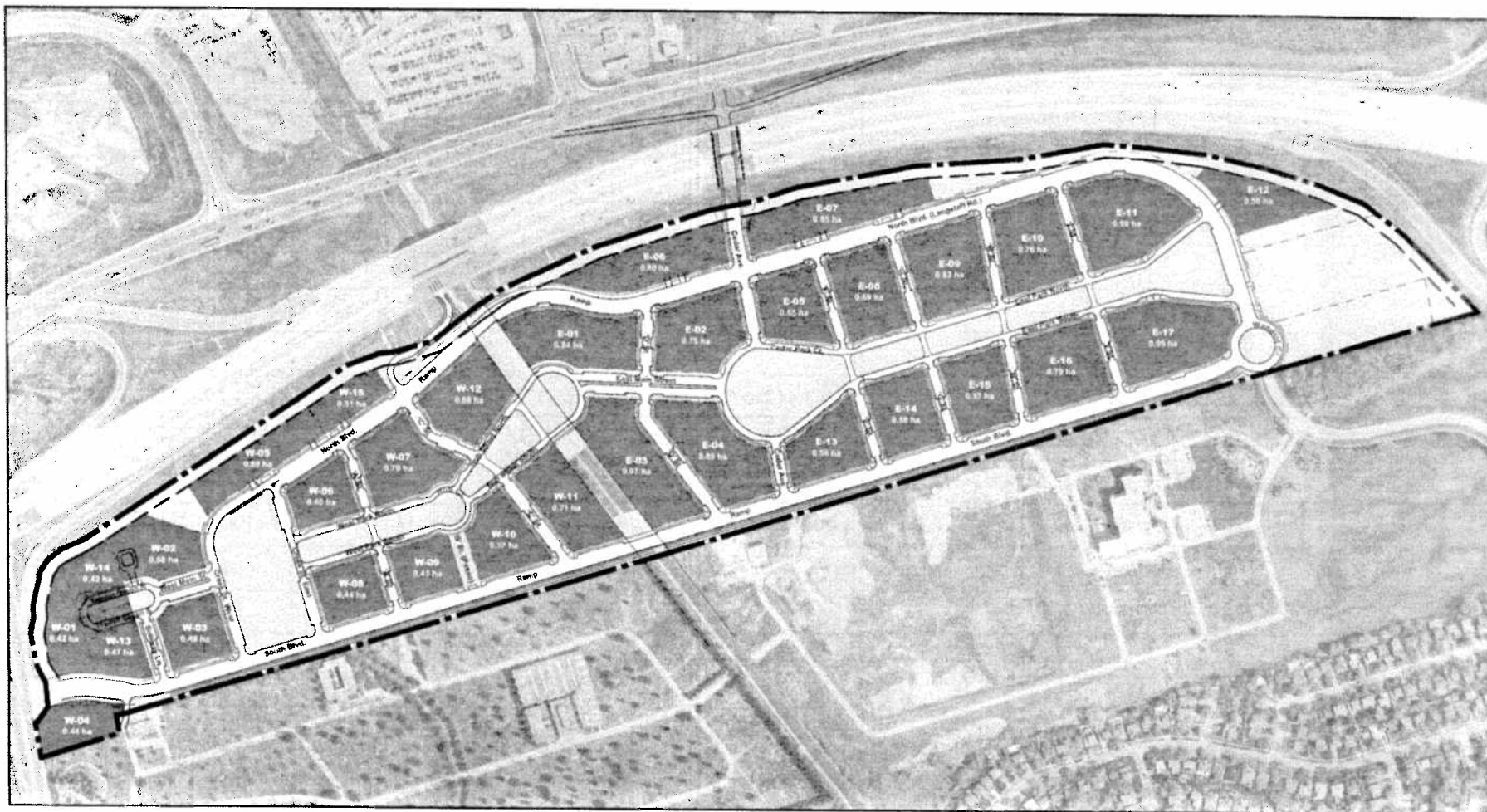


DIAGRAM 5.07.01 - Street and Parcel Key Control

This diagram illustrates the labeling for each parcel and their corresponding gross areas.

DESIGN CONTROLS

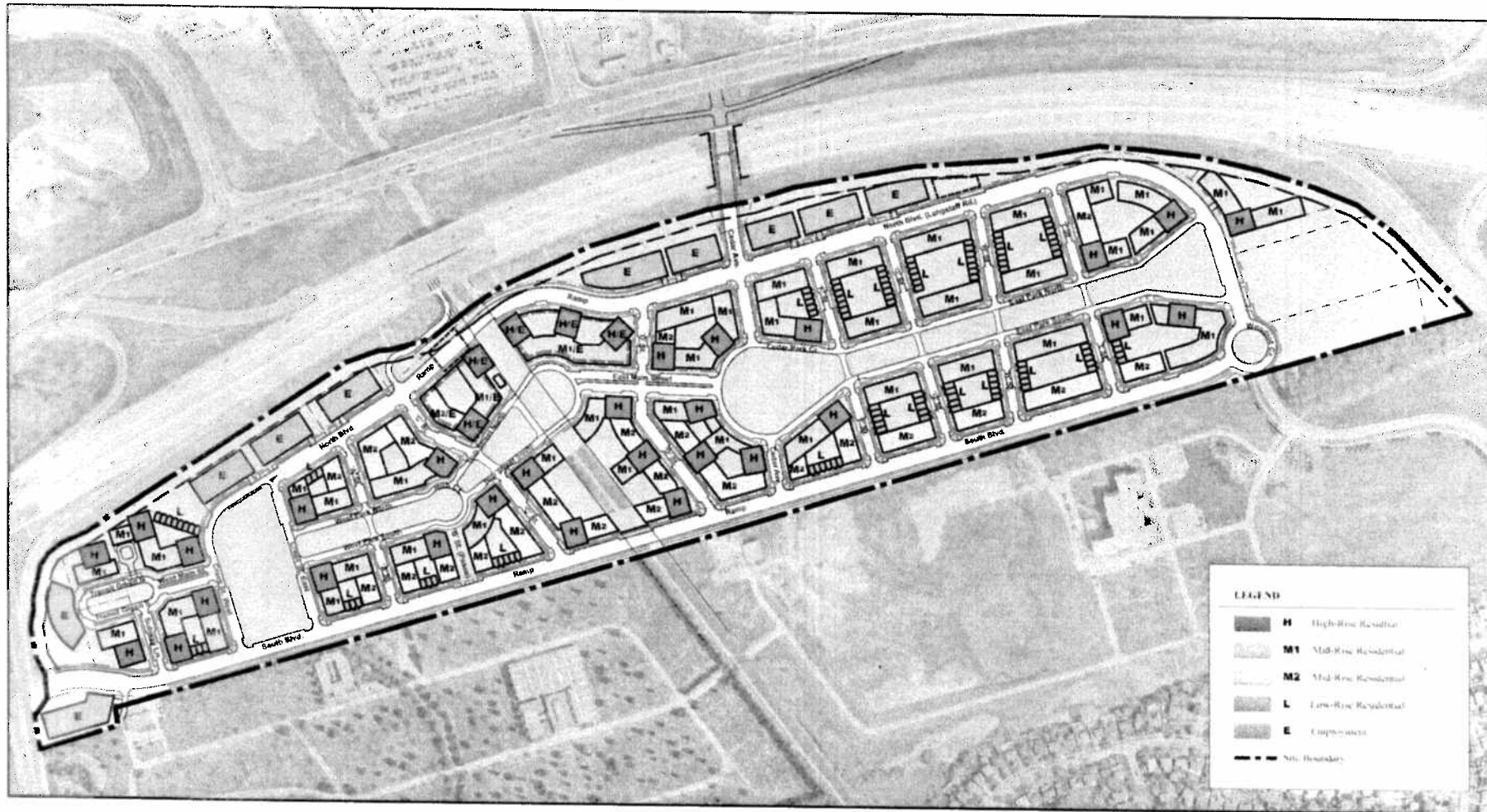


DIAGRAM 5.07.02 - Building Type Control

This diagram shows the breakup of every parcel into their allowable building types. It also illustrates the variety of building types and their relationship to one another in the different areas of the project. The diagram shows approximate tower locations as Type H.

DESIGN CONTROLS

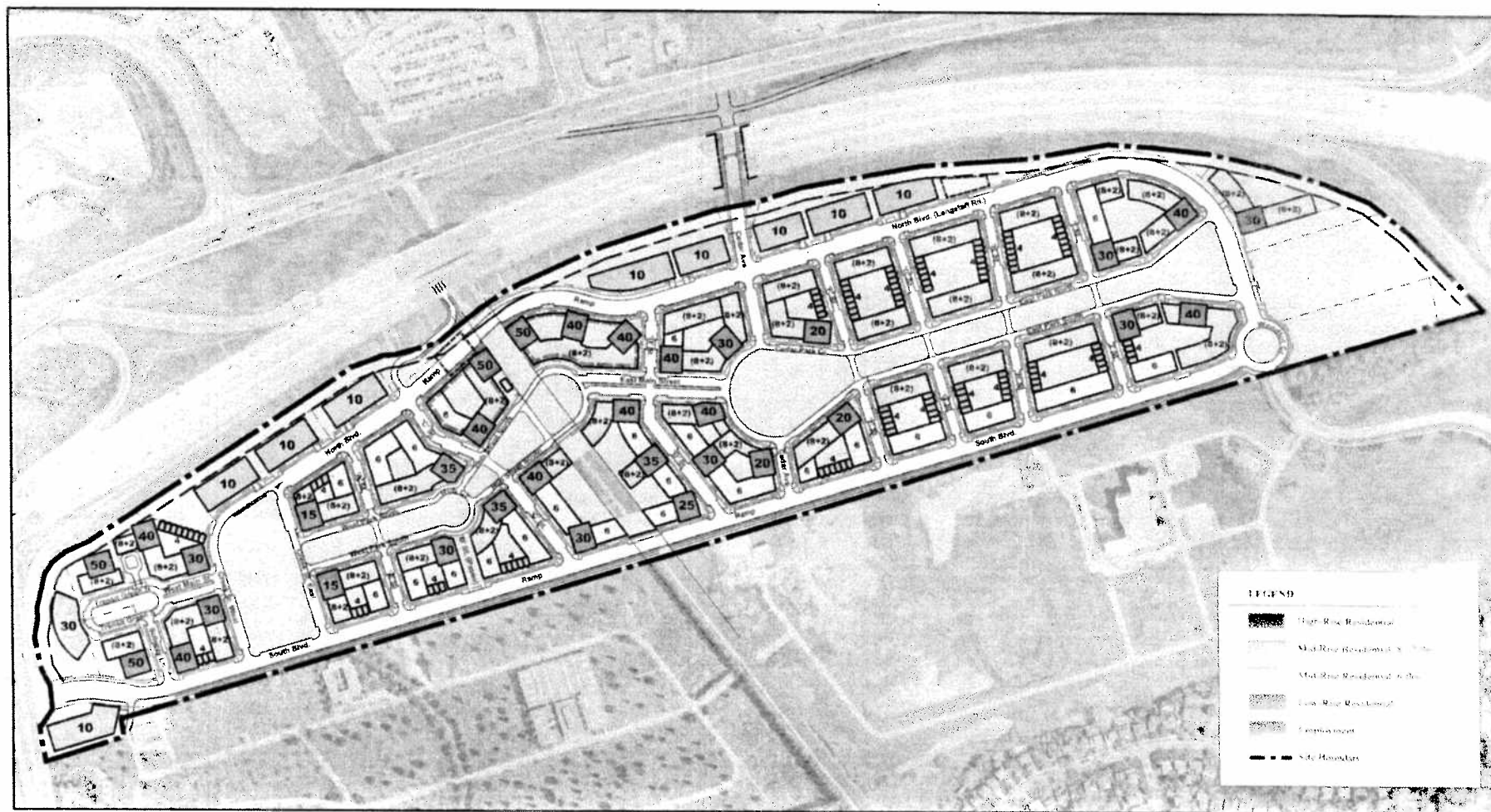


DIAGRAM 5.07.03 - Maximum Heights Control

This diagram shows both the breakup of every parcel into their different building types by colour and their corresponding maximum heights. The diagram shows *approximate* tower locations. Building height is defined in Section 5.08 and Table 5.08.02

DESIGN CONTROLS

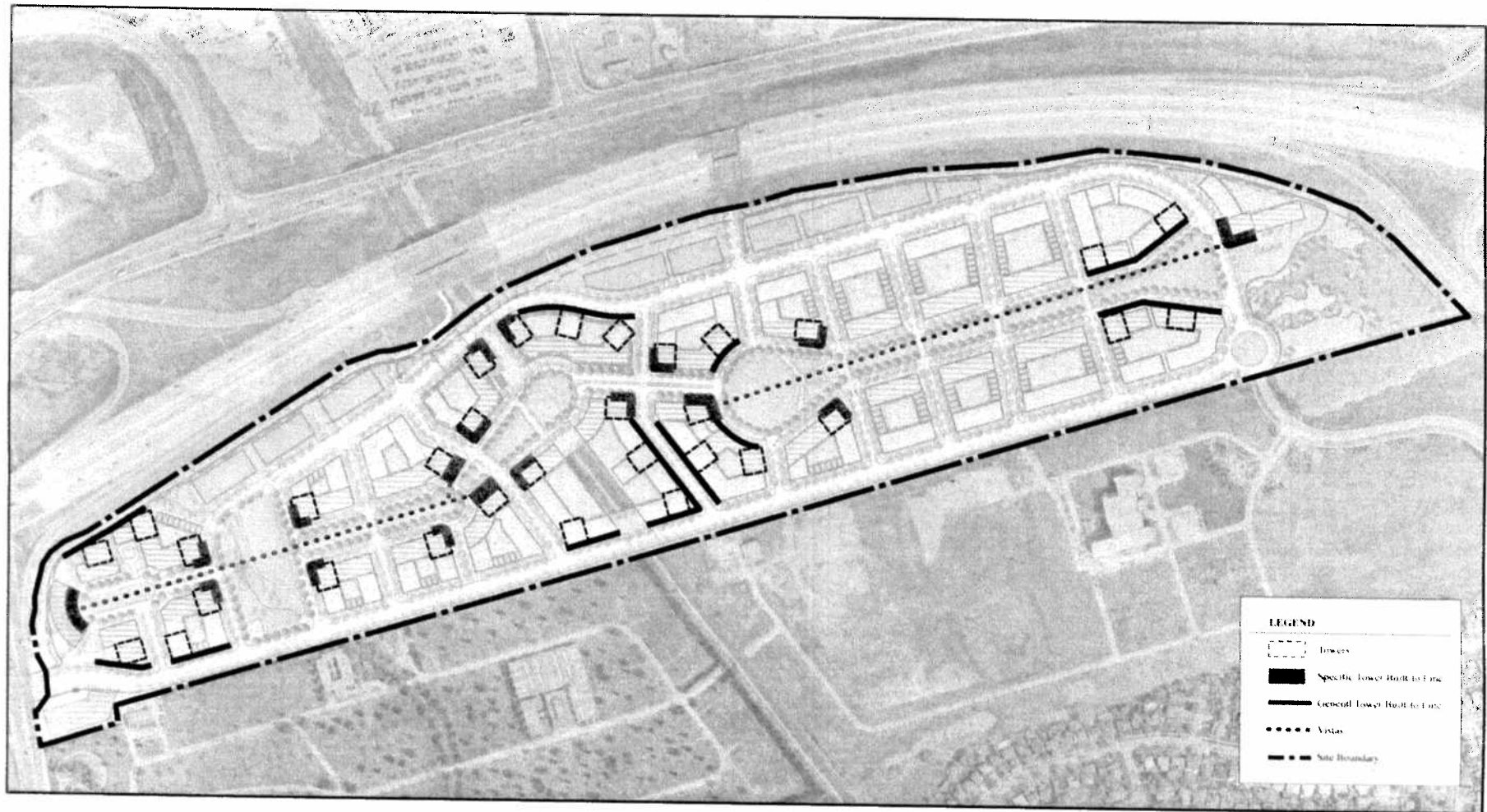


DIAGRAM 5.07.04 - Tower Placement Control

This diagram shows the placement of the tower elements and also their specific location with relationship to their blocks and street frontages. This illustration also shows the long vistas in regards to the more predominant tower buildings. Tower placement is also subject to setbacks noted in Table 5.08.03 - Urban Design Controls per Building Type.

DESIGN CONTROLS

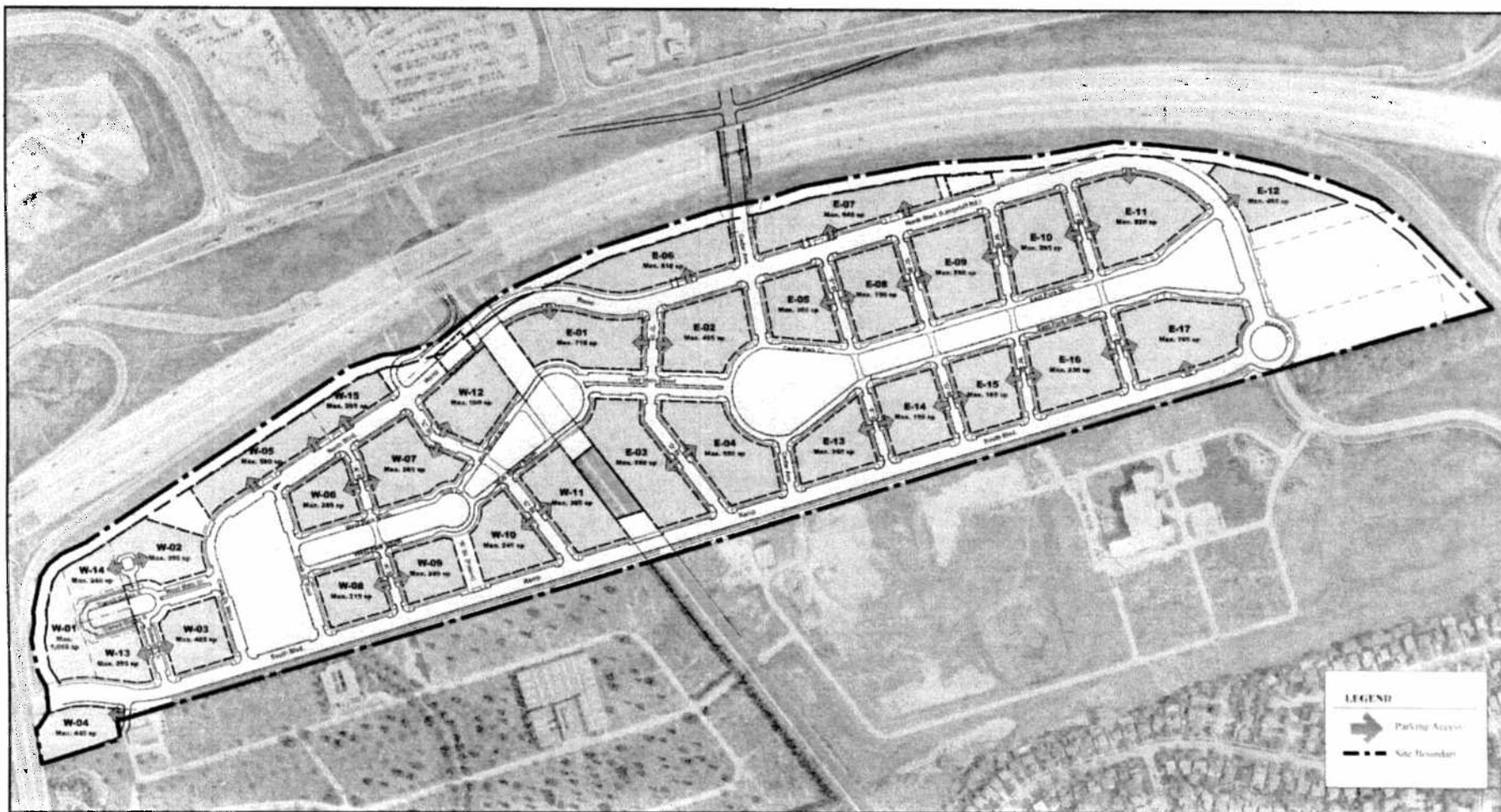
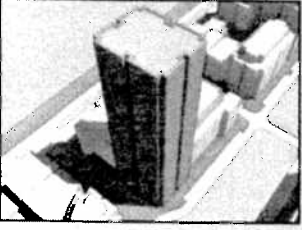
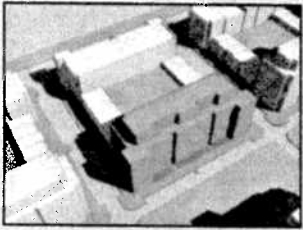
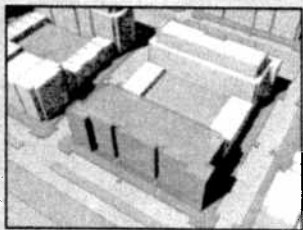
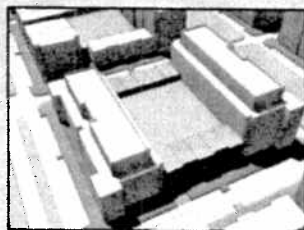
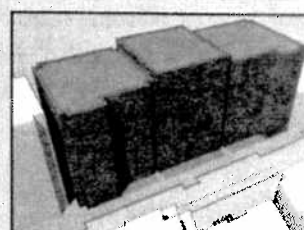


DIAGRAM 5.07.05 - Parking and Access Control

The diagram shows off which street autos access each parcel's interior courtyard for parking, servicing, etc. Table 5.16.01 - General Parking Requirements specifies minimum distance from Property Line that the parking entry/auto access driveway is located. This diagram also illustrates the maximum parking spaces allowed per block (not including on-street parking). Maximums are established to encourage walking and transit use through the site. These maximums are based on the anticipated uses and the proximity of the parcel to transit stations. The parking ratios are shown in Table 5.17.01 - On-site Parking Spaces Required at Build-Out.

DESIGN CONTROLS

TABLE 5.08.01 - Building Types

HIGH-RISE RESIDENTIAL (H)	MID-RISE RESIDENTIAL TYPE 1 (M1)	MID-RISE RESIDENTIAL TYPE 2 (M2)	LOW-RISE RESIDENTIAL (L)	EMPLOYMENT (E)
				

SECTION 5.08 - URBAN DESIGN CONTROLS BY BUILDING TYPE

The following definitions refer to the categories in Table 5.08.03 - Urban Design Controls per Building Type and also to the different Design Control Diagrams in this Section.

Building Height

Building Height is defined by the minimum and maximum number of stories allowed, not by an absolute vertical measurement. This is intended to allow height variation based on differing floor to floor dimensions. It will also allow visual height variation to similar building types. Refer to Table 5.08.02 - Floor to Floor Heights for allowable heights for the different types of floors.

TABLE 5.08.02- Floor to Floor Heights

FLOOR TYPE	FLOOR TO FLOOR HEIGHT
Ground Floor Retail / Commercial	5m min. - 6m max.
Civic / Community	4m min. - 5.5m max.
Office Floor	4m min. - 5.5m max.
Residential Floor	3m min. - 4.5m max.
Hotel Floor	3m min. - 4.5m max.

Building Front Setbacks

In order to maintain a consistent and active street edge, a tight range of minimum and maximum setbacks is required along a majority of the Property Line adjacent to streets and public spaces and applied to all levels of the building. This required setback range will allow street side courtyards, plazas, and architectural features and variation but will keep the primary mass of the building oriented to the sidewalk avoiding large empty setbacks and plazas. The percentage of Property Line subject to setbacks will be measured along all street and public space edges of the property and the requirement will be met on each individual side or frontage. For the remaining percentage of the Property Line the building will be measured along the building corner and will come up closer to the sidewalk to frame and enhance the public realm.

Building Side and Rear Setbacks

It is expected that most sides of the building not fronting the street will have an allowable zero setback for party wall construction with no openings and building code fire-ratings. If openings are desired for light or ventilation the wall must have a minimum 4 meter setback or a minimum 20 meters for the High-Rise Building Type.

DESIGN CONTROLS

Building Massing

For façades over 20 meters in horizontal dimension a vertical architectural articulation or offset is required to divide the façade into bays that do not exceed 15 meter in width. Refer to Diagram 5.08.01 - Building Massing and built images of towers with architectural articulation and offset to further illustrate this guideline.

Required Ground Floor Uses

At key locations along the project's most important pedestrian streets, plazas, and parks it is desirable to have uses that have direct, barrier free access to the public that support the activity of the sidewalk. Therefore certain uses are required or encouraged along these critical edges. Retail, civic and other non-residential uses at the ground floor are encouraged to have multiple entrances at grade. Refer to Diagram 5.05.01 for more specifics on location of required ground floor uses.

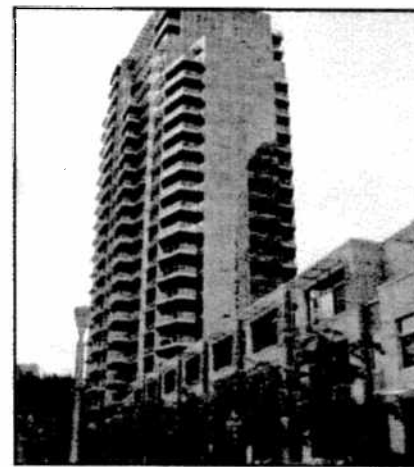
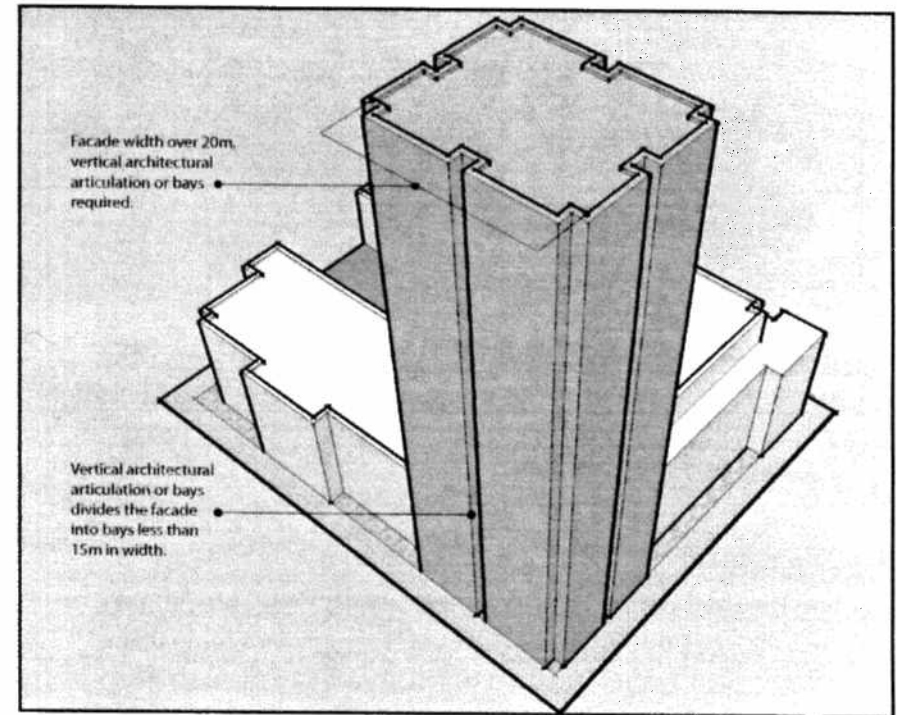
Pedestrian Entries

Although a building may have several entries, the primary entry to a tower or its lobby and interior circulation must be located near the corner of the two most important street frontages. The primary entry for a Mid-Rise residential and office buildings is near mid-block with corner entries allowed. And Low-Rise residential buildings will have multiple entries allowed to individual units. All building entrances must be visible, barrier free, and accessible from the sidewalk.

Parking Structure and Auto Access

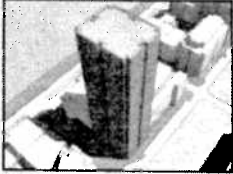
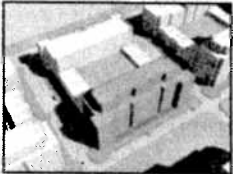
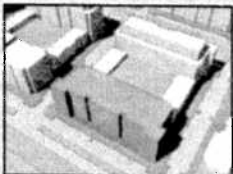

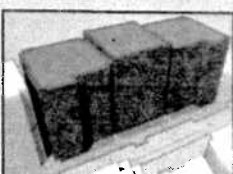
Below-grade parking structures are preferred. Auto access to parking structures will be from side streets and are prohibited along principal streets or boulevards (refer to Diagram 5.07.05 for specifics and exceptions). The top of all parking structures shall be green roofs, pavers and planters for a minimum 70% of the roof area. In no case shall a parking structure have frontage along a street (Parcels W-12 and E-01 are exceptions).

DIAGRAM 5.08.01 - Building Massing



DESIGN CONTROLS

TABLE 5.08.03 - Urban Design Controls per Building Type

BLOCK TYPE	HIGH-RISE RESIDENTIAL (H)	MID-RISE RESIDENTIAL TYPE 1 (M1)	MID-RISE RESIDENTIAL TYPE 2 (M2)	LOW-RISE RESIDENTIAL (L)	EMPLOYMENT (E)
					
BUILDING HEIGHT *	15 stories (min) - 50 stories (max)	8 stories (min) - 10 stories (max)	4 stories (min) - 6 stories (max)	3 stories (min) - 4 stories (max)	8 stories (min) - 10 stories (max) **
FRONT SETBACKS	100% of Property Line (PL) required to have facade at 0-2m fronting all streets	Min 70% of Property Line (PL) required to have facade at 3-5m fronting all streets. Any remaining PL required to have facade at 0-2m fronting all streets. Upper 2 stories must recess 4m min. from rest of building facade	Min 70% of Property Line (PL) required to have facade at 3-5m fronting all streets. Any remaining PL required to have facade at 0-2m fronting all streets.	100% of Property Line (PL) required to have facade at 3-4m fronting all streets.	Min 70% of Property Line (PL) required to have facade at 3-5m fronting all streets. Any remaining PL required to have facade at 0-2m fronting all streets.
SIDE AND REAR SETBACKS	0m to party wall, 20m min. to window wall	0m to party wall, 4m min. to window wall	0m to party wall, 4m min. to window wall	0m to party wall, 4m min. to window wall	0m to party wall, 4m min. to window wall, 10m max. side setback to Property Line and building.
PEDESTRIAN ENTRY	Primary entry near corner of two most important street frontages.	Primary entry is located near mid-block. Corner entries allowed.	Primary entry is located near mid-block. Corner entries allowed.	Multiple entries allowed for individual units.	Primary entry is located near mid-block. Corner entries allowed.
MAXIMUM FLOOR PLATE	750 sqm.	N/A	N/A	N/A	N/A
BUILDING MASSING	Building facades greater than 20m wide must have a vertical articulation to subdivide facade. Subdivisions must not exceed 15m in width.	Building facades greater than 20m wide must have a vertical articulation to subdivide facade. Subdivisions must not exceed 15m in width.	Building facades greater than 20m wide must have a vertical articulation to subdivide facade. Subdivisions must not exceed 15m in width.	N/A	N/A

* Or as specified in Diagram 5.07.03 - Maximum Heights Control

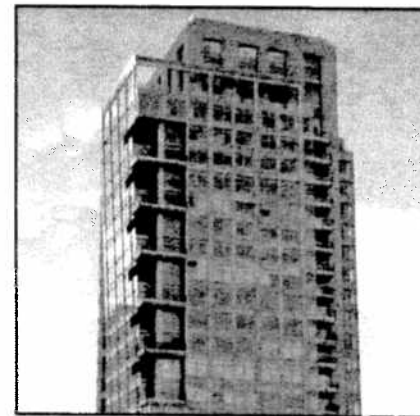
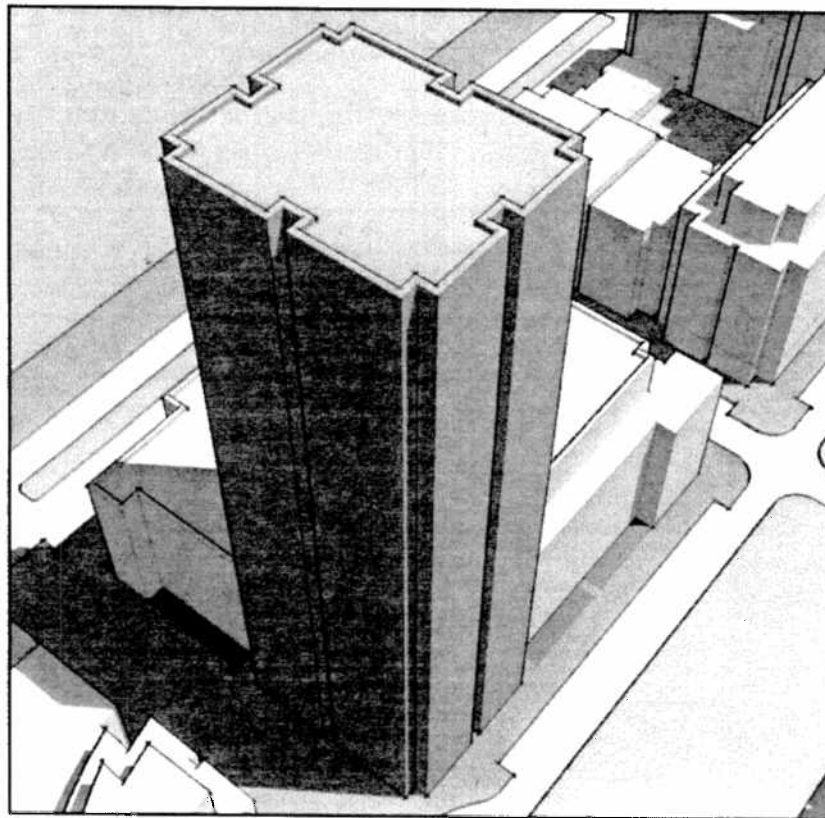
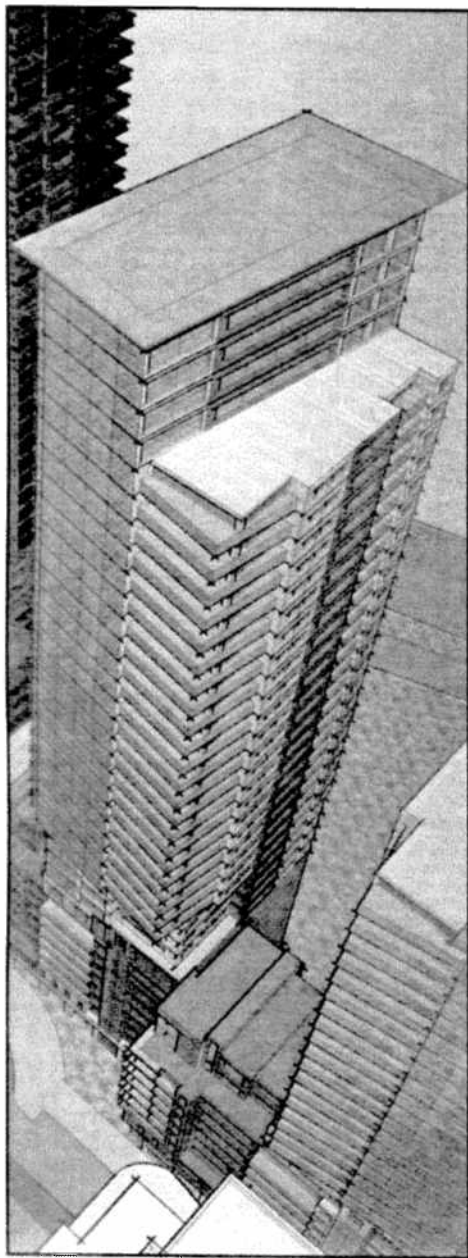
** Height range does not apply to parcels W-01, W-12, and E-01

DESIGN CONTROLS

SECTION 5.09 - BUILDING PROTOTYPES

High Rise Residential

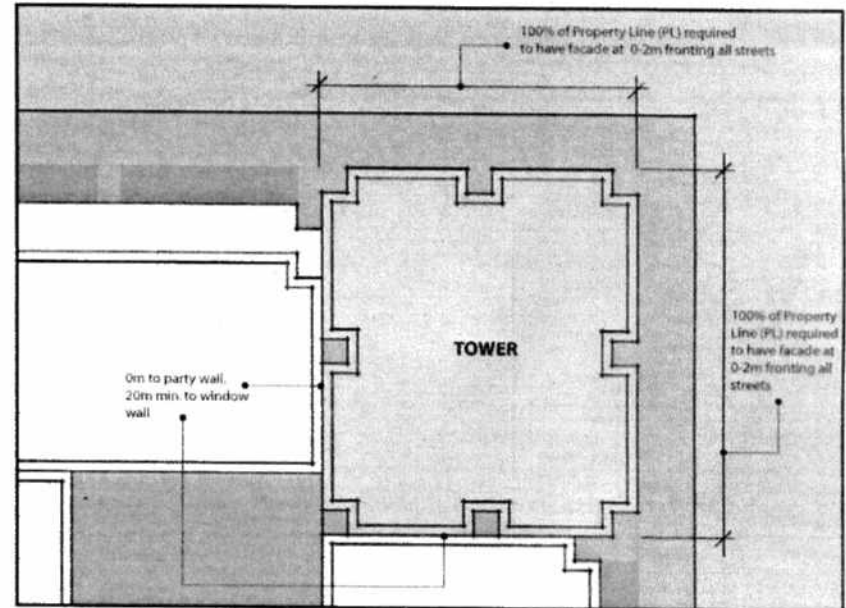
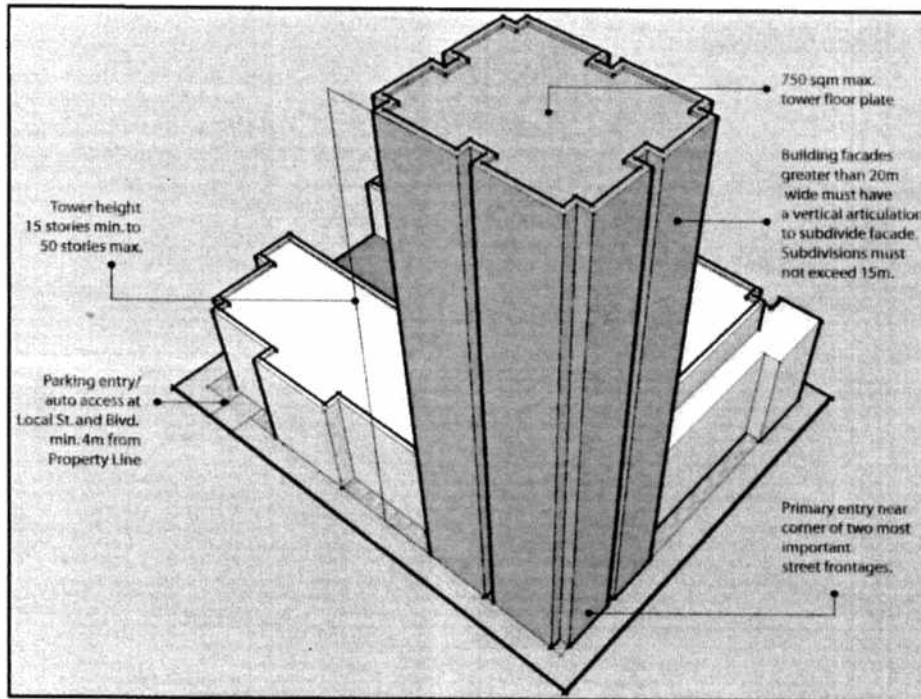
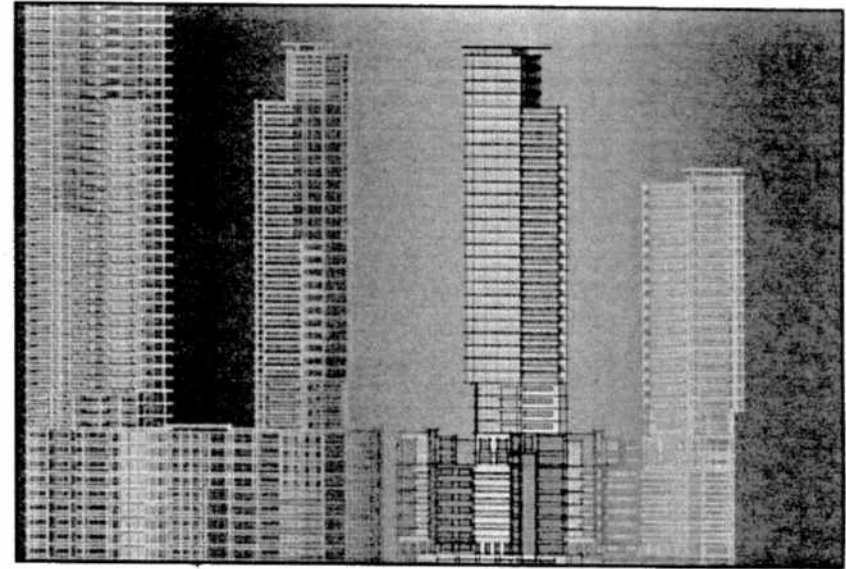
The Langstaff Master Plan will provide a wide range of building types that will support and promote a healthy urban environment. The densest of these building types is the Residential High Rise, which will consist of a slim tower whose floor plates will not exceed 750 square meters. These towers will be located mainly surrounding big open spaces in the west part of the project. They will be primarily residential with retail and/or office use at the ground levels.



DESIGN CONTROLS

TABLE 5.09.01 - Urban Design Controls Summary

BUILDING HEIGHT	15 min. - 50 max. stories
FRONT SETBACKS	100% of Property Line (PL) required to have facade at 0-2m fronting all streets
SIDE AND REAR SETBACKS	0m to party wall, 20m min. to window wall
PEDESTRIAN ENTRY	Primary entry near corner of two most important street frontages.
TOWER MAXIMUM FLOOR PLATE	750 sqm
BUILDING MASSING	Building facades greater than 20m wide must have a vertical articulation to subdivide facade. Subdivisions must not exceed 15m. in width



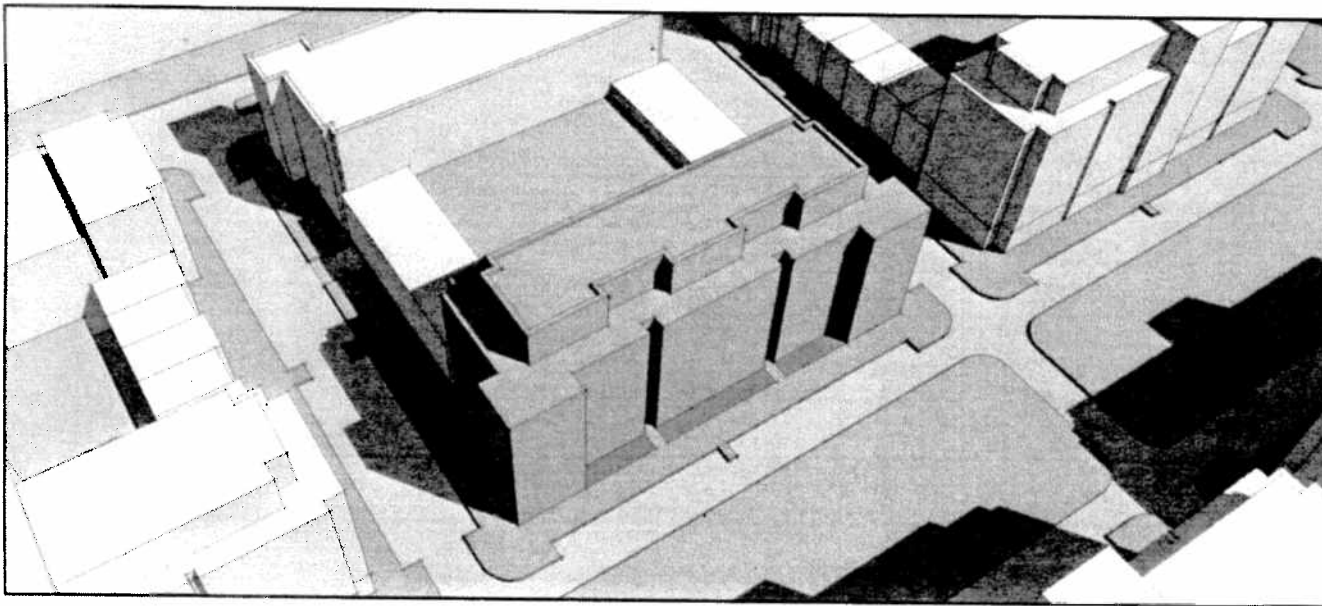
Note: The massing and plan diagrams shown are conceptual only and illustrate one of many possible design solutions.

DESIGN CONTROLS



Mid Rise Residential Type 1

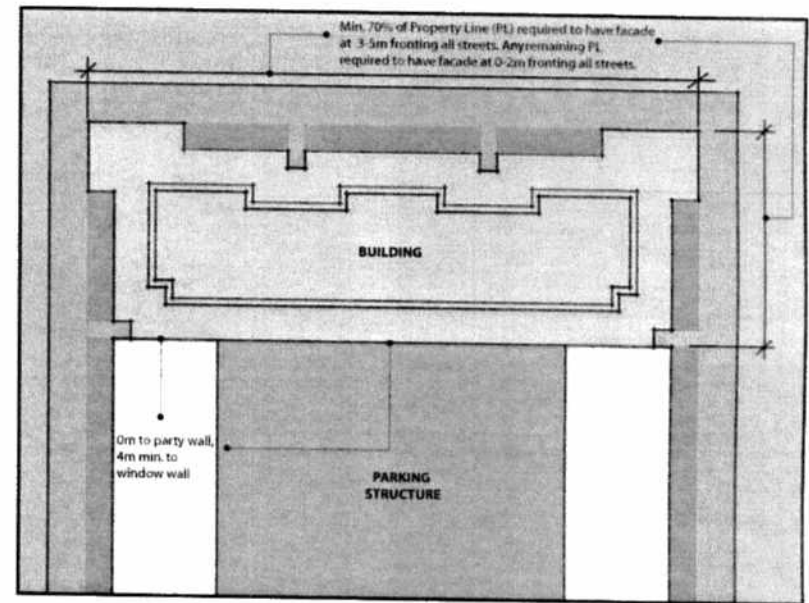
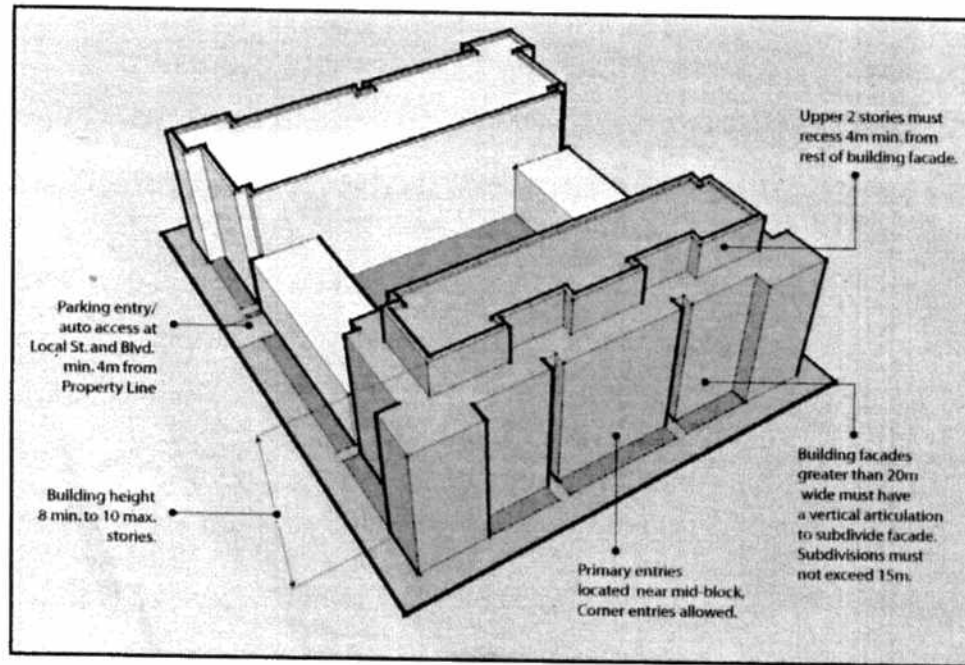
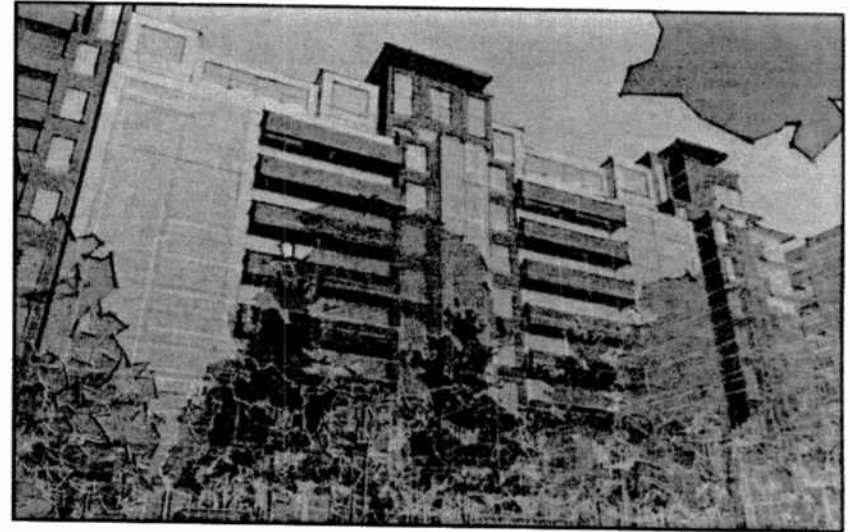
This residential type will mainly line the Linear Park, ensuring a nice urban feel and a diverse building edge to Langstaff. Through a set of setbacks both at the property line and the top two stories, this building type will provide a scale that is both dense, yet friendly to the pedestrian at the ground level. Retail uses and other non-residential uses will be required at the ground level of these buildings.



DESIGN CONTROLS

TABLE 5.09.02 - Urban Design Controls Summary

BUILDING HEIGHT	8 min. - 10 max. stories
FRONT SETBACKS	Min 70% of Property Line (PL) required to have facade at 3-5m fronting all streets. Any remaining PL required to have facade at 0-2m fronting all streets. Upper 2 stories must recess 4m min. from rest of building facade.
SIDE AND REAR SETBACKS	0m to party wall, 4m min. to window wall
PEDESTRIAN ENTRY	Primary entry located near mid-block. Corner entries allowed.
BUILDING MASSING	Building facades greater than 20m wide must have a vertical articulation to subdivide facade. Subdivisions must not exceed 15m.



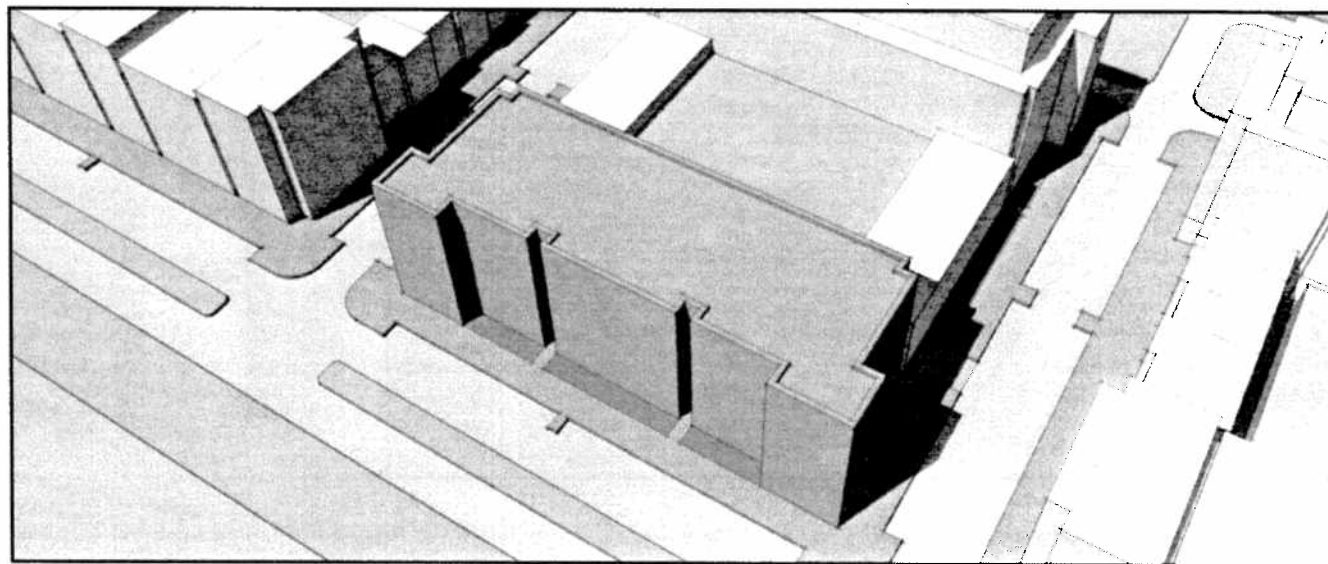
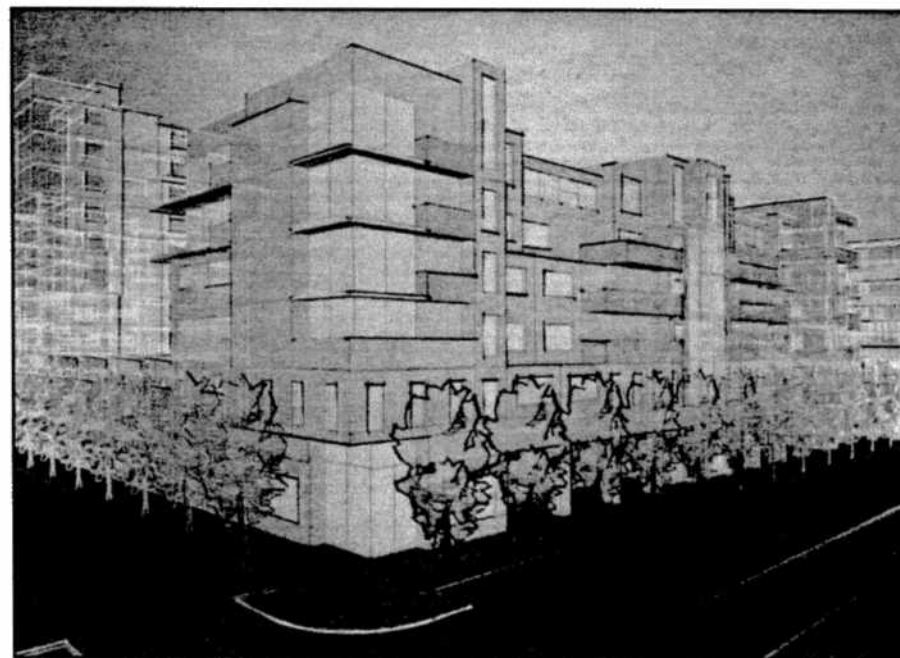
Note: The massing and plan diagrams shown are conceptual only and illustrate one of many possible design solutions.

DESIGN CONTROLS



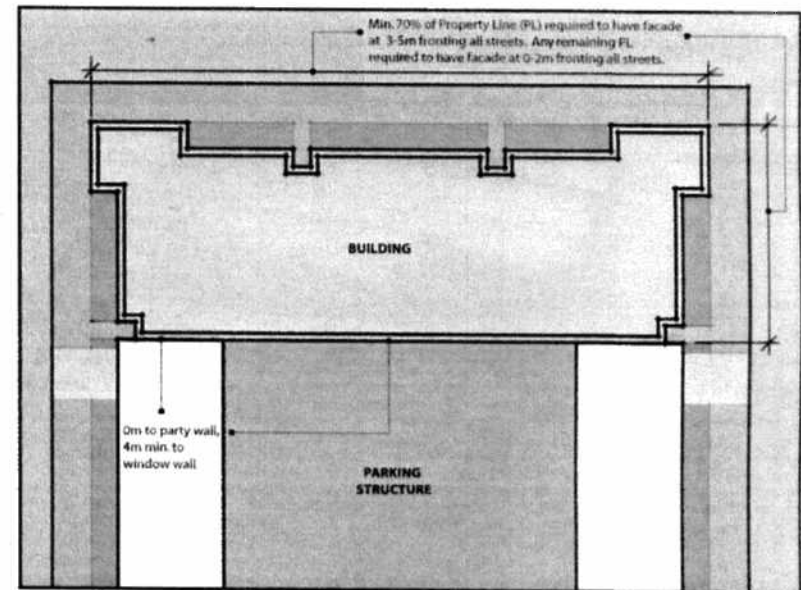
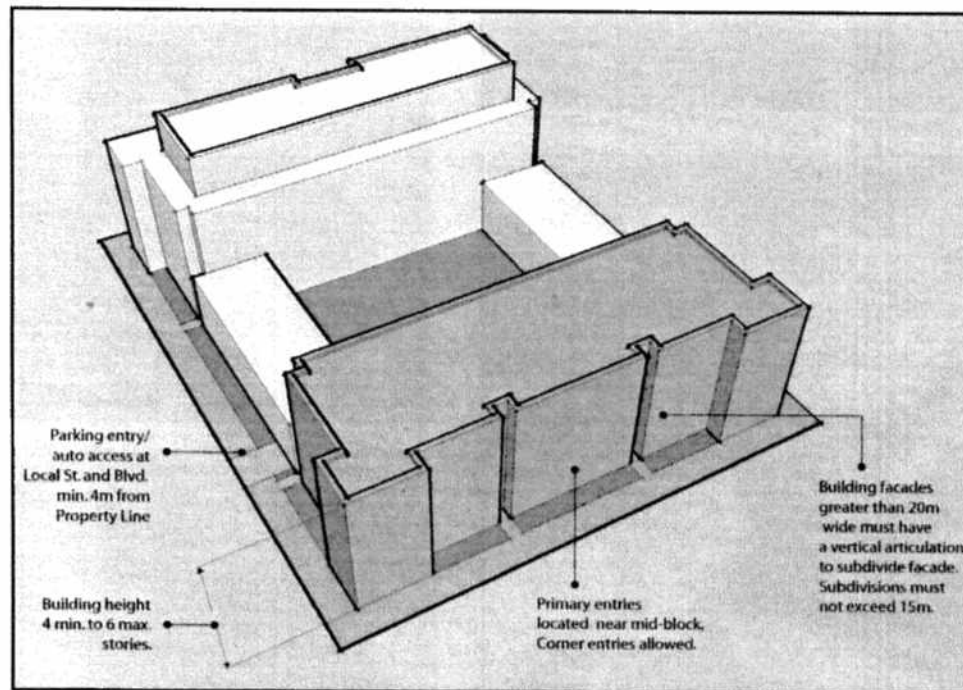
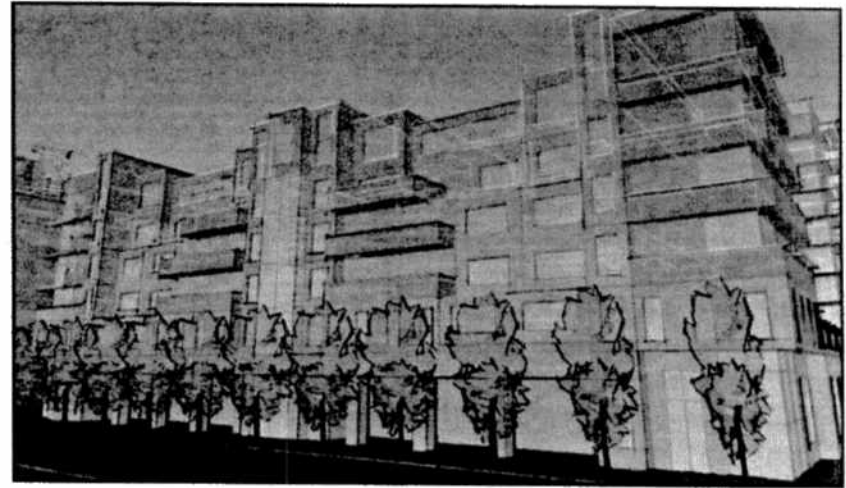
Mid Rise Residential Type 2

Similar to Mid Rise Type 1, this residential type offers density, architectural diversity, and an urban building form, yet is a scaled down version of Type 1, allowing for a more human scale environment and promoting pedestrian friendly spaces. Mid Rise Type 2 will be predominantly located on the side streets of Langstaff helping shape spaces that will serve as relief from the more dense and more urban environment of the Linear Park.



DESIGN CONTROLS

TABLE 5.09.03 - Urban Design Controls Summary	
BUILDING HEIGHT	4 min. - 6 max. stories
FRONT SETBACKS	Min 70% of Property Line (PL) required to have facade at 3-5m fronting all streets. Any remaining PL required to have facade at 0-2m fronting all streets.
SIDE AND REAR SETBACKS	0m to party wall, 4m min. to window wall
PEDESTRIAN ENTRY	Primary entry located near mid-block. Corner entries allowed.
BUILDING MASSING	Building facades greater than 20m wide must have a vertical articulation to subdivide facade. Subdivisions must not exceed 15m in width.

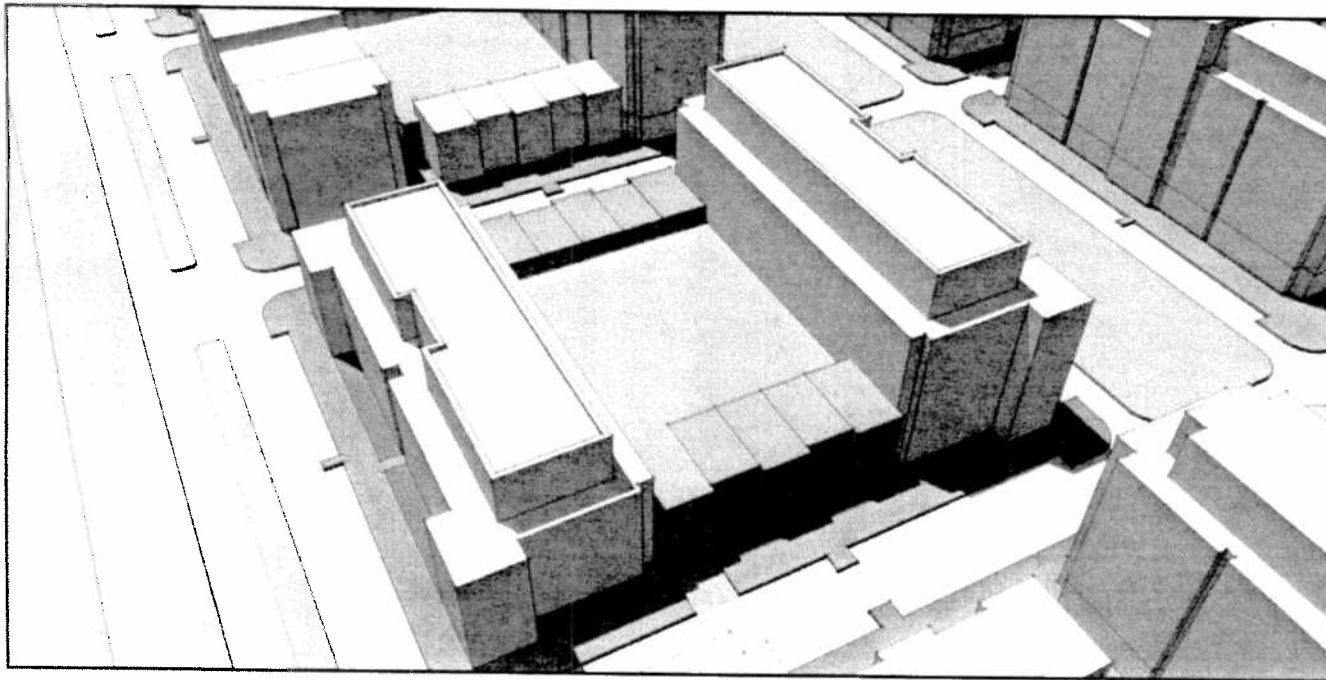
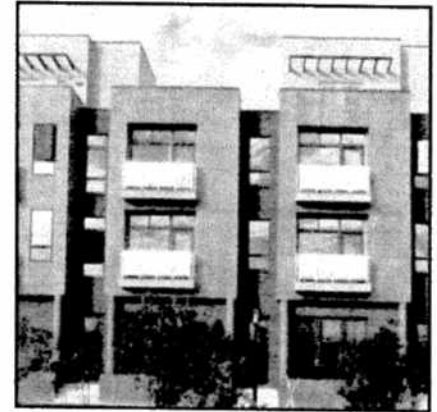
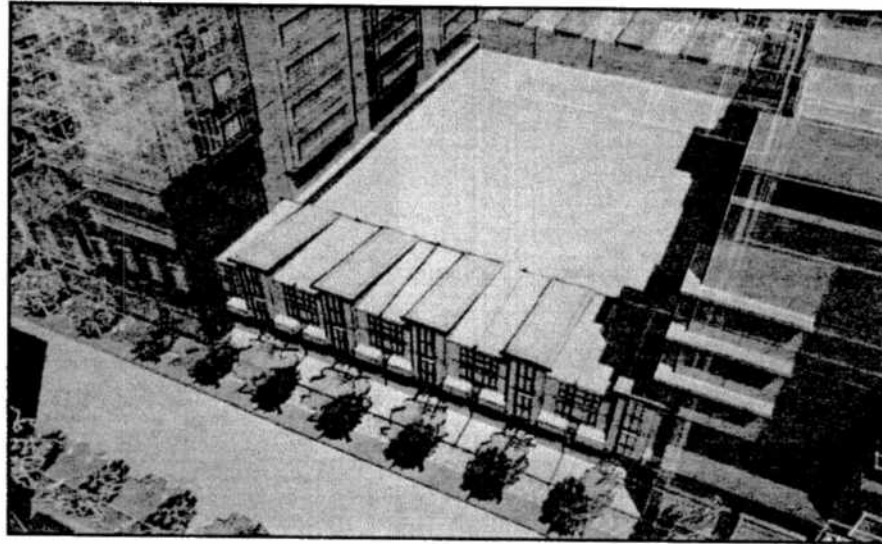


Note: The massing and plan diagrams shown are conceptual only and illustrate one of many possible design solutions.

DESIGN CONTROLS

Low Rise Residential

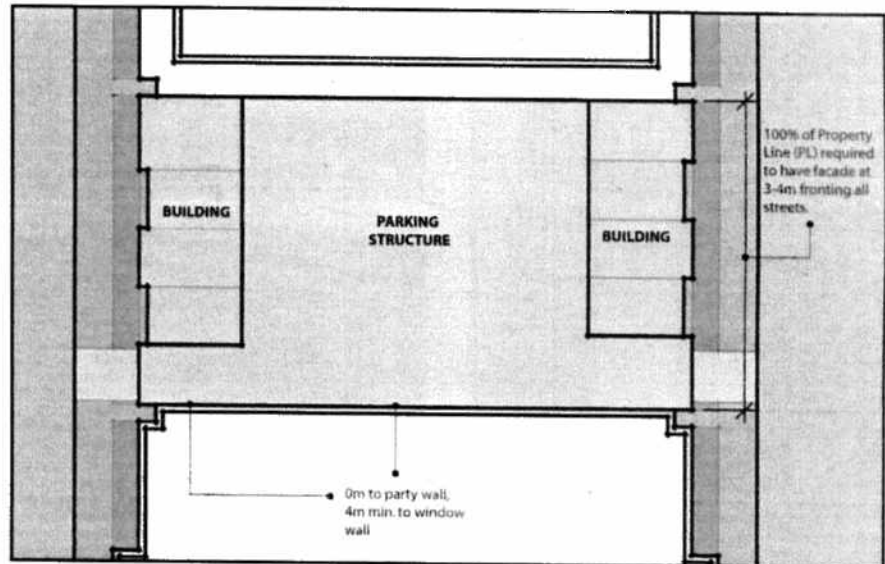
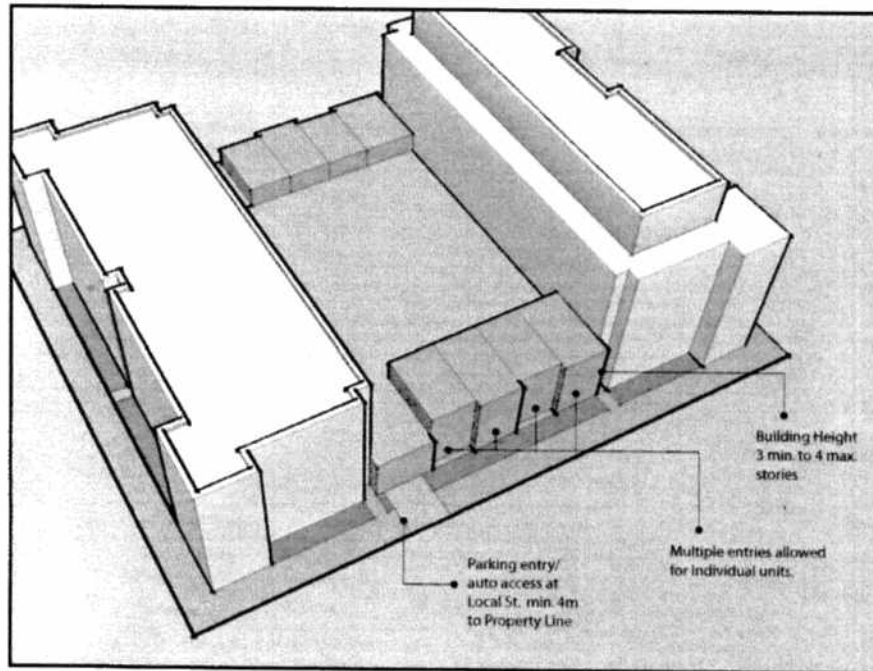
At 3 - 4 stories height, the Low Rise Residential is the less dense type in the Langstaff Master Plan. Front setbacks will be required in this type to push the building away from the street and allow for a more private environment for each individual unit. Front setbacks will also provide spaces for front lawns. This type is purely residential, yet it will be centrally located close to retail and civic uses.



DESIGN CONTROLS

TABLE 5.09.04 - Urban Design Controls Summary

BUILDING HEIGHT	3 min. - 4 max. stories
FRONT SETBACKS	100% of Property Line (PL) required to have facade at 3-5m fronting all streets.
SIDE AND REAR SETBACKS	0m to party wall, 4m min. to window wall
PEDESTRIAN ENTRY	Multiple entries allowed for individual units.

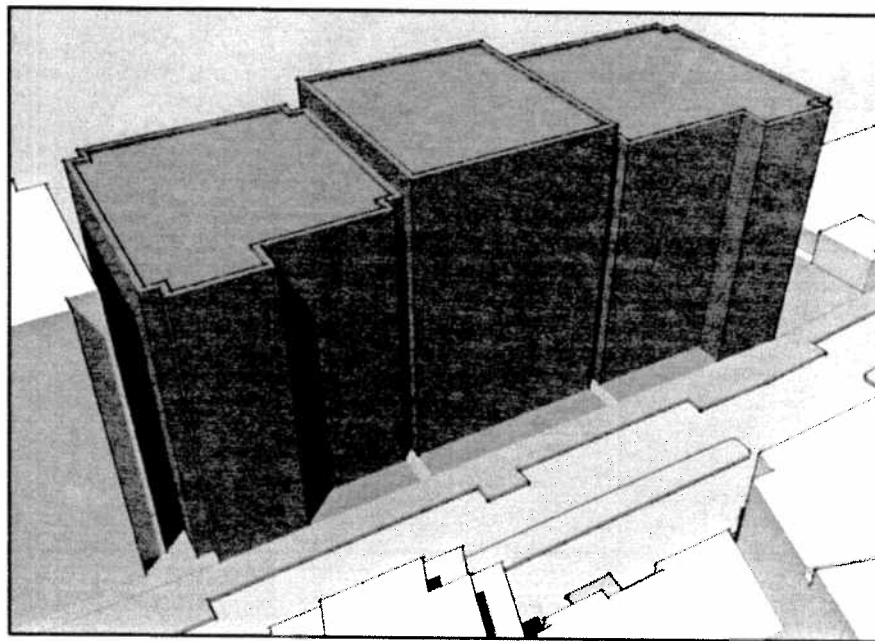
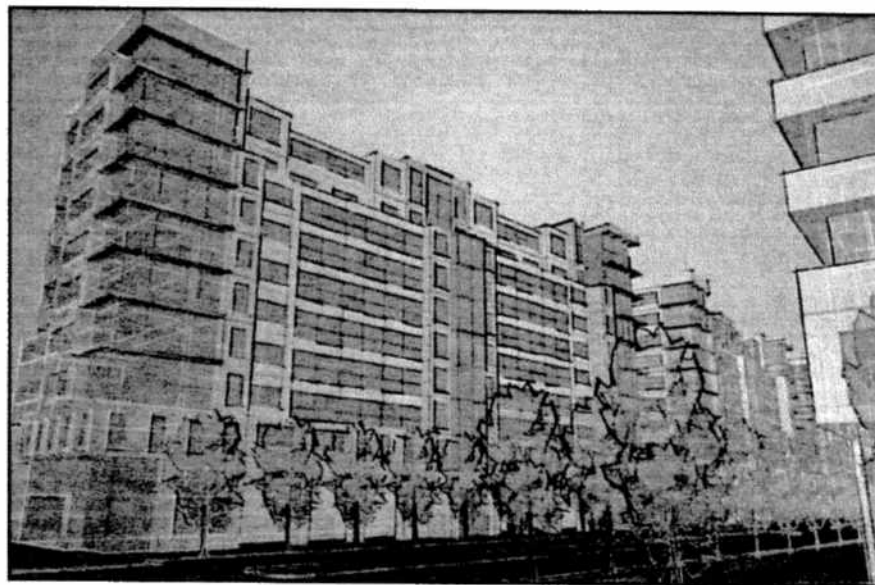
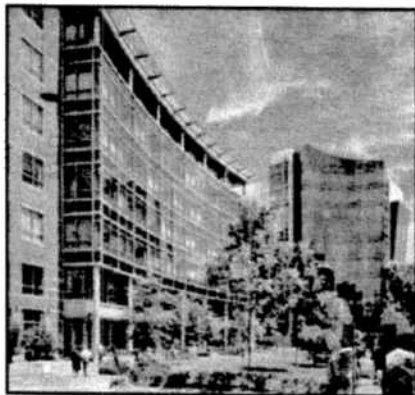


Note: The massing and plan diagrams shown are conceptual only and illustrate one of many possible design solutions.

DESIGN CONTROLS

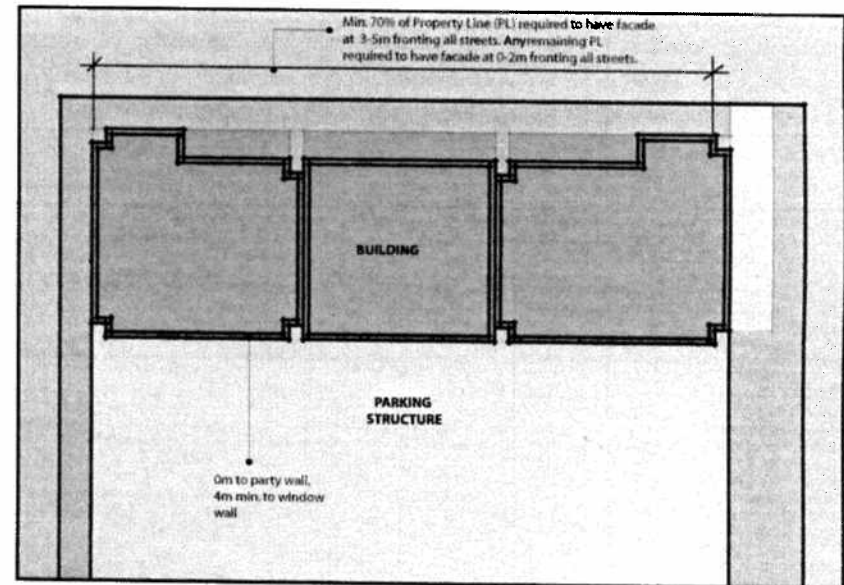
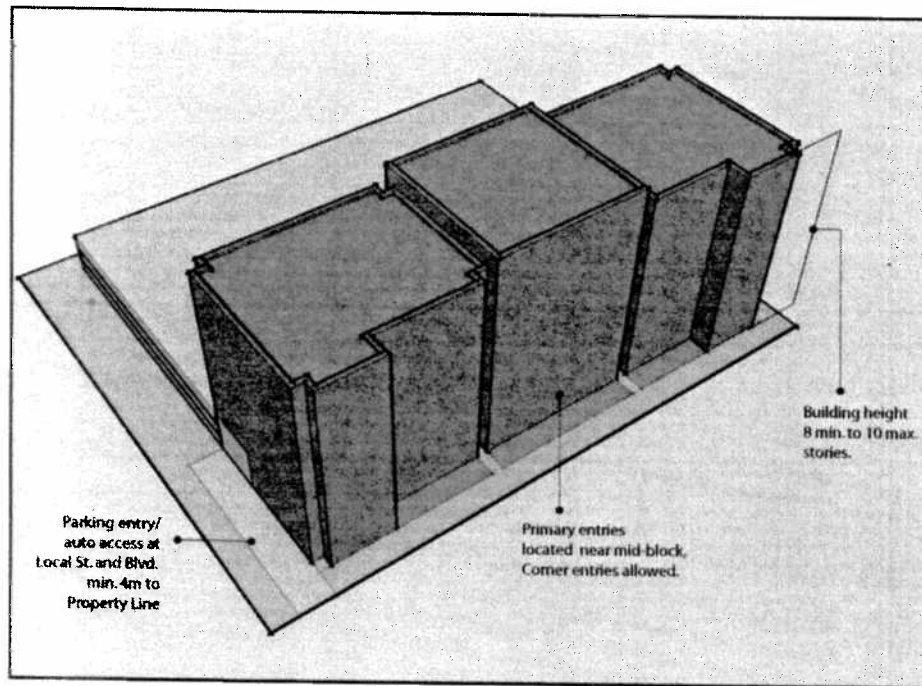
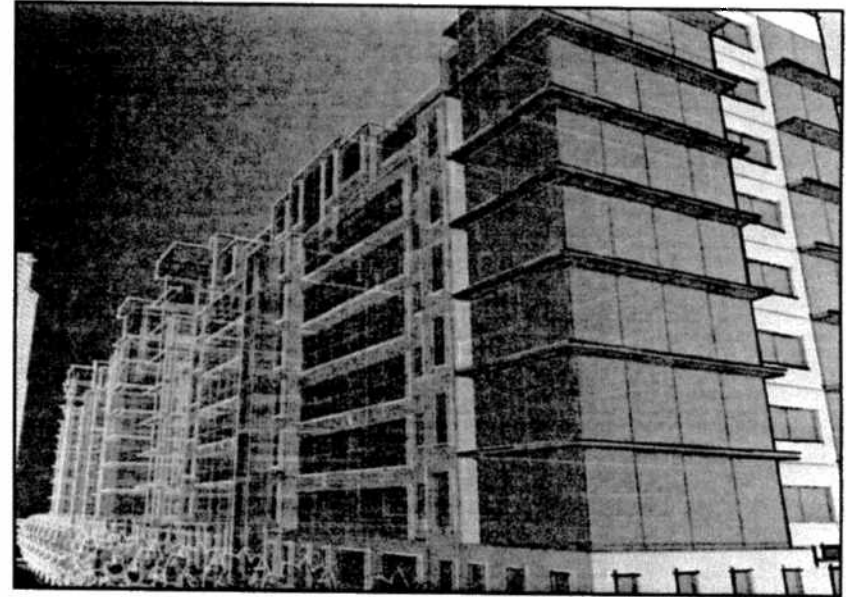
Employment

Langstaff will provide employment sectors not only for the internal population of the project, but also for the surrounding population of the Town of Markham, York Region, and the Greater Toronto Area. These employment areas will allow office, retail, and civic uses and provide a rich downtown centre environment that will respond to the employment demand of an urban town. The Employment building type will be flexible to permit the diversity of uses such as office over retail, civic amenities, and even some residential over office.



DESIGN CONTROLS

TABLE 5.09.05 Urban Design Controls Summary	
BUILDING HEIGHT	8 min. - 10 max. stories
FRONT SETBACKS	Min 70% of Property Line (PL) required to have facade at 3-5m fronting all streets. Any remaining PL required to have facade at 0-2m fronting all streets.
SIDE AND REAR SETBACKS	0m to party wall, 4m min. to window wall, 10m max. side setback to Property Line and building.
PEDESTRIAN ENTRY	Primary entry located near mid-block. Corner entries allowed.



Note: The massing and plan diagrams shown are conceptual only and illustrate one of many possible design solutions.



LANDSCAPE GUIDELINES

Section 5.10 - General

Section 5.11 - Streetscape

Section 5.12 - Parks and Open Space

Section 5.13 - Natural Features

Section 5.14 - Additional Streetscape Requirements

LANDSCAPE GUIDELINES

SECTION 5.10 - GENERAL

The landscape design guidelines for Langstaff are intended to create a rich and varied public realm. The proposed landscape elements will reinforce new patterns of buildings, roads, and public spaces – including pedestrian, recreational, and open space amenities. The following guidelines address community-wide elements such as streets, parks, plazas, sidewalks, and other components.

SECTION 5.11 - STREETScape

Urban streets often double as public spaces. They are places where people walk, shop, meet and engage in a variety of social and recreational activities. They are destination places that offer a wide range of activities and provide links to a variety of experiences. The design of the streetscape seeks to enhance the pedestrian character by providing and incorporating design features that minimize the negative impacts of the car on pedestrians.

How street right-of-ways are designed and constructed is critical. Streets and sidewalks are a key factor to the liveability, vitality and identity of a place. Well designed streets and sidewalks add value and help create a strong identity for the neighbourhood.



LANDSCAPE GUIDELINES

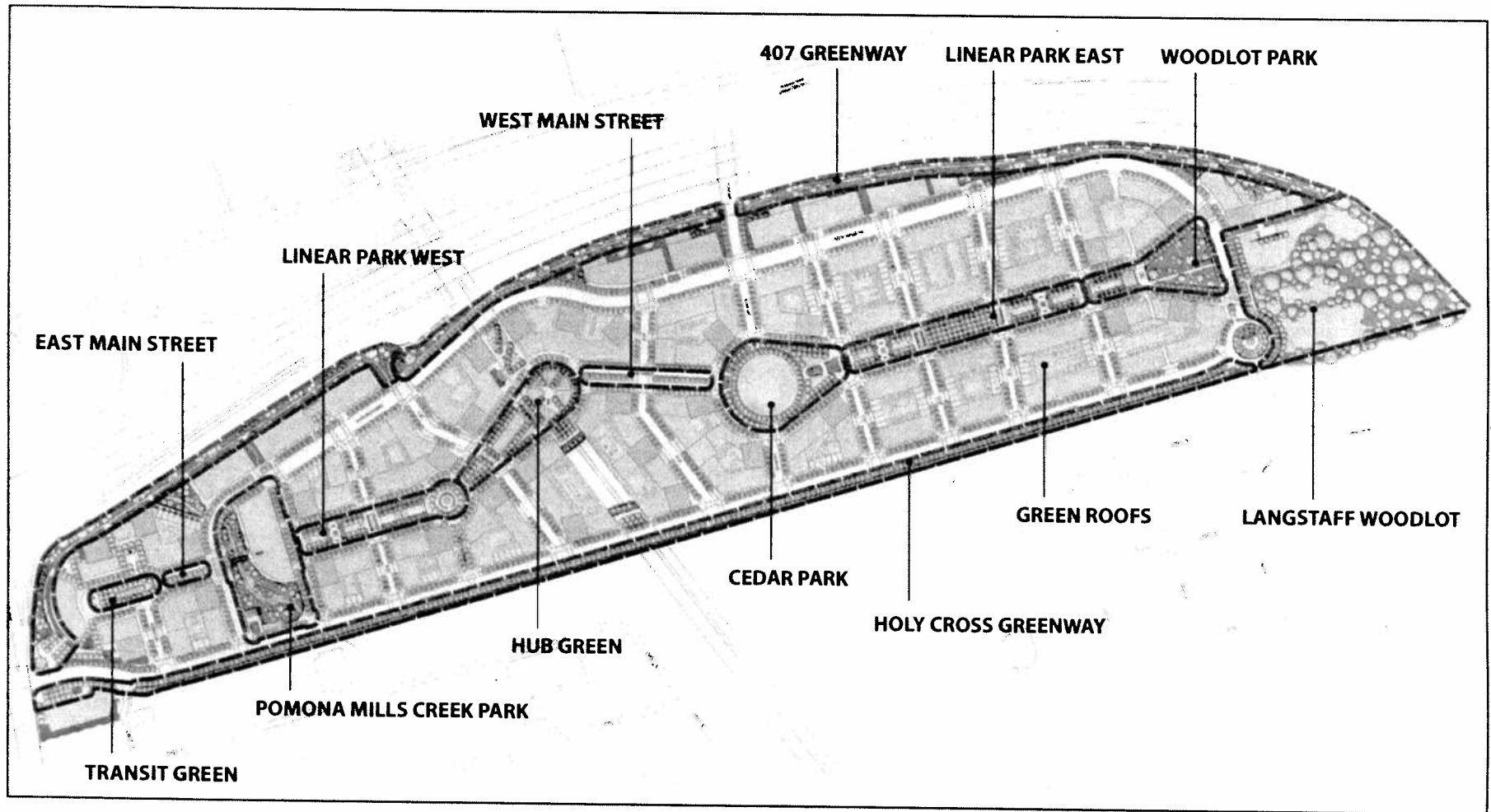


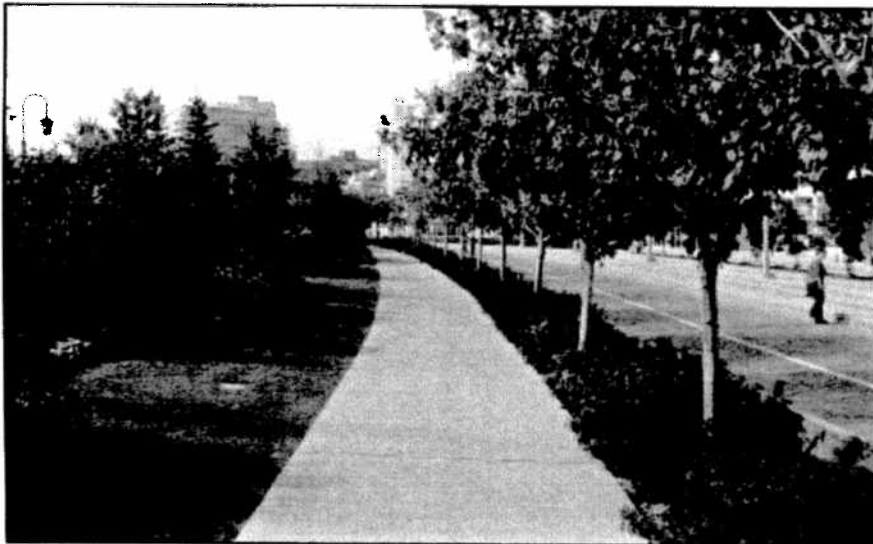
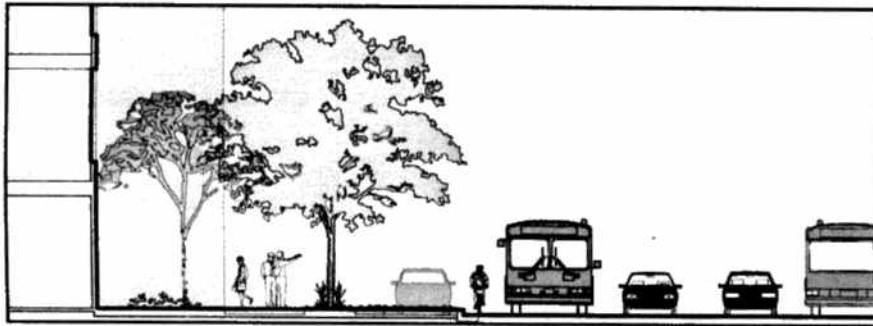
DIAGRAM 5.10.01 - Parks and Open Space

The following diagram illustrates the various open spaces which comprise the overall open space concept at Langstaff. Adjacent parks and plazas help create contiguous bicycle and pedestrian pathways, both safer and more enjoyable.

LANDSCAPE GUIDELINES

Boulevards

The boulevard is a major street and is typically a wide, multi-lane arterial thoroughfare that carries higher volumes of traffic at faster speeds. The intent of the boulevard treatment is to create a comfortable pedestrian environment so the street is not only serving vehicles, but people as well. Several design elements help create suitable buffers between pedestrians and traffic, including planting strips, bicycle lanes, landscaping and lay-by parking.



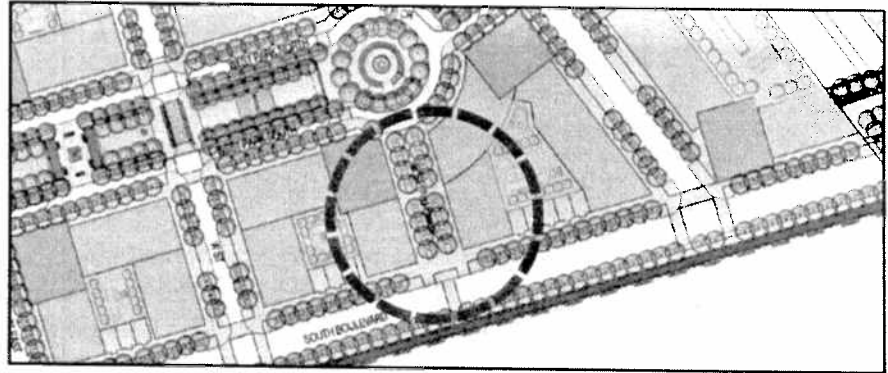
Urban Streets

Urban sidewalks are generally located in business and mixed-use districts where there is a concentration of higher density development, ground floor retail, restaurants and entertainment uses. The urban street is a slower moving thoroughfare that is urban in character and is considered to be a "shared space". The urban streetscape addresses character and appearance as well as facilitates people interaction. Great streets support the context around them. There should be a clear transition from commercial streets to nearby residential neighbourhoods, communicating a change in surroundings with a change in street character.

LANDSCAPE GUIDELINES

Neighbourhood Streets

The neighbourhood streetscape is designed to accommodate pedestrian traffic in locations where the intent of the neighbourhood streetscape is to create a pleasant pedestrian environment and encourage walking.

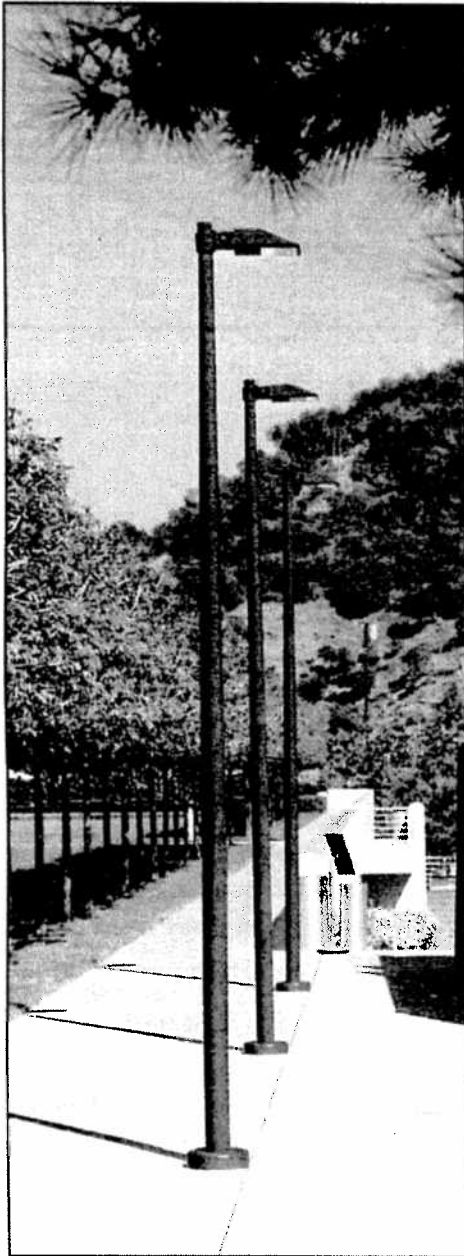


Promenade Park

Promenade Park designation is used for a particular paseo or mews where an extraordinary pedestrian emphasis and/or place-making are warranted. A Promenade Park may function as both a street for cyclists and pedestrians, and as a public space for sidewalk cafes, street fairs, and festivals, cultural and special events.

Special paving may be used to designate this street as pedestrian friendly where significant attention is given to the aesthetic quality of the pedestrian environment. Special paving is required to create distinctive places for people to gather, live, work, shop, dine, and socialize, where extra emphasis is desired to signify the importance of these focal points of people activity.

LANDSCAPE GUIDELINES



Sidewalk Surfaces

The following streetscape standards are typical for all streetscapes:

Surface treatment may vary depending on building use, setbacks, and other conditions.

Diversity of paving types to define areas is to be encouraged.

Crosswalks at intersections shall be visually different from the street surface, and shall be universally accessible.

Street Trees

All street trees are to be high branching deciduous trees, a minimum of 80mm calliper size, located 6.0m on centre, planted in continuous tree pits.

Understory material located in the 150 cm wide strip shall be planted with low maintenance plants such as shrubs, groundcovers, grasses and/ or sod. Seeding shall be prohibited. Plant material shall be selected to be well-suited to the location and climate.



Pedestrian Street Lights

The intent is to provide an optimum level of lighting for public safety while minimizing adverse environmental impacts such as glare and light pollution.

Lighting shall differentiate areas of use, emphasize neighbourhood amenities, provide continuity along streets and promote public safety. Lighting shall minimize glare and impacts to adjacent land uses, particularly residential. This may be achieved by utilizing full cut-off energy-efficient light fixtures, to shield the disbursement of light and prevent light glare and sky glow.

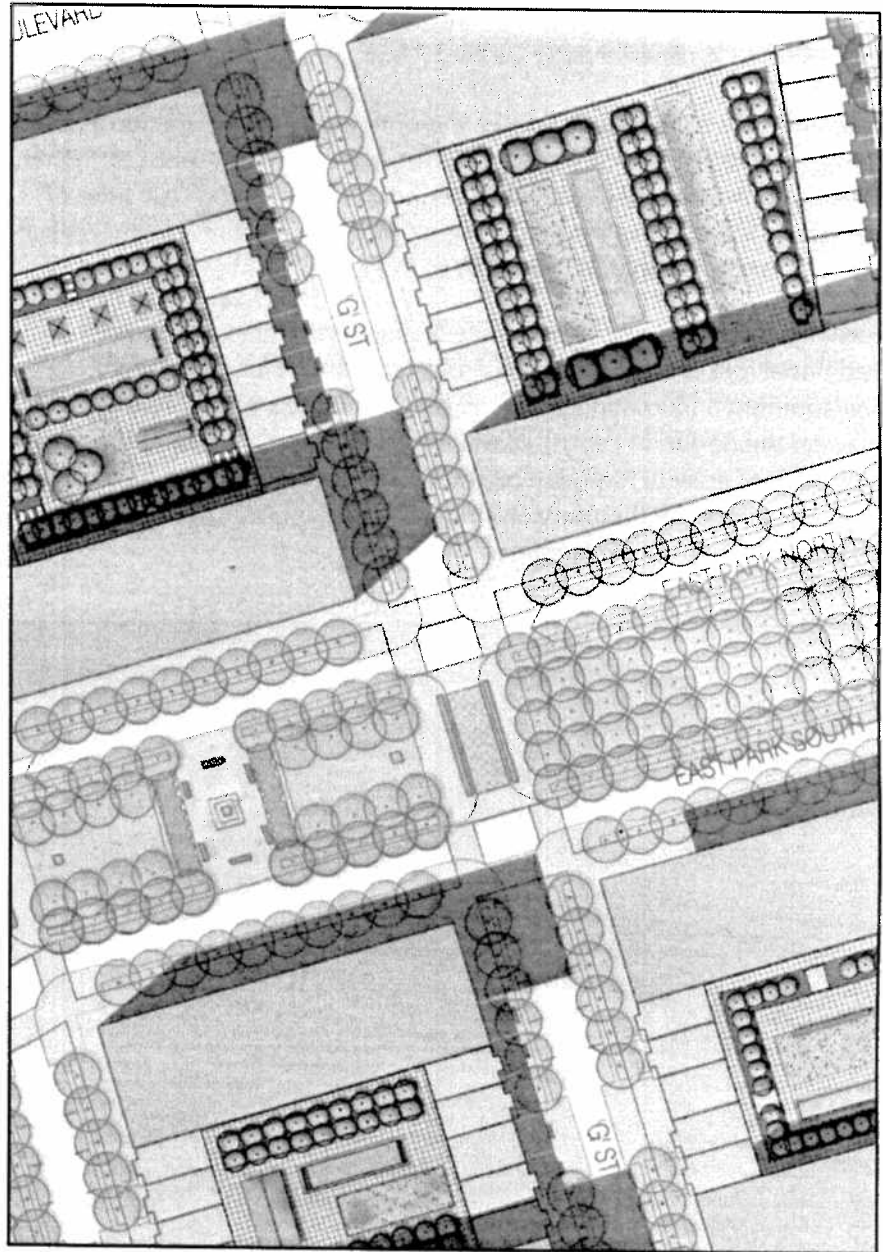
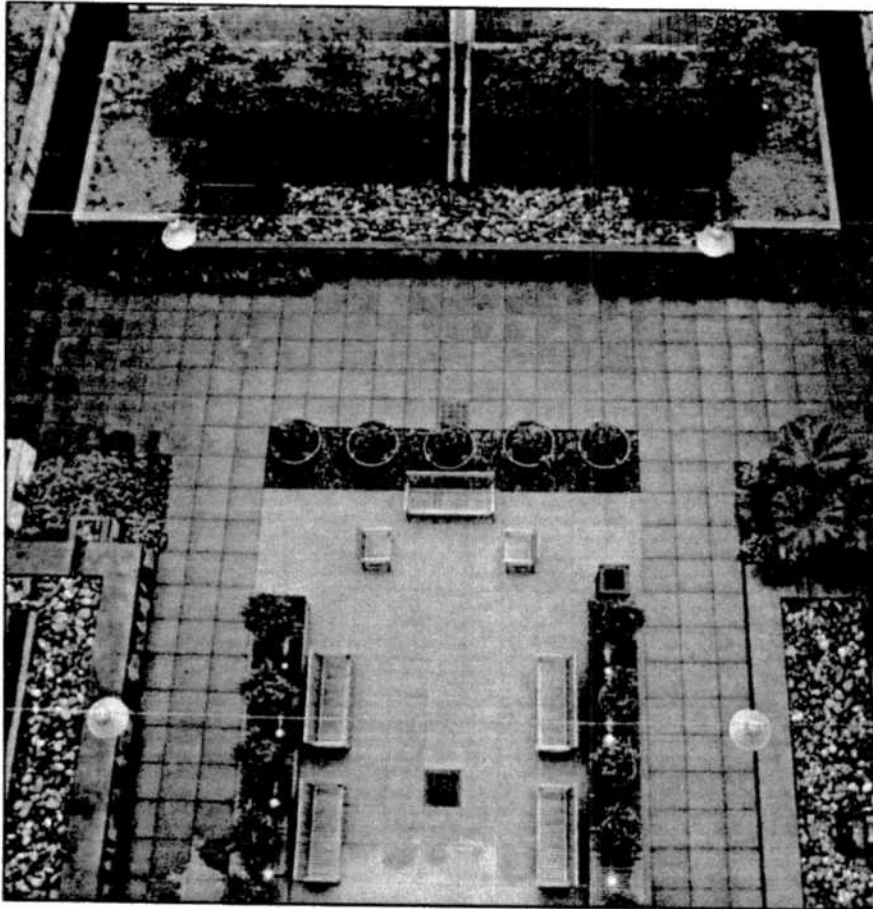
Lighting that blinks, flashes or of unusually high intensity of brightness shall be prohibited. Light fixtures shall be durable and easily maintained.

Streetlights addressing both vehicular and pedestrian lighting levels are to be provided. Fixtures shall be consistent throughout and shall be a minimum height of 4.5 meters, be no more than 20 meters on centre, and have metal halide lamp elements. Streetlights are to be in the same alignment as the proposed street trees

LANDSCAPE GUIDELINES

Amenity Space for Green Roofs

Roof terraces shall be incorporated into the community as a means of providing additional green space and recreational amenities. Roof terraces shall be designed to have a mix of hardscape, softscape and waterscape elements. Roof terraces are to be shaded and offer some recreational opportunities for residents of the building. Roof terraces shall consist of a mix of paving, shade, water features, trees and shrubs.

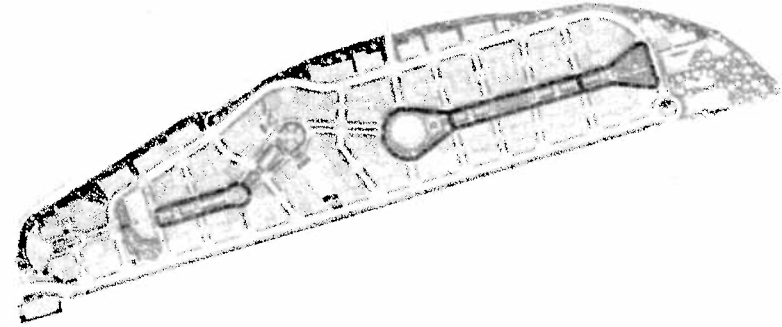
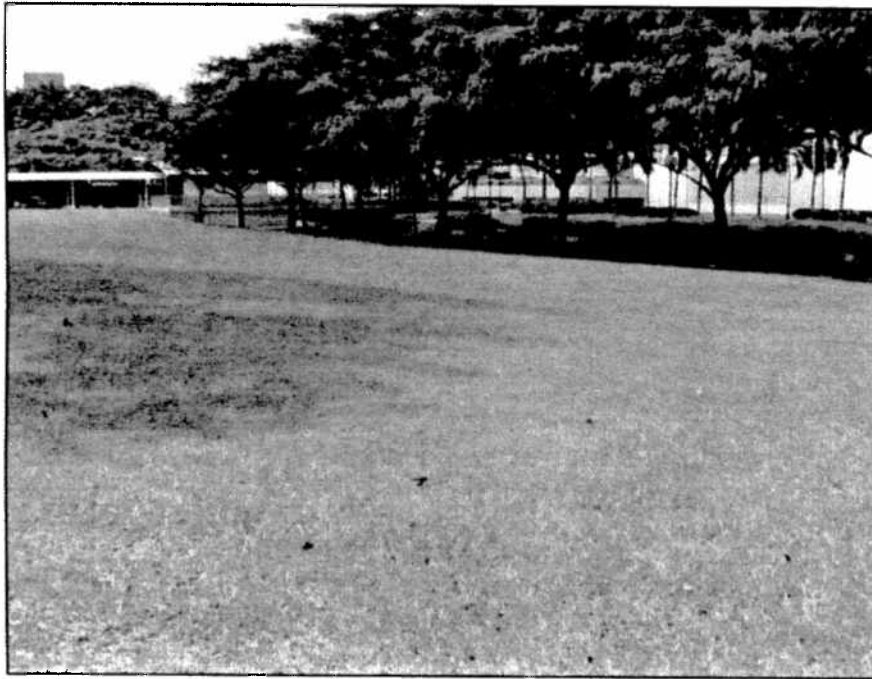


LANDSCAPE GUIDELINES

SECTION 5.12 - PARKS AND OPEN SPACE

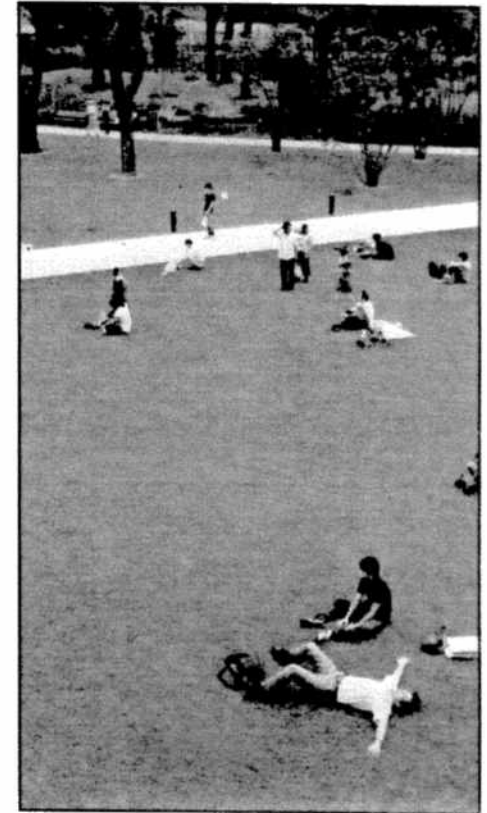
Langstaff offers a number of parks and open spaces that function as a "spine" of surrounding development. These major green space elements create a cohesive public realm that connects the west and east sides of Langstaff. The open space network is anchored by Pomona Mills Creek to the west, and the Langstaff Woodlot to the east.

The linkage of parks evolves the role of the urban park from a more traditional role of recreation into a role as a catalyst for community development and enhancement. These parks play a pivotal role in shaping the design of Langstaff and form the centre around which ground floor activity has been oriented. The park system will be an essential component in transforming and enriching Langstaff as a place of social and cultural exchange.

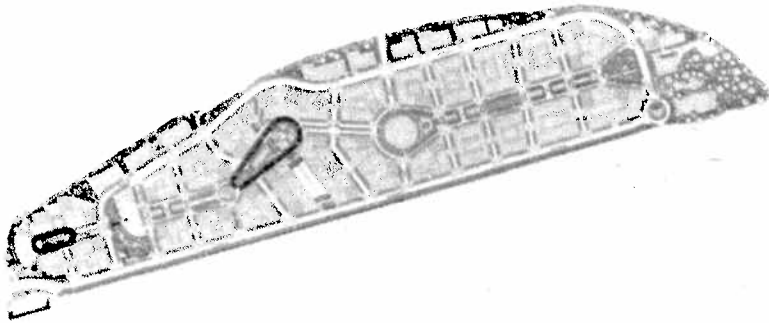


Cedar Park, Linear Parks East and West, and Woodlot Park

The combination of Cedar Park with the Linear Parks will provide vital connectivity in the Master Plan's overall open space concept. Linear Park East and Linear Park West will complement adjacent ground floor uses, such as cafes and restaurants, with a diverse offering of outdoor lawns, diverse seating and plazas. Cedar Park will provide a larger expanse of open space, perfect for sports and programmed activities such as concerts, markets and other community events. High accessibility and a wide range of amenities will make the parks valued assets in Langstaff.

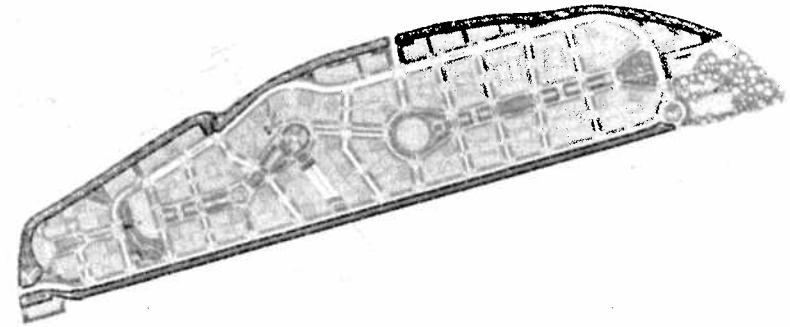
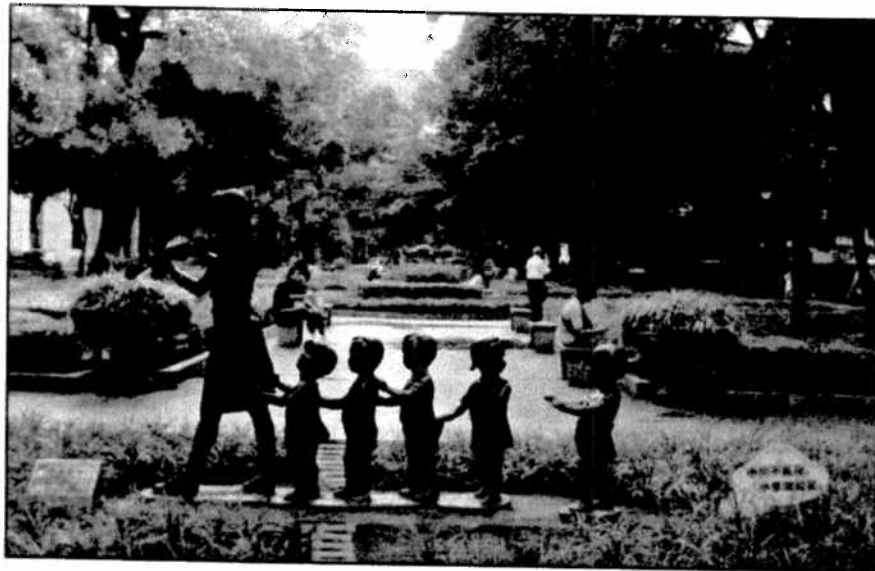


LANDSCAPE GUIDELINES



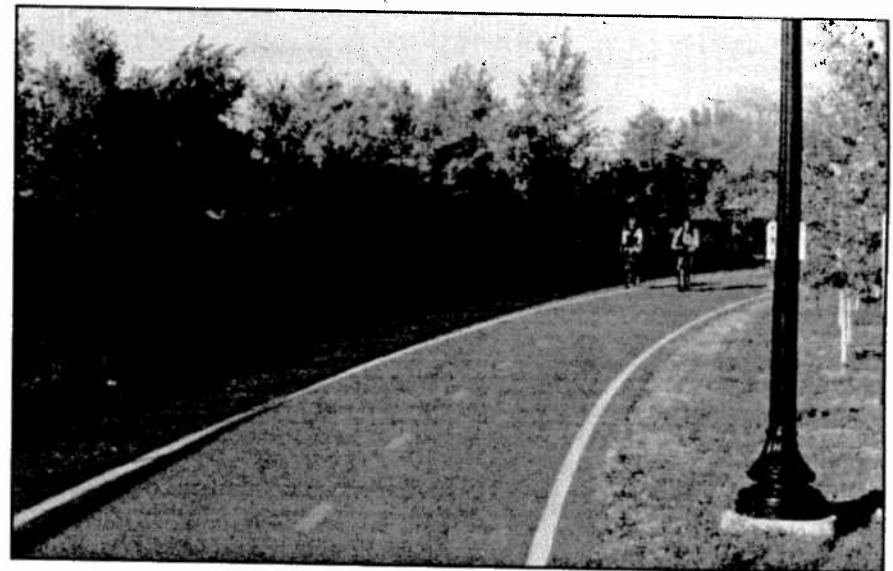
Transit Node Greens

High pedestrian traffic will be harnessed at the site's East and West Transit Nodes through the creation of small, convenient Greens. Transit Green to the west and Hub Green to the east will both frame the entrance to underground transit stations and provide an ideal space for a short break. While small, the Greens will be heavily visited by virtue of their location.

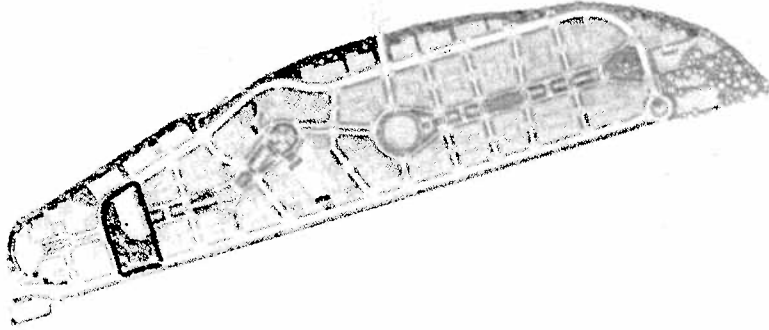


Greenways

A continuous recreational trail runs along the majority of the site's perimeter and connects Pomona Mills Creek to the Langstaff Woodlot. This pair of east/west greenways shall be designed to reflect a more natural setting. They will also foster cycling supportive neighbourhoods with bicycle routes that serve local destinations and link into the larger town-wide network of bicycle routes.

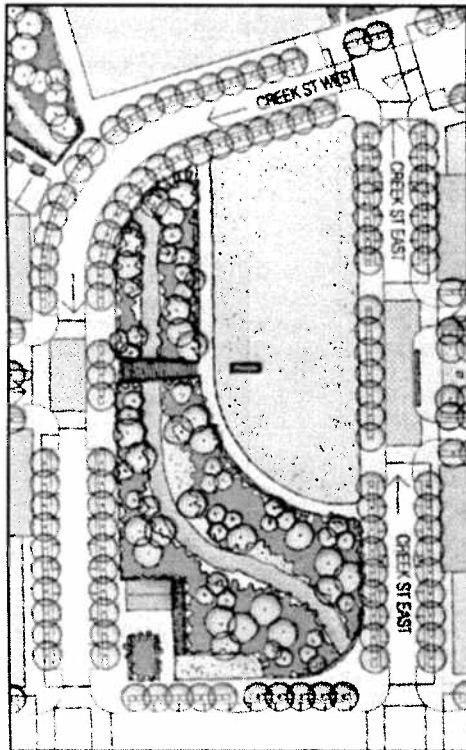


LANDSCAPE GUIDELINES

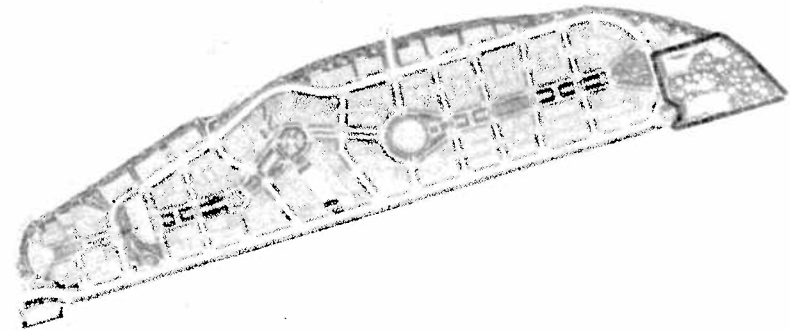


SECTION 5.13 - NATURAL FEATURES

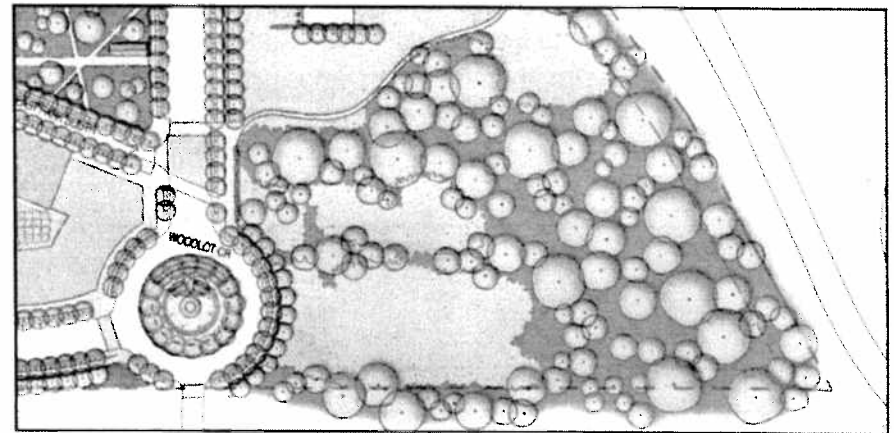
Pomona Mills Creek Park



Pomona Mills Creek is a natural feature that requires a set of standards for the protection and enhancement of the creek. Pomona Mills Creek Park will be a naturalized landscape that contrasts the traditional view of parkland by providing residents with a natural retreat in an urban setting. Pomona Mills Creek will be naturalized through vegetated buffers and incorporating components such as a boardwalk bridge into the open space parkland. These natural features make a visual contribution towards the street by providing universal views.



Langstaff Woodlot



The existing Langstaff Woodlot is a natural feature that should be restored and preserved. The Woodlot is a grove of mature deciduous trees and is a natural buffer that provides screening against Bayview Avenue. The Woodlot also provides a natural character to the development and anchors the east end of the linear corridor of parks. Similar to Pomona Mills Creek Park, the Langstaff Woodlot will sharply contrast Langstaff's well-maintained parks and plazas due to its more natural aesthetic. It will be connected to the linear park corridor by Woodlot Park, a public space blending the urban and earthly characteristics of the open spaces it connects.

LANDSCAPE GUIDELINES

SECTION 5.14 - ADDITIONAL STREETScape REQUIREMENTS

On-street parking

On street parking shall be incorporated into the streetscape consistent with the Langstaff Master Plan.

Block Service and Private Parking Entry

The visual impact of driveways may be minimized by narrowing the width to 6 meters typical. All driveways and block service drives are to be located within private property except as noted on the Master Plan. Streetscape paving to continue across service and parking drives. Curb cuts for these drives to be located at the road edge and shall not encroach into the streetscape.



Medians

Medians shall be provided only along streets specified in the Langstaff Master Plan and Streetscape Sections. Medians provide pedestrian refuge and protection from vehicle turning movements while minimizing the pedestrian crossing distances. All medians shall include appropriate landscape treatments such as trees, shrubs, groundcover and/ or grasses.

Transit stop

Transit stops are to be sited past the intersection so the transit vehicle is able to clear the intersection and come to a stop at the curb. Transit shelters are to be provided at each transit stop.

Street furniture

Site furnishings are encouraged to add to the diversity of streetscape life. They provide an opportunity for the reinforcement of a community identity through the consistent use of repetitive site details, a standard palette of materials, colours and accessories. These include however are not limited to recycling and trash receptacles, benches, newspaper boxes, community kiosks, bike racks and transit shelters.



Utilities

All utilities are to be located underground, either within the 80 centimeter pedestrian landing or in the roadway, or enclosed within the main building on the lot.

Irrigation

An automated irrigation system is to be provided to all landscape in the streetscape and is to be connected to the individual building blocks.



PARKING & LOADING

Section 5.15 - Purpose & Type

Section 5.16 - General Provisions

Section 5.17 - Space Requirements

Section 5.18 - Space & Lot Design

Section 5.19 - Loading Area

PARKING & LOADING

SECTION 5.15 - PURPOSE AND TYPE

Parking and loading requirements are established as part of these Guidelines to ensure that all activities in Langstaff are provided adequate and reasonable parking and loading facilities to meet the needs of structures and uses, while supporting a transit travel option.

Parking Types

Opportunities for parking shall be classified in two categories as follows:

- A. **On street parking.** Permitted on most streets throughout Langstaff.
- B. **Structure parking.** Above and below grade parking structures are restricted by design and appearance.

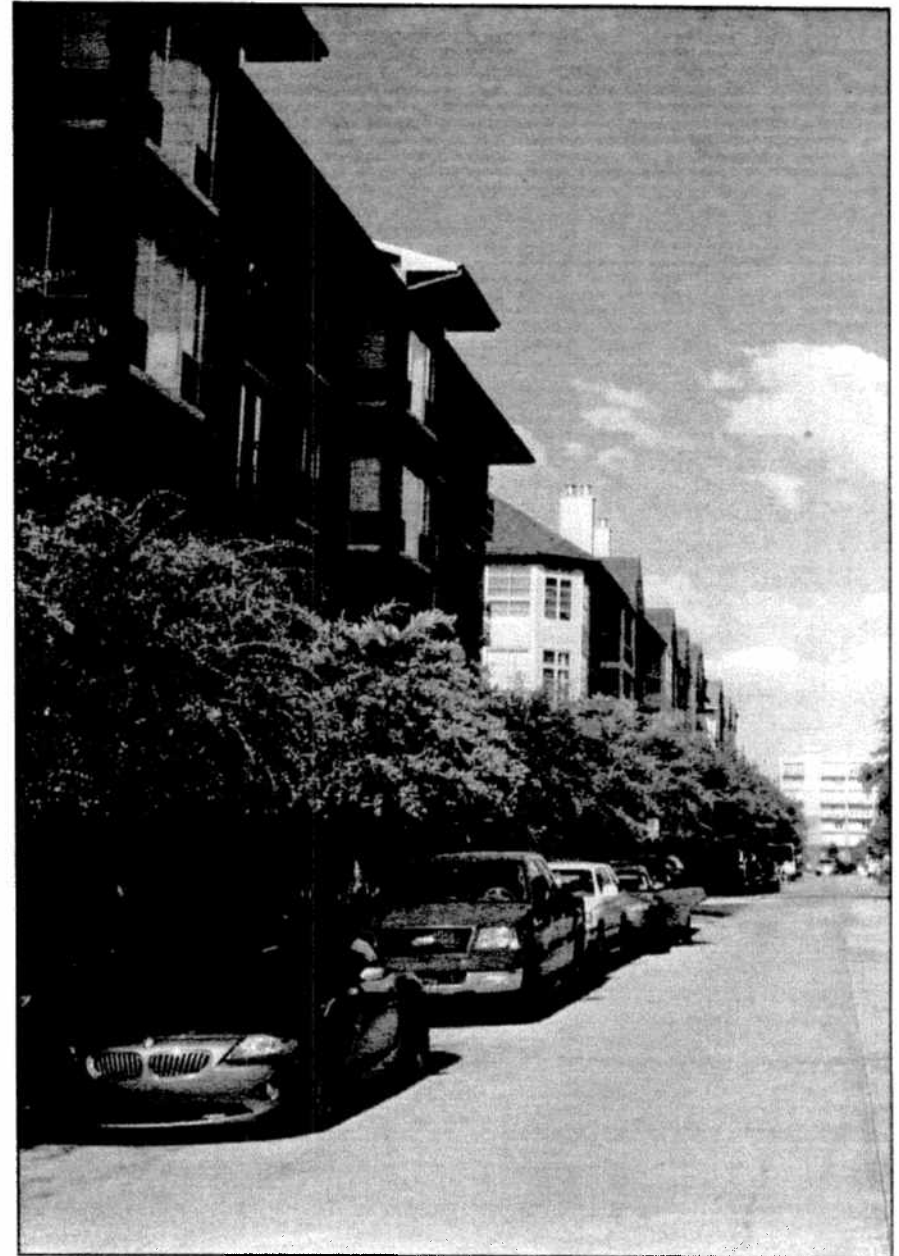
On Street Parking

On street parking is strongly encouraged as a flexible, efficient parking option. On street parking shall be permitted along all streets throughout Langstaff, with a few exceptions.

- A. On street parking located adjacent to the front lot line of a lot shall be included in meeting parking requirements for that particular lot.
- B. All on street parking shall be designed as parallel parking. No diagonal parking is permitted.
- C. On street parking spaces shall have a maximum length of 7 meter and a maximum width of 2.5 meters unless otherwise specified in the implementing zoning by-law or Markham parking by-law.

Parking by Parcel Type

Parking type is determined to have an impact upon the visual character and overall efficiency of a lot or block. Table 5.18.01 - General Parking Requirements indicates the type of parking permitted in each Parcel Type. "P" indicates that the specific type of parking is permitted within the given Building Type.



PARKING & LOADING

SECTION 5.16 - GENERAL PROVISIONS

Location of Parking





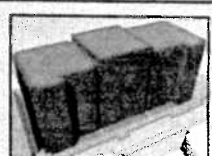
- A. Location of parking in relationship to structures on a lot and the streetscape are regulated by Table 5.16.01 - General Parking Requirements.

Shared Parking

Two or more structures or areas may share parking provided that all height, design and other criteria established within the Parking and Loading Section are met and approval is granted by the Town of Markham.

Approval Required

Parking and loading shall require approval by the Town of Markham prior to construction or use. No concept plan or site plan approval shall be granted if the Town of Markham is unable to determine that parking and loading areas meet the requirements of the section Parking and Loading of these Guidelines.

Table 5.16.01 - General Parking Requirements	HIGH-RISE RESIDENTIAL	MID-RISE RESIDENTIAL TYPE 1	MID-RISE RESIDENTIAL TYPE 2	LOW-RISE RESIDENTIAL	EMPLOYMENT
					
Type of Parking					
On Street	P	P	P	P	P
Below Grade Carpark Structure	P	P	P	P	P
Above Grade Carpark Structure	P	P	P	P	P
Added Requirements					
Visibility of Parking Structure	All sides are required to be wrapped with residential or commercial use.*	All sides are required to be wrapped with residential or commercial use.*	All sides are required to be wrapped with residential or commercial use.*	All sides are required to be wrapped with residential or commercial use.*	All sides are required to be wrapped with residential or commercial use.*
Vehicle Access**	Local Street and Boulevard min. 4m from Property Line.	Local Street and Boulevard min. 4m from Property Line.	Local Street and Boulevard min. 4m from Property Line.	Local Street min. 4m to Property Line.	Local Street and Boulevard min. 4m to Property Line.

* Parcels W-12 and E-01 are exceptions.

** Refer to Diagram 5.07.05 - Parking Access Control for access streets by parcel.

PARKING & LOADING

SECTION 5.17 - SPACE REQUIREMENTS

Number of Spaces

Table 5.17.01 - On-Site Parking Spaces Required at Build-Out, designates the maximum number of parking spaces necessary by type of land use and also by proximity to transit nodes. These numbers represent ratios at final build-out.

TABLE 5.17.01 - On-Site Parking Spaces Required at Build-Out

Use	Proximity to Transit	Space Requirement
Residential	< 200 m radius	0.5 spaces/unit
	< 400 m radius	0.7 spaces/unit
	other	1.0 spaces/unit
Office	< 200 m radius	1.75 spaces/100 m ²
	< 400 m radius	2.0 spaces/100 m ²
	other	4.0 spaces/100 m ²
Retail	< 200 m radius	.7 spaces/100 m ²
	< 400 m radius	1.0 spaces/100 m ²
	other	3.0 spaces/100 m ²
Civic / Community	< 200 m radius	.5 spaces/100 m ²
	< 400 m radius	.7 spaces/100 m ²
	other	1.5 spaces/100 m ²

Note: If a building is bisected by a radii it follows the parking space requirements of the smaller radii.

Bicycle Accommodations

A secured, weather protected bicycle storage facility is required in all multi-family and commercial buildings and it shall be easily accessible preferably located near an entrance. It may be either short-term or long-term bicycle parking depending on the building's use. Sufficient clearance should be provided for safe movement. Bicycle spaces shall be required at the rate of 0.75 spaces per unit for residential uses and 0.2 spaces per 100 square meters for office and retail uses.

Calculating Space Requirements

- Those requirements including a square meter measure shall base measurements on gross floor area.
- In the event that calculations result in a fraction greater than one-half (.5), the number shall be rounded up to the next whole number. Otherwise, the number shall be rounded down.



PARKING & LOADING

SECTION 5.18 - SPACE AND LOT DESIGN

Parking Space Size

- A. Parking spaces shall conform to the requirements established by the Town of Markham.
- B. Required parking spaces in a structure shall have minimum dimensions of no less than 2.6 meters in width and 5.8 meters in length.
- C. Parking spaces for the physically disabled in a structure shall have minimum dimensions of no less than 3.9 meters in width and 5.8 meters in length.

Access

- A. No parking space shall have direct access to a street except on street parking spaces. Off street parking spaces shall be accessible without backing onto or otherwise entering a street.
- B. All off street parking areas shall be limited to one point of two-way operation access with the exception of those parking areas that exceed a total of 500 spaces, in which case two points of two-way operation access are permitted.

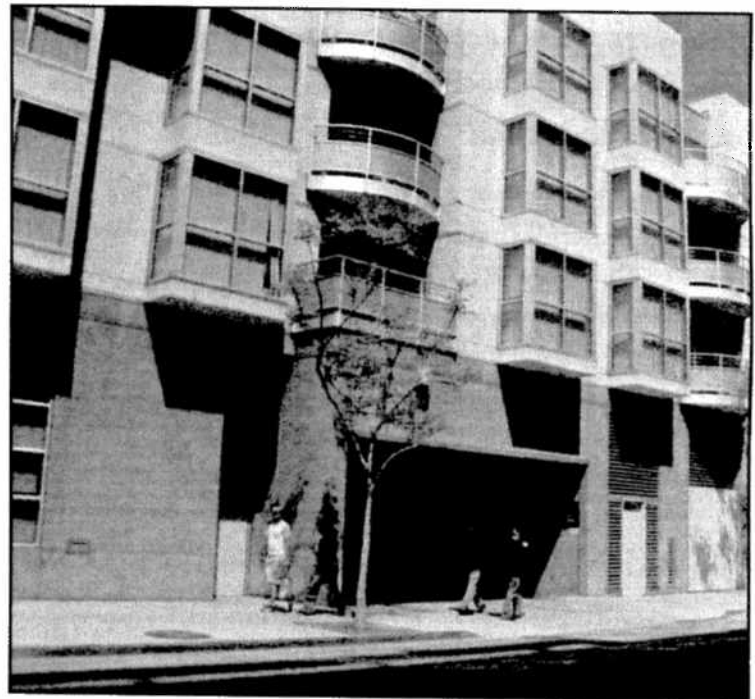
Access Standards

Access driveways for parking and loading shall meet the following design standards:

- A. Access for emergency vehicles and loading shall have a minimum vertical clearance of 5.5 meters.
- B. Access to residential buildings shall have a minimum vertical clearance of 2.3 meters.

(The following Access Standards, criteria 'C', 'D' and 'E', will be reviewed and confirmed later in the planning process).

- C. Curb cuts shall not be placed closer than 4 meters from an intersection, measured from the nearest edge of the access driveway.
- D. Access driveways shall have a minimum width of 3 meters for one-way operation or 6 meters for two-way operation.
- E. At no time shall the total width permitted for access exceed 30 percent of the total street frontage.



PARKING & LOADING

Markings and Accessories

- A. Each required off-street parking space shall be individually identified by surface markings in accordance with adopted standards. Aisles and maneuvering areas shall also be clearly marked with directional and traffic information as determined necessary.
- B. Wheel stops or a continuous curb shall be provided along the boundary line of a parking area or within proximity to structures, pedestrian areas, or landscaping.
- C. Lighting shall be installed as needed for purposes of safety and shall be installed in a manner to prevent light from reaching beyond the intended area.

Screening and Drainage

Parking and loading areas shall be graded, paved with a material acceptable to the Town of Markham, drained, and maintained to avoid dust, erosion or excessive water flow.

Vehicle Stacking Areas

Vehicle stacking may be a consideration in "staging areas" such as banks or parking areas for commercial retail or entertainment activities. In such instances, the following requirements shall apply:

- A. Vehicle stacking areas must be provided on-site and may not impede on or off-site traffic movement.
- B. The number of vehicles to be considered in the vehicle stack shall be determined in coordination with the Town of Markham.

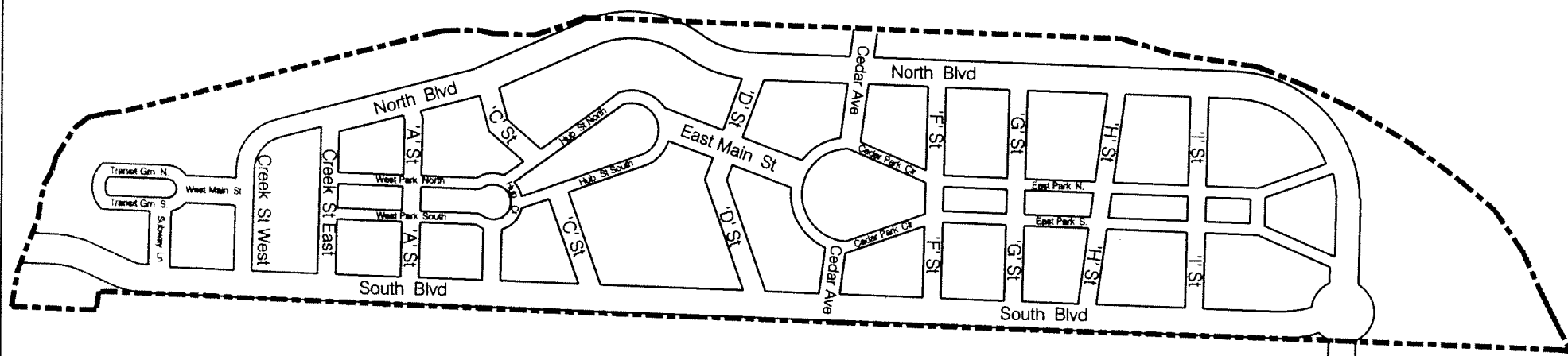
SECTION 5.19 - LOADING AREAS

Location of Loading Areas

Loading areas shall be located beyond the view of the general public as determined in Table 5.16.01 - General Parking Requirements.

- A. Bus and taxi pick up/drop off areas shall be permitted in areas visible to the general public.
- B. Drive-Through service facilities should be prohibited in this project. Drive-Through facilities are defined as a building, structure or part thereof where goods and/or services are offered to the public within parked or stationary vehicles by way of a service window or kiosk, in which goods, money, or materials are exchanged. Kiosks for parking garages are not considered drive-throughs.
- C. The right-of-way shall not be used as a location for general loading or unloading of goods and services. No part of any vehicle shall be permitted to extend into any street during loading or unloading.
- D. Loading spaces shall have minimum dimensions of 3.5 x 12 meters with vertical clearance dimension of 4.2 meters.

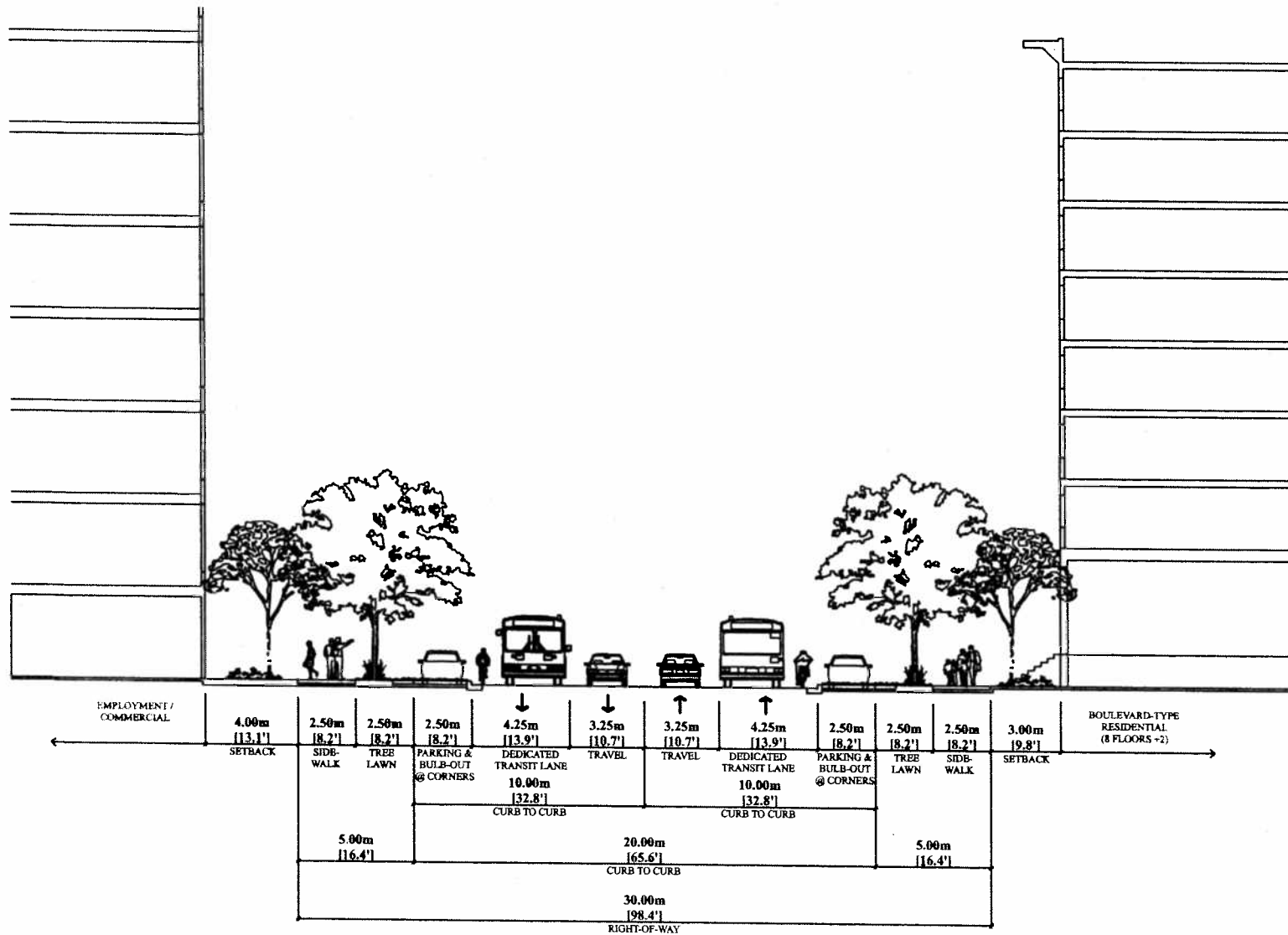
Road Name Key *



Langstaff Gateway Urban Design and Streetscape Guidelines June 2010

* See Section 8.1.6 Road Classifications Langstaff Gateway Planning District Secondary Plan

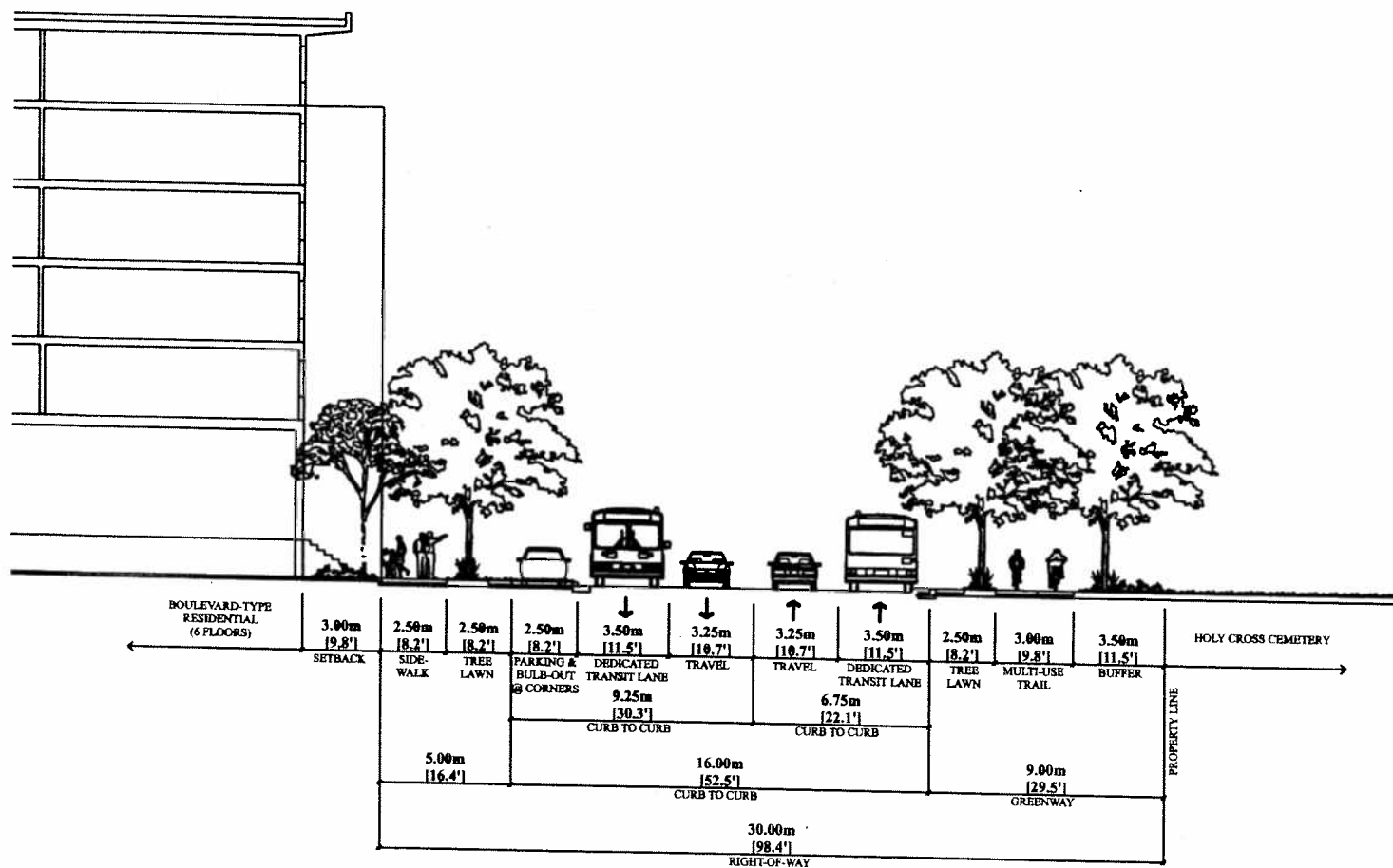
NORTH BLVD



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

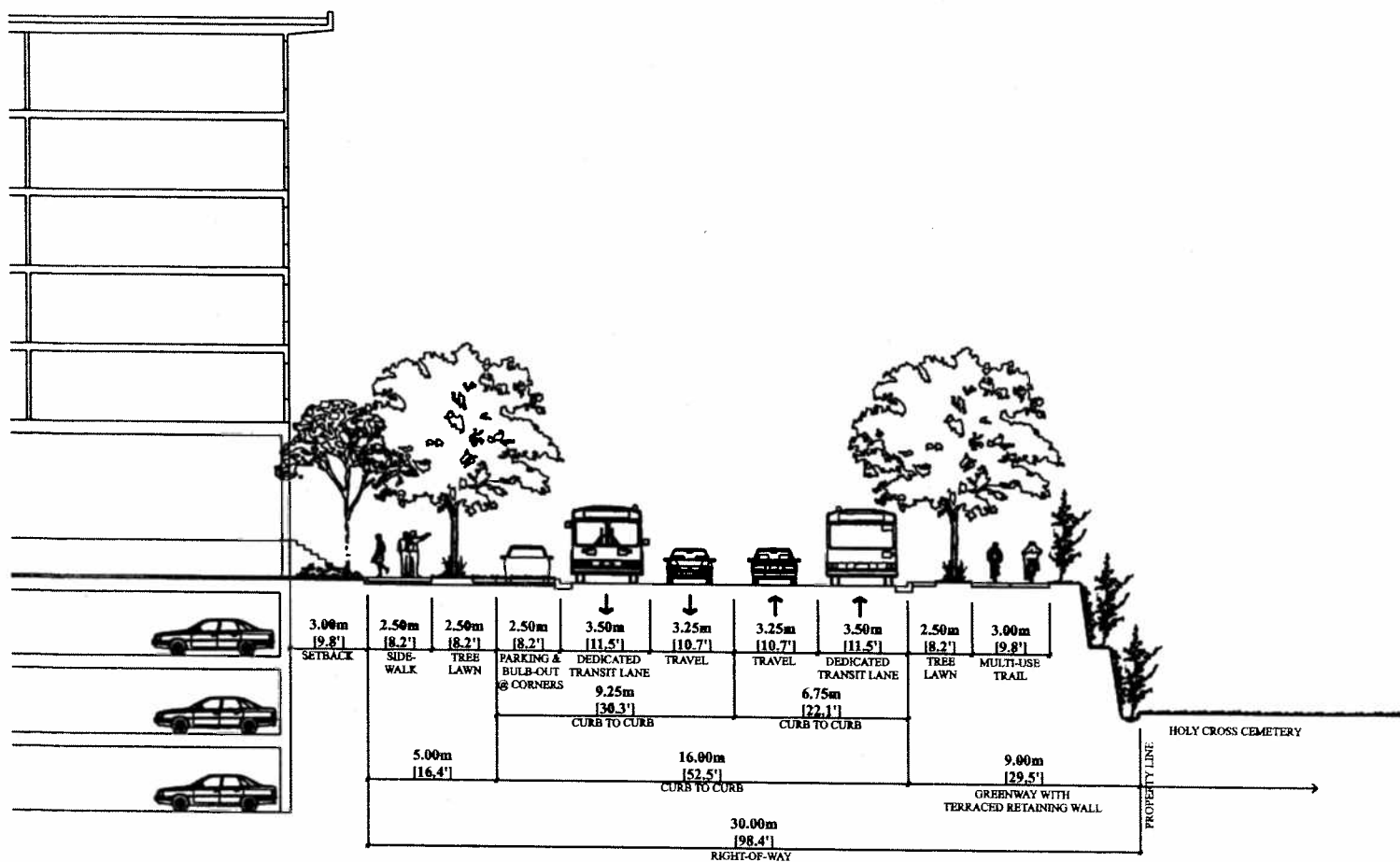
SOUTH BLVD (NEXT TO HOLY CROSS CEMETERY)



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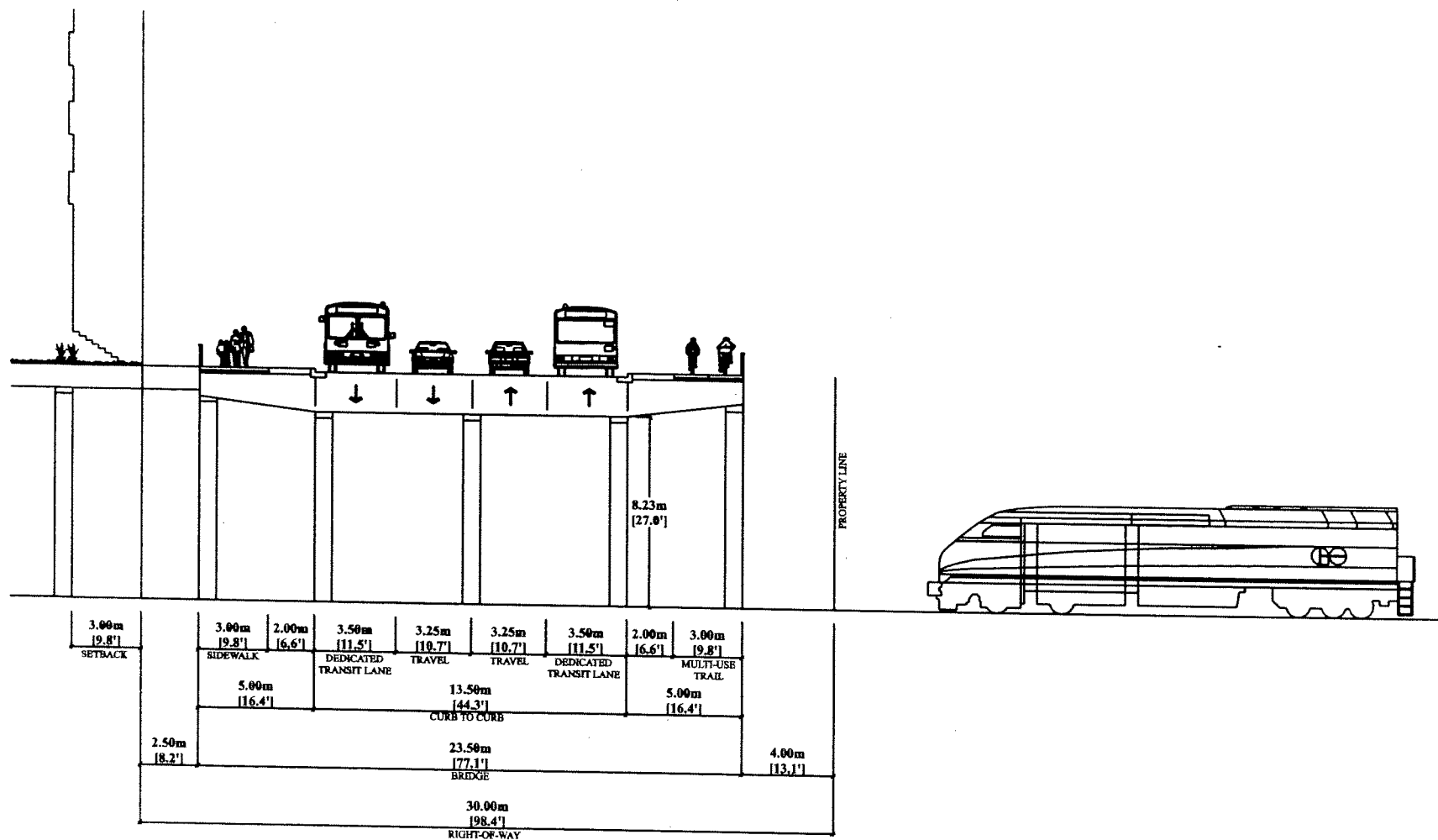
BLVD RAMPING (UP/DOWN AT CNR)



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

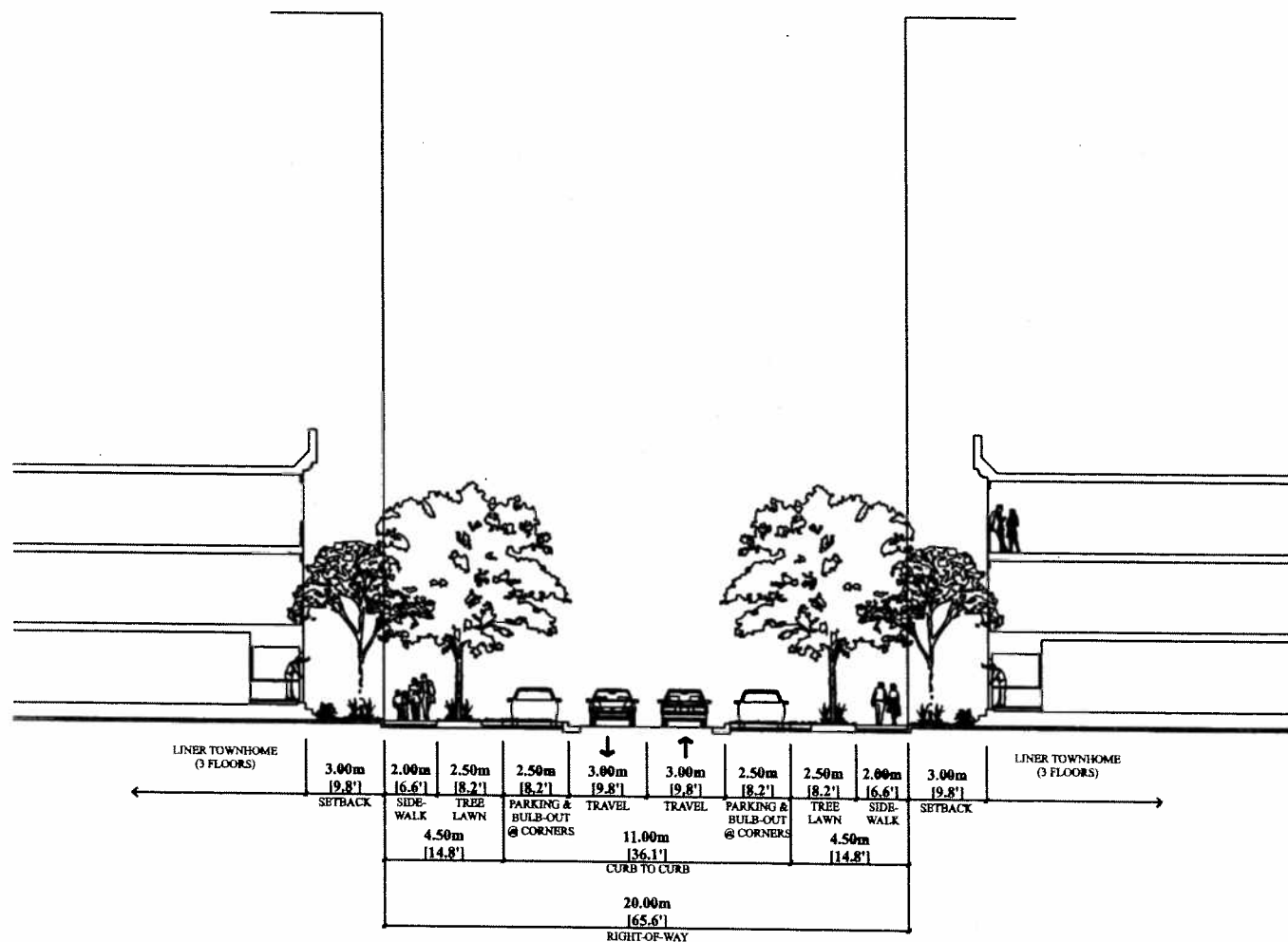
BLVD BRIDGE



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

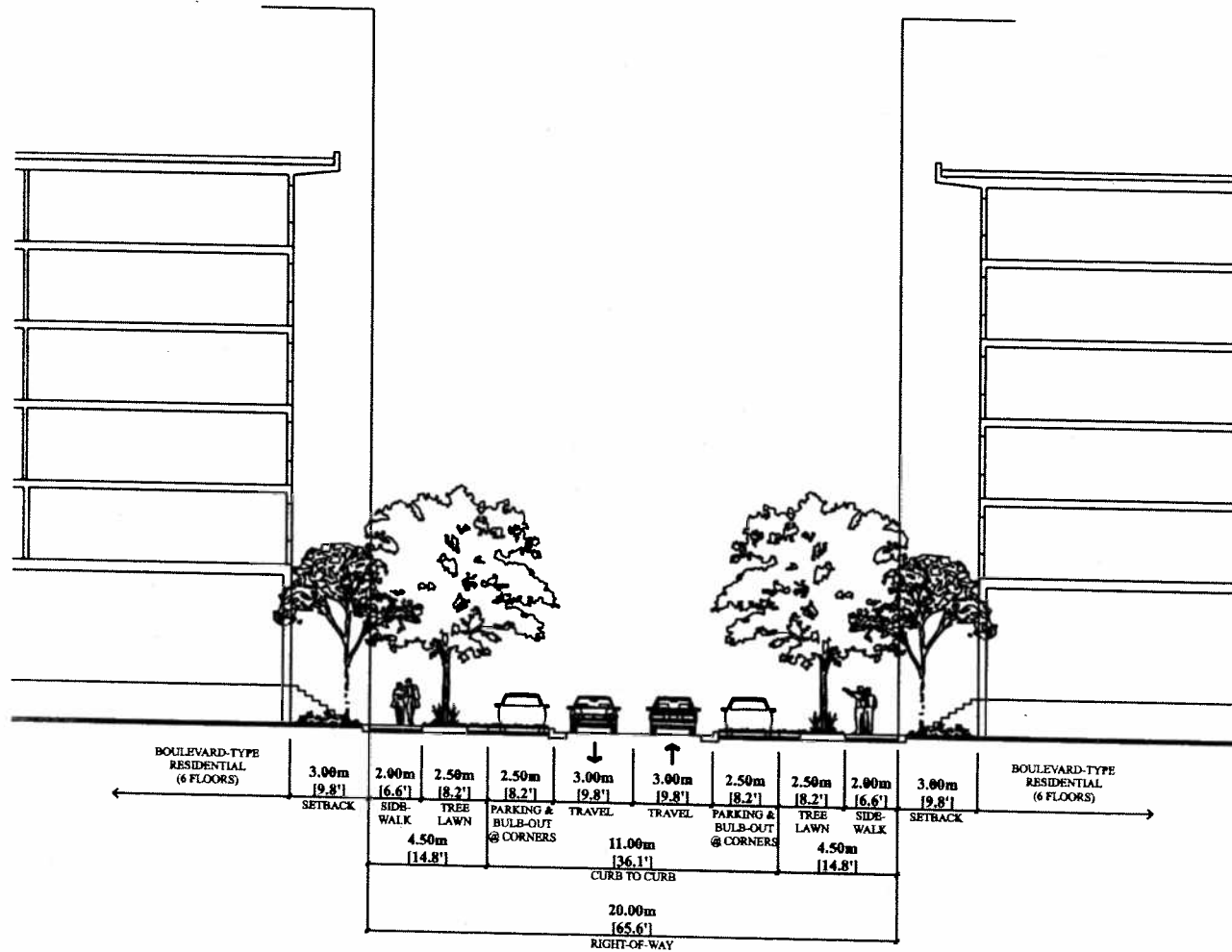
LOCAL STREET (TOWNHOMES)



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

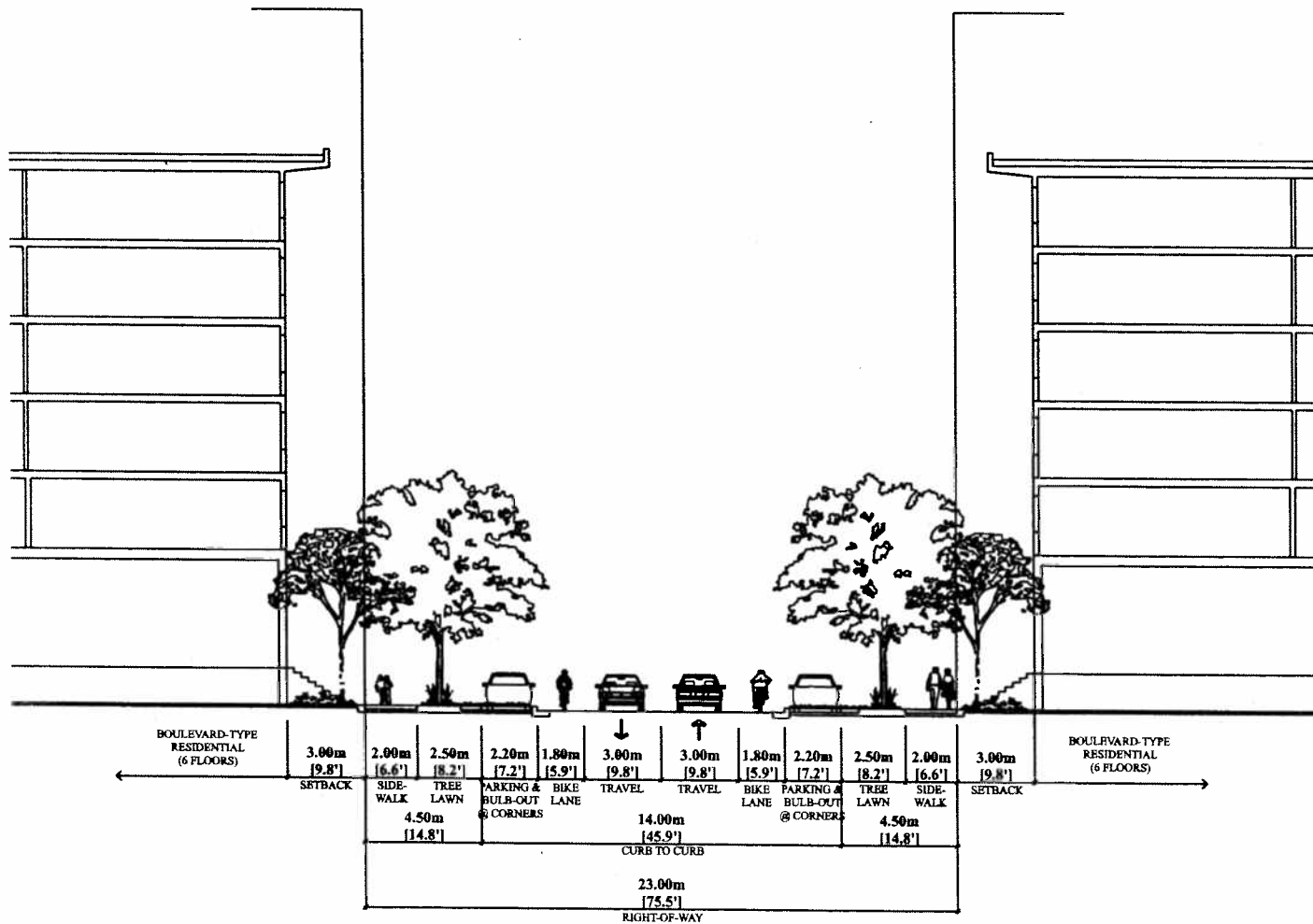
LOCAL STREET (6 FLOORS)



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

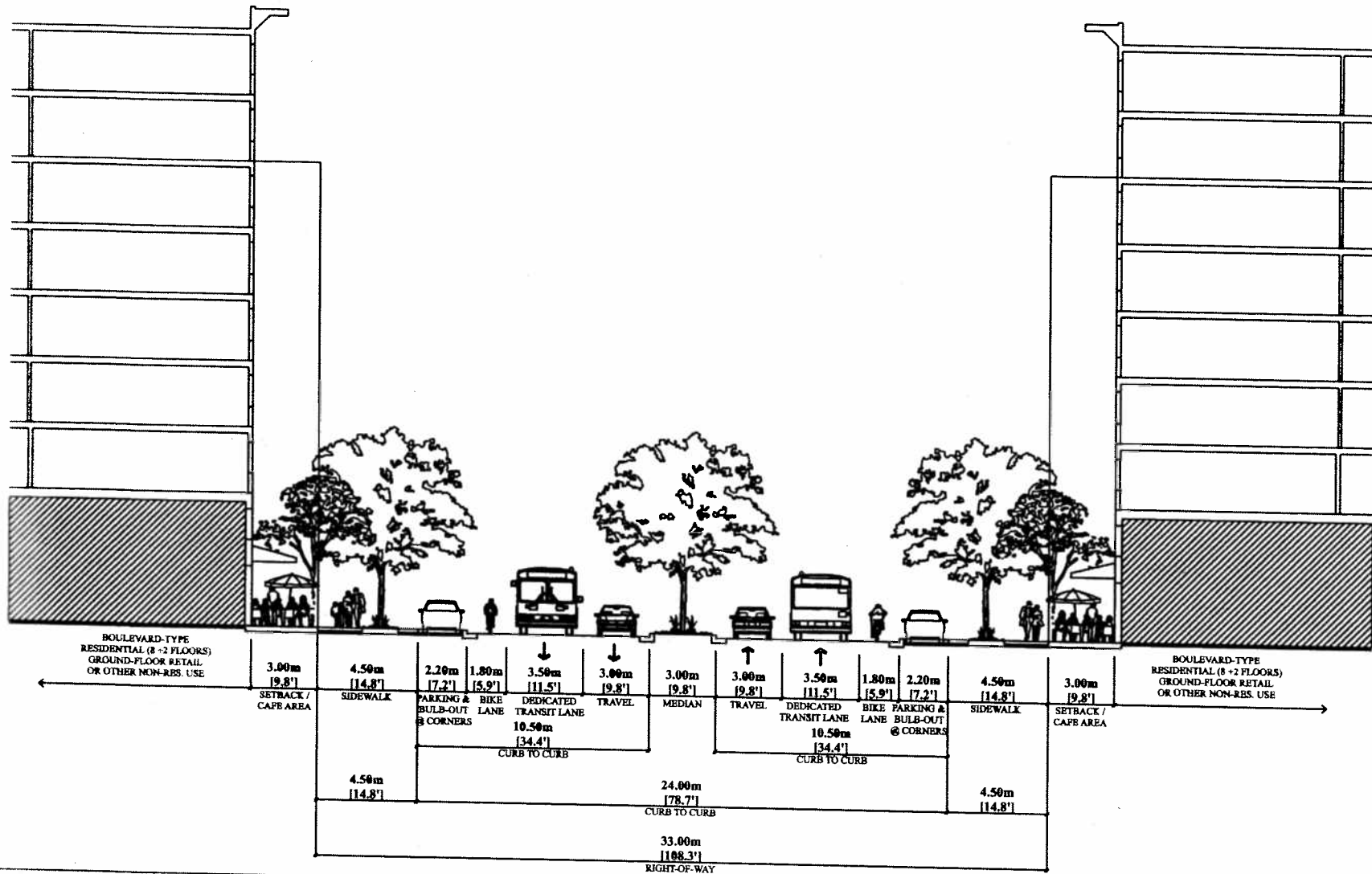
LOCAL STREET w/ Bike Lane (6 FLOORS)



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

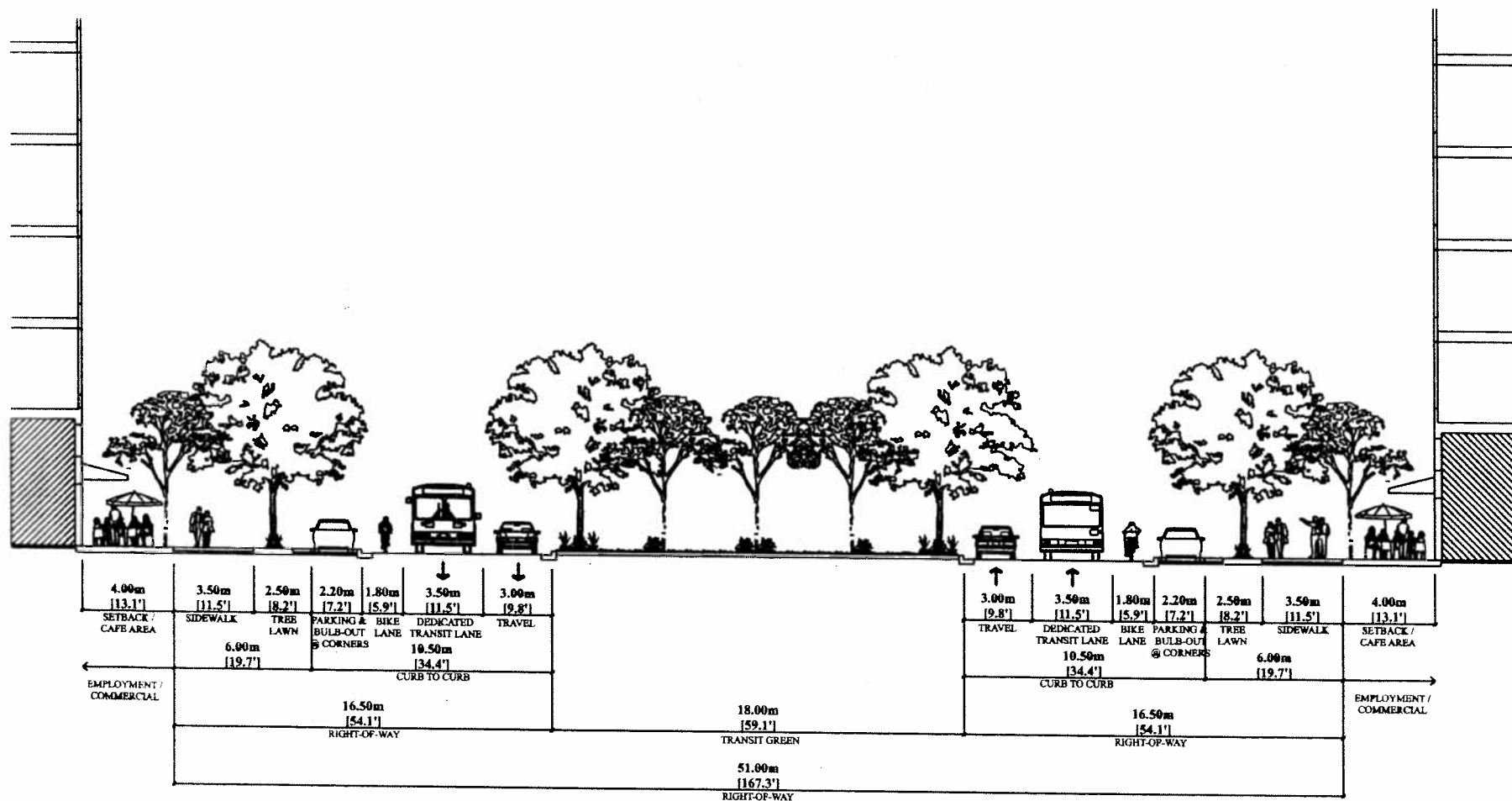
MAIN STREET (EAST & WEST)



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

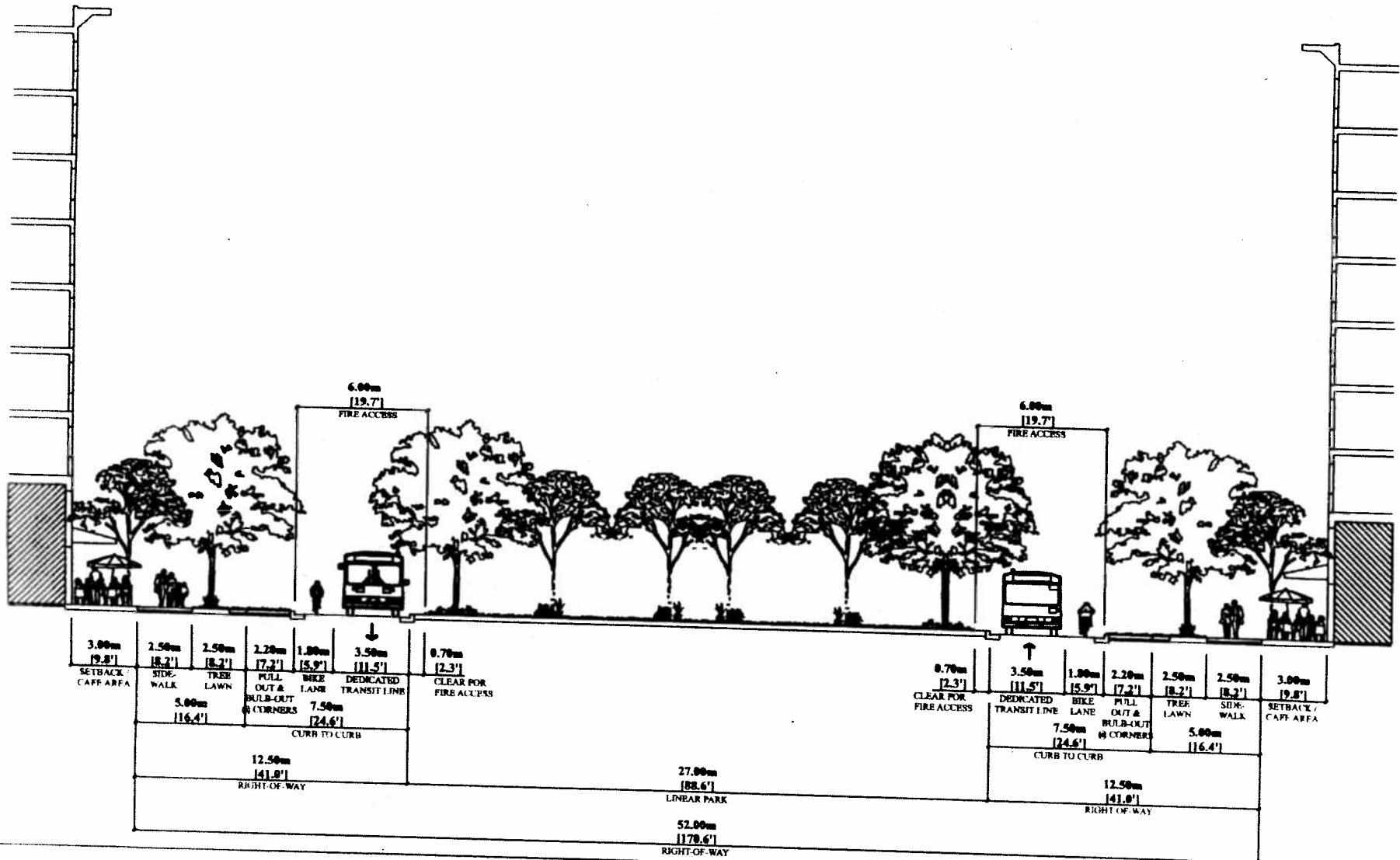
TRANSIT GREEN COUPLET



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

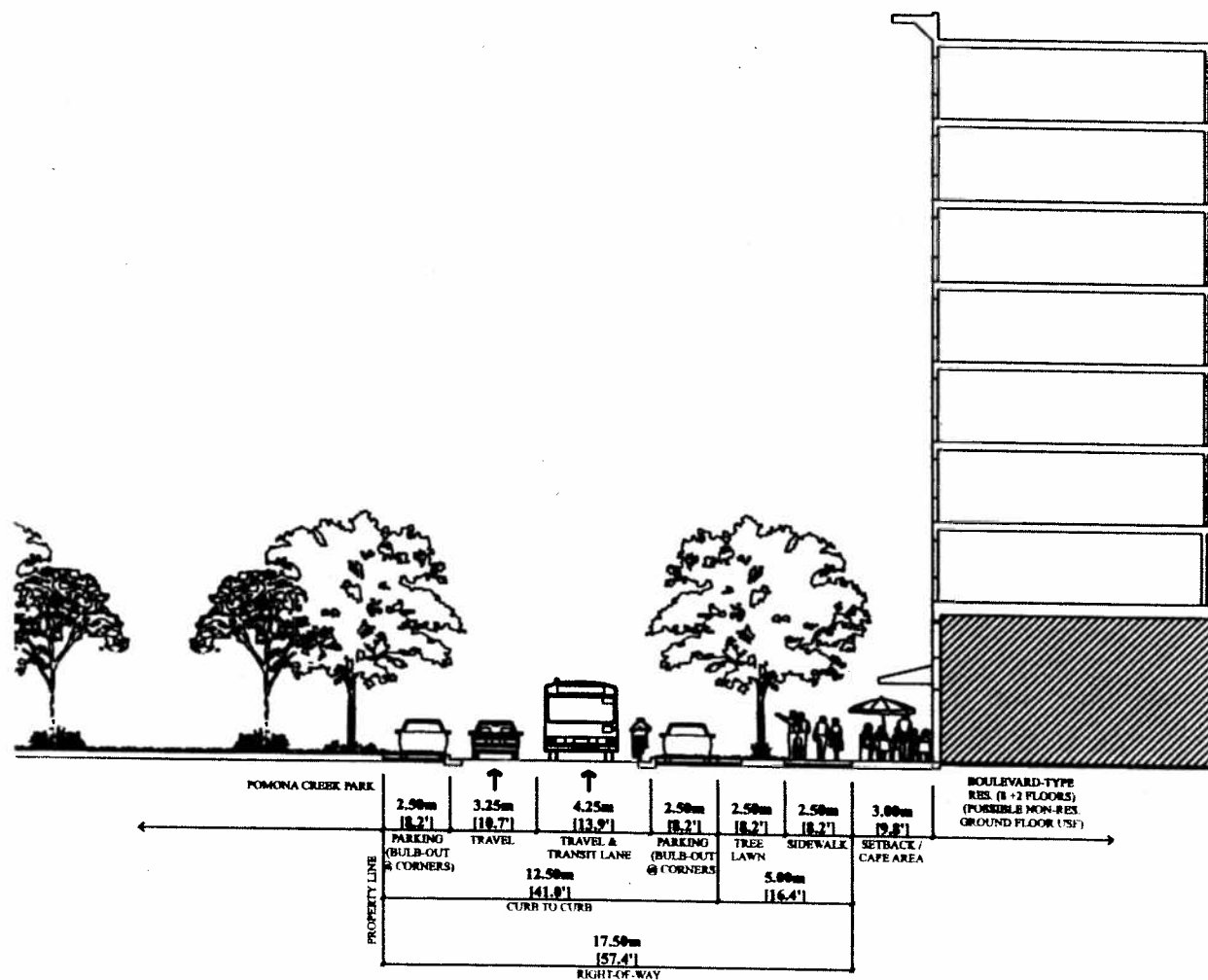
LINEAR PARK COUPLET



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Extract from the Calthorpe / Ferris Langstaff Land Use & Built Form Master Plan, dated October 2009.

POMONA MILLS CREEK PARK COUPLET



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