

## Urban Design Series - III



Design of  
Subdivision Access  
& Perimeter Walls  
for Arterial &  
Collector Streets

## URBAN DESIGN SERIES III

# Design of Subdivision Access & Perimeter Wall for Arterial and Collector Streets



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PREPARED BY CITY OF ALBUQUERQUE • PLANNING DEPARTMENT, AUGUST 1997



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## INTRODUCTION

Albuquerque has a magnificent natural environment, diversity of cultures, unique architectural heritage, and mild weather. To meet the challenge of creating our built environment in a way that matches the natural setting, we must continually strive for high quality design. A visually attractive, economically healthy, and socially integrated Albuquerque will foster civic pride and mutual responsibility, and will celebrate people and our unique environment. As Albuquerque continues to grow and change, both the public and City Government have important concerns about how we design and plan our built environment. On the Westside and in the far Northeast, housing subdivisions are springing up almost daily, and often these new developments are not well integrated into the greater community. Solid, unbroken expanses of concrete masonry walls along public streets look massive, create monotony, and have a detrimental effect on pedestrian/bicycle accessibility, public transit service and city streetscapes. Many older subdivisions throughout the city have unsightly grey cinderblock perimeter walls facing the public streets with almost no set-back from the sidewalk for landscaping. The challenge is to develop design guidelines which provide ideas for future subdivisions as well as for retrofitting the existing neighborhoods.

In early 1996, several design and engineering professionals, State and City staff, neighborhood and business group representatives, and public officials participated in a City-sponsored urban design workshop on streetscapes. A

breakout group on arterial streets suggested that ideally, no walls along public streets should be built. However, they suggested that if perimeter walls are built, the walls should include landscaping buffers, pedestrian access points, openings for natural surveillance, and visually enhancing features such as artwork, openings or an undulating wall design. This stems from the view that walls are a statement about how we see our community and deal with the issues of safety and security, social values, and the aesthetics of the built environment.

In terms of safety issues, proponents of concepts like Crime Prevention through Environmental Design (CPTED) argue that high, solid walls hamper natural surveillance. But, when walls are designed and built in such a way as to allow people to see through them or over them at selected points, it encourages natural surveillance and provides a safer environment.

Socially, long and unbroken perimeter walls separate new subdivisions from existing neighborhoods and nearby streets. These subdivisions form islands and people tend to travel around them as they go from one neighborhood to another. In *Fortress America: Gated and Walled Communities in the United States*, Edward J. Blakely and Mary Gail Snyder write that these barriers result in, "a loss of connection and social contact which is weakening the bonds of mutual responsibility and social contact." (p.26). In addition, the increased travel required to go around these walled subdivisions and the

resulting auto emissions has an adverse impact on our environment.

Often perimeter walls are physical barriers to daily activities and can be visually unattractive. Without appropriate scale, massing, design, and materials, walls can destroy the visual effect of even the best-designed homes and subdivisions, as well as the streetscape. Perimeter walls which provide some diversity through design--height, setbacks, openings, materials, texture, and landscaping--will better define the space, be visually pleasing, and will complement the nearby homes.

A set of design guidelines has been developed by the Planning Department with input from various City Departments, design and engineering professionals and the development community. This document is to be used for public education, to guide future developments, and the retrofitting of existing walls. It includes examples of existing walls, alternative design possibilities, and proposed design guidelines for subdivision access and perimeter walls.

The design alternatives and guidelines included in this document can enhance public safety and improve the visual quality of the streetscape. *The Homebuilders Association agreed in late 1996 to form a committee which will provide general oversight on how well the development community is meeting these guidelines.* We look to the design and development community to assist the City in meeting its goal of enhancing the visual environment and the quality-of-life for the citizens of Albuquerque.

## 1. **SOLID AND MASSIVE WALLS**

*What was I walling in or walling out and to whom I was to give offence.*

Robert Frost



### **Concerns**

- Limits pedestrian & bicycle access
- Prohibits visual surveillance
- Prevents air circulation
- Visually Unattractive
- Blocks Views
- Discourages social interaction

**Location:** Walls along Osuna, west of Eubank NE, looking west

A tall solid concrete masonry wall with narrow sidewalk provides no surveillance, is visually stark and unfriendly for pedestrians, bicyclists and even automobile drivers/passengers.



**Location:** Walls along Osuna NE near Louisiana

This high exposed masonry block wall has no cap, texture or landscaping. It is massive and stark, and provides no visual surveillance.





**Location:** Walls around subdivision west of Coors & south of Paseo Del Norte

This long solid perimeter wall built of brown concrete masonry units is fairly tall and massive. Although it is sufficiently set back from the curb, there is no landscaping relief.



**Location:** Walls along Las Terrazas off of Golf Course Road

This wall is high, has no cap, texture or set-back from the sidewalk. A narrow sidewalk between the long perimeter wall and wide road (encouraging fast auto traffic) is pedestrian unfriendly.



## 2. UTILITARIAN RETAINING WALLS



### Concerns

- Excessive Height
- Excessive mass of hard materials
- Hard surface reflects more heat
- Excessive barriers
- Claustrophobic effect
- Visually Unattractive

**Location:** Walls along Osuna NE, at Moon NE looking east

This bulky retaining wall made of exposed concrete masonry blocks adds to the massiveness of the perimeter wall. It is visually unattractive, and unfriendly to pedestrians.



**Location:** Walls along Golf Course Road on the Westside

This massive retaining wall along with the perimeter wall gives the effect of a fortress. It is pedestrian unfriendly, and inappropriate to the hot climate. The solid mass reflects heat in the summer. This vast expanse of wall is an invitation for graffiti.



### 3. SAFE & FRIENDLY PERIMETER & RETAINING WALLS

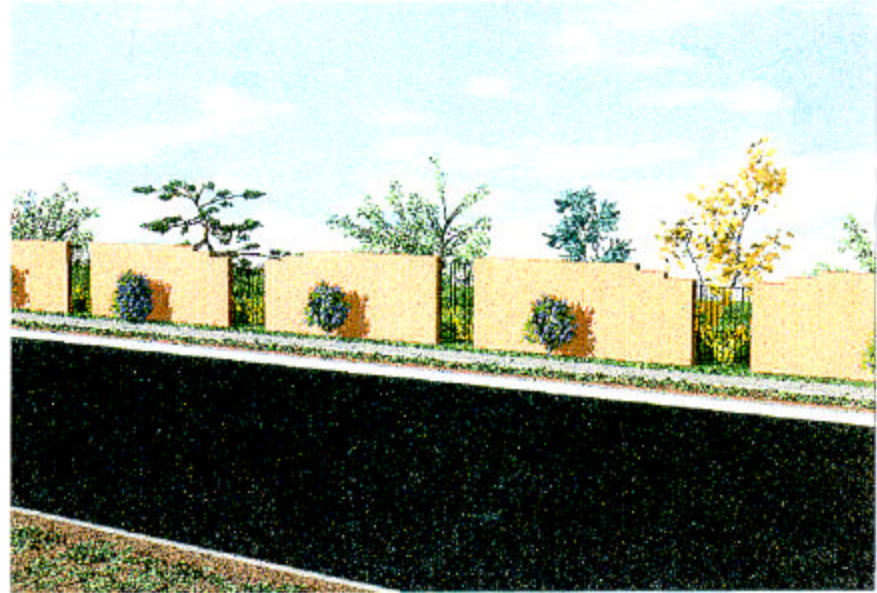


#### OBJECTIVES

- Increase pedestrian & bicycle access
- Provide visual surveillance
- Permit air circulation
- Encourage visual attractiveness
- Allow views
- Ensure a people friendly environment

**Location:** Prototype Design 'A'

A combination of stucco walls and tubular steel fencing provides a balance of privacy, natural surveillance, southwestern character and air circulation, and is visually attractive. Landscaping further enhances the design and reduces the visual impact of the solid wall.



**Location:** Prototype Design 'B'

This wall design is traditional and graceful, and allows for natural surveillance. Selectively planted trees and shrubs add to the privacy, allow for air flow, and cool the environment. The proportion of solid to transparent may be changed to suit individual situations.



**Location:** Wood fence around large apartment complex along Coors Bypass on the Westside.

This wood fence design provides privacy, natural surveillance, views to the mountains and air circulation. It is attractive, and can be durable with proper wood treatment and construction methods. Wood fences should be elevated 6" off of the ground for surveillance.



**Location:** Apartment Complex along Coors bypass on the Westside

This fence is located along the main entrance of this multi-unit complex in front of the club house. It was designed to create a sense of arrival to the club house and rental office. It is simple and provides two-way surveillance and views. It also advertises the amenities of the complex without having to add signs.



**Location:** Perimeter wall around house on Indian School NE east of Washington.

This creative wall design is colorful, yet provides for natural surveillance, privacy, and air flow. It is a "neighborhood-friendly," low height wall design.



**Location:** Houses along Washington NE near Constitution.

The wall materials and color used in this example complement adjacent structures. The glass blocks, textured pilasters and steps break the monotony and massiveness of the wall. Use of even small openings in the wall allow for natural surveillance and air circulation. *Trees between the curb and the sidewalk, and shrubs in front of the wall would make it more neighborhood friendly.*



**Location:** Wall around Wells Park & Community Center

This design provides two-way surveillance, traffic safety, air circulation, and is visually attractive. Privacy could be gained either by planting shrubs and trees or increasing the stucco portion of the wall height to 3-4 feet with the remainder of the wall height as tubular steel fencing.



**Location:** Fence around Lew Wallace Elementary School

This fence design complements the building, provides two-way surveillance and traffic safety. A brick cap over the pilaster matches the building cornice and architectural details on the facade.





**Location:** A low wood fence around a single family home along Washington NE south of Constitution.

This attractive painted wood fence defines the boundary of the property. Shrubs and trees provide privacy and shade. There is some natural surveillance.



**Location:** Honeycomb brick wall around single family home in Spruce Park Neighborhood

This wall defines the property, provides privacy, allows natural surveillance, and is attractive. A wider sidewalk with landscaping would enhance the streetscape, provided that the landscaping is well maintained.



**Location:** Wall along Rio Grande, near the Liz Sanchez horse stables in the North Valley.

This exposed adobe brickwall design makes use of openings, buttresses and landscaping and reduces the effect of long solid expanse of walls.



**Location:** Wall along Rio Grande near Chavez Road in the North Valley.

This adobe wall has texture, color and is an attractive addition to the landscape. The wall is articulated with openings, buttresses, landscaping and level changes which add to its visual appeal.



**Location:** Retaining wall in Vista Development along Coors bypass on west side

This masonry retaining wall system has texture, color and is an attractive addition to the landscape. The shape, size, color and texture of these inter-locking masonry blocks respond well to the topography, and contribute to the streetscape environment.



**Location:** Retaining wall along South Seven Bar Loop NW off of Coors bypass

A step down and landscaped retaining wall, in addition to containing earth and preventing erosion, enhances the visual quality of the streetscape. The texture and color of wall materials and serpentine sidewalks with landscaping on either side make it a neighborhood friendly environment. Trees planted along the sidewalk would provide shade and further enhance the streetscape.



#### 4. DESIGN GUIDELINES



- Sub-division layout & access
- Perimeter wall design
- Retaining wall design
- Landscaping
- Lighting
- Maintenance

## **URBAN DESIGN GUIDELINES FOR SUBDIVISION ACCESS & PERIMETER WALLS**

The following Ordinances and/or policies contain provisions relating to subdivisions, development designs, and aesthetics of perimeter walls:

The City Comprehensive Plan Goals and Policies state:

8. Developed Landscape      The Goal is to maintain and improve the natural and developed landscape's quality.
- Policy a-2.      Create environmentally-based development standards for use in the subdivision, zoning, and site approval processes which encourage parking and drainage solutions, street design, setbacks, and other solutions which are not limited to engineering effectiveness.
  - Policy a-3.      Review development applications for the visual impact of building site treatment.
  - Policy e.      In highly scenic areas, development design materials shall be in harmony with the landscape. Building siting shall minimize alteration of existing vegetation and topography and minimize visibility of structures in scenic vista areas.

The Subdivision regulation 14-14-2-3 states:

"No land shall be subdivided which is found to be unsuitable for subdividing by reason of flooding, ponding, poor drainage, adverse soil conditions ... lack of access or restrictions on accessibility, or other conditions likely to be harmful to the public health, safety, or general welfare, unless such unsuitable conditions are corrected or mitigated to the satisfaction of the city."

The Zoning code 14-16-1-3 INTENT states:

"...This Article is intended to create orderly, harmonious, and economically sound development in order to promote the health, safety, convenience, and general welfare of the citizens of the city."

## PURPOSE

The purpose of these design guidelines for subdivision access and perimeter walls is to encourage good design and minimize the negative effects of subdivisions and walled communities on the streetscape and the surrounding environment. The guidelines would enhance public safety in neighborhoods, commercial areas and public streets, and help builders meet the intent of the City's Comprehensive Plan, Zoning Code and Subdivision Regulations. The guidelines are not intended as regulations, but as a guide for existing and future development to enhance visual quality, pedestrian/bicycle access, public safety and traffic safety.

## SCOPE

The scope of these guidelines is limited to the effects of residential subdivisions and perimeter walls on city streetscapes. Since the need for a wall is created by the layout of a subdivision in which backyards of homes abut a public street, it is difficult to separate the issue of subdivision access and perimeter walls from the layout of the subdivision. Therefore, the guidelines include subdivision layout and access; wall setback, design and materials; landscaping; and safe access by auto, pedestrian, bicycle and transit. These guidelines apply to residential developments, i.e. subdivisions and or site development plans.

The guidelines take into consideration the following principles from the City-sponsored *Crime Prevention through Environmental Design* (CPTED) initiative: natural surveillance, identification of territory, limited access, and regular maintenance of property. Surveillance principles encourage two-way surveillance to deter unwanted activity. The limited access principle suggests fewer in-and-out streets through the neighborhood. Identification of property boundaries can be accomplished through picket fences, low walls, and hard and soft landscaping. *A well-maintained property is less likely to be vandalized.*

The design guidelines are intended both to enhance the visual quality of the city and to deter crime. However, they do not claim to solve crime. Provision of indoor and outdoor open spaces for community interaction and building subdivisions that foster contact with neighbors and provide visual surveillance are important means of deterring crime.

**DESIGN GUIDELINES**

These design guidelines are for subdivision access and perimeter walls of residential developments, both single and multi-family. The intent is to improve the effects of perimeter walls, and allow pedestrian and bicycle access along public streets and recreational trails. This can be achieved through setback, attractive design, landscaping, and pedestrian and bicycle openings while still providing natural surveillance and privacy.

**1. Access & Layout**

The discussion of walls and access is directly related to subdivision layout and street design. In early, "traditional" neighborhood subdivisions, homes face public streets and the back yards abut either an alley or the back yard of another home. Auto access to homes from an alley fosters more pedestrian and recreational activity on the street in front of the homes, in the alleys, and back yards. Back-to-back yards prevent backyards of homes from being exposed to a public street and provide a measure of security. The streets in these traditional subdivisions served all modes of transportation: pedestrians, bicyclists, and automobiles.

Some streets onto which homes front have been widened since traditional subdivisions were built in Albuquerque. Several alleys in older areas have been abandoned as people converted their garages into accessory living quarters. A few of the abandoned alleys have become havens for drug dealers and crime related activities.

In response to crime and the fear of crime, market demands for privacy and noise abatement, present-day subdivisions are often walled. These subdivisions are primarily auto-oriented, with wide streets and often no sidewalks or pedestrian/bicycle access from the subdivision to the adjoining public streets. The guidelines in this

document recommend provisions for pedestrian/bicycle access. The access must take into account the topography of the land, and meet the *Americans with Disabilities Act* requirements. All pedestrian access pathways should be well lit and have visual surveillance from adjoining public and private property.

These guidelines intend to provide adequate access to and between adjacent communities to: 1) avoid directing excessive amounts of traffic onto any one local street, and 2) provide a safer environment and improved visual quality for the streetscape. Traffic volumes should not exceed those recommended for local streets in the Neighborhood Traffic Management Plan. This can be accomplished by providing the necessary access from a subdivision to adjacent collectors and arterials.

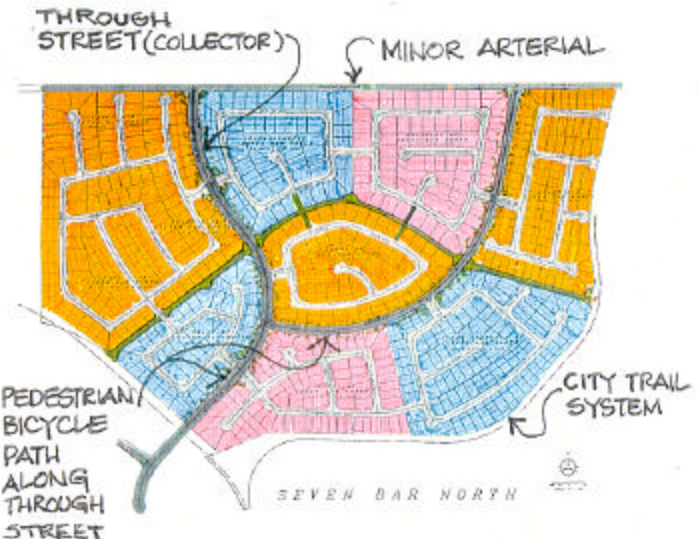
**1.1** *Minimize the number of double frontage lots (with rear yards abutting public streets) by locating townhouses, apartments, garden apartments or mixed-use developments at the intersections of arterials and collector streets. A frontage road parallel to the arterial and collector street may be provided for access to the above uses. The location of the frontage road location is to be determined in consultation with the Transportation Development Department on a case by case basis.*

*These uses would be a buffer between the single family residences and the arterial/collector streets, and would provide a break in the long expanse of perimeter wall. These uses should be located adjacent to the public transit service routes.*



*Multi-unit housing along Eubank buffers the single-unit homes from the street.*

**1.2** Provide a minimum of one through street in a subdivision. This provision allows neighboring communities to be connected with each other and the new subdivision. When a through street connects two major streets (arterial or collector) the street may be staggered or curved to discourage through traffic.



**1.3** Provide a 20 foot wide pedestrian and bicycle access easement from the subdivision to the adjoining local streets, the arterial roads, and any city trail systems adjacent to the subdivision. There should be a minimum of an 8 foot wide paved pathway in this access easement for pedestrians, bicyclists, and transit riders. This pedestrian/bike access easement may be along and part of the through street R.O.W., a designated City Bike Lane or a bike trail going through the subdivision. When the pathway is designated on the Trails and Bikeways Facility Plan, the width of the paved path and the ROW will conform to the Plan. The pathway should be lighted, have visual surveillance, and be landscaped.

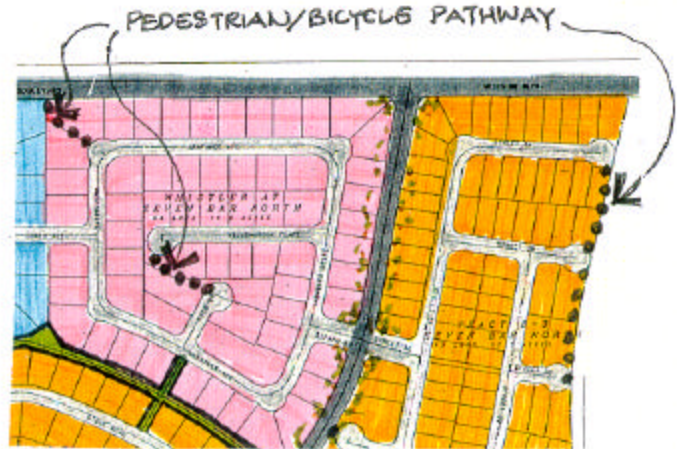
**1.4** Provide a 20 foot wide pedestrian and bicycle access easement and an 8 foot wide paved pathway between local streets of the

subdivision and any adjacent existing or potential neighborhood shopping center.

**1.5** Provide a pedestrian/bicycle access to and from the transit service line to the subdivision along and through the perimeter wall of the subdivision. The access should be located near an existing or possible transit stop in consultation with the City Transit Department, and at a quarter mile walking distance from each home.

**1.6** Use grid or modified grid-pattern streets where feasible, with pedestrian-scale city blocks (300 feet on the narrow side\*). This allows a variety of travel options, efficient layout of utility services, and facilitates city services such as street cleaning, and garbage and recycling pick up. Some streets may be diagonal or curved for a special land use treatment or for terminating a vista into a civic building or plaza.

- 1.7** When cul-de-sacs are used,
- provide loop roads to facilitate street circulation
  - provide pedestrian connection between cul-de-sacs or between a cul-de-sac and a nearby street. The connection should be at least ten feet wide.

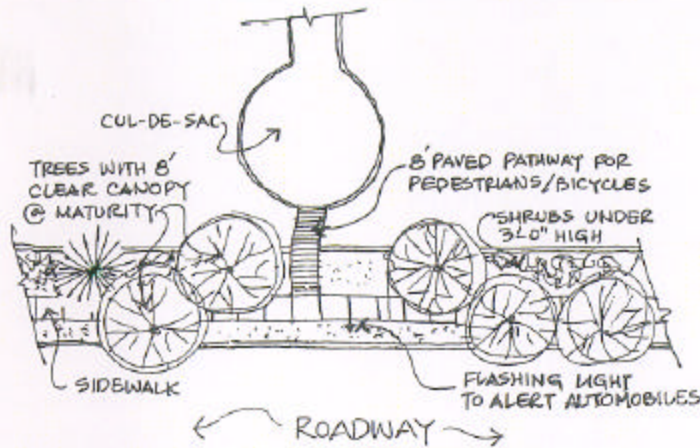


\*Note: the grid pattern does not have to be strictly at right angles. The emphasis here is on the availability of alternate routes to avoid traffic congestion & air pollution on certain streets.



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**1.8** Provide an 8-foot wide paved pedestrian/bikeway path connecting a cul-de-sac and a city street (marked distinctly by the use of different materials, textures, or colors) from the access point of the subdivision perimeter wall to the city sidewalk or city pedestrian/bicycle trail system. The pathway should be well lit and landscaped on each side according to the lighting & landscaping sections of these guidelines.



**.9** Provide signs and beacons where a pedestrian/bicycle pathway and a street come to a juncture at a mid-block location between two intersections to alert the vehicle drivers. At the juncture there must be a clear sight triangle from all approaches, as illustrated.

**Note:** The pedestrian and bicycle pathways should have lighting and surveillance. Any walls built along these pathways must be up to 30% transparent to provide safety and security through surveillance.

## 2. Perimeter Wall Design

These guidelines use design as a tool to develop visually attractive, functionally safe perimeter walls. They will reduce the negative effects of solid and continuous perimeter walls. The design tools take into consideration height, setbacks, materials, textures, layout and landscaping.

## HEIGHT

**2.1** Where at least 30 percent of a perimeter wall surface is transparent (e.g. tubular steel grill, see-through concrete masonry blocks above 30" inches high), the height of the wall should not exceed 6 feet from the surface of the adjacent sidewalk.



**2.2** When less than 30 percent of the perimeter wall surface is transparent, the transparent portion (tubular steel grill or openings) should be in an area either 2 feet to 4 feet from the ground or 2 feet from top of the wall. In either case, the height of the wall should not exceed 5 feet from the top of the adjacent sidewalk.



**2.3** When a wall is completely solid, the maximum height should not exceed 5 feet from the surface of the adjacent sidewalk elevation and at least 25 percent of the wall surface should be covered with landscaping. The sidewalk should be clear of landscaping. The height of landscaping may exceed 5 feet, as long as it allows visual surveillance.



**2.4** When a subdivision is built adjacent to a local street and surrounded by at least 50 percent single unit homes, the design of the perimeter walls should follow the requirements of this section - guidelines 2.1 and 2.2.

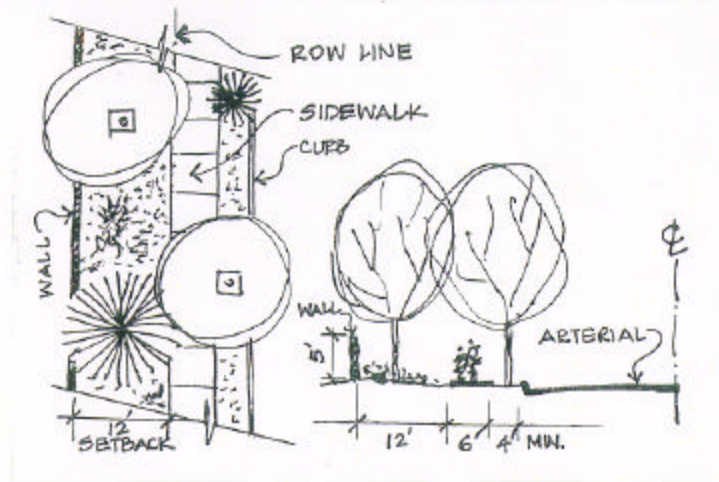
**2.5** Where the ROW is limited and the sidewalk in a residential areas is adjacent to the wall, the sidewalk should be a minimum of 1 foot wider than the required, as follows:

- Arterial (principal and minor)  $6' + 1' = 7'$
- Collector (depending upon adjacent zoning)  $4' - 6' + 1' = 5' - 7'$

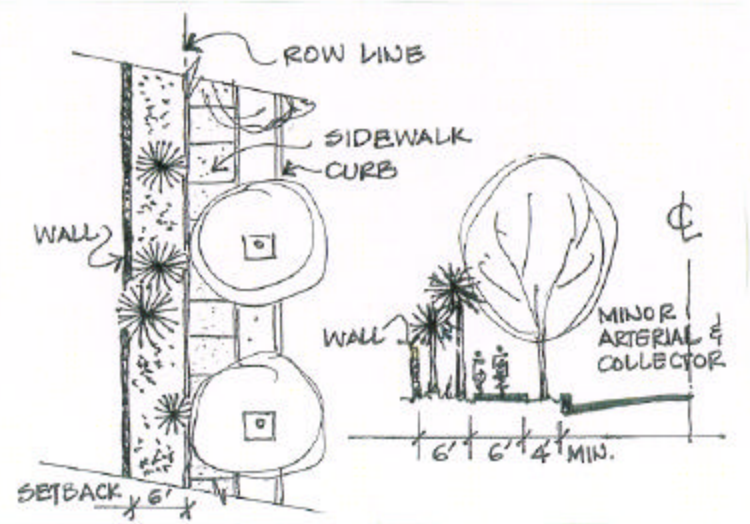
**SETBACK & LAYOUT**

**2.6** Provide set-backs from the public ROW line to the outer face of the perimeter wall adjacent to major and minor arterials, and collector streets, as follows:

**a.** A 12 foot set back from the outer face of a wall to the public ROW line should be provided for landscaping when backyards of homes in a subdivision are adjacent to a principle arterial street.

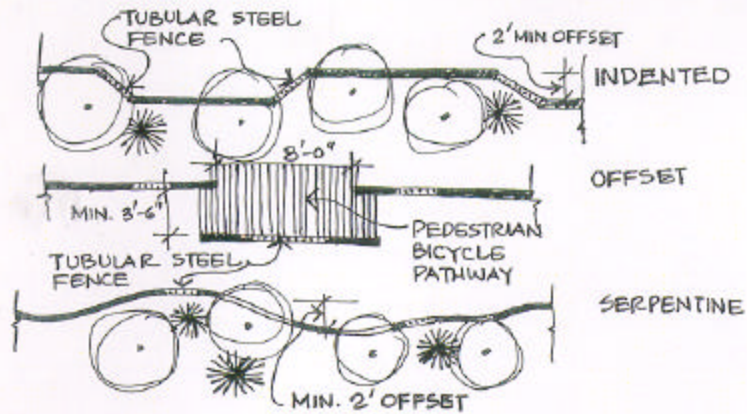


**b.** A 6 foot set back from the outer face of a wall to the public ROW line should be provided for landscaping when backyards in a subdivision are adjacent to a minor arterial or collector street.



## Urban Design Series III

**2.7** Layout of walls should be indented, offset or in serpentine form. The indentation should be a minimum of 2 feet.



## MATERIALS & TEXTURE

**2.8** Use materials such as stucco (textured or smooth) over concrete masonry units (CMU), curved interlock block, split face block, slump block, stabilized adobe, brick, tubular wrought iron, wood, see-through masonry blocks, landscaping (hedge, shrubs or trees) or a combination of those materials for perimeter walls. An exposed grey color CMU wall should not be used.



**2.9a** Design walls to complement the architectural character of the subdivision or neighboring architecture by incorporating the architectural features and motifs used on adjacent homes or buildings (for example, brick capping on stucco walls to reflect the Territorial style of architecture).



**2.9b** Provide a cap on the wall. The cap course should project a minimum of 1 inch from the finished surface of the wall.

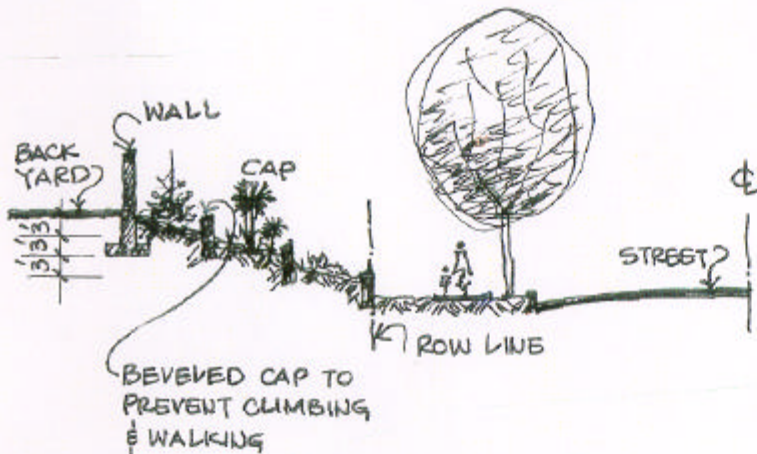


### 3. Retaining Wall Design

A retaining wall is built to stabilize earth and to accommodate a large grade variation between a residential lot and the adjoining land or public street. It is often built to maximize use of residential lots and avoid mass grading. However, careful site planning and road layout can both reduce the number of lots requiring retaining walls and minimize mass grading. Appropriate setback from the public ROW line, step-down design, and landscaping can reduce the negative effect of retaining walls on the environment.

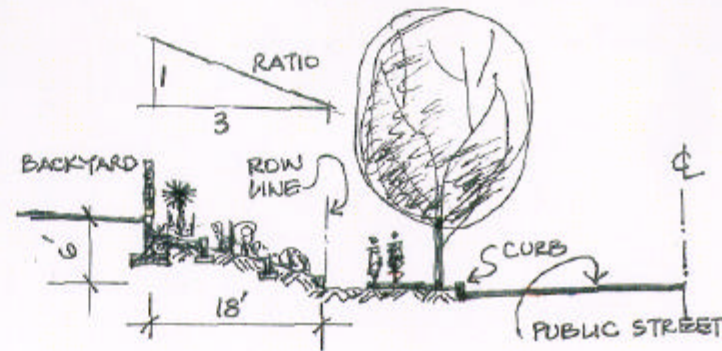
#### HEIGHT

**3.1** When the height of a retaining wall at the perimeter of a subdivision is higher than 3 feet, it should be stepped down toward the public street. The height of each step should not exceed 3 feet. For horizontal distance see guidelines 3.2.



#### SETBACK

**3.2** Provide a setback from the public ROW to the face of the retaining wall (facing public ROW), so that the slope within the setback does not exceed 3:1 (horizontal to vertical dimension).



**3.3** For retaining walls along public streets, use materials, textures, and landscaping which follow guidelines listed in section 2 on perimeter wall design.



**3.4** When the ROW is limited and the sidewalk is adjacent to the retaining/perimeter wall, the sidewalk should be a minimum of 1 foot wider than required.

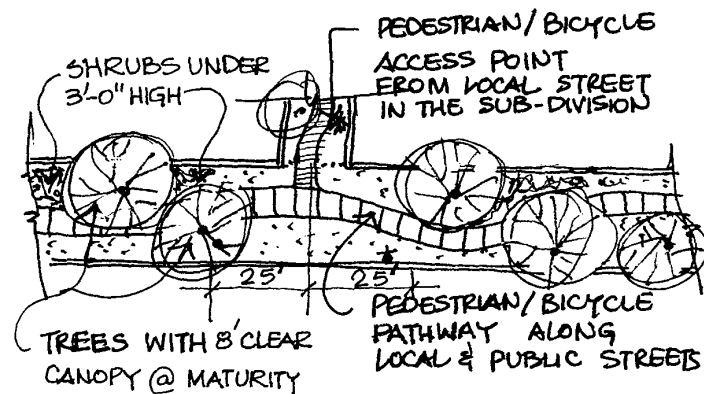
- Arterial (principal and minor)  $6' + 1' = 7'$
- Collector (depending upon adjacent zoning)  $4'6" + 1' = 5'$  to  $7'$

#### 4. Landscaping

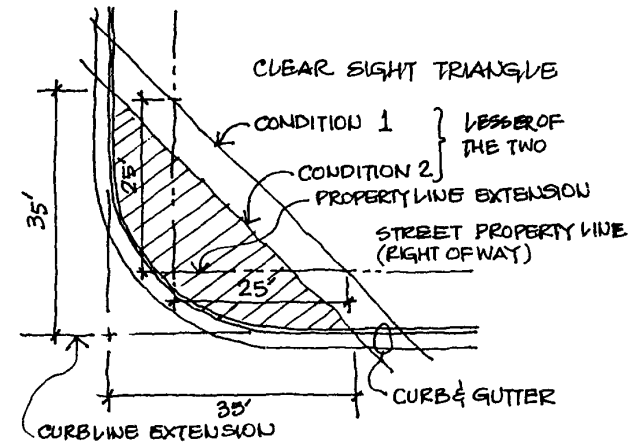
Landscaping including, trees shrubs and ornamental trees, is an integral part of a streetscape environment. It enhances the streetscape, provides shade, and reduces the effect of long and monotonous expanse of walls. The landscaping in Albuquerque should be xeriscape. The plant materials should be selected according to the City of Albuquerque landscaping ordinances:

- a. Water Conservation Landscaping and Water Waste Ordinance
- b. Street Tree Ordinance, City Forester Ordinance
- c. Landscaping Regulations Applicable to Apartments and Nonresidential Development
- d. Pollen Control O-51 ordinance

**4.1** For safety, leave pedestrian and bicycle ingress/egress pathways (from the perimeter wall to the sidewalk) clear of any objects including solid walls, fences, or dense plant materials higher than 3 feet, for 25' feet on either side of the pathway. Trees with 8-foot clear canopy (at maturity) may be planted.



**4.2** Location and height of plant materials to maintain a clear sight triangle for automobiles, bicycle riders, pedestrians and equestrians.



**4.3** Select type, size, and shape of plant materials which provide safety, security, and shade, and require minimum maintenance.

**4.4** Plant trees in the perimeter wall setback and in the access easement one tree per 25 feet frontage. The trees may be planted in a row generally at a distance of 25-30' (equal to the diameter of the spread of mature trees) as well as in groups to add interest.

**4.5** Plant vines, such as Virginia Creeper, especially on surfaces facing north, to provide texture and color, and to reduce the mass of wall surfaces. This treatment is especially appropriate for existing walls where space between sidewalk and the wall is limited for planting.

#### 5. Lighting

**5.1** Light pedestrian and bicycle entry/exit openings from the subdivision to adjoining public street with pedestrian-scale lighting.

**5.2** Match the design of pedestrian-scale lighting fixtures to the design of fixtures in adjacent public streets or elsewhere in the subdivision if there is no adjacent public street/fixtures.

**5.3** Shield all light fixtures to focus light downward and maintain dark skies. Refer to zoning code section 14-16-3-9 Lighting Regulations.

## 6. Signage

**6.1** Provide the necessary road signs or beacons as required by the Manual on Uniform Traffic Control Devices (MUCTD) to alert the vehicle drivers regarding the pedestrian bicycle pathway connections with arterials, collector and local streets. However, these signs should be attractive, unobtrusive, and combined with other signs.

## 7. Maintenance

Each property owner is responsible for keeping sidewalk and property between the property line and the curb free of litter and weeds. Refer to Weed and Anti-litter Ordinance 9-8-4.

**7.1** Landscaping, irrigation systems and lighting provided by the developer in the set-back referred to in 2.6 a & b, and access easements is to be maintained by the developer for the first three years, and by adjacent property owner(s), and/or the homeowners association thereafter.

**7.2** Landscaping in the public ROW provided by the City or the developer is to be maintained by the adjacent property owners and/or the homeowners association.

**7.3** Landscaping must be trimmed clear of curb, the roadway, sidewalk, street lights and traffic signals.

**7.4** Perimeter wall should be properly maintained by the adjoining property owners, as follows:

- a. Wood fences should be properly treated and use corrosion resistant screws instead of nails.

- b. Color, materials and texture should be matched when repairs or changes are made to the existing walls.

## 8. Use Of Guidelines

While guidelines are by definition voluntary, there are a number of ways their intent can be realized. This document, *Design of Subdivision Access & Perimeter Walls*, will be widely distributed by the Planning Department to design and engineering, surveying and planning professionals; development and construction companies; appointed and elected City, County and State officials; Community Partnerships; and to the general public. The guidelines will be administered by the Development Review Board. It may also be used by:

**8.1** Architects, engineers, urban designers, planners, developers, contractors and surveyors during project planning, design, and construction

**8.2** The Environmental Planning Commission, City Council, Development Review Board, Design Review Committee, and Development Services Division of the Planning Department and the Capital Implementation Program (CIP) in reviewing project applications

**8.3** The design planner of the Planning Department in reviewing subdivision and site development plans with DRB or through the pre-application review process.

**8.4** Homebuilders Review Committee in creating a new design ethic in the development community

**8.5** The Planning Department, other City department staff, and the design and development community in public education efforts

**8.6** Annual Awards Program which recognizes development, construction, design planning, and engineering companies and individuals whose projects have enhanced the visual environmental and quality of life in the City through application of city policies and guidelines.

**8.7** *In the event these guidelines conflict with any adopted City Ordinances, or regulations promulgated thereto, the City adopted ordinances and regulations will take precedence. However, the design of the wall and landscaping, as outlined in these guidelines, should be reviewed by the DRB at the time of platting or site plan approval.*

## **9. Submittal**

### **9.1** *Subdivision plats:*

*A street tree plan should be submitted along with the subdivision plat for approval by the DRB. The street tree plan will include the following:*

- Subdivision Layout*
- Design and specifications of the perimeter wall*
- Location type and specifications of landscaping in relation to walls, and street trees in accordance with the Street Tree Ordinance*

### **9.2** *Site Development Plans:*

*A landscape plan, required as part of the site development plan, must be submitted. The landscape plan will include the following:*

- Site layout*
- Design and Specifications of the perimeter wall*
- Location, type and specifications of landscaping in relation to walls, and street trees in accordance with the Street Tree and Pollen Control Ordinances.*

## 5. IDEAS FOR RETROFITTING

This section includes some examples of situations which should be avoided, along with possible solutions for existing perimeter and retaining walls. These ideas are equally applicable to future development.



### Situations

- Narrow setback between wall & sidewalk perimeter
- Narrow sidewalk next to High perimeter wall
- No setback between wall & sidewalk
- Massive, steeply sloped retaining wall



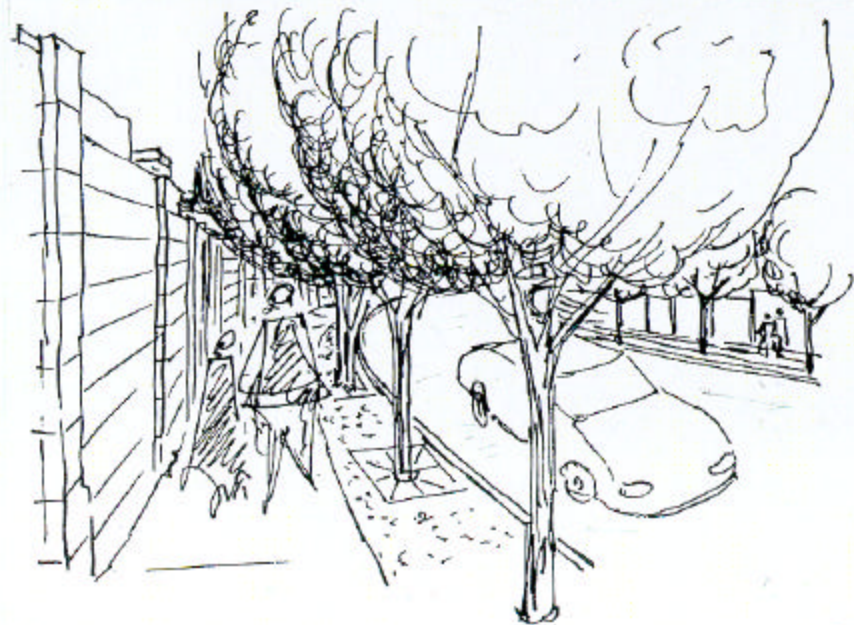
**Existing:**

High, long expanse of wall and narrow sidewalk is very pedestrian unfriendly. The landscaping strip has no trees.



**Potential Solution:**

One side of the street already has a landscaping strip between the curb and the sidewalk, in which trees can be planted. A similar landscaping strip with trees can be added on the other side of the road. Alternately, widen the sidewalk by two feet to increase sidewalk width. Either measure requires approval and participation by the City Public Works Department.



**Existing:**

North facing long and high perimeter wall has narrow sidewalk and 2 feet setback between the wall and the sidewalk.



**Potential  
Solution:**

Plant vines such as Virginia creeper, Honey-suckle and narrow and small foliage shrubs in the 2 feet setback.



**Existing:**

Long concrete masonry wall abuts the sidewalk; accessory building on the property line acts as an even higher wall section.



**Potential  
Solution:**

Vines planted inside the yard on private property and allowed to grow to the outer surface of the wall would "soften" the wall's effect on the streetscape. This measure requires the cooperation of the property owner for planting and maintaining the vines. Alternately, walls could be stuccoed with a brick cap, painted, or a selected segment of the wall painted with murals.



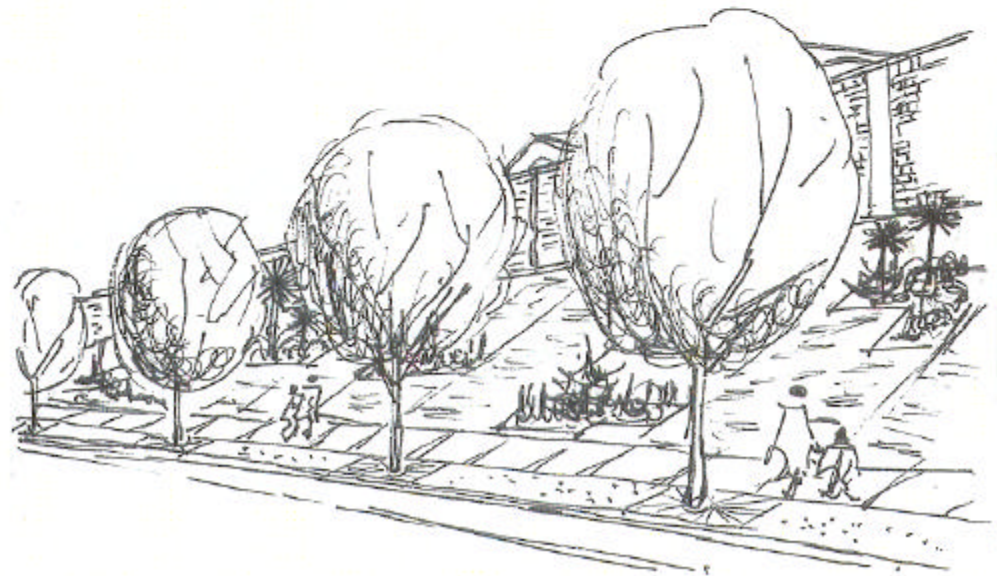
**Existing:**

A perimeter wall is above a solid brick and sloped blanket retaining wall. This collector street has no trees.



**Potential  
Solution:**

Remove brick surface in a random or formal order, creating "planting boxes" for xeriscape landscaping, and add trees in the strip between the curb and sidewalk.



**APPENDIX A:  
ESTIMATED COSTS  
FOR VARIOUS WALLS**

**COST PER LINEAR FOOT**  
{Spring 1996}

<b>SPECIFICATION</b>	<b>COST</b>
Wood (Cedar) fence 6'-0" high	\$11-13/linear foot
Concrete masonry 6'-0" high {grey or brown color}	\$22-24.50/linear foot
Split block wall 6'-0" high {grey or brown color}	\$25-27/linear foot
Stucco over concrete masonry units 5'-0" to 6'-0" {Varies}	\$27/linear foot
Stucco over concrete blocks, 5'-0" high and 4'-0" iron grate every 50' length	\$30/linear foot

**Source: Telephone contacts with a sample of local  
development and construction companies.**