# 96<sup>TH</sup> Street/Northwest Parkway Subdistrict Plan

# **RESOLUTION NO. 190-99**

# A RESOLUTION AMENDING THE 1995 BROOMFIELD MASTER PLAN BY ADDING THE $96^{\text{TH}}$ STREET/NORTHWEST PARKWAY SUBDISTRICT PLAN

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BROOMFIELD, COLORADO:

<u>Section 1</u>. Pursuant to section 17-58-030, B.M.C., the 1995 Broomfield Master Plan is amended by adding the 96<sup>th</sup> Street/Northwest Parkway Subdistrict Plan dated August 1999. The Mayor or Mayor Pro Tem is authorized to sign and the City Clerk to attest the 96<sup>th</sup> Street/Northwest Parkway Subdistrict Plan, including the maps and descriptive matter therein.

Section 2. This resolution is effective upon its approval by the City Council.

APPROVED on August 10, 1999.

CITY OF BROOMFIELD, COLORADO

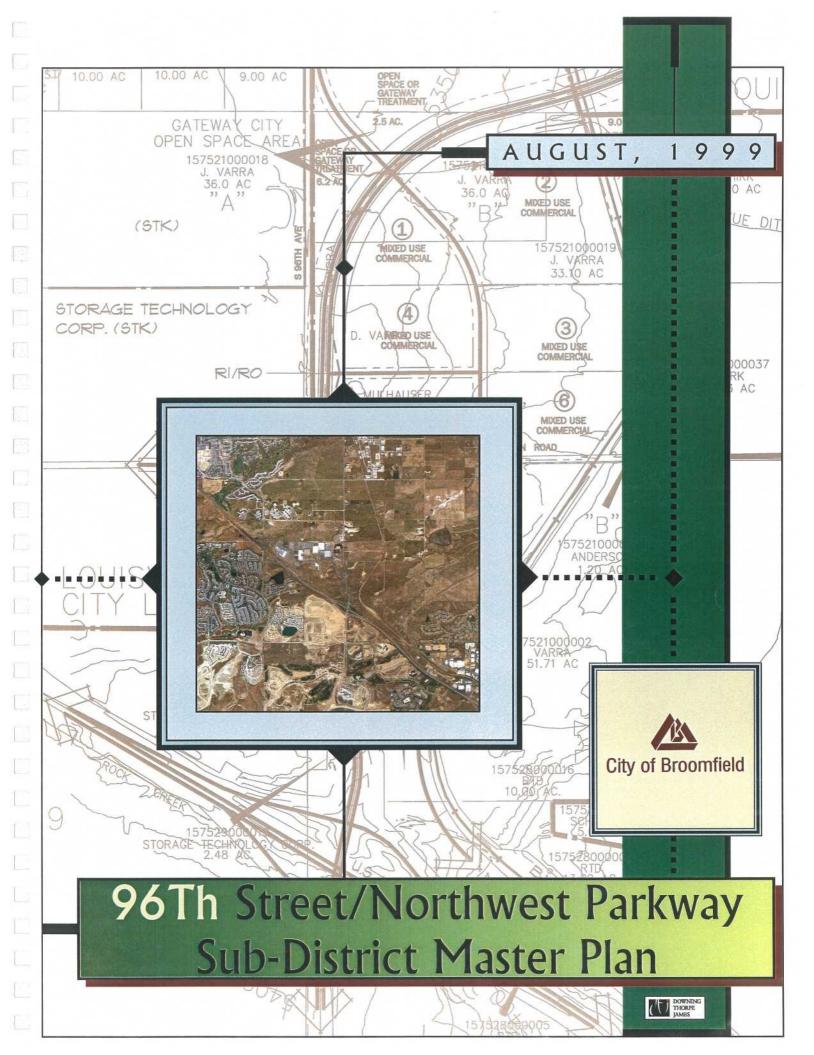
William M. Bere Mayor

ATTEST:

City Clerk (

APPROVED AS TO FORM:

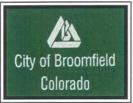
City Attorney





# Acknowledgments

# Prepared for:



One DesCombes Drive Broomfield, Colorado 80020 303 - 438 - 6384

# Prepared by:



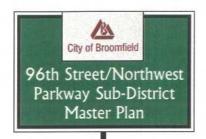
DOWNING THORPE IAMES

ARCHITECTURE
PLANNING
LANDSCAPE ARCHITECTURE
ENGINEERING

1881 Ninth Street, Suite 103 Boulder, Colorado 80302 303 - 443 - 7533 Fax 303 - 443 - 7534



Engineering Consultants 303 - 820 - 5240



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# INTRODUCTION





### Purpose:

The 96th Street/Northwest Parkway Sub-District Master Plan is the second in a series of planning studies documented to complement the City of Broomfield U.S. 36 Sub-Area Plan, completed in May 1997. The Sub-District Plan is intended to be a master land use "Vision Plan" with conceptual engineering and associated costs for infrastructure to guide future development of the "Gateway Area" in the vicinity of the Northwest Parkway and U.S. 36 Interchange. A similar study was completed for the U.S. 36/96<sup>th</sup> Street Sub-District in December 1998.

Broomfield's Sub-District Plans are designed to help achieve several common goals:

- Create a quality "Gateway Image" that conveys the desired vision for the Broomfield community
- Establish a balance of complimentary land uses
- Maintain economic stability for the City through value-creation and value-retention
- Provide a means for coordinating planning for infrastructure
- Promote meaningful dialog among landowners, governmental agencies, and others to facilitate communication, cooperation, and successful development results

The 96th Street/Northwest Parkway Sub-District Plan will be used by:

- Land owners in the area
- Various Broomfield agencies and referral agencies
- Marketing representatives
- Economic development entities
- Prospective developers and users within the area
- Service-providers, such as utility companies
- Media and other special interest groups

Similar to Broomfield's Master Plan and the U.S. 36 Sub-Area Plan, the 96th Street/Northwest Parkway Sub-District Plan has been developed to help direct the City's growth in its Southern Gateway vicinity. In this regard, the Plan is an advisory document that City officials will use to assist in the planning and evaluation of proposed development in the area. Portions of the Sub-District Plan will also be adopted as integral parts of Zoning and Development Codes. To continue to serve as an effective tool, the Sub-District Plan should be reviewed and updated as the area develops.

# **Project Planning Area:**

The new 96<sup>th</sup> Street corridor is planned as the future Northwest Parkway, part of the major beltway around the Denver Metropolitan Area. The parkway is scheduled to meet up with E-470 at north I-25 by 2003. The Northwest Parkway will then complete the northwest quadrant of the beltway and connect Boulder County and Jefferson County, and eventually Broomfield County, to the airport (DIA) and other destinations in the region. This future parkway connection to the airport and northwest area communities makes this intersection one of the most important transportation nodes in the metropolitan region.

The 96th Street/Northwest Parkway Sub-District consists of approximately 160 acres. It is located in the City's Southern Gateway vicinity, significantly impacted by the presence therein of U.S. 36 and the future Northwest Parkway. Exhibits A and B show the Sub-Districts prime location within the Denver Metropolitan Area.

# Summary of Approach:

Several factors were considered in developing this Plan. Goals established in the Broomfield Master Plan were key considerations toward providing a more detailed and complimentary "next step," as were those identified through inter-governmental agreements with surrounding jurisdictions. Key issues identified and addressed include:

- Creating a strong mix of land uses that is consistent and complimentary to surrounding development
- Preserving and enhancing sensitive natural habitats and open lands, as a consideration in the planning process
- Establishing efficient and well-organized road networks to maximize development opportunities and regional connectivity
- Integrating private development initiatives within the planning process, as appropriate, to create a cohesive vision for the Sub-District

# INTRODUCTION

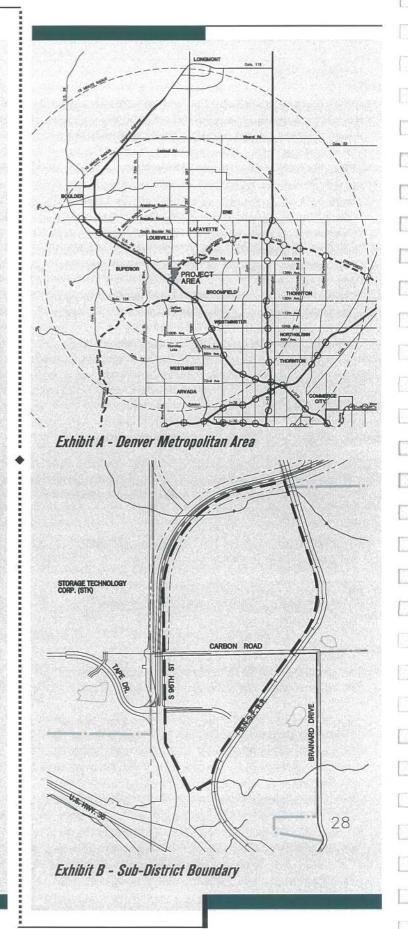
By focusing on these goals and referring to other current planning documents pertaining to the study area (source documents listed below), the 96th Street/ Northwest Parkway Sub-District Master Plan has evolved, in fact, into a long-range "Vision Plan" for significant mixed use development." Key components to guide future development in this area include a Land Use Plan, Roadway Plan, and Conceptual Engineering for Infrastructure.

This study and its documentation have been organized within a traditional planning approach. Beginning with a site analysis, several natural and jurisdictional elements were collected, evaluated, and synthesized to identify development opportunities and constraints. By combining these findings with identified goals, conceptual land use plans and roadway layouts were developed for the study area. When preferred concept plans were selected, conceptual engineering for infrastructure was initiated in order to provide an Opinion of Probable Infrastructure Costs. The included sections of this report document this planning approach for each of the key elements studied in preparing the 96th Street/Northwest Parkway Sub-District Master Plan.

### **Source Documents:**

The following source documents were used as the basis for developing the Sub-District Master Plan and its respective engineering components:

- 1. City of Broomfield 1995 Master Plan
- 2. City of Broomfield 1997 U.S. 36 Sub-Area Plan
- 3. City of Broomfield 1996 Transportation Plan
- City of Broomfield 1992 Wildlife and Open Space Study
- Other similar planning studies for private or public land, as provided.





# SUB-DISTRICT LAND USE PLAN





# Reference to Broomfield Master Plan:

The Sub-District Master Plan continues the vision identified in the Broomfield Master Plan — to create a distinctive southern "Gateway" into the City. As a more detailed study of the Master Plan and the U.S. 36 Sub-Area Plan, the Sub-District Plan addresses specific land uses and road configurations, including conceptual recommendations for infrastructure. It is anticipated that key components of this Sub-District Plan will result in refinements to the Broomfield Master Plan.

Currently, the Master Plan (Exhibit C), shows employment and transit oriented development as primary land uses within the Sub-District. Agriculture and Open Lands are designated to the east and employment (Storage-Tek) in the City of Louisville is located west of 96th Street. The U.S. 36 Sub-Area Plan (Exhibit D) shows mixed use, employment, and retail uses within the Sub-District. Business/Light Industrial is shown to the north and agriculture/low density residential is shown to the east. Planning for the proposed Northwest Parkway resulted in the adoption of an inter-governmental agreement between Broomfield, Louisville, Lafayette, and Boulder County. One outcome of this agreement was the establishment of city and rural preservation areas and open space areas aimed at:

- Precluding increased development and urban sprawl
- Regulating land uses to minimize the negative impacts of development on surrounding areas
- Protecting the environment
- Establishing a mandated urban growth boundary that serves to preserve individual communities through rural development and/or open space buffers separating such communities

# Site Analysis:

A key step in the planning process involved collecting and analyzing data to identify overall opportunities and constraints within the Sub-District. This analysis considered both natural and jurisdictional elements to determine their impacts on future development.

Natural elements considered within this step included:

- Slope (Topography)
- Subsidence
- Hydrology
- Plant and Wildlife Habitats

Jurisdictional elements considered included:

- Property Ownership
- Existing Structures
- Existing Roadways and Transportation Corridors
- Existing Utilities
- Adjacent Development

Key aspects of the analysis were synthesized to create development opportunities and constraints as shown on the site analysis map (Exhibit E).

Given the Sub-District's rural, agricultural nature, existing conditions offer numerous opportunities to create land-sensitive development while maintaining a high quality landscape image throughout the area. The Sub-District's topography is gently sloping from west to east allowing for good drainage to proposed detention facilities. It also allows for a greater size range of building footprints.

The City of Broomfield Wildlife and Open Space Study identifies a moderate quality habitat in the southern part of the Sub-District by Rock Creek. Although most of the habitat occurs outside the planning area, there is potential to provide pedestrian links to this area via a multi-use trail system. The Broomfield Master Plan supports the preservation and enhancement of natural open space, and this goal should serve as a cornerstone in directing future Sub-District development. Hydrologically, the highest flood plain incidence occurs on the area's southern edge closest to Rock Creek.

Existing infrastructure within the Sub-District is primarily located along 96<sup>th</sup> Street to serve residential uses. Each of the residences are individually owned among seven (7) property owners who participated in the planning process from its initiation. Their input during this process has resulted in the Proposed Sub-District Land Use Plan.

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# SUB-DISTRICT LAND USE PLAN

# Proposed Sub-District Land Use Plan:

Much of the property within the Sub-District is rural residential. However, its predominant location along the proposed Northwest Parkway and the U.S. 36 corridor, offers excellent long-term development potential for the Sub-District. For this reason, the Sub-District Land Use Plan focuses on issues of land use compatibility with adjacent uses, the impacts of land use on traffic patterns and infrastructure systems, and access

Another important aspect of the Sub-District Land Use Plan is the integration of natural and jurisdictional elements to create a cohesive "District Vision" that continues the goals of the Broomfield Master Plan. Key elements include:

- Creating a well-developed transportation network to provide regional connectivity
- Providing a balance of land uses sensitive to regional development
- Establishing a well-developed open space system that preserves sensitive natural areas, while maximizing recreational opportunities.

Highlights of the Sub-District Plan include:

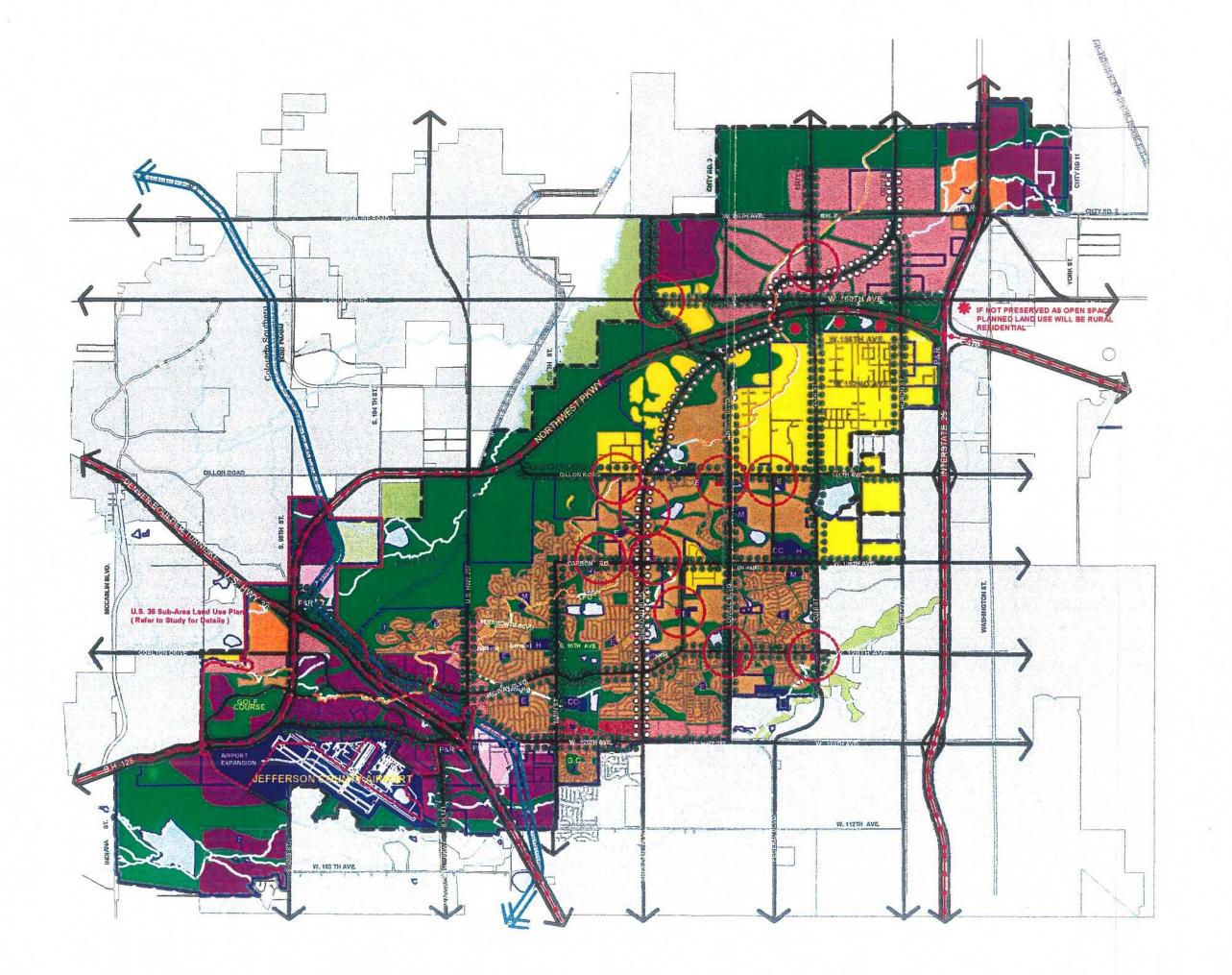
- Establishing an interior Via Varra from Tape Drive to the proposed 96th Street realignment via a central location through the site that maximizes the development efficiency of each subdivided parcel.
- Extending Midway Boulevard (existing Industrial Lane) to intersect the Via Varra and provide connectivity to Coalton Road and other points to the east of the Sub-District.
- Providing a centrally located third access road to the Northwest Parkway with right in/right out access.
- Identifying nine (9) parcels of mixed-use commercial development with the following potential uses:
  - Office
  - Office Showroom
  - Light Industrial

- Restaurant
- Hotel
- Retail/Commercial

The land uses designated on the Proposed Sub-District Land Use Plan (Exhibit F) are consistent with those identified in the Broomfield Master Plan. The table (shown on page 5) outlines estimated yields for mixeduse commercial development at an average floor area ratio (FAR) of 0.40. The overall average FAR within the Sub-District of 0.40 to 0.50 will be reviewed on a case by case basis for the degree to which each parcel transitions to adjacent properties. Other factors include the level to which developments create a higher finish and higher quality, its incorporation of pedestrian and transit-oriented amenities into the overall development of the Sub-District, and its ability to create a "special place" within this key gateway area. It should be noted that densities above 0.35 FAR typically require structured parking to meet zoning requirements for open space, parking and building size. While this is not intended to limit development within the Sub-District, cost ramifications should be carefully studied to determine overall development benefits and constraints.

This proposed Sub-District Land Use Plan can be used immediately by Broomfield to assess development proposals in the defined Sub-District relative to City goals and desired community vision. All avenues of public/private funding, cost-sharing reimbursement programs, and related incentives to work together toward these goals and vision should be pursued.





# LEGEND

OPEN LANDS
ADJACENT OPEN SPACE
TOWN CENTER
VILLAGE CENTER
NEIGHBORHOOD CENTER
TRANSIT ORIENTED DEVELOPMENT
REGIONAL COMMERCIAL
MIXED USE COMMERCIAL
EMPLOYMENT
NEIGHBORHOOD RESIDENTIAL
RURAL RESIDENTIAL
PUBLIC COMMUNITY CENTER
HIGH SCHOOL
M MIDDLE SCHOOL
E ELEMENTARY SCHOOL
AGRICULTURE
TRANSIT CENTER
PARK AND RIDE
ADJACENT CITIES
LAKES

FUTURE BUS LT RAIL

OMMUTER RAIL

VILLAGE RESIDENTIAL AREA

DITCH

STREAMS

PLANNING AREA

BROOMFIELD CITY LIMITS

ADJACENT CITY LIMITS

SHERIDAN PARKWAY

SECONDARY PARKWAY

# 1995 Broomfield Master Plan Broomfield, Colorado

November 28, 1995

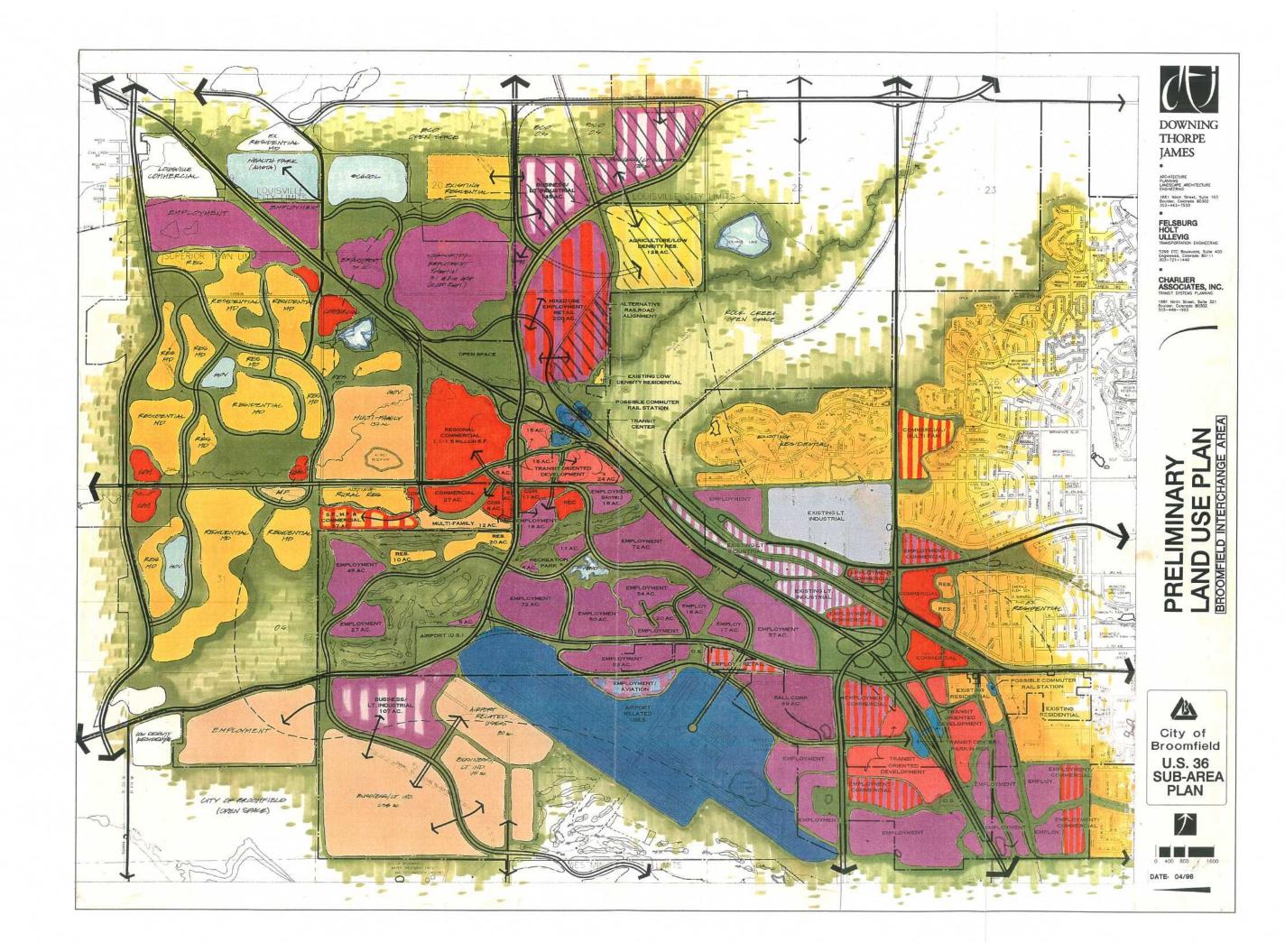
Re-adopted: November 25, 1997

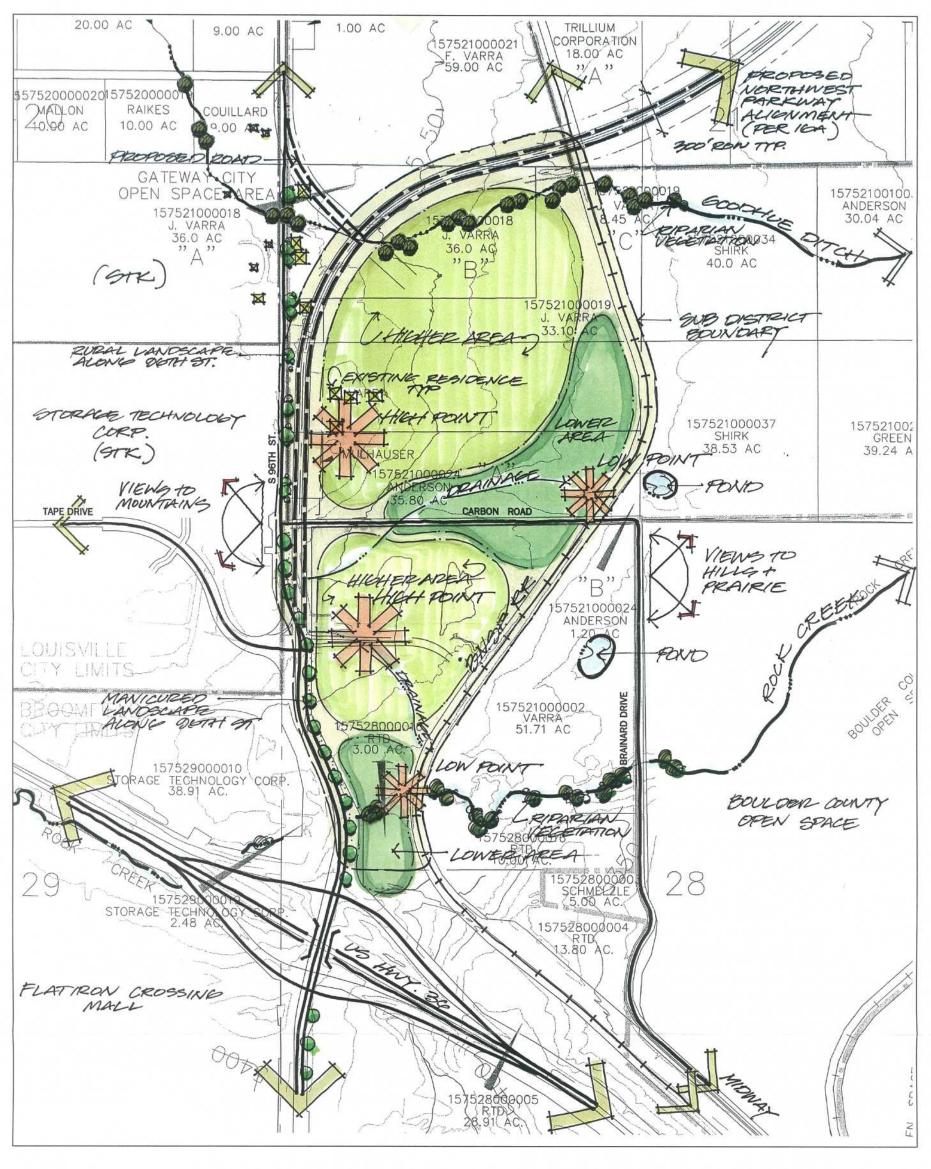
Revised: August 21, 1998

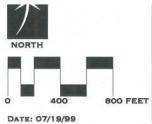


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**EXHIBIT C** 





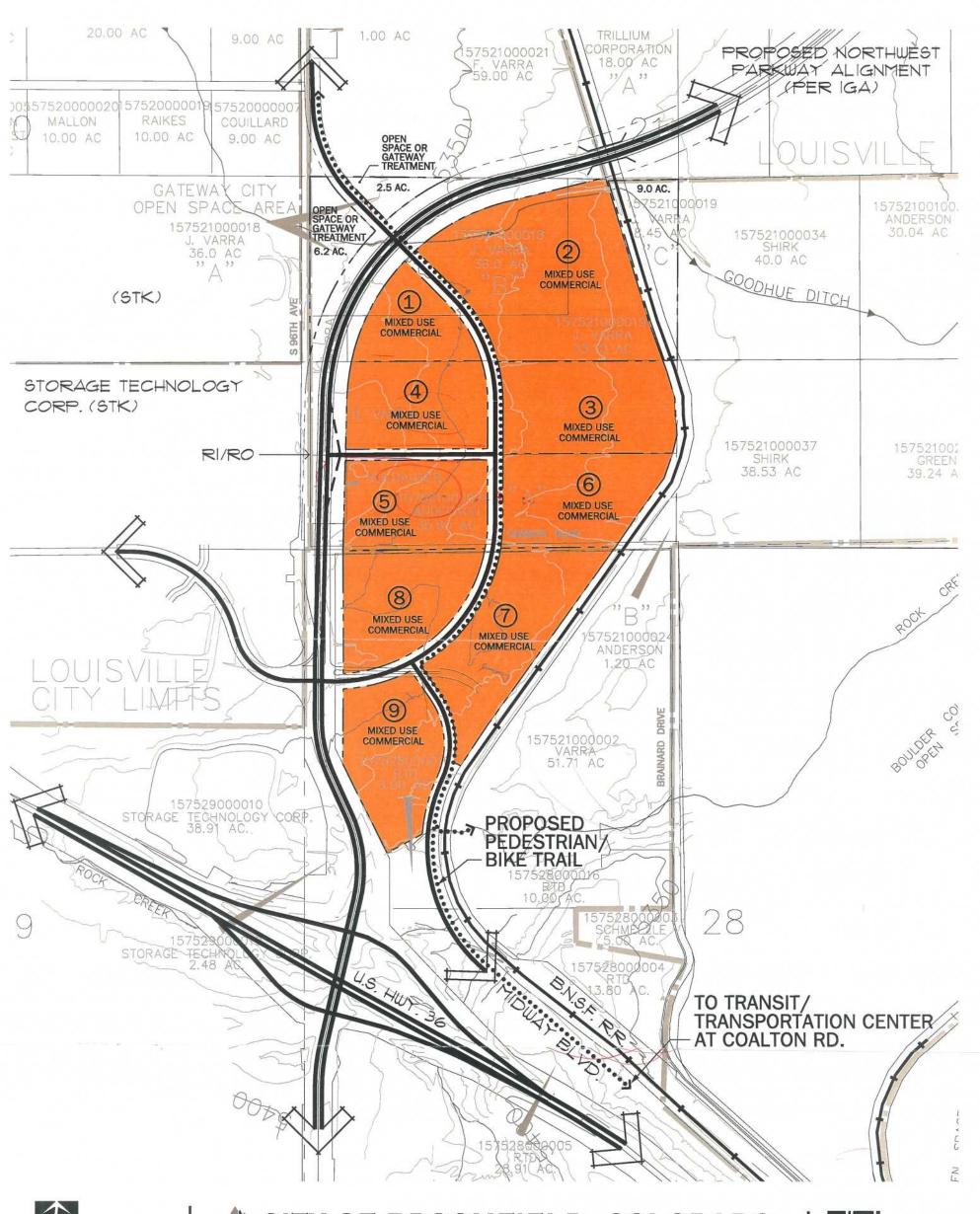


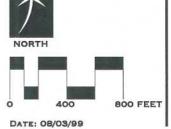
⚠ CITY OF BROOMFIELD, COLORADO

96TH STREET / NORTHWEST PARKWAY SUB-DISTRICT

SITE ANALYSIS







A CITY OF BROOMFIELD, COLORADO

96TH STREET / NORTHWEST PARKWAY SUB-DISTRICT

LAND USE PLAN



DOWNING THORPE IAMES

Carter + Burgess 116 Striameth Street Melt, Suitz 1700 Derver, Colometo 80207-5131 2003 820-5240



# SUB-DISTRICT TRANSPORTATION PLAN





# **Roadway Network:**

The transportation system in and around the Sub-District was evaluated to determine future transportation needs. The primary transportation component will be roadways, with provisions for pedestrian and bicycle paths where appropriate. Most of the future external roadway system has been agreed to as part of the Northwest Parkway Intergovernmental Agreement (IGA).

The Northwest Parkway IGA determined that the Parkway will initially have signalized intersections at Tape Drive and 96<sup>th</sup> Street, with grade-separated interchanges east of 96<sup>th</sup> Street.

Through coordination efforts with the landowners within the Sub-District, a general location for a Via Varra that will provide local access to the developable land within the area has been determined. This roadway is shown in Exhibit G. The Via Varra will have access to Northwest Parkway/96th Street at Tape Drive and realigned 96th Street as determined by the IGA. An agreement reached between the City of Broomfield and the area property owners has determined that the City will support a third access point. This access would have limited turns and would be approximately halfway between Tape Drive and 96th Street, and it is likely that this access would be closed with ultimate grade separation of the Northwest Parkway.

### **Traffic Volumes:**

The Via Varra will serve as the primary access for parcels within the Sub-District. The possible land uses within the Sub-District that will use the Via Varra have been determined, with specific parcel sizes identified for planning purposes. The following table describes the parcel sizes forecasted for mixed-use building space based on a 0.40 floor-area-ratio, and forecasted daily trips from each parcel. Traffic studies required for each proposed development will more closely identify traffic forecasts from each site and on the Via Varra.

Lot #	Acres	Bldg. Floor area based on 0.40 F.A.R. (rounded)	Prkng based on 1:250	Daily trips based on 15 trips per 1,000 s.f. (rounded)*
1	9.24	161,000	644	2,400
2	34.41	600,000	2,400	9,000
3	18.50	322,000	1,289	4,800
4	14.31	249,000	997	3,800
5	14.93	260,000	1,040	3,900
6	15.67	273,000	1,092	4,100
7	19.65	342,400	1,370	5,200
8	15.40	268,000	1,073	4,000
9	15.48	270,000**	1,080	4,100
Total	157.59	2,745,400	8,236	41,300

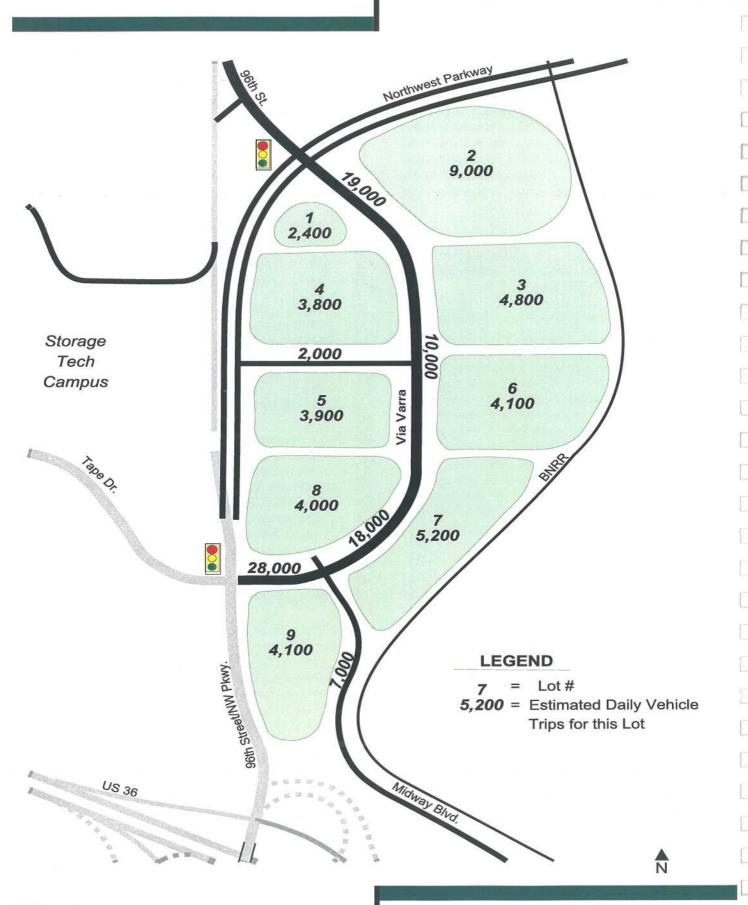
\*ITE trip generation rates for office/industrial uses are 10-13 trips per day per 1000 sf. 15 used to account for higher trip rates of possible restaurant and retail uses.

\*\*Lot 9 contains Rock Creek floodplain, so true development potential is likely less than shown.

Exhibit G shows how the trips generated along the Via Varra are forecasted to distribute to the regional roadways. Most of the Sub-District traffic should orient toward U.S. 36 and Interlocken, and the trips shown represent about 70% of the trips oriented south. The Via Varra should be carrying Sub-District traffic only with very few regional trips due to the existence of the Northwest Parkway. Midway Boulevard should add relatively few trips to the Via Varra since it only provides access to a few land uses along the railroad.

The volumes forecasted for the Via Varra have a high of 28,000 daily vehicles near the south end and range from 10,000 to 19,000 daily vehicles on other portions of the road. This traffic volume can be accommodated on a roadway section of four lanes plus median turn lane. A parkway road section with a 110 ft. right-of-way will be appropriate for the Via Varra. The south end of the Via Varra between 96th Street and Midway Boulevard may need to be the equivalent of six lanes when additional turn lanes are added, but should also fit within the 110 foot right-of-way.

# SUB-DISTRICT TRANSPORTATION PLAN



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# CONCEPTUAL ENGINEERING FOR INFRASTRUCTURE





# **Water Distribution System:**

The 96th Street/Northwest Parkway Sub-District will be served by the City of Broomfield through the proposed Water Distribution Master Plan. Due to the City water system improvements in the vicinity of the Sub-District, expensive off-site improvements will not be necessary.

Recent completed water supply and treatment system upgrades, as well as the current expansion of the City's distribution system will benefit this Sub-District Area and the overall community. These upgrades include a six million-gallon water storage tank and a network of water mains in the western portion of the City. The improvements will interconnect the water system and provide sufficient water pressures to the Sub-District area.

The following improvements are included in the City of Broomfield Master Plan:

- A 12" extension of the existing 20" water main along the east side of 96th Street
- A 16" and 12" water main paralleling the west side of the railroad
- A 12" connection across U.S. 36
- A 16" interconnect between the 20" on 96th Street and the 16" along the Railroad
- Two 12" interconnects between the 12" on 96<sup>th</sup>
   Street and the 12" along the Railroad

However, the Sub-District area within the City's Master Plan has been modified as shown on the attached drawing. The modifications are as follows:

- The 12" water main along 96th Street will follow the proposed realignment of 96th Street
- The proposed 16" and 12" main along the railroad will be shifted to the west to parallel the main Via Varra for the Sub-District
- The above modifications will create a 12" loop therefore eliminating the 16" and 12" interconnects

As previously determined by Rocky Mountain Consultants, the Sub-District will be located in Pressure Zone III-W. Areas at lower elevations may require pressure-reducing valves (PRV's) to lower pressures into the 90-100 psi range.

Main sizes shown are estimates only, and will be verified during final design.

# Sanitary Sewer System:

The Sanitary Sewer Master Plan for the Sub-District shows the main proposed gravity lines to service the area. The existing City of Broomfield wastewater treatment plant has adequate capacity to the serve the Sub-District. However, the western portion of the City is in a separate drainage basin from the wastewater treatment plant. Therefore, all sewer flows from the Sub-District will flow to the Rock Creek Lift Station which is currently under construction and will be completed January 2000. The lift station will be located just north of Rock Creek on the West Side of Brainard Drive.

The City has started construction on system upgrades to provide service to the western portion of the City. Included in these upgrades are the Rock Creek Lift Station and a force main to the wastewater treatment plant. A sanitary sewer service fee of \$6,883 per acre will be charged to the developers of this Sub-District.

The proposed Sanitary Sewer improvements for the Sub-District are as follows:

- An 8" sewer through the Sub-District along the main road
- An 8" sewer paralleling the railroad for the northern portion of the property
- A 12" sewer from the main 8" lines to the Rock Creek Lift Station
- A 12" sewer from the southern portion of the property to the Rock Creek Lift Station

Main sizes shown are estimates only and will be verified during final design.

# Drainage System:

The Sub-District area drains to Rock Creek, which runs through the southern portion of the property. The Urban Drainage and Flood Control District, City of Broomfield, and City of Louisville were contacted for information on existing facilities. Currently, there is very little detailed drainage information for this portion of the Rock Creek Basin. From review of USGS Quadrangle maps and a site visit, it appears that there are seven existing culverts in the Sub-District.

The following is a list of the existing culverts that were found during a site visit:

- A triple box culvert (12'x12'-12'x17'-12'x12') crossing under 96<sup>th</sup> Street just north of the westbound off-ramp
- A single box culvert (17'x10') crossing under 96<sup>th</sup>
   Street north of the triple box culvert
- A 48" pipe culvert crossing under 96th Street next to the single box culvert
- A 10" storm sewer outlet pipe tied in a drop inlet on the east side of 96th Street at the Storage Tech intersection
- A 48" pipe culvert crossing under 96<sup>th</sup> Street just north of the Storage Tech intersection
- A 12" pipe culvert under Carbon Road
- A single box culvert (size not determined) for the Rock Creek crossing under Brainard Drive
- A 36" pipe culvert under the railroad
- A 180" pipe culvert under the railroad
- Another 180" pipe culvert under the railroad
- A 12" pipe culvert under the railroad just north of Carbon Road
- A culvert under the railroad at the north east corner of the property (not measured during the site visit)
- There were also various culverts under driveways to convey drainage along Carbon Road and Brainard Drive

Rough basin area and flow calculations were preformed to estimate probable future drainage needs. It is anticipated that five new culverts will be needed for the Sub-District.

- A 36" pipe culvert under Northwest Parkway north of Carbon Road
- A culvert under Northwest Parkway at the intersection with the Via Varra
- A48" pipe culvert under the Via Varra
- A 60" pipe culvert under the Via Varra
- Replace the existing 12" pipe culvert under Carbon Road with a 54" pipe culvert

On-site stormwater detention for each property is assumed. Properties may cooperate in combining detention facilities to increase development efficiency.

The proposed 16" water main paralleling the railroad will cross underneath Rock Creek, the drainage way to the south of Rock Creek and the drainage way to the north of Rock Creek. The 12" water main loop will cross major drainage ways in at least three places.

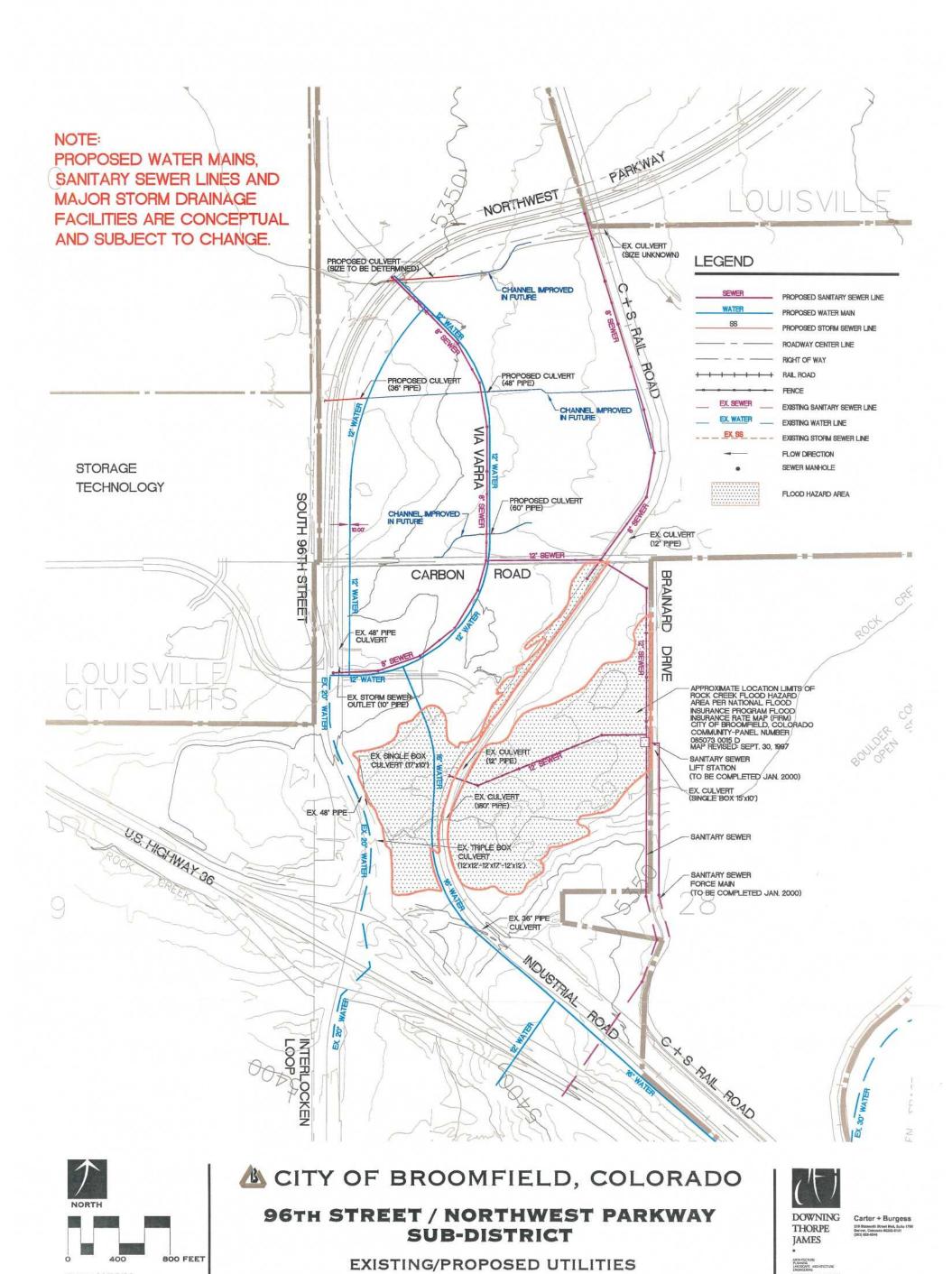
Due to the level of uncertainty still remaining with drainage structure needs, costs have not yet been developed. Estimates will be developed during the design stages.

# Roadways:

The needed roadway section for the Via Varra is discussed in the traffic section. A four-lane arterial roadway with a raised median is the recommended roadway section for the Via Varra. Access points to the Via Varra will be determined based on Broomfield's criteria for accesses to a minor arterial.

The proposed connection of Industrial Lane/Midway Blvd. between Flatiron Circle East and the Via Varra is not included in the cost estimate. The cost for realigning and re-connecting 96th Street to the Northwest Parkway at the north end of the study area is presumed to be the responsibility of the Northwest Parkway. Exhibit H shows the existing and proposed utilities within the Sub-District.





1881 Nern Street, Suite 163 Boulder, Colorado 80302 303-443-7533

DATE: 08/03/99

# PRELIMINARY OPINION OF PROBABLE INFRASTRUCTURE COSTS





# Introduction:

The following Opinion of Probable Infrastructure Costs has been prepared at a conceptual level to determine common infrastructure costs within the Sub-District. The City of Broomfield may then use this information to prepare a cost-sharing program for the implementation of this infrastructure. The proposed spine road through the Sub-District was the starting point for developing infrastructure costs based on a length of 4,400 linear feet. Various items such as removals, earthwork and traffic control were estimated to produce a Total of Construction Bid Items. This total was then used to estimate by percentage, a series of associated infrastructure costs including utility connections, landscaping, and contingencies.

Costs for drainage can not be calculated at this time due to limited information regarding proposed flows and structure sizing. This information should be completed in future design phases.

This Opinion of Probable Infrastructure Costs does not include development costs for individual parcels within the Sub-District, right of way acquisition, or any costs associated with the construction of the Northwest Parkway.

# Next Steps:

The purpose of this Sub-District Master Plan is to address at a conceptual level, the available development opportunities in the north 96th Street Corridor. The Plan has designated mixed-use commercial development and outlines estimated costs for infrastructure. The City of Broomfield will use this information to outline a development cost sharing program. Similar to the U.S. 36/96th Street Sub-District, there is potential to establish a metropolitan district and a reimbursement program through tax revenues generated within the Sub-District. This is one potential avenue for funding infrastructure. Future City Council approvals for the Metropolitan District would have to occur in order for them to be created.

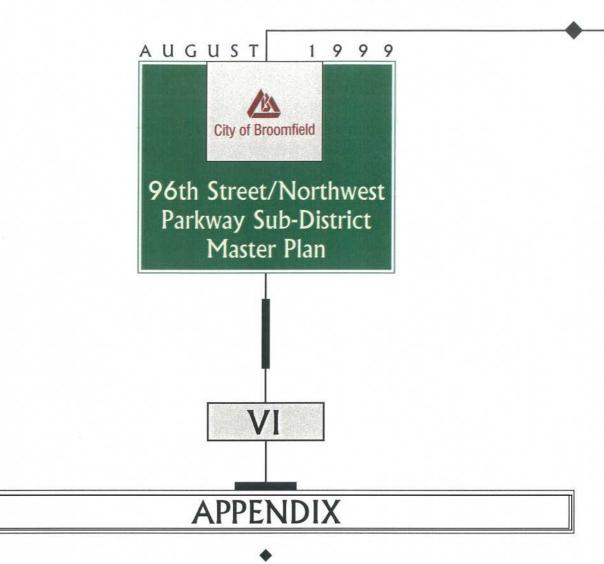
As a next step in the planning process, the property owners and their representatives may choose to initiate additional engineering to investigate preliminary design and identify more specific development issues. This same procedure was completed for the U.S. 36/96th

Street Sub-District and was beneficial in blending the various needs of the evolving project development plans into a unified overall Sub-District Master Plan and a single strong vision for the area. It also helped to maximize mutual benefit opportunities and identify best scenarios to resolve key technical parameters, maximize cost effectiveness, maintain quality area treatment, incorporate detailed traffic analysis, integrate transit goals, and position the project for concurrent financial analysis.

The following table outlines the Preliminary Opinion of Probable Infrastructure Costs:

### Via Varra (4400 I.f.)

	Unit	Unit	Est. Qtv.	Est. Cost
Removals/Relocations				
Remove Asphalt	SY	\$4	2500	\$10,000
Removals, clearing	LS	\$250,000	1	\$250,000
New Street Construction				
Earthwork	CY	\$8	75000	\$600,000
Concrete Pavement	SY	\$40	28000	\$1,120,000
Curb & Gutter	LF	\$10	17600	\$176,000
Sidewalks	LF	\$12	8800	\$105,600
Bridges/Structures				
none	SF	\$70	0	\$0
Retaining Walls			eding of S Space	
none	SF	\$70	0	\$0
Traffic Control				0.400.000
Signals	each	\$100,000	1	\$100,000
Signing & Striping	each	\$50,000	1	\$50,000
Lighting	each	\$7,000	25	\$175,000
Total of Construction Bio	d Items			\$2,586,600
Associated Infrastru	cture (	Costs		
Drainage			10%	\$258,660
Roadway Utilities			5%	\$129,330
Water Distribution Sys	stem		15%	\$387,990
Sanitary Sewer Syste Drainage System	m		10%	\$258,660 N/A
Construction Traffic C	ontrol		5%	\$129,330
Urban Design, Landso			10%	\$258,660
Contingiencies and ot	her cost	s		
Contingency			30%	\$775,980
Construction Mar	nagemer	nt	15%	\$387,990
Design, Permits	_goo		10%	\$258,660
Mobilization			5%	\$129,330
South Sanitary S	ewer-		0,0	Ψ.20,000
Outfall Reimburs		ee		\$1,397,249
Total of Contingiencies a	and othe	er costs		\$4,371,839
				40.000.00
<b>Total Construction Cost</b>	without	Hight of V	vav	\$6,958,439



Design Standards

The following Design Standards are compiled from the 1997 U.S. 36 Sub-Area Plan. The 96<sup>th</sup> Street/Northwest Parkway Sub-District is included within the Sub-Area which was adopted by the Broomfield City Council in 1997. These Standards are therefore included in this document for reference only. If any discrepancies exist in these design standards from those provided in the Sub-Area Plan, the Sub-Area Plan takes precedence.

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# 1. INTRODUCTION

Through a recent comprehensive Master Planning process for the entire City, as well as the more detailed focus study of the **U.S. 36 Sub-Area Plan**, the U.S. 36 corridor has been identified as a critical resource to the Broomfield community and surrounding cities. The area is strategically located and will continue to represent significant opportunity for quality development as a key south "window" through and into the City of Broomfield. This distinction has identified the U.S. 36 corridor as a "Gateway" area or District.

To ensure properly planned and integrated development of the Gateway District, **Design Standards** have been established as a key part of an overall Sub-Area Plan.

# 1.A. PURPOSE AND APPLICABILITY

The purpose of the Broomfield **U.S. 36 Sub-Area** "Gateway" **Design Standards** is to assist private developers, as well as public agencies and service providers, in the proper and orderly development of the area and to establish minimum standards and guidelines for quality that will help each property and the area as a whole, maintain its value as adjacent projects develop. The Design Standards are intended to protect the communities' quality of life, minimize adverse impact from development, protect economic vitality, encourage high quality development, discourage less attractive/enduring alternatives and enhance security/safety for all users.

The Design Standards are intended to guide and apply to all properties, private developments and public improvements throughout the "Gateway District" area. The level of applicability of specific design standards to any particular development proposal will need to be assessed by the City of Broomfield during planning, zoning and processing phases.

### 1.B. DESIRABLE AND UNDESIRABLE ELEMENTS

In general, developments and improvements should incorporate the following desirable elements:

- Provide well articulated clear and efficient access and roadways to and through the area, without diminishing the level of traffic service to adjacent properties;
- Provide all reasonable facilities to promote "alternative" modes of transportation to supplement personal automobile transportation, including pedestrian systems, bikeways, and transit facilities;
- 3. Provide land uses and development improvements that promote quality in the area and do not detract from the property values, image, or developability of adjacent properties. Quality Site Planning, infrastructure, landscaping, signage, architectural massing, details and meaningful open space areas are all desired for the area. Compatibility with other uses, themes, and designs for the area is very important.

In general, developments and improvements should avoid or minimize the following undesirable elements:

- Poorly design access and roadways which diminish the capacities, safety, or usefulness of the "traffic system" and which promote congestion or other negative impacts to the users of the area.
- Inadequate facilities which deter or discourage users from considering alternative modes of transportation due to lack of facilities, poorly designed elements, safety issues, or other deterrents.

3.	Development improvements which reflect a substandard image, lack of care in design or detract from the value or developability of adjacent projects. Facilities which create disjointed and confusing site areas, circulation patterns, or design treatments are discouraged. Facilities that do not screen negative views to large parking areas, service docks and other undesirable features should be avoided.
1.C.	RELATION OF GATEWAY DESIGN STANDARDS TO OTHER REGULATION/STANDARDS
Develo regulat	esign Standards are intended to supplement the City of Broomfield Codes, Ordinances, and opment Standards. Where there is a conflict between these Design Standards and any other tory requirements, the more restrictive Standard or the Standard that would yield the safest or t quality of development would apply.
during	esign Standards are intended to be used by developers and referral agencies and city departments development review, processing, and implementation phases as guidelines to the "intent" of the rea vision plan.
and be	these Design Standards are "advisory" in nature, many will be extracted from the Sub-Area Plan ecome part of the City Code, if approved and adopted by the City. If portions of the Design ards become part of the City Code, the remaining Standards will remain as an advisory guide to be
	uring the review process.
	대한 사용을 하면 있는 사용을 하면 하면 보면 보면 보면 되었다. 그렇게 되는 사용을 보는 사용을 보는 사용을 보면 되었다. 그렇게 되었다면 보면 되었다면 보면 되었다면 보면 사용을 보면 되었다면 보면 보면 되었다면 보면 되었다면 보면 되었다면 보면 보면 되었다면 보면
Per the corridor quality feature	GATEWAY DISTRICT BOUNDARIES
Per the corridor quality feature overall	GATEWAY DISTRICT BOUNDARIES (SUBDISTRICTS)  U.S. 36 Sub-Area Planning Process key goals and objectives have been established for the or. While the area as a whole is seen as a major resource to the Broomfield Community and high Development Standards are anticipated/intended for the whole area (Gateway District), special are and requirements specific to various portions or "Sub Districts" are necessary to achieve the
Per the corridor quality feature overall  2.A. In the key District	GATEWAY DISTRICT BOUNDARIES (SUBDISTRICTS)   U.S. 36 Sub-Area Planning Process key goals and objectives have been established for the or. While the area as a whole is seen as a major resource to the Broomfield Community and high Development Standards are anticipated/intended for the whole area (Gateway District), special as and requirements specific to various portions or "Sub Districts" are necessary to achieve the goals for the community.

### 2.B. PHASE 1 SUBDISTRICT PARCELS

The Broomfield/U.S. 36 Gateway District has been defined in two phases. In general, the Phase One Gateway District includes a few minor additions to the previously adopted "Ordinance #907 - U.S. 36/96th Interchange Influence Area." It focuses on the South side of the U.S. 36 Corridor between U.S. 287 and 96th, the 96th Street/Northwest Parkway Corridor in the north and south vicinity of U.S. 36 to Jeffco Airport, the State Highway 128 Corridor from Wadsworth Parkway to 96th Street, and the land uses adjacent to those corridors.

The Phase One portion of the Gateway District has been divided into six (6) subdistricts to allow specific goals and policy/standards for each subdistrict. The Phase One Gateway Subdistricts are as follows:

- 1. Freeway and Arterial Roadway Subdistrict
- U.S. 36 / 96th Street Mixed-Use Subdistrict
- Jeffco Airport North Employment/Aviation Subdistrict
- 4. Interlocken Subdistrict
- 5. North 96th Street / Northwest Parkway Subdistrict
- Open Space Subdistrict

Note: The future Phase Two portions of the Gateway District will be the subject of future studies to define the specific goals and policies for those areas.

The Phase One Subdistrict Design Standards are as follows:

# 2.1. FREEWAY & ARTERIAL ROADWAY SUBDISTRICTS

### DESCRIPTION/LOCATION:

The Freeway and Arterial Roadway Subdistrict consists of the existing and proposed public right-of-way and associated open space areas within the corridors as shown on the Gateway Subdistrict maps.

### GOAL:

An efficient high quality freeway and arterial roadway system serving and running through the Gateway District is critical to the ongoing economic stability, safety, image, and success of the Gateway District and surrounding communities.

One of the largest impacts on the public's perception of the City of Broomfield is it's quality of life and image perceived from the Gateway Districts Freeway/Arterial network. In addition to the safe and efficient movement of vehicles throughout the District, state-of-the-art multi-modal transit systems, quality landscaping, visual buffering, view enhancements, signage controls, safe pedestrian/bike interface and ongoing maintenance will all need to be addressed in design and implementation throughout development within this subdistrict. All developments impacting or adjacent to the freeway and arterial roadway system will be required to coordinate infrastructure improvements and participate in the ongoing success of this subdistrict.

### POLICY/STANDARD:

All freeway and arterial roadway improvements will be required to comply with the overall **Transportation** and **Access Plan** for the Gateway District (see "Sub-Area Transportation Plan"). Access will be limited to those locations shown on the Plan to maintain an efficient roadway system, unless additional traffic studies can demonstrate that "better" alternatives will not lower the "level of service" from that which is established in the overall Plan, nor have a negative aesthetic impact.

In General, it is the intent of these Policy/Standards that the prorated cost of roadway improvements will be appropriately and proportionately paid for by the developments creating the demand for the improvements. The City, however, may choose to facilitate and expedite improvements through a variety of funding approaches as deemed in the best interest of the community. Land dedications, cost-sharing and reimbursements of improvement costs advanced by others shall all be pursued and considered within the Gateway District.
All frontages will be required to be landscaped and maintained along all freeways and arterial roadways within the subdistrict beginning at the time of development (including the public right-of-way areas). All landscape improvements shall meet the landscape standards (see Section 8) and the design of all subdistrict corridors shall demonstrate compatibility within the overall theme and quality level of landscaping within the Gateway District. The accommodation of and interface with Gateway District Transit Systems will be required. Pedestrian/bicycle trail systems shall be provided and interconnect to the overall regional system, drainage crossings, and grade separated intersections should be accentuated as features, and upgraded treatments will be required. Roadways should not be barriers to pedestrians.
All building and parking setbacks will be required to be landscaped, maintained, and designed to tie to the overall corridor landscape themes. All positive views to natural features should be enhanced/encouraged. All views to parking lots, service areas, utility equipment, and unarticulated building facades will require visual buffering.
2.2 U.S. 36 / 96TH STREET MIXED-USE SUBDISTRICT
DESCRIPTION/LOCATION:
The U.S. 36/96th Street mixed-use subdistrict is the approximately 300 acres immediately to the south the new 96th/U.S. 36 Interchange with a small portion on the north side of U.S. 36.
GOAL:
A quality regional mixed-use commercial subdistrict is to be located at the crossroads of two major regional freeways to maximize economic viability, while minimizing traffic impacts and congestion within the Community. As a highly visible portion of the Gateway District, quality landscaping, site design, signage, and architectural treatments are envisioned and required for the area. In addition to safe and efficient vehicular access to the subdistrict, all forms of "multi-modal" transit system access are planned for the area, to reduce auto dependancy and congestion, attract all segments of the population, and establish one of the premier "transit-oriented" developments in this region of the country.
POLICY/STANDARD:
All developments and improvements within the subdistrict should accommodate, comply, and participate in the overall development of the freeway and arterial roadway system as designed in the sub-area plans, as well as local circulation routes. A consistent landscape and signage theme compatible with the district standards and adjacent developments should be established for the subdistrict and fully integrated between the various projects within the subdistrict.
A high quality regional mall facility on the southwest corner of the 96th Street Interchange should feature the natural amenity of the Rock Creek Corridor and Regional Trail System, proximity to a regional transit

"hub," and maximize all opportunities to interconnect the mall with adjacent residential and employment communities. All approaches to mitigate the dominant impacts of the automobile and feature pedestrian, bike, transit and open space components should be pursued. Requirements associated with the large

scale development of the Mall should be taken into account by both the developers and the City during the planning, design, processing, and implementation phases.

A series of transit-oriented mixed-uses are envisioned surrounding the mall, and the Transportation Center, including retail, entertainment, residence-type hotels, multi-family residences, professional offices, with special focus on pedestrian plazas, open space features, and transit connections.

# 2.3 JEFFCO AIRPORT NORTH EMPLOYMENT/AVIATION SUBDISTRICT

# DESCRIPTION/LOCATION:

This subdistrict occurs on the north edge of Jeffco Airport along State Highway 128.

### GOAL:

The development parcels of this subdistrict occur along the highly visible bluff, a key backdrop view from the U.S. 36 Gateway Corridor and along the Highway 128 frontage. A high quality employment/aviation land use is anticipated incorporating offices, aviation schooling, airport servicing, retail facilities, corporate campuses, and related commercial support uses. All future developments will need to provide quality landscape, signage, site planning, and architectural features per the Gateway Standards.

As Jeffco Airport continues to provide convenient, safe and efficient air travel services, this subdistrict must be recognized as a "Gateway" to the area for key business and recreational travelers and development in the area should establish a strong first impression character through quality development.

# POLICY/STANDARD:

Access along State Highway 128 should be well analyzed through traffic studies and planned to facilitate proper principle arterial level service along the corridor, and all access points should be embellished as key entrances with quality landscaping and signage improvements.

All improvements along the bluff should be well site planned to minimize visual impact of negative features, such as parking, service docks, utility areas, and unarticulated building facades. Special mitigation efforts to accommodate steep north facing grades in an attractive manner shall be required, and all fill conditions should be minimized and treated with intensified landscape revegetation. Site improvements and buildings should carefully terrace into the hillside and utilize quality, retaining walls, and artificial abrupt grade slopes are not allowed. Access to the subdistrict individual parcels should primarily come from 120th Avenue, and all developments in the subdistrict should participate in the upgrading of the 120th Avenue Corridor. Pedestrian and transit connections to the Airport and regional systems will be required. A new landscaped entrance to Jeffco aligning with future Interlocken Boulevard should be accomplished.

### 2.4 INTERLOCKEN SUBDISTRICT

# DESCRIPTION/LOCATION:

Interlocken is a 1,000 acre campus for Advanced Technology Companies on the south side of U.S. 36 between Broomfield's western city limits and the U.S. 287 Interchange.

### GOAL:

The Interlocken Development has set the standard in the Gateway District for high-quality development and the incorporation of enhanced roadways, landscaping, signage controls, site planning, and architectural quality control features. The integral network of pedestrian paths, open space amenities, and transit facilities planned or existing, should continue to be a focus and establish an example for all Gateway District Developments. Focus on environmental sustainable design principles, resource conservation, and "quality of life" for all users should continue as a priority. State-of-the-art infrastructure systems have been established to support the advanced technology companies' key to the area and all extensions and interface with those systems should continue throughout Interlocken, the Gateway District, and adjacent developments.

# POLICY/STANDARD:

The Interlocken Campus should continue to develop per the approved P.U.D. Zoning Documents, and established design guidelines, and quality control process currently enforced. The Interlocken Architectural Control Committee should continue to evaluate all proposed developments for compatibility with the General Development Plans and confirm the proper connections between each individual development and the overall regional series of infrastructure systems. Compatibility with the Broomfield/U.S. 36 subarea plans and these Gateway Standards should be an ongoing part of the review process.

Continuity between the Interlocken landscape features along the U.S. 36 and Highway 128 frontages should be extended throughout the subdistrict and carry into adjacent subdistricts as a unified theme.

### 2.5 NORTH 96TH STREET / NORTHWEST PARKWAY SUBDISTRICT

# DESCRIPTION/LOCATION:

The area of this subdistrict occurs north of Rock Creek Drainageway, east of 96th Street, west of the County Regional Open Space, and within the recently annexed portion of Broomfield.

### GOAL:

The North 96th Street/Northwest Parkway Subdistrict represents an opportunity to provide a fully masterplanned area for quality mixed-use development, facilitating the future northwest parkway corridor and enhancing or preserving the key natural features in the vicinity.

As a "Gateway Development" to the City of Broomfield, as well as to Louisville and Lafayette, the subdistrict is envisioned to include quality mixed-use commercial land uses including retail, professional offices, corporate campuses, research and development facilities, transit oriented developments. In addition, a variety of housing types are anticipated which "step down" in density toward the Rock Creek Regional Open Space Corridor.

# POLICY/STANDARD:

The future alignment of the Northwest Parkway right-of-way corridor should be fully accommodated and planned into each development. Limited access to the area from the Northwest Parkway should be established as a major "Gateway Entrance" with high quality landscaping, signage, and entry features. The subdistrict should establish an overall consistent theme for landscaping, signage, and open space amenities to enhance the subdistrict as a whole.

The Rock Creek Corridor and Regional Trail System should be a special southern edge to the subdistrict and all opportunities to "pull" the open space features and trail connections into the area with development should be pursued. The proximity to the regional transit "hub" at 96th Street/U.S. 36 will require this area to fully accommodate all modes of transit systems into the development and encourage use of these systems.

The realigned 96th Street connection should accommodate and provide a quality entrance into the City of Louisville. The Midway Blvd. realignment and extension to the area should be incorporated and all developments in the subdistrict should support in the improvement of the Midway Corridor.

All avenues to mitigate the railroad impacts on development through landscaping, etc., should be pursued and minimize the "barrier effect" of the development's connection to the Rock Creek Farm Open Space by grading above the tracks and allowing grade-separated crossing for bikes/pedestrians. The relocation of the railroad tracks to the east should be considered, if feasible without diminishing future community rail possibilities.

# 2.6 OPEN SPACE SUBDISTRICT(S)

# DESCRIPTION/LOCATION:

The Open Spaces Subdistrict(s) occurs primarily along the north side of U.S. 36 from StorageTek to Industrial Lane.

### GOAL:

The Rock Creek Farm Open Space Corridor is one of the most important natural features in Broomfield, Boulder County and within the Gateway District. The key goal of this Subdistrict is to preserve and enhance the Open Space natural amenity by allowing the Open Space system to remain continuous south to U.S. 36 Frontage, and limit development that would inhibit views and pedestrian connections to the area. Development along portions of the north side of U.S. 36 between 96th Street and Industrial Lane would diminish views to the Open Space area and place the amenity in a "backyard" perception by everyone traveling along U.S. 36.

The area is envisioned to make a strong open space and pedestrian/bike connection between the new transit-oriented development south of U.S. 36 at 96th Street, StorageTek, Interlocken, Rock Creek Community, Industrial Lane/Midway Employment Centers, and all points along the western edge of Broomfield.

# POLICY/STANDARD:

An open space "Linear Park" connection should be created with a key regional/pedestrian bike path along the north side of U.S. 36 from the future transit station at 96th to the existing regional trail underpass at Industrial Lane. The "Linear Park" should include an 8' trail, enhanced landscaping, grading, and berming to enhance views and diminish railroad impacts, and accommodate the Midway realignment connection to the Northwest Parkway. The "Linear Park" trail system will also connect to Rock Creek Farm Open Space and the transit center underpass at U.S. 36. All improvement projects and developments in the area of this subdistrict should assist and anticipate the execution of the Linear Park Trail System. The opportunity for incorporation and interface of the StorageTek open space area into the overall open space subdistrict should be preserved. All needed "grade-separated" trail connections at the new mall entrance should be incorporated into infrastructure improvement projects. Open space region/trail connections along the south side of U.S. 36 from 96th to 88th Street should be facilitated. Shared parking opportunities with the transit center and adjacent developments should be considered, as well as strong multi-modal connections to the regional systems.

# 2.C. FUTURE PHASE 2 SUBDISTRICTS

The future Phase Two portion of the Gateway District has been defined and divided into five (5) future subdistricts including:

- 7. Phase Two Freeway and Arterial Subdistrict
- 8. Industrial Lane / Midway Blvd. Light Industrial Subdistrict
- 9. U.S. 36 / Wadsworth Mixed-Use Subdistrict
- 10. U.S. 287 Commercial Subdistrict
- 11. Southwest JeffCo Airport Employment Subdistrict

Note: The future Phase Two portions of the Gateway District will be the subject of future studies to define the specific goals and policies for those areas.

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# GOAL:

All development improvements should be sited so they enhance visibility from major roadways and entries, create visual interest and provide convenient circulation for both vehicles and pedestrians. Placement of structures should consider the existing built context, all adjacent land uses, and the location of major traffic arterials and should include an analysis of the site's physical and natural characteristics and particular influences. High quality organized developments with common gathering spaces shall be created through the clustering of buildings and other creative design solutions.

# 3.1 BUILDING SITING AND ORIENTATION

### POLICY/STANDARD:

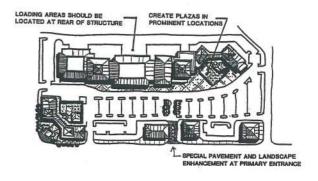
Buildings should be sited so that the character of existing land forms and site features is respected; the relationships between buildings are strong; pedestrian and vehicular circulation is facilitated; and the overall quality as viewed from adjacent properties is maintained. Cluster buildings to create plazas and pedestrian gathering places and establish visual links between separate structures. Design for high quality views through and into each development. Develop sites in a comprehensive and coordinated manner to provide order and compatibility, and to avoid jumbled or confusing development. Siting of facilities should respond to solar, wind, and other microclimate factors.

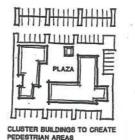
# 3.2 BUILDING AND PARKING SETBACKS

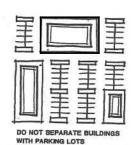
### POLICY/STANDARD:

All development should provide a well-landscaped and pedestrian friendly character along major and minor streets. All buildings and parking should be set back from perimeter and interior streets a sufficient distance to create a distinct landscape zone between buildings, parking, and adjacent roadways, and to allow adequate visual buffering and screening. Varying building setbacks above minimum standards to enhance visual interest along the streetscape is strongly encouraged.

In general, wrapping the project perimeter with parking lots, is discouraged, except in cases of comprehensively planned, very large buildings; while opportunities to orient some buildings closer to the street to screen parking and provide strong pedestrian connections to buildings is encouraged. Minimum setbacks are as follows:







CLUSTER BUILDINGS TO CREATE PLAZAS AND PEDESTRIAN GATHERING

COLLECTOR STREET	Sa Sa		COLLECTOR STREET	
TREA	TMENT OF	STREET CORNERS I	AND SE	ER LANDSCAPE EATING AREA

A	Minimum Building and Parking Setbacks			
	(from all perimeter property lines or rights-of-way).			

1	on an pointerer property mise of rights of	. way.
•	Freeway/Principal Arterial R.O.W.	75 ft. *
	Minor Arterial/Major Collector R.O.W.	30 ft.
	Collector/Local Road R.O.W.	20 ft.

Collector/Local Road R.O.W.
 Perimeter Property Lines
 Internal Property Lines
 20 ft.
 20 ft.

(Note: Within a development, a Village Center Concept of common walls, zero lot lines, and minimal setbacks to public spaces is encouraged if designed in a comprehensive manner. The City should allow zero or minimal setbacks in those cases).

\* Setbacks from freeway/principal arterial R.O.W. lines can vary to 30' min. if additional landscape buffering/screening or other mitigation or trade-off techniques are provided and approved by the City. Varying the setbacks to undulate the landscape zones is encouraged.

# 3.3 VIEW CORRIDORS AND PUBLIC AMENITIES

# POLICY/STANDARD:

Views from and into the Gateway District's attractive natural surroundings, such as the Flatirons and Rocky Mountain backdrop, as well as distinctive on-site features, including water features, golf course, park areas, and open space, are amenities to be shared by all. Maximizing view opportunities of these features from roadways, open space corridors, building entries, and all user spaces is required. Developers are to emphasize these key natural features by reflecting them in their individual developments.

Plazas, courtyards and other public pedestrian amenities should be incorporated into both overall district plans and individual site development plans. These areas should be designed to be easily accessible and reasonably comfortable for a substantial part of the year.

# 3.4 SITE COVERAGE REQUIREMENTS

# POLICY/STANDARD:

Open space and proper landscape buffers are highly valued and required within the Gateway District and therefore building, parking, and driveway site coverages within each development are to be limited as follows:

- A The maximum building, parking, and driveway coverage within each parcel and for the entire development is 75%.
- B. The minimum amount of open space provided within a development parcel or cluster of parcels is 25%. Open space can include "pedestrian-oriented" areas such as sidewalks and hardscape plazas within open space areas and pedestrian gathering places. This open space area is in addition to any "required public land dedication". (Note: for large scale buildings over 350,000 s.f. GLA with large

public "indoor spaces" may also be allowed as part of the open space requirement up to 10% if approved by the City).

# 3.5 UTILITIES, MECHANICAL, SERVICE AND STORAGE AREAS

### POLICY/STANDARD:

The visual and auditory impacts of utilities, mechanical equipment, data transmission dishes, towers, microwaves, and other services and equipment should be minimized within all developments. Install all permanent utility lines underground. Screen all transformers, utility equipment and other utility cabinets from view from streets and adjacent property.

Service, delivery and storage areas are visually obtrusive. The visual impact of service and delivery areas should be minimized, especially views of such areas from public ways and along designated view corridors and adjacent properties. Careful design of screening solutions and placement of these facilities must be planned.

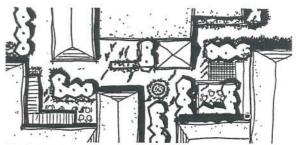
# 3.6 WATER QUALITY CONTROL AND DRAINAGE

### POLICY/STANDARD:

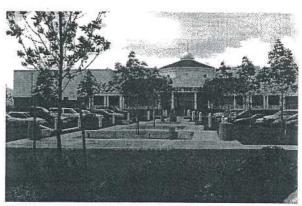
To as great an extent as possible, stormwater management and site drainage should be designed as visual and recreational amenities, as well as site development necessities. First and foremost, however, downstream impacts shall be minimized. Utilize consolidated detention ponds, grassy swales, naturalistic stream bed details and attractive year-round features wherever possible. Maintain natural "continuity" of drainage swales through sites even where modified by improvements.

Site development plans must demonstrate proper engineering practices to protect stormwater from carrying undesirable elements, before releasing water into the overall storm drainage system. Bio-filtration and particle settling areas are strongly encouraged.

Site drainage should be designed to minimize water collection near building foundations, entrances and service ramps. Comply with all governing agency criteria.



A TREAT SPACES BETWEEN BUILDINGS AS "OUTDOOR ROOMS".



DELINEATE AND ENHANCE AREAS OF INTENSE PEDESTRIAN ACTIVITY.





PROVIDE SEATING THAT IS USABLE YEAR ROUND.

# 4 VEHICULAR CIRCULATION AND PARKING

# GOAL:

The Gateway District's highway, roadway, and on-site vehicular circulation and parking system is a critical factor in the image, safety and success of the overall Community and any related development. The access/circulation/parking system should provide for the safe, efficient, convenient, and functional movement of multiple modes of transportation throughout the District, as well as, both on and off the site where pedestrian/bicycle/vehicle conflicts are minimized. Alternate modes of transportation, including public transit, bicycles and pedestrians should be given priority in the overall District and as part of each individual site design.

To facilitate immediate and long range vehicular goals, an overall **Subarea Transportation and Access Plan** for the Gateway District has been established to control congestion, project long-term needs, and identify infrastructure requirements. All development within the district should facilitate the overall transportation network.

# 4.1 VEHICULAR ACCESS

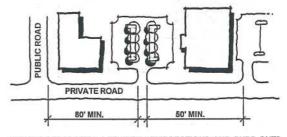
# POLICY/STANDARD:

It is the intent of these standards to promote the safety and mobility of through traffic by minimizing the number of access points to private property from public highways and streets. Access points along arterial and collector roads are to be minimal, limited to those shown on the Sub-Area Transportation and Access Plan, which are spaced to provide safe, clear and efficient service. Variations to the plan may be allowed if a comprehensive traffic analysis can demonstrate access will not diminish levels of service to adjacent projects. Enhance entrance drives as "gateways" by incorporating consistent design treatments including signs, accent paving, special landscaping and lighting. Design elements should be visually interesting and consistent with other streetscape materials used in the overall development. Locate site access points as far as possible from street intersections in order that adequate stacking room can be provided. Maintain proper minimum separation between public and/or private road intersections and parcel curb cuts. All opportunities to establish cross property access is encouraged.

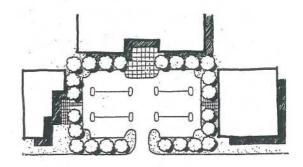
When the opportunity exists, provide common or shared entries. Locate site entries to minimize pedestrian/vehicular conflicts, and design these entries with enhanced paving to differentiate "crosswalks" from sidewalks. Design entrances to align with focal points within the development such as landmark towers or landscape features.



DESIGN VEHICLE ENTRANCES AS ENHANCED "GATEWAYS".



MINIMUM SEPARATION BETWEEN INTERSECTIONS AND CURB CUTS

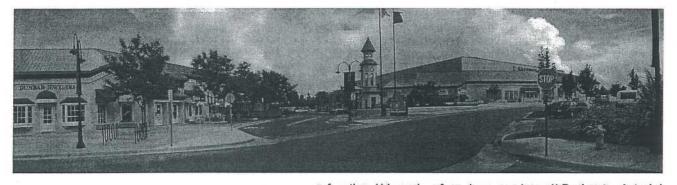


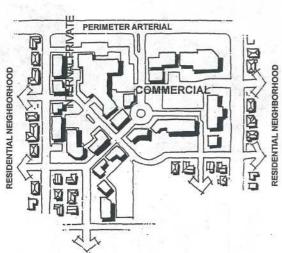
PROVIDE COMMON OR SHARED ENTRIES WHEN POSSIBLE.

#### 4.2 VEHICULAR CIRCULATION

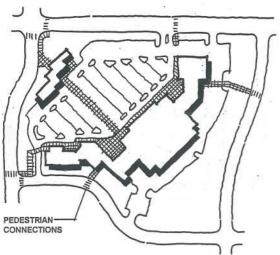
#### POLICY/STANDARD:

From the overall Gateway District scale, to individual building sites, the vehicular circulation system should provide for a





LINK COMMERCIAL DEVELOPMENTS WITH SURROUNDING AREAS.



PROVIDE SEPARATE VEHICULAR AND PEDESTRIAN CIRCULATION SYSTEMS WITH A STRONG EMPHASIS ON PEDESTRIAN LINKAGES.

functional hierarchy of roadways such as: 1) Perimeter Arterial Streets; 2) Internal Private or Public Connector and Local Roadways; 3) Internal Private Drives; and 4) Service Drives. This hierarchy is to be designated in all street and civil engineering design and landscape treatments. The street, access and parking network shall provide for the smooth, safe, convenient and functional movement of all modes of transportation, including vehicles, public transit, bikes and pedestrians with an emphasis to the pedestrian. The vehicular circulation system should link developments with surrounding areas by extending streets (public or private) and sidewalks. Separate parking aisles from vehicle circulation routes and entry drives, Internal roads and drives should reinforce natural and man-made landforms and lead drivers visually to building entries or other intended destinations. Allow for all required vehicle stacking distance and site line distances.

## 4.3 PASSENGER DROP-OFF AREAS

#### POLICY/STANDARD:

Passenger drop-off areas should be incorporated into all projects to provide for safe and convenient access to building entries, and provide a clear separation of vehicular traffic betweendrop-off zones and access to either a parking lot or parking structure. Use a textured paving material that is distinguishable from the travel lane at the drop-off, and use signs to indicate "drop-off zone".

# 4.4 SERVICE, DELIVERY EMERGENCY AND UTILITY ACCESS

#### POLICY/STANDARD:

Convenient and appropriate routes for all required service, emergency and utility accessways should be easily discernible and clearly marked. Vehicle circulation within a development shall be designed to provide safe and efficient turning movements for all anticipated service and emergency vehicles. The design of individual developments to accommodate truck access shall meet all regulatory requirements for turning radii without sacrificing other important objectives of safety and appearance. Where feasible, connect emergency routes between adjacent properties, and provide shared service and delivery accessways between adjacent parcels and/or buildings, where possible.

#### 4.5 PUBLIC TRANSIT FACILITIES

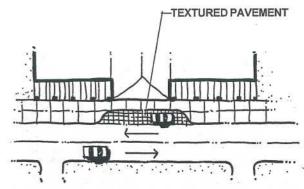
#### POLICY/STANDARD:

Public transit facilities should be provided within all developments to a level consistent with the Gateway district goal to accommodate high volumes of transit patronage. Provision for transit routes, access points, internal site circulation, and boarding areas should be addressed along all major roadways within and along the perimeter of all developments.

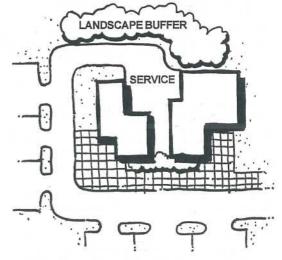
All sites with planned future employment of 1,000 employees or more should designate specific locations for future transit boarding areas at appropriate locations on internal or perimeter roadways. Such boarding areas should be designed and maintained in a manner that makes public transit an attractive, safe and convenient mode of travel for both employees and patrons. Transit boarding areas should be located close to building entrances of all large (>50,000 sf) buildings or clusters of buildings. Transit boarding areas should include attractive shelters with appealing character that are large enough to protect peak period standees from rainfall and should be designed in full accordance with the Americans With Disabilities Act

Transit boarding areas should incorporate either a bus pullout bay (arterial roads and other roads with forecast traffic over 15,000 vehicles per day) or an on-street bus pad which in either case shall be consistent with RTD minimum design standards for such facilities. Pedestrian connections via sidewalks and walkways should be provided between building entrances and all transit boarding areas.

Planning and design of boarding areas should be coordinated with RTD.



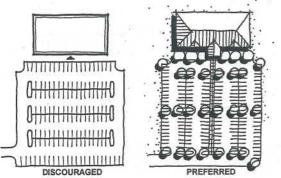
DESIGN DROP-OFF LANES SO AS TO NOT OBSTRUCT TRAFFIC FLOW AND USE TEXTURED PAVEMENT TO DELINEATE THIS ZONE. PROVIDE DIRECTIONAL SIGNAGE TO TRANSIT FACILITIES.



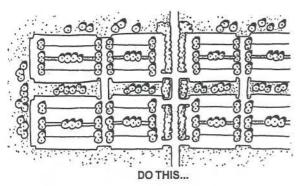
PROVIDE SHARED SERVICE AREAS BETWEEN BUILDINGS OR PARCELS

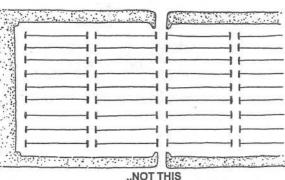
# 

LOCATE BUS SHELTERS CLOSE TO SIGNIFICANT CLUSTERS OF BUILDINGS.



ORIENT PARKING AISLES PERPENDICULAR TO BUILDING ENTRANCES SO PEDESTRIANS WALK PARALLEL TO MOVING CARS.





DIVIDE LARGE PARKING AREAS INTO A SERIES OF SMALLER, CONNECTED LOTS.

#### 4 - 4 Vehicular Circulation and Parking

#### 4.6 SURFACE PARKING LOTS

#### POLICY/STANDARD:

Vehicle parking should be provided to meet the location and quantity requirements of specific uses without undermining the function of other modes of transportation or detracting from the creation of attractive pedestrian environments. All parking lots shall be paved, screened with perimeter landscaping, provide save, clear pedestrian connections to facilities and include landscape islands.

Separate parking areas from buildings by a raised concrete walkway and landscaped area. Situations where parking spaces directly abut structures are not allowed. Orient parking aisles perpendicular to buildings so pedestrians walk parallel to moving cars and/or provide separate distinct pedestrian walkways. Design parking areas in a manner that links buildings to the street sidewalk system as an extension of the pedestrian environment. Use design features such as walkways with enhanced paving, trellises, or special landscape treatments to achieve this objective. Divide parking areas which accommodate more than 100 vehicles into a series of smaller, connected lots where possible. Large projects (with more than 500 cars) will not be held to areas of 100 cars, but will require a comprehensive parking plan that demonstrates landscape mitigation techniques to reduce the visual impact of large parking lots. Use landscaping and off-setting portions of the lot to reduce the visual impact of large parking areas. Avoid aligning all travel lanes in parking lots in long straight configurations that facilitate speeding.

#### Minimum Parking Ratios:\*

The minimum number of parking spaces required per parcel is based on the following ratios (# Parking Spaces/Gross Building Floor Area):

- · Retail Uses
- · Restaurants and Theaters
- · Professional Offices
- · Warehouse Showroom
- · Hotel or Motel
- 5 spaces/1000 SF
- 1space/3 seats
- 4 spaces/1000 SF 4 spaces/1000 SF
- 1space/guest room
  - plus

1space/2 employees

(\* on large projects over 200,000 s.f., a comprehensive parking study may be provided to justify parking ratio adjustments. Shared parking and other parking reduction techniques are encouraged).

Provide spaces for the handicapped in accordance with local codes and ADA requirements. Provide ramps as required. Shared parking between different uses with staggered peak parking demand, is encouraged to reduce the total number of parking spaces within the development. Cross parking easements must be recorded.

Use curbed landscaped islands to designate a change in direction of parking stalls and aisles. Provide landscaped islands at the ends of all rows of parking and between every 20 linear car spaces minimum. Parking bumpers in surface lots are prohibited. Larger projects over 300,00 s.f. with large parking requirements should include a plan showing visual mitigation techniques to diminish the negative impact of lots.

Broomfield / U.S. 36 Gateway District Standards

## 4.7 PARKING STRUCTURES AND PARKING BENEATH BUILDINGS

#### POLICY/STANDARD:

The use of well designed parking structures and parking beneath buildings is encouraged to provide close in spaces and maximize open space areas. The appearance of parking structures, whether free-standing or attached, should relate "architecturally" to the building they serve, and contribute positively to the character of any development. The incorporation of parking structures in a development is encouraged in order to minimize site coverage, however, the location of structures shall not negatively impact the development, adjacent properties, or the visual corridors of the district.

The general architectural criteria shall apply to all parking structures; specifically with regard to mass, scale, and materials. Provide convenient, weather-protected pedestrian connections between parking structures and main buildings, and at pick-up points. Atriums should be considered to let in light. Provide screening at all ground level parking and separate all structures from surface lots with planting areas.

## 4.8 PROVISIONS FOR FUTURE PARKING LOTS AND STRUCTURES

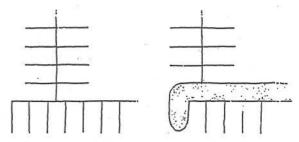
#### POLICY/STANDARD:

Many large projects which are expected to be developed in phases, should anticipate and accommodate such phasing in the parking lot design. Provision should be made for increased parking demands related to anticipated expansions, and for possible changes in use of a building or complex of buildings. Where expansion of a building is planned, reserving appropriate amounts of unimproved land for additional parking or making provisions for structured parking is required at the outset.

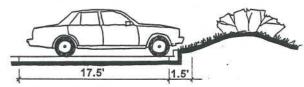
#### 4.9 MOTORCYCLE PARKING

#### POLICY/STANDARD:

Motorcycle parking should be provided to minimize parking areas, and designed and sited in such a way that it is clearly distinguishable from automobile parking. Parking stalls should be identified to encourage orderly positioning of parked motorcycles. Adequate security and visibility should also be concerns. Use concrete paving in these parking areas to support kickstand pressure. Provide motorcycle parking spaces in the following ratio: 1 motorcycle space/40 vehicle parking spaces up to a total of 10 spaces.



USE CURBED LANDSCAPED ISLANDS TO SEPARATE A CHANGE IN DIRECTION OF PARKING STALLS AND AISLES.



PARKING SPACES MAY BE SHORTENED BY 1.5' WHERE THEY ABUT LANDSCAPED ISLANDS.

# 5. PEDESTRIAN AND BICYCLE CIRCULATION DESIGN STANDARDS

#### GOAL:

The Gateway District will be a pedestrian-oriented environment where provisions are required to encourage walking for short trips, and for access to public transit.

All approaches to encourage pedestrian and bicycle circulation will be encouraged and required throughout the Gateway District.

Pedestrian and bicycle systems shall be incorporated into all developments and designed to be safe and invite walking and bicycling throughout the project. Individual parcels and sites should be integrated with the overall community design to form a comprehensive system and to provide convenient access to the adjacent neighborhoods, developments, open space as well as the overall regional trail systems. A comprehensive non-vehicular circulation plan is encouraged.

## 5.1 OVERALL PEDESTRIAN AND BICYCLE CIRCULATION

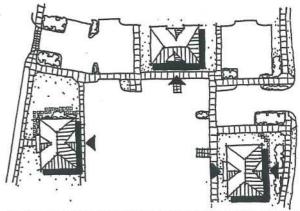
#### POLICY/STANDARD:

Pedestrian and bicycle spaces and routes should be designed to invite walking and riding throughout and around each development. Routes should be fully integrated to form a comprehensive circulation system providing convenient, safe and visually attractive access to all portions of the site. Ease of maintenance should also be considered.

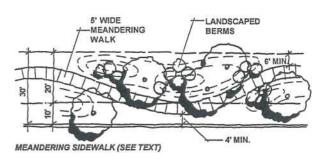
Locate buildings and design on-site circulation to minimize pedestrian/vehicle conflicts. Provide for the separation of pedestrian and vehicle movements with landscaping. Delineate areas of pedestrian and bicycle/vehicle interface with accent pavement and signage to alert drivers to potential conflicts. Locate and align walkways to directly and continuously connect areas or points of pedestrian origin and destination. Minimize pedestrian access and walks on the north sides of buildings where ice build-up occurs. Design sidewalks to be a minimum 8' wide for major walks and 5' wide for minor walks and detached from all arterial, connector and local public streets by a meandering minimum 6 foot wide landscaped plant zone. Note: If the appropriate width is not provided within the public R.O.W. to meet this criteria, a sidewalk easement will be required. Attached sidewalks are permitted only adjacent to internal drives, the front of parking stalls and designated dropoff areas outside of the traffic flows.

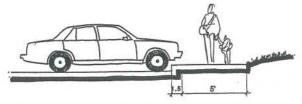


SEPARATE PEDESTRIAN AND VEHICULAR MOVEMENTS WITH LANDSCAPING, BARRIERS, OR OTHER APPROPRIATE DESIGN SOLUTIONS.

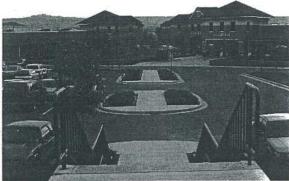


LOCATE AND ALIGN WALKWAYS TO CONNECT AREAS OF PEDESTRIAN ORIGIN AND DESTINATION.





WALKWAYS SHOULD BE WIDENED BY 1.5' WHERE ATTACHED TO HEAD-IN PARKING STALLS.



PROVIDE CLEAR, CONVENIENT PEDESTRIAN ROUTES THROUGH PARKING

## 5.2 PEDESTRIAN CONNECTIONS THROUGH PARKING LOTS

#### POLICY/STANDARD:

Bikeways and pedestrian walkways should be separated and buffered from external and internal automobile circulation within parking lots to the extent possible. Walkways should be designed to lead pedestrians from parking areas to building entrances in order to facilitate convenient movement and minimize conflicts with cars. Pedestrians should feel comfortable that they are in a clearly defined pathway to the building. Pedestrians should not be required to cross drive-thrus or service areas to gain access to major entrances.

## 5.3 ACCESSIBILITY TO THE DISABLED

#### POLICY/STANDARD:

All developments shall be equally accessible to both able and disabled persons. All developments are expected to meet or exceed all requirements of the Americans with Disabilities Act (ADA), and all amendments thereto.

#### 5.4 SITE BARRIERS

#### POLICY/STANDARD:

Barriers should be used to separate vehicular traffic from pedestrian and bicycle traffic for safety purposes, or to restrict access for security reasons. Barriers should be designed as visual assets to the development. Excessive numbers and types of barriers are not allowed. Typical barriers include fences, walls, gates, curbs, bollards, low shrubbery, and berms. Use materials that are similar to others used for site furniture or that relate to the building materials. Alternatives to conventional barriers may include: A change in level between a walkway and the surrounding area, and installing benches, seating walls, bike racks, or raised planters along the edge of a designated route to discourage cross-cutting.

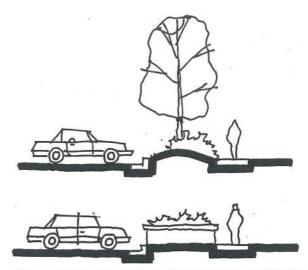
## 5.5 BICYCLE ROUTES AND BICYCLE PARKING

#### POLICY/STANDARD:

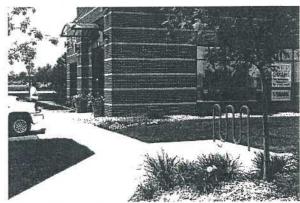
To encourage the use of alternative transportation modes, functional and attractive bike routes and bike parking shall be provided in convenient locations and adequate for both customers and employees. Regional on-roadway commuter bike lanes will not be allowed on freeways, but will be required along all arterials and collector roadway corridors. An interconnected network of bike lanes will be part of each developers site improvements. Off-road regional bike trails will also be interconnected through individual developments to

create a "recreational" bikeway /pedestrian system. Each development will be required to provide on-road and off-road bikeways and sidewalks as needed to maintain continuity and connect each project to the overall regional system.

Locate lighted bicycle parking spaces near both customer and employee building entrances so they are convenient and highly visible. Provide bicycle parking spaces in the following minimum ratio: One (1) bicycle space for every twenty (20) required offstreet automobile parking spaces up to a total of 50 bicycle parking spaces (quantities of bike parking spaces for large projects (with GLA over 200,000 s.f.) should be reviewed/addressed). Providing protection from the elements for bicycle parking is encouraged. Select bicycle racks that provide options for use by a range of bicycle types and locks.



USE LOW WALLS AND BERMS TO SEPARATE PEDESTRIAN AND VEHICULAR TRAFFIC.



LOCATE BICYCLE PARKING CLOSE TO BUILDING ENTRANCES.



PROVIDE RACKS THAT ACCOMMODATE A VARIETY OF BICYCLE TYPES.

#### 6. TRANSIT DESIGN STANDARDS

#### GOAL:

The Gateway District lies along one of the most important transit corridors in the Denver region. Nearly 10,000 people per day board one of the RTD routes running on U.S. 36 and others patronize connecting routes and local circulators. These transit patrons are primarily professionals commuting to work in downtown Denver, downtown Boulder, and other employment centers in the region, and students commuting between jobs and classes.

At build-out, the study area will employ over 60,000 people, and by 2020, daily transit trips within and through the study area should approach 50,000 boardings.

The Gateway District will become one of the region's premier transit accessible destination, and will be developed as a pedstrian-oriented and transit-serviceable environment through the cooperative effort of the landowners, the City of Broomfield and the Regional Transportation District. This will set the area apart as a unique and desirable place to live, work, shop and dine.

## 6.1 OVERALL TRANSIT STANDARDS

#### POLICY/STANDARD:

All sites and locations within the Gateway District will be accessible and serviceable by transit. Pedestrian-oriented design features will be used to support and encourage transit patronage and to ensure that boarding areas are well-integrated into site plans. All District roadways will be designed to accommodate circulation by transit vehicles.

## 6.2 TRANSIT ROADWAY STANDARDS

#### POLICY/STANDARD:

All roadways within the Gateway District will be designed and built to allow access by transit vehicles. Parkway and collector roadway corridors, and principal access roadways shall be designed to enable circulation by regional transit vehicles (40 - 45' vehicles). Preferred lane widths shall be 12' (10' minimum). Minimum vertical clearance of 16' 6" shall be provided. Design of any raised pedestrian crossings shall be coordinated with RTD. A minimum simple curve radius of 35' shall be provided at all intersections.

#### 6.3 BOARDING AREAS

#### POLICY/STANDARD:

Bus stops shall be located wherever possible at the far side of signalized intersections to minimize conflicts between motor vehicles, pedestrians and buses. Mid-block pedestrian crossings coupled with transit boarding areas may be used in locations where intersections are far apart. All boarding areas shall be designed in consultation with RTD and in a manner consistent with the "Creating Livable Communities" handbook published (and available from) RTD.

## 7. ARCHITECTURAL DESIGNSTANDARDS

#### GOAL:

The goal of these architectural design standards is to promote development of high quality architecture. Buildings should convey an image appropriate to the specific use(s) and an enduring expression of this emerging community along the Highway 36 corridor. It is the intent of the Architectural Design Standards to provide flexibility for architectural design, while achieving a sense of continuity for the overall Broomfield Gateway Distric development. The Gateway corridor will develop over a number of years. Structures built later in development phases should express qualities and characteristics that will be shared with those developed in the early phases of construction.

These Standards apply to all buildings within the Gateway District, including retail, corporate campus, multi-tenant buildings, professional offices, hotel, recreation and transit station facilities. Additional architectural design standards for specific subdistrict buildings are included in subdistrict sections of these standards.

## 7.1 BUILDING RELATIONSHIPS AND COMPATIBILITY

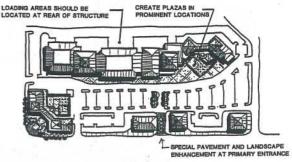
#### POLICY/STANDARD:

All buildings within a proposed development should relate visually and physically to one another, and be compatible with existing buildings on adjacent sites. Orient buildings so they desired views from existing or proposed buildings nearby, and orient buildings to each other so they shape meaningful pedestrian plazas and corridors. Position entrances and courtyards so they relate to entries of adjacent buildings. Use creative architectural solutions where major topographic differences occur with special consideration to mitigating potential negative impacts. Strengthen compatibility by relating to adjacent building heights, setbacks, orientation, mass, similar details, window forms, roof forms, materials, textures, and colors.

#### 7.2 BUILDING HEIGHTS

#### POLICY/STANDARD:

The overall sense of building heights throughout the Gateway District, within a development, should scale. Buildings should appear "anchored" closely to the ground in this gently rolling, open landscape. Building heights are expected (and desired) to vary, especially along the perimeter edges, stepping up in height as developments are further away from major arterials/collectors.



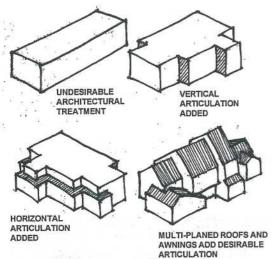
ORIENT BUILDINGS TO EACH OTHER SO THEY CREATE MEANINGFUL PEDESTRIAN PLAZAS AND CORRIDORS.

NEW STRUCTURE

EXISTING
DEVELOPMENT

THE PROPERTY OF THE PROPE

TRANSITION HEIGHT OF NEW BUILDINGS TO BE COMPATIBLE WITH EXISTING DEVELOPMENT.



BREAK LARGE BUILDINGS INTO MODULES OR SUB-PARTS TO REDUCE PERCEIVED SCALE.



USE A VARIATION IN FACADE ELEMENTS TO REDUCE PERCEIVED SCALE.

Relate building heights to adjacent open spaces to: allow maximum sun and ventilation; provide protection from prevailing winds; enhance views of the natural setting; and minimize obstructions of views from adjoining structures. Provide compatibility and "transition" between the height of new development and that of existing development in the area.

In general, use the following building heights and categories:

1. High Tech Research & Development: Two (2) to six (6) stories 2. Corporate Campus: Two (2) to twelve (12) stories

3. Corporate Offices: Two (2) to ten (10) stories
4. Professional Offices: One (1) to six () stories

Light Manufacturing, Aviation and Distribution:

and Distribution:
6. Commercial/Retail/Hotel
7. Multi-Family Residential

8. Transit Stations

One (1) to four (4) stories One (1) to thirteen (13) stories

One (1) to ten (10) stories One (1) to eight (8) stories

Note: All heights shall comply with Jeffco Airport regulations.

## 7.3 BUILDING MASSING, FORMS, AND PEDESTRIAN SCALE

#### POLICY/STANDARD:

Buildings should relate to the natural and human-made terrain and each other in their massing and forms. Typically, buildings should appear to be built upwards from an aggregation of subordinate volumes. Larger masses should be located at the centers of building compositions, with smaller forms stepping down and outwards. Large, square or rectangular "box-like" structures are not acceptable. Facades with a high level of visual interest for both auto and pedestrian viewpoints are encouraged. The exterior character of all buildings should enhance pedestrian activity in their immediate vicinities. Buildings shall have architectural features and patterns that provide visual interest at the scale of the pedestrian, help to reduce mass, and provide local architectural character.

Perceiving the scale of a building in human dimensions is important in terms of a pedestrian's ability to relate to it comfortably. Building mass should be modulated to achieve a small human scale by; subdividing large areas, and variations in color and/or texture. Step downs and setbacks should emulate the terrain and be reinforced by landscape elements. Variation in roof forms, materials, and height of roof elements are encouraged to reduce perceived scale.

Another recommended scale-reducing method is to express the floor levels on the exterior elevations. Wall planes should not run in a continuous direction more than 40 feet without an offset or other relieving elements (use windows, trellises, wall articulation, arcades, material changes, awnings or other features). Large scale buildings over 500,000 GLA should be allowed larger wall surfaces if visual impacts are mitigated through landscaping or other methods. Avoid blank walls at ground-floor levels. Architectural features such as columns, pilasters, canopies, porticos, awnings, brackets or arches should be included to create an interesting, inviting streetscape for pedestrians. Avoid locating walkways where users will be subjected to harsh environmental conditions. Covered walks or arcades are encouraged.

## 7.4 ROOF FORMS AND MATERIALS

#### POLICY/STANDARD:

Rooftops should contribute to the visual continuity of each development and should be considered as design elements seen from various viewpoints: higher surrounding areas, at ground level, from other buildings, and from adjacent perimeter roadways. Roofs should also be interesting when seen from above in higher buildings and roof structures should be used to create a top to the buildings.

Mixing roof forms on buildings creates variety in the "roofscape". Avoid roof lines running in continuous planes of more than fifty (50) feet. Offset or jog the roof planes to add visual interest, reduce the scale and break up long, continuous roof lines. Flat roofs are not encouraged. Roof materials should be of a high quality, durable and reflect consistent local architectural themes. The use of concrete tile, and standing-seam metal are appropriate roof materials. Conceal roof top mechanical units from view with architecturally integrated screening units, roof parapets, and sloped roof forms, as appropriate. Design roof forms to correspond to, and denote, building elements and functions such as entrances, arcades, porches, etc. Roof forms, whether sloping, hipped or gabled, should relate to adjacent buildings or developments. Where possible, develop roof tops as recreation and open space. Quality detailing, accent materials, ornamental ironwork, etc. are highly encouraged.



USE BUILDING MATERIAL THAT CAN VISUALLY BE MEASURED TO GAIN A SENSE OF HUMAN SCALE.

## 7.5 BUILDING MATERIALS AND COLORS

#### POLICY/STANDARD:

Exterior materials and colors should be aesthetically pleasing, of a high quality and compatible with materials and colors of adjoining structures. Visual continuity in major building materials is desired throughout a development project consisting of multiple buildings.

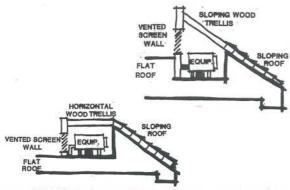
Utilize a simple palette of color, and texture in the exterior material selection. Use natural, earthen materials manufactured in units measurable in human proportions.

- Masonry, brick, and stone in their natural state are strongly preferred as principle cladding materials.
- Textured concrete and concrete block may also be considered.
- Wood is only appropriate in the context of similar adjacent development.
- Stucco, modulated in jointed patterns, is also acceptable.
- 5) Precast concrete with appropriate detailing.

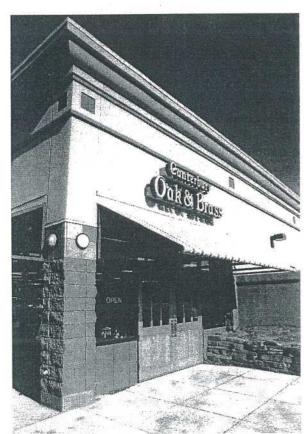
In most cases, select a single, dominant building material and minimize the number of accent materials. Use the same materials and colors on all elevations of a building. Avoid



MIX ROOF FORMS TO CREATE VARIETY IN THE "ROOFSCAPE".



SCREEN ALL ROOF EQUIPMENT WITH MATERIAL CONSISTENT WITH THE MAIN STRUCTURE.



USE HEAVIER MATERIALS AT LOWER PORTIONS OF BUILDINGS.

reflective materials such as bright aluminum and glass as the primary building material that will generate glare. Mirror glass is not allowed. Use heavier materials such as natural stone and masonry materials on the lower portions of buildings to help visually anchor them to the ground. High quality, low-maintenance materials are encouraged. Select building materials that will age with grace.

Choose color combinations for new buildings that are compatible with the colors of adjacent structures and keep their number to a minimum. Avoid large applications of unfamiliar materials or bright colors, (including bright white) that may streak, fade or generate glare. While subdued or muted colors generally work best as a dominant, overall color, a bright or primary color can also be appropriate for accent elements, such as door and window frames, and architectural details.

#### 7.6 BUILDING ENTRANCES

#### POLICY/STANDARD:

Primary building entrances should be easily identifiable and relate to human scale. Develop main entrances to be clearly identifiable from primary driveways and drop-offs. Design building entrances to contrast with the surrounding wall plane. Design primary entrances to positively be accessible to handicapped users without complex ramp systems. Building entrances should be well-lit. Use building entrance ways as a transition from the building to the adjacent landscape.

## 7.7 SERVICE ENTRANCES AND LOADING AREAS

#### POLICY/STANDARD:

Service areas should be visually unobtrusive and should be integrated with the site design and the architecture. Orient service entrances, loading docks, waste disposal areas and similar uses toward service roads and away from major streets. Screen service areas with walls and/or landscaping. Utilize shared service drives where feasible. Avoid placing service areas where they will be visible from adjacent buildings or where they will negatively impact important/identified view corridors.

## 7.8 ENERGY CONSERVATION MEASURES

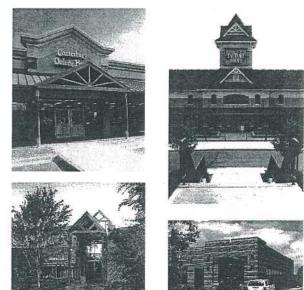
#### POLICY/STANDARD:

Efforts to conserve energy and other natural resources will be required in the design of each building. Local climate conditions afford the opportunity to take significant advantage of passive

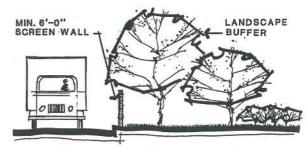
and active solar energy applications. Buildings should be designed and sited to maximize the use of solar gain for energy savings, and respect the solar access requirements of adjacent (existing and proposed) buildings.

Energy conserving concepts to be considered shall include, but are not limited to the following:

- Building shape, mass, orientation and placement.
   Orient buildings to take advantage of the prevailing summer winds and to buffer against adverse winter winds
- 2) Clustering buildings
- 3) Types of materials, and their insulation characteristics.
- 4) The arrangement and design of windows and doors.
- 5) Direct solar or photovoltaic energy.
- 6) Daylighting concepts.
- 7) Earth sheltering with creative land forming.
- 8) Natural ventilation of outdoor, indoor and attic spaces.



DEVELOP MAIN ENTRANCES TO BE CLEARLY IDENTIFIABLE.



SCREEN SERVICE ENTRANCES AND TRASH DUMPSTERS WITH WALLS AND/ OR LANDSCAPING.

# 8. LANDSCAPE AND IRRIGATION DESIGN STANDARDS

#### GOAL:

Landscaping and decorative elements including fences and walls for all development areas shall be provided within each building site to: 1) enhance the aesthetics of the development, 2) create a pedestrian friendly environment, 3) break up the mass of buildings, 4) soften architectural materials, 5) provide screening of service areas, 6) enhance the streetscape/parkway environment, 7) define building and parking area entrances, 8) provide shade and climate control, and 9) provide buffers between incompatible land uses. Water conservation efforts will include the use of drought tolerant plant species, native to the region.

The Landscape Design Criteria addresses 4 distinct zones; corresponding to the 4 major design influences on each commercial site.

- 1) Perimeter Landscaping Adjacent to Public Roads
- 2) Perimeter Landscaping Adjacent to abutting property
- 3) Parking Lot Landscaping
- 4) Individual Building Landscaping

#### 8.1 PERIMETER LANDSCAPING ADJACENT TO PUBLIC AND PRIVATE ROADS

#### POLICY/STANDARDS:

Roadway corridors throughout the Gateway District shall provide a visually cohesive landscaped system. Similar landscape treatments should be used at all entrances and intersections. Plant materials, massing, spacing, and height characteristics should convey the hierarchy of roadways. Planting and grading should work together to create a variety of experiences along these roadways and to call attention to open space amenities.

The following landscape treatments should be incorporated for these site conditions:

#### Entries:

Include a combination of manicured and enhanced natural landscape areas, at entries and project identification markers along the perimeter edge of all development sites. Provide a minimum of 3 levels of scale, including shade, evergreen, and/ or ornamental trees, shrubs, annual and perennial flowers, and ground covers. Integrate the plant design with the entry sign. Plantings should frame or provide a visual base for the signs.

#### Fences & Walls:

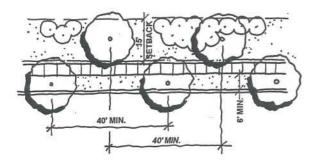
Off-set long expanses of fence and wall surfaces to create landscape pockets wherever possible.

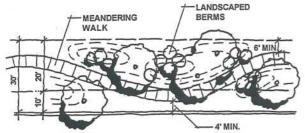


INCLUDE A COMBINATION OF MANICURED AND ENHANCED NATURAL LANDSCAPE AREAS.

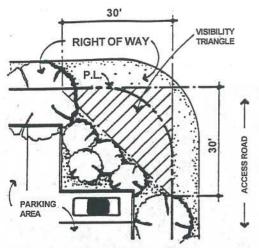


CREATE LANDSCAPE POCKETS IN FENCES AND WALLS WHERE POSSIBLE.

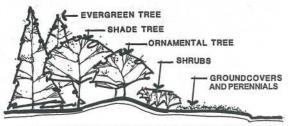




LANDSCAPE REQUIREMENT DIAGRAMS



TYPICAL SIGHT LINES AT INTERSECTIONS



PROVIDE A MINIMUM OF 3 LEVELS OF LANDSCAPE SCALE AT ENTRY DRIVES.

#### Roadway and Median Plantings:

Vary street tree planting species in medians and parkways to enhance the streetscape experience and provide rhythm of plantings by selecting street trees with similar characteristics (i.e., height and branching patterns).

#### **Detached Walks:**

Provide a minimum of 1 tree per 40 lineal feet of street frontage between the sidewalk and curb, and an additional 1 tree and 10 shrubs per 40 lineal feet of street frontage within 10 feet outside the sidewalk, internal to the development.

#### Attached Walks:

Provide a minimum of 1 tree per 20 lineal feet of street frontage within 15 feet of the edge of the sidewalk and a minimum of 5 shrubs per tree plus perennial flower beds, ground cover or grass lawn is required within 20 feet of the edge of curb.

#### Meandering Sidewalks:

Provide a minimum of 1 tree per 20 lineal feet of street frontage and accompany the trees with a variety of shrubs and ground covers and make berming an integral component of the landscape design. A minimum of 10 shrubs per tree plus perennial flower beds, ground cover or grass lawn is required.

#### Sight Triangle:

Provide adequate sight-lines for an effective 6 foot sight triangle per the City codes. Plant parkways with landscape materials that do not interfere with the visibility of the motorist. Plant trees a minimum of 3 feet from the back of curb and choose shrubs that do not exceed mature heights as required by City Code.

## 8.2 PERIMETER LANDSCAPING ADJACENT TO ABUTTING PROPERTY

#### POLICY/STANDARDS:

Visual buffers should be provided between similar land uses to accomplish transitions and to mitigate potential conflicts between dissimiliar uses.

The following landscape treatments should be incorporated for these site conditions:

Between similar uses (i.e., where a large scale commercial/ retail use abuts a small scale retail use or office complex):

Provide a minimum 15 foot wide buffer planting strip next to a property line containing 1 tree for every 20 lineal feet of property line and a screen hedge incorporating both deciduous and evergreen shrubs a minimum of 3 feet in height (at maturity) along a minimum of 50% of this perimeter area.

Note: Plant spacings shown are to quantify numbers of plants not "typical" spacings, and clustering of plants in natural pattern is highly encouraged.

Between dissimilar uses (i.e., where a commercial/retail use abuts a residential area):

Provide a minimum 30 foot wide buffer planting strip incorporating a minimum 3 foot high berm containing a minimum of 1 tree for every 20 lineal feet of property line and a screen hedge incorporating both deciduous and evergreen shrubs a minimum of 5 feet in height (at maturity) along a minimum of 50% of this perimeter area.

#### Common/Shared Access Drives:

Provide a minimum 8 foot wide buffer strip along both sides of a shared access drive when no sidewalk is included. Provide a minimum 12 foot wide buffer strip along both sides of a shared access drive where a sidewalk is included.

#### 8.3 PARKING LOT LANDSCAPING

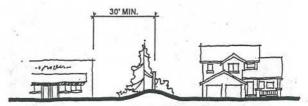
#### POLICY/STANDARDS:

Parking lots are necessary features of building sites that can, if not designed properly, visually detract from the overall development character. Parking lots within the Gateway District should be designed to blend with each building site's character using landscape plantings and grading.

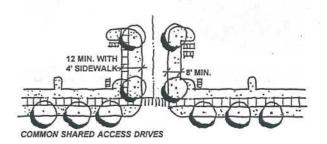
The use of low, opaque walls and/or colorful landscaping combined with berming will screen parking from peripheral streets. Where practical, lower the grades of parking lots below existing street elevations to minimize visual impacts, while promoting views of architectural elements. Landscape a minimum of (10% up to 500 car lots, 8% up to 1,000 car lots; 5% above 1,000 car lots) of each total parking lot (excluding perimeter landscaping). A minimum of 1 tree per 10 parking spaces (average equivalent) is required in all parking lots, to be planted in islands, medians, and perimeter areas adjacent to lots (excluding streetscape tree plantings). Utilize landscaped islands and medians to improve the definition of circulation patterns, provide shading for paved areas and break up continuous rows of parking.

Incorporate 6' foot minimum wide landscaped islands at the end of every row of parking, and provide a minimum of 2 shade trees in each island. In addition to the trees, plant each island with a minimum of 8 shrubs, not exceeding 3 feet in height at maturity.

Landscaped Medians should provide a effective pedestrian walkway a minimum 4 feet wide, exclusive of car overhangs. Where walkways in medians will not be utilized, the medians may be reduced to a width of 8 feet. Place landscape medians between every fourth parking bay in lots for more than 100 cars. Provide a minimum 1 canopy shade tree and 8 shrubs for each 30 lineal feet of median (average equivalent - clustering encouraged). The use of landscape medians is encouraged as a transition slope between parking bays on hillside parking lots (maximum slope of 4:1).

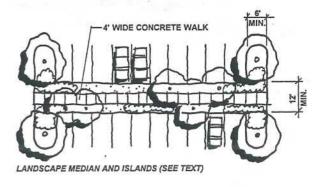


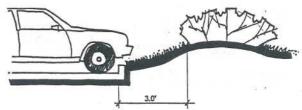
PROVIDE A 30' WIDE PLANTING STRIP BETWEEN DISSIMILAR USES.





USE LOW WALLS, BERMING AND LANDSCAPING TO SCREEN PARKING.

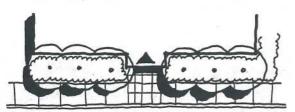




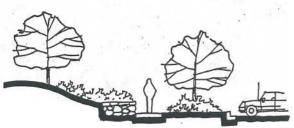
SET SHRUBS 3' BACK FROM CURB AT THE FRONT OF HEAD-IN PARKING STALLS.

Landscape and Irrigation Design Standards 8 - 3

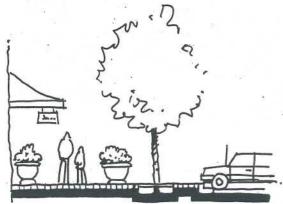
EMPHASIZE AND INTENSIFY LANDSCAPE AT BUILDING ENTRANCES, INCLUDING FLOWER BEDS WITH A VARIETY OF PERENNIALS, ANNUALS, GROUND COVERS AND ORNAMENTAL GRASSES.



PROVIDE LANDSCAPING AROUND BASES OF BUILDINGS (SEE TEXT).



PROTECT LANDSCAPING FROM PEDESTRIAN AND VEHICULAR TRAFFIC WITH ATTRACTIVE BARRIERS.



USE CONTAINERS WITH FLOWERING PLANTS TO ENHANCE SIDEWALK SHOPS, PLAZAS AND COURTYARDS.

## 8.4 BUILDING SITE LANDSCAPING

#### POLICY/STANDARDS:

The coordination of landscape design within the Gateway District, for individual building sites and larger, multi-parcel projects is essential for creating a consistent, high-quality character. A cohesive design unifies the various buildings and strengthens the cohesiveness of the development. Individual landscape treatments for building sites must compliment the roadway landscapes, create distinctive settings for buildings, help reinforce the design of the open space system and provide a transition for pedestrians.

Use landscaping that is of appropriate scale and emphasize landscaping at building entrances to provide focus and accent. Provide landscaping around the bases of buildings to soften the edge between sidewalks/parking lots and structures.

The Minimum Landscape Area required within each building site shall be 25%, (see also 3.2, including parking lot landscaping, hardscape plazas, and walkways.)

#### 8.5 LANDSCAPE IRRIGATION/ WATER CONSERVATION

#### POLICY/STANDARDS:

Every effort should be made to conserve water by utilizing alternative means for maintaining a suitable landscape environment. In areas where irrigation systems are utilized, water conservation should be emphasized through the use of water efficient systems and the selection of plant materials with low water requirements.

Incorporate a "zoned planting scheme" to reduce water demand by grouping similar varieties of native plants that are drought and disease tolerant together. Limit the use of blue grass. Incorporate heavily mulched planting beds to aid in retaining moisture and make planting areas easier to maintain. Improve the soil prior to planting for better water absorption and retention. Install an efficient automatic irrigation system that will incorporate water conservation measures. areas, with drip irrigation for shrubs and trees.

#### 8.6 LANDSCAPE STANDARDS AND PLANT MATERIAL SELECTION/PLANT SIZE STANDARDS

#### POLICY/STANDARDS:

For a strong visual impact plants should be used in masses of the same species and rows or clumps of the same trees. Random spotting of many different types is not appropriate. Planting should reinforce the site planning concepts and complement architectural forms.

Landscape development within the Gateway should fall into one of the following zones:

High Maintenance Zone (located at site and building entrances and pedestrian areas):

These area manicured lawns which require weekly mowing and regular watering, formal plantings of trees and shrubs, and planters, with annuals and perennials.

Medium Maintenance Zone (located along perimeter roadways and at building entrances):

These are native grasses which require less water and maintenance, large shrubs, and large specimen trees.

Low Maintenance Zone (located in environmentally sensitive areas, along waterways and open space areas):

These are existing vegetation and natural areas with drought resistant plant species including meadow/open fields, and wetlands areas.

The selection of plant materials should come from the Recommended Plant Materials List

These materials were selected on the basis of suitability to climate, setting and compatibility with other development plantings, character and functions. Select plant materials that are free of disease and harmful insect problems. The quality of plant material selected will follow the guidelines of the "American Standard for Nursing Stock" by the American Association of Nurserymen unless otherwise indicated.

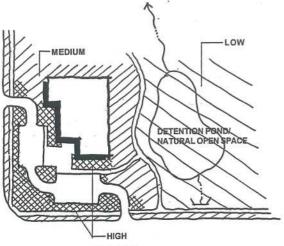
The following design considerations should be taken into account when selecting plant materials:

Choose plant materials that provide variety and year-round color and screening. Plant annual and perennial flower beds in visible areas such as pedestrian plazas, building entries and vehicular entries, to create color, texture and interest. All planting beds should be mulched with wood or rock to stabilize soils, control erosion, and conserve water use.

## 8.7 LANDSCAPE MAINTENANCE AND REPLACEMENT

#### POLICY/STANDARDS:

The property owner is responsible for providing, protecting and maintaining all landscaping in a healthy and growing condition. The property owner will remove and replace dead or diseased plant materials immediately with the same type, size, and quantity of plant material as originally installed.



#### LANDSCAPE MAINTENANCE ZONES

#### 8.8 EXISTING VEGETATION

#### POLICY/STANDARDS:

Special attention should be paid to preserving significant natural features and vegetation within the Gateway District. "Significant" is considered to be any vegetation of unique character due to its history, size, variety, or growth habits. This includes all mature trees greater than 3 inches in diameter and significant understory plants and shrubs. Specific requirements include the following:

Locate site and building improvements to preserve significant natural vegetation. Preserve and incorporate into the landscape plan, any existing healthy tree 3" caliper or larger, and located more than 20 feet from any proposed building location. Preserve all existing trees over 24" caliper unless deemed unhealthy or unsuitable for preservation. During construction of site improvements, erect suitable protective barriers around trees to be preserved, making sure trunks, branches and root structures are not damaged by construction equipment (generally located beyond the drip line). Incorporate tree wells or retaining walls as necessary in the landscape plan to protect existing trees. Maintain historic drip lines.

## 8.9 WALL AND FENCE DESIGN MATERIALS

#### POLICY/STANDARDS:

Fencing and walls shall be constructed of materials that are compatible with the adjacent building architecture and their appearance softended with landscape materials whenever possible.

In general, avoid using retaining walls in excess of 72 inches in height. Where taller retaining walls are required near pedestrian zones, provide safety protection in the form of railings, fences or hedges or create a terrace with two (2) shorter walls. Incorporate architectural treatment on both sides of perimeter walls, and provide landscaping to soften their appearances. Break up long expanses of fences or walls with periodic columns, insets or change in materials. When walls or fences are required, construct them from durable materials such as stone, brick, or metal with dark finishes (wrought iron or similar), or a combination of these materials. Chain-link and wood are not acceptable screening materials.

#### 8.10 SCREENING REQUIREMENTS

#### POLICY/STANDARDS:

Integrate walls and fences into the building architecture and site design and set at an appropriate height to accomplish adequate screening of meters, transformers, loading, and service areas. Make screening for loading docks and service areas a minimum of 6 feet high and constructed of the and finishes compatible with the main building. Conceal all materials, supplies, trucks, or equipment stored on a site inside a closed building or behind a visual screen. All noise pollution and noxious odors shall be mitigated



PLANT FLOWER BEDS IN VISIBLE AREAS.



REMOVE AND REPLACE DEAD OR DISEASED PLANT MATERIALS IMMEDIATELY.

#### **EXTERIOR SITE** LIGHTING DESIGN **STANDARDS**

#### GOAL:

Exterior lighting should be used to provide illumination for the security and safety of entry drives, parking, service and loading areas, pathways, courtyards and plazas, without intruding on adjacent properties. Site lighting shall be architecturally compatible and consistent in design between sites.

#### 9.1 FIXTURE DESIGN AND **ILLUMINATION LEVEL**

#### POLICY/STANDARD:

Exterior light standards should be designed as a "family" of compatible fixtures which relate to the architectural character of the buildings on a site. Site lighting should be provided at the minimum level (per City Standards) to accommodate safe pedestrian and vehicle movements, without causing any offsite glare. Meet all regulatory requirements for lighting.

Poles and fixtures should be architecturally compatible with structures and lighting on adjacent properties. Illuminate all intersections and perimeter public roads with similar poles and fixtures. Select and locate all lighting fixtures to shield or confine light spread within a site's boundaries and to eliminate light directed towards the sky. To facilitate security, specify lighting levels that are adequate for visibility, but not overly bright. All building entrances should be well-lighted.

#### 9.2 DECORATIVE **ARCHITECTURAL LIGHTING**

#### POLICY/STANDARD:

Special lighting that accents building features and creates visual interest is permitted in the Gateway District, provided that design continuity is maintained among buildings.

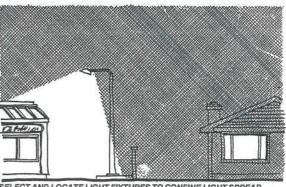
Lighting fixtures mounted directly on structures may be allowed when utilized to enhance specific architectural elements or to help establish scale or provide visual interest. Integrate illuminators or fixtures used to light building mounted signage, building facades or pedestrian arcades, into a building's architectural design. Consider highlighting entrances, art, terraces, and special landscape features.



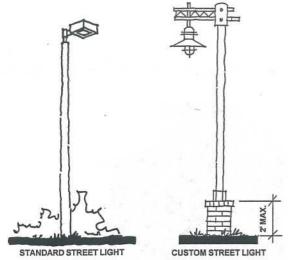
LIGHTING SHOULD BE A "FAMILY" OF COMPATIBLE FIXTURES WHICH RELATE TO ARCHITECTURAL CHARACTER.



POLES AND FIXTURES SHOULD BE COMPATIBLE WITH ADJACENT STRUCTURES AND LIGHTING.



SELECT AND LOCATE LIGHT FIXTURES TO CONFINE LIGHT SPREAD.



ARCHITECTURAL LIGHTING FIXTURE MOUNTS

USE LIGHTED BOLLARDS TO IDENTIFY PEDESTRIAN AREAS.

#### 9.3 PARKING LOT LIGHTING, PEDESTRIAN, LANDSCAPE LIGHTING

#### POLICY/STANDARD:

Parking lot lighting should be unobtrusive, and should not attract attention to itself, but rather provide safe light for orderly functions.

The fixtures should be uniform in design and provide adequate lighting for all areas. Select metal halide lighting with a concealed light source of the "cut-off" variety to prevent glare and "light trespass" onto adjacent buildings and sites. Emphasize pedestrian ways through parking lots with lighting.

Walkway lighting should be scaled to the pedestrian (10'-16' ht.) and provide for safe passage particularly in areas which are dangerous, such as stairs, ramps, intersections, and underpasses.

The use of lighted bollards with incandescent or metal halide lamps or other low level fixtures is encouraged to identify pedestrian walkways and drop-off areas at entrances to buildings. Emphasize pedestrian-to-vehicle intersections with low level decorative street lights.

Landscape lighting should enhance and complement the landscape materials in the night-time hours.

The design of the landscape lighting should work for all seasons of the year and through the life of the landscape. When mounting from tree locations, consideration of the mature size of the plant and surrounding plant life will help achieve the desired effect. Conceal fixtures where possible (ie. in trees, by landscape, behind rocks), control glare, and avoid extreme bright spots on the surrounding landscape.

#### 10.EXTERIOR SIGNAGE DESIGN STANDARDS

#### GOAL:

Signs should contribute to the visual continuity of the development, but should be subordinate to architectural and landscape elements. Signs serve important functions in areas used by the public. They identify, inform, direct, regulate and interpret. Buildings within the Gateway District should have a consistent and comprehensive sign program from project identification at the street through individual tenant suite identity. Consideration must be given to sign location, layout, organization, and length of message, the typeface, the design of supporting structures, and the compatibility with other signs in the system. All projects in the Gateway District involving more than 200,000 SFGLA shall provide comprehensive signage a design program plan to demonstrate that the proposed signage will meet the genereal intent of this section.

# MONUMENT SIGN DIMENSIONS

#### 10.1 SIGN MATERIALS

#### POLICY/STANDARD:

Design and construct signs of durable, high quality architectural materials.

Utilize materials and colors in the sign system that are architecturally compatible in color and design with the associated structures and that do not detract from the architectural character or aesthetic appeal of the community. Signs for similar purposes should be consistent in style and detail.

#### 10.2 SIGN SHAPES AND SIZES

#### POLICY/STANDARD:

The size of signs should be modest and afford businesses sufficient visibility and identification without becoming a dominant part of the landscape or interfering with vehicular movement along the public streets. Sign size shall be consistent with and conform to the City of Broomfield Sign Code. Sign forms should be simple and act as subordinate elements in the landscape.

The following conditions shall apply to all signage within the Gateway District.

One freestanding sign is allowed per development project and must be of a ground-mounted monument type. The display area shall not exceed 32 SF (total per sign) and the vertical dimensions of the monument sign display area shall be no greater than 4 feet with the top of the sign being no higher than 6 feet from grade level. The horizontal dimensions of the monument sign display area shall be no greater than 8 feet. The total allowable area of flush-mounted signs on buildings shall be computed by the following formula: 1 square foot of



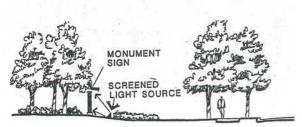
FREESTANDING SIGNS MUST BE GROUND-MOUNTED AND MAY BE DOUBLE FACED.



FLUSH MOUNTED SIGNS (SEE TEXT)



LOCATE MONUMENT SIGNS IN A PLANTER SETTING WITHIN A LANDSCAPED AREA.



EXTERNAL LIGHT SOURCES DIRECTED AT SIGNS SHOULD BE CONCEALED FROM PEDESTRIANS' AND MOTORISTS' "LINES OF SIGHT".



USE MONUMENT SIGNS AT THE STREET OR PRIMARY ENTRIES TO PROVIDE PROJECT IDENTITY.

sign area per lineal feet of building frontage on a street of the individual business, subject to the provisions of the City's Sign Code up to a maximum total sign area of 200 square feet per elevation. Flush mounted signs are limited to 2 building elevations. The maximum number of flush-mounted signs allowed for each free-standing building is 3. If a small monument sign is desired as well, the total allowed flush-mounted signs is 2. The exception to this is the provision of sign bands/panels above the store fronts within a cluster of small retail businesses. Use simple, straight-forward shapes that convey the message clearly. Signs as symbols are encouraged because they are easily read and enhance pedestrian interest.

#### 10.3 LOCATION/PLACEMENT/ VISIBILITY

#### POLICY:

Signs shall be located to be visible and legible from streets and paths without conflicting with safe vehicular or pedestrian movement and visibility.

Monument signs should be located in a planter setting within a landscaped area, and a minimum of 8 feet from the right of way so as to not obstruct visibility at intersections.

#### 10.4 SIGN ILLUMINATION

#### POLICY:

Sign illumination should complement, not overpower, the image of the building and its immediate landscaping.

The use of individually-cut, back-lit letter signs is strongly encouraged. When external light sources are directed at the sign surface, conceal the light source from pedestrians' and motorists' "lines of sight". Avoid light spill onto adjacent areas. Flashing signs are not permitted under any circumstances.

#### 10.5 ALLOWABLE SIGN TYPES

#### POLICY:

In general, the type of sign used should reinforce the urban environment of commercial developments. Signs should be designed as a "family", incorporating similar, compatible materials that reinforce the design and style of the project architecture. The following sign types should be considered within a project site.

#### Monument Signs:

Monument signs may be located at the street or primary entries to commercial developments to provide the overall project identity. Smaller scale monument signs, less than 20 SF, may be located at primary entries to free-standing office buildings to provide individual business identifications and building

addresses. Such sign shall contain only the name or trademark of the business, building or building complex which it identifies and shall not contain change panels, advertising or names of individual tenants. Affix monument signs to the ground in a continuous connection and integrate monument signs into landforms or landscaping. For multiple user facilities such as shopping centers or office buildings, site ID signage requires additional variables that must be considered. Conceptual designs for signs serving these types of facilities must be submitted to the planning department with the site development plans.

#### Flush-mounted Signs on Buildings:

Locate flush-mounted signs on buildings at the first floor level only for retail uses and at the second floor level for office uses. Wall signs shall identify the individual business, building or building complex by name or trademark only. Flush-mounted signs may not project more than 8 inches from the face of the building.

#### **Projecting Signs:**

Signs that project perpendicular from a building are allowed for multi-tenant retail and office uses within a predominantly retail center only. Projecting signs may not exceed 4 square feet in area, must be mounted above 7 feet from grade and may not project more than 5 feet from the attached wall.

#### Pole-mounted Signs:

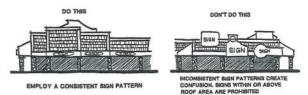
Pole-mounted signs are allowed only as traffic regulation signs providing appropriate directions to loading and receiving areas, visitor parking, and other special areas within each development site. These signs may not exceed 4 square feet in area and 6 feet in height measured from grade.

#### Flashing or Moving Signs:

Flashing or moving signs are not permitted.



SMALLER SCALE MONUMENT SIGNS MAY BE LOCATED AT PRIMARY ENTRIES TO PROVIDE INDIVIDUAL BUSINESS IDENTIFICATIONS AND ADDRESSES.



LOCATE FLUSH-MOUNTED SIGNS ON BUILDINGS AT THE FIRST FLOOR LEVEL ONLY FOR RETAIL AND AT THE SECOND LEVEL FOR OFFICES.



FLUSH-MOUNTED SIGN AT THE FIRST LEVEL



SIGNS THAT PROJECT FROM A BUILDING ARE FOR RETAIL USE ONLY.



PROJECTING SIGNS MAY NOT EXCEED 4 SQUARE FEET IN AREA.

#### 1 1.EXTERIOR / SITE FURNISHINGS DESIGN STANDARDS

#### GOAL:

The purpose of the site furnishing guidelines is to provide a visually attractive and coordinated selection of trash receptacles, drinking fountains, bike racks, and tree-grates. These site furnishings are extremely important to the overall character and impression of the Gateway District.

## 11.1 REQUIRED SITE FURNISHINGS

#### POLICY/STANDARD:

Major site furnishings include benches, waste receptacles, planters, railings and bollards. In general, visual continuity of these elements is desired throughout the District. All components of outdoor site furniture should be low maintenance and resistant to vandalism.

#### **Outdoor Seating:**

Design/select outdoor seating that is comfortable, attractive, durable and easy to maintain. Locate benches at major building entryways, drop-off areas, transit stops, pedestrian courtyards and plazas. Locate benches in areas that receive direct sunlight in the winter, are sheltered from the winds and shaded in the summer. Where seating is designed to be fixed, provide a variety of arrangements (both linear and grouped), which accommodate two (2) to six (6) persons

#### Planters and Waste Receptacles:

Design planters and waste receptacles to coordinate with other furniture. Use materials and colors similar to those used for benches.

#### Tree Grates:

Use tree grates to prevent excessive soil compaction and to give added interest to the pavement. Choose tree grates that are fabricated of a strong non-rusting steel, capable of supporting maintenance vehicles. In some areas which receive heavy use by people, tree guards may be appropriate to give added protection to young trees.

#### Trash Dumpsters:

Locate trash dumpsters near building service entrances, easily accessible by trucks and away from predominantly public areas. Provide concrete pad, minimally 8 feet wide, to provide truck access to dumpster locations.

Whenever feasible, gang trash dumpsters in areas to be shared	
by multiple buildings and users. Enclose gate and landscape around all trash dumpsters.	
Bicycle Racks:	
Bicycle racks should be compatible with other site furnishings. These should be located in major activity areas within close proximity to building entrances, adjacent to walkways.	
11.2 OPTIONAL SITE FURNISHINGS	
POLICY/STANDARD:	
While the following site furnishings are not required in all public areas, it is important that an attractive and coordinated system of these amenities be provided.	
Newspaper Vending Machines:	,
Group newspaper and other publication vending machines in pedestal-mounted racks. Select locations near activity centers and principal entry points to buildings. Screen side and rear panels with hedges or walls. Install pedestal or wall-mounted machines that project into circulation spaces no higher than twenty-seven inches (27") above floor level. Projections above this height are a hazard to white cane users.	

#### 12.ENVIRONMENTAL SENSITIVITY DESIGN STANDARDS

#### GOAL:

Residents, workers, visitors and all types of users are attracted to Boulder County and the Broomfield Gateway District area as a result of an exciting blend between economic vitality, quality of life, and natural beauty. Preservation of this proper blend, while inevitable changes occur, is the key to the ongoing future stability and quality of the Gateway District area.

#### POLICY/STANDARD:

Each development should view environmentally sensitive design challenges as opportunities to create lasting value and real beauty by respecting the natural environment and creatively responding to it, rather than opposing it. Towards that end, the Gateway District seeks to achieve ecological development through sustainable design principles, and ongoing environmental programs and maintenance. The application of emerging eco-technologies and environmentally sensitive design will be an ongoing and evolving part of the development approval process within the Gateway District.

#### 12.1 ENVIRONMENTALLY SENSITIVE DEVELOPMENT STANDARDS

#### POLICY/STANDARD:

Each development will be required to demonstrate compliance with the intent of this section. All reasonable efforts will be required to apply latest technical understandings toward the preservation of sensitive natural features or natural systems, mitigation of development impacts to natural patterns, conservation of resources, optimization of the efficiency of systems, safe technologies, and recycling of valuable materials. Developers in the Gateway District will be expected to "take the lead" in the industry implementing and managing sustainable design concepts. Many eco-development programs do not cost more and may even save money in the initial stages.

## 12.2 SUSTAINABLE DESIGN CONCEPTS

#### POLICY/STANDARD:

To the extent possible and practical each development shall comply with the following sustainable design concepts:

Integrate all development into the existing sites in an environmentally sensitive way, minimizing disturbance to the site and responding to the unique natural patterns (ie. topography, drainage, wildlife, and vegetation). Plan site improvements to conserve resources and factor in local climate conditions.

Choose "renewable materials" to maximize durability, minimize waste and maintenance cost. Eliminate the use of toxic materials, and conserve resources throughout the full life-cycle, from raw material stages to the final product and replacement materials. Employ all reasonable energy and resource conservation practices including soil protection, water conservation, and energy efficient systems throughout. Pursue natural bio-filtration systems in drainageways to purify runoff. Omit all toxic emissions and pursue all avenues to reduce automobile traffic and thereby reducing air pollution. Pursue solar opportunities and daylighting concepts.

#### 12.3 ONGOING ENVIRONMENTAL PROGRAMS AND MAINTENANCE

#### POLICY/STANDARD:

A key aspect of environmental sensitivity design is the ongoing environmental programs and maintenance. Each development is encouraged to pursue all opportunities to promote car pooling, ride sharing, bus pass programs, and all other programs which reduce single-occupant vehicles. Energy conservations programs to educate and remind users to recycle and conserve resources are important to meet the overall goals of the Gateway District. Ongoing maintenance of ecodevelopment concepts and programs is required to continue effective environmental sustainability.

# 13. CONSTRUCTION CRITERIA AND MAINTENANCE STANDARDS

#### GOAL:

The importance of proper construction implementation, site operationals, as well as ongoing maintenance standards have a very significant impact on the surrounding property owners, users, public, and ongoing success bu the Gateway District. Beyond the proper and creative design and planning of Development Improvements, it will be required for each development to demonstrate criteria and systems to protect the City, the public, and others during all phases of implementation of each project. The ongoing maintenance operations and management to continually portray a high quality image reflective of a premier Gateway District will be required.

## 13.1 CONSTRUCTION STAGING AND SITE MANAGEMENT

#### POLICY/STANDARD:

Each developer will need to continually demonstrate clear plan to protect the City, public, and others during all operations and to fully coordinate schedules and impacts with adjacent owners, developers, contractors, tenants, and users. Each developer shall prepare and have available for review by the City an accurate and updated "Construction Site Logistics Plan" demonstrating: general schedule of product, siting of construction, staging areas, erosion control measures, vehicular access/servicing/deliveries, and construction parking controls (including mud control devices). Pedestrian, bike, transit, and emergency access and circulation requirements and protection will all need to be addressed (submit with plans for building permits).

## 13.2 TEMPORARY STRUCTURES FACILITIES

#### POLICY/STANDARD:

In addition to all regulatory requirements, each development phase within the Gateway District will need to clearly demonstrate and receive City approvals for all temporary structures and facilities. The Construction Site Logistics Plan should show all temporary structures, trailers, lighting, signage, utilities, and key security measures (submit with plans for building permits).

#### 13.3 POLLUTION CONTROLS

#### POLICY:

The Construction Site Logistics Plan should clearly show mitigation controls to avoid all aspects of pollution throughout all phases of construction. Dust, noise, erosion, emulsions, debris, toxic chemicals, and all other forms of pollution. Regular and periodic clean up the site will be required to minimize the potential impact of construction on adjacent property, including visual nuisance (submit with plans for building permit).