City of Sacramento

NORTHGATE BOULEVARD

STREETSCAPE MASTER PLAN

February 2006
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EXECUTIVE SUMMARY

The Streetscape Master Plan Project for Northgate Boulevard was initiated in the winter of 2003 in response to community needs and desires expressed in the Gardenland- Northgate Strategic Neighborhood Action Plan (SNAP). The project specific area for this Master Plan is Northgate Boulevard from Rosin Court at the north end to Arden- Garden Connector at the south end. The objectives of the streetscape Master Plan are:

- improving pedestrian and bicycle safety,
- encouraging walking options,
- identifying land use changes that would encourage residential and commercial development, and
- enhancing the overall image of the area.

The proposed improvements have been defined through a series of stakeholder meetings, community meetings, Project Development Team meetings, and meetings with the Council District 1 staff and Councilmember. Stakeholders included the Smythe School, Gardenland Northgate Neighborhood Association (GNNA), business groups, Natomas Community Association, and others. Overall, the proposed improvements have the support of the community. On April 14, 2005, the GNNA voted in support of the proposed improvements in the Master Plan. Also, on September 28, 2005, the Natomas Community Association (NCA) voted in support of the vision of the proposed improvements.

The proposed improvements in the streetscape Master Plan include providing a landscaped median, lighting, vertical curb, and planter strips separating sidewalks from the street. Other improvements include providing enhanced crosswalks, benches, bus shelters, and street monuments. In addition, this Master Plan also includes making land use changes to support the objectives. The land use changes include rezoning some of the existing general commercial and single-family residential zoned properties to residential mixed-use and updating the Northgate Special Planning District (SPD).

The total cost of the proposed improvements in the streetscape Master Plan is approximately $19 million. Based on the feedback gathered through the public outreach, the proposed improvements could be phased in the following order: From Arden- Garden Connector to West El Camino Avenue first, then from West El Camino Avenue to Potomac Avenue, then from Rosin Court to San Juan Road, then from San Juan Road to Potomac Avenue.
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Major Stakeholders

Gardenland - Northgate Neighborhood Association

Northgate Boulevard Business Association

Natomas Journal

Natomas Community Association

Project Design Team

RRM Design Group
Fehr & Peers Transportation Consultants
Mark Thomas & Company, Inc.
INTRODUCTION

The Gardenland-Northgate community has progressively evolved from one of Sacramento’s earliest subdivisions of agriculturally oriented land to the urban enclave we know today. This evolution began in about 1915 after the drainage and levee system Reclamation Districts 1000 and 1001 were completed and large tracts of agricultural land were divided into 10 acre parcels. This was done with the intent of bringing more people into the area while maintaining a rural feel and character. In 1926, the land was further subdivided into smaller lots. Over time, the intensity of development in this area continued to increase with annexation of the Northgate neighborhood (west of Northgate Boulevard) in 1960 and then annexation of the Gardenland neighborhood in 1962.

The land use pattern that resulted from this evolution includes smaller commercial properties and some residential lots fronting on Northgate Boulevard and more residential lots in the adjacent neighborhoods.

Until recently, the residential development in the Gardenland neighborhood, with its larger deep lots, is less suburban feeling than that in the Northgate neighborhood, which was developed more as a typical suburban subdivision. With this intensification of development, the density of population and traffic volumes have steadily increased, and the resulting impacts are evident in the current conditions of the Boulevard.

One significant event in the history of this area occurred in the 1950’s when Northgate Boulevard was widened to four lanes to accommodate the shipment of airplane parts from the Sacramento River north to McClellan Air Force Base. This is when commercial uses started developing along the corridor. Now, with a bridge over the American River, the Northgate corridor has convenient access to downtown Sacramento, and the Gardenland-Northgate neighborhood is positioned such that it could become a sought after location for housing and business within the Sacramento urban area.

Although the tie to downtown is an asset to the area, it also has a downside; Northgate Boulevard has become a busy commuter connection to downtown for communities to the north resulting in a significant increase in traffic volume passing through the neighborhood.

Over the past 10 to 15 years, the Gardenland-Northgate community has been the subject of several planning studies focused on improving the image, safety, and economic viability of the area. Though well intended, these efforts have resulted in little physical change to the community. This Master Plan is intended to break the cycle of planning analysis and establish a design concept to serve as a framework within which real projects that respond to the specific concerns of the community can be implemented as funding becomes available.

Project Purpose And Scope

This Master Plan was initiated in response to community needs and desires expressed in the Gardenland-Northgate Strategic Neighborhood Action Plan (2003). Some of the specific objectives of this plan include implementing traffic calming measures, improving pedestrian and bicycle safety, encouraging walking options along the boulevard, identifying land use changes that will encourage both residential and commercial development, and enhancing the over all image of the area.
NORTHGATE BOULEVARD STREETSCAPE MASTER PLAN

Introduction

The specific project area for this Master Plan is Northgate Boulevard from Rosin Court at the north end to Arden-Garden Connector at the south end. Further, the scope of this Master Plan is limited to the area within the existing right-of-way (ROW), except for proposed acquisition of very minor sliver pieces of ROW to accommodate U-turn movements at some intersections. In addition, the Master Plan includes recommendations for the rezoning of parcels adjacent to the existing ROW.

Master Planning Process

Community input was integrated throughout this process via stakeholder meetings and general public presentations. The general steps of this process were as follows:

- Analysis of Existing Conditions
- Land Use Assessment and Recommendations
- Preparation of Conceptual Options
- Master Plan Refinement

The following three sections describe generally what transpired during each step of this process. Public input received during the process is described within each step, generally at the point at which it occurred. The fifth section presents the Master Plan that evolved from this process and the sixth and seventh sections address the general cost and maintenance implications of implementing the Master Plan.

Figure 1.1. Northgate Redevelopment Study Area Key Map
ANALYSIS OF EXISTING CONDITIONS

This step in the process provided the foundation for developing the Master Plan. To establish this foundation, the project team reviewed previous planning studies, met with key stakeholders, inventoried and evaluated existing physical conditions along the corridor, and conducted a qualitative analysis of existing traffic conditions. Below is a summary of the project team’s observations and conclusions resulting from this analysis.

Review of Previous Studies

The following previously prepared studies were reviewed and their findings considered during the analysis phase of master planning:

- Natomas Gardens Neighborhood Early Revitalization Program, 1996
- Gardenland/Northgate Neighborhood Association Action Plan, 2000
- Pedestrian Safety Guidelines, 2003
- Neighborhood Commercial Design Principles, 2003
- Gardenland/Northgate Strategic Neighborhood Action Plan (SNAP), 2003
- Dan Burden, Walkable Communities Report, 2002
- City of Sacramento Design Standards

These studies provided depth and background about community desires and attitudes as well as knowledge regarding regulatory issues to which the Master Plan needed to respond.

Of these previous studies, two stand out because of their focus on action and pedestrian walkability - the Gardenland-Northgate Strategic Neighborhood Action Plan (SNAP) and the Northgate Boulevard Neighborhood Report by Mr. Dan Burden of Walkable Communities, Inc. These documents were most valuable in gaining an understanding of issues, concerns and desired solution.

The Burden report, which was completed in 2002, provided some very specific recommendations that grew out of input from the community.

These specific recommendations can be summarized as follows:

- Create a true boulevard with medians
- Improve safety at Smythe School
- Promote mixed use development
- Establish easements for wider sidewalks
- Promote public/private partnerships
- Establish better links to adjacent neighborhoods

In March of 2003, the Gardenland-Northgate Strategic Neighborhood Action Plan (SNAP) was completed. The SNAP report was also the result of significant public input and reflected many of the ideas raised by Dan Burden. It identified many very specific action items, one of which was the preparation of a Master Plan for Northgate Boulevard (Action Item #21). The Northgate Boulevard Master Plan is specifically intended to fulfill that Action Item.
NORTHGATE BOULEVARD STREETSCAPE MASTER PLAN

Analysis of Existing Conditions

Other specific action items that are directly related to the Northgate Boulevard Master Plan are:

- Action Item #17, Improve Safety at Smythe School, and
- Action Item #7, Allow Housing in the Commercial Zones.

In addition to the action items, the SNAP also captured the community’s sentiments regarding some very specific priorities one of which was to:

"Improve appearance, safety, and range of commercial services along Northgate Boulevard, including:

- Provide landscaped medians
- Create focused commercial areas;
- Improve safety in front of Smythe School;
- Improve landscaping and lighting
- Promote housing on Northgate Boulevard;
- Expand architectural review."

The background and community attitudes gleaned from these studies established the basic goals for this Master Plan to address.

Initial Stakeholder Input

Prior to conducting analysis or design, the project team met with representatives of the Gardenland/Northgate Neighborhood Association (GNNA) and the Northgate Boulevard Business Association (NBBA) to get a first hand feel for current attitudes and desires for redevelopment of the corridor.

Many of those present had been involved in the Dan Burden study as well and had participated in the workshops that led to the SNAP report. It became obvious in this meeting that the residents and business owners were anxious to see action - not just more analysis.

In addition to GNNA and NBBA, the project team met with Smythe Elementary School Principal, Mr. Kurt Fujikawa, to discuss issues related specifically to the vehicular and pedestrian circulation patterns of the school site. This meeting revealed many concerns about safety and congestion related to the peak drop and pick up times.

A general review of the school’s layout further revealed that these concerns could not be fully addressed without significant on-site modifications which are outside the scope of this Master Plan. It was agreed that it would take modification to the Northgate Boulevard on-site configuration and operational functions to fully address the breadth of issues discussed.
Inventory of Existing Conditions

In February 2004, an inventory of existing conditions was conducted by members of the project team. This inventory entailed the members of the project team walking the length of the project area several times, taking photographs, and recording observation on base maps of the project area. The purpose of this walk through was to develop baseline information about the character and condition of the project area.

From information gleaned through this process, the team was able to identify opportunities and constraints to be considered during the Master Plan process. Some of the specific conditions that were the focus of this process included current traffic patterns and flow, turn lane configuration, signalization, median opportunities, sidewalks in-place and missing, the level of compliance with the Americans with Disabilities Act (ADA) requirements, driveway locations, above ground utilities, walls and fencing, lighting, bus stop locations, and opportunities for landscaping.

Photographs were taken throughout the project area and a series of maps were prepared to illustrate the apparent opportunities and constraints of the project area. The Opportunities and Constraints Maps are attached as Appendix A. Additional site visits were conducted throughout the process and these maps were used to record the information observed at these various times. The following sections describe the general character and conditions observed, and the Opportunities and Constraints Maps provide a graphic delineation of specific existing conditions, such as signal locations, roadway striping, median locations, walkways (or lack thereof), landscaping, bus stops, lighting, and adjacent land uses.
Analysis of Existing Conditions

Sub-Areas

One result of the existing conditions analysis was that three distinct sub-areas along Northgate Boulevard were identified. These sub-areas are defined primarily by the type of development that occurs within each sub-area. Sub-areas 1 and 3 are primarily commercial/retail, while Sub-area 2 is primarily residential. The opportunities and constraints within these sub-areas vary slightly based on a variety of factors, such as the relative age of construction, width of ROW, or whether or not adjacent properties remain undeveloped. This report will discuss the apparent opportunities and constraints with respect to each sub-area. For the purpose of this summary, the sub-areas will be identified as Sub-areas 1, 2 and 3, commencing at the north end of the study area.
Sub-Area 1
Rosin Court to San Juan Road

The land use within this portion of the project area is predominantly newer commercial, with some undeveloped land remaining. Having been newly developed or redeveloped within the past 10-15 years, improvements are of newer construction, the ROW is 110’, and roadway improvements generally meet City standards. Newly developed parcels have included sidewalks and landscaping along the Northgate Boulevard frontage; however, due to intermittent development, in some areas the sidewalks end abruptly leading to undeveloped dirt paths.

With new, comparatively generous landscaping and most utility lines underground, the general appearance of this segment is new. Some segments of sidewalks are in poor shape and bike lanes are not marked north of San Juan Road. Intersections have multiple turn lanes presenting long distances for pedestrians to cross.

The vehicular orientation of existing development, lack of pedestrian amenities; however, there are opportunities for improvements that would soften this appearance and establish a more pedestrian-friendly scale. Such improvements may include completing the missing sidewalk segments ahead of development, adding pedestrian-oriented amenities (benches, pedestrian-scale lighting, and signage), and developing raised landscape medians in place of the existing painted medians.
Analysis of Existing Conditions

Sub- Area 2
San Juan Road to West El Camino Avenue

This portion differs significantly from Sub- Areas 1 and 3 largely because of the type of land use and the 80’ ROW. The land use bordering the west edge of this segment is predominantly residential with the backyard fences lining the boulevard. On the east side, there is a mix of aging small lot commercial and residential.

Sidewalks are narrow, often less than 4’, and have obstacles such as utility poles and pedestals, which impede pedestrian flow. Several locations are missing ADA-compliant curb ramps. Both residential and commercial properties have limited space available for landscape improvements under existing conditions.

Commercial development on the east side generally appears to be 25 - 50 years old. As such, it was developed with many parking lots built up to the ROW limit with limited or no landscape buffer. Adding to this undesirable condition is the presence of multiple driveways for the many small properties, which tends to create a predominantly vehicular atmosphere. Utilities have not been placed underground and present both visual clutter and physical obstacles. Rolled curbs are predominant.

The fencing along the west side of this sub-area is comprised of a variety of materials, such as wood, block, chain-link, and brick, which create a fractured visual image. Many of these residential fences are in disrepair, which presents a “run-down” appearance; although there is one unique segment of undulating brick wall on the west side between Potomac Avenue and Bridgeford Drive, which is generally in good repair.
Smythe Elementary School is located in the mid portion of this sub-area. This facility is a significant element presenting unique challenges and need for improvement. It generates high pedestrian and vehicular traffic at several times during a typical school day. This creates significant localized congestion and presents access and safety concerns, and nearby safe crossings are limited in the area. Student pick-up and drop-off patterns are not ideal as a result of the school’s site configuration. Significant improvement to the pedestrian and vehicular circulation in the school area will require on-site modifications to the school site. Complete resolution of the negative issues at this location is not within the scope of this Master Plan and would need to be addressed by the school district.

Lighting is basic and appears minimally adequate but would benefit from increased light levels and aesthetic/themed treatments to help define this neighborhood.
Analysis of Existing Conditions

Sub-Area 3
West El Camino Avenue to Arden-Garden Connector

Sub-Area 3 is somewhat similar to Area 1 in that it is predominantly commercial, but its scale is smaller and older than the commercial that occurs in Sub-Area 1. The shopping center at the southwest corner of Northgate Boulevard and West El Camino Avenue is a significant community feature in that it appears to be a destination for locals. This commercial center includes locally owned businesses on which many in the immediate neighborhood rely. Both vehicular and pedestrian access to this commercial node appears to be important to the community. Additionally, further south at about Jefferson Avenue but on the east side is a popular locally-owned food store, La Superior Market.

Review of aerial photographs indicate that in at least one instance there appears to be encroachment into the ROW with private improvements and uses. The landscape supply yard located at Columbus Avenue appears to be one situation where the encroachment is significant enough to be further investigated by city staff and remedied.

Many of the streetscape opportunities and constraints in Sub-Area 3 are similar to Sub-Area 2 with one important distinction—at the extreme south end, between Jefferson Avenue and the Arden-Garden Connector, there is a large expanse of ROW on the west side that could be developed as a significant gateway landscape treatment. The adjacent parcel is developing as a mini-storage facility which would benefit from buffer/screen planting.

Figure 2.13. Typical existing street cross section for Sub-Area 3
Analysis of Existing Conditions

Existing Conditions Exhibits

The inventory of existing conditions is graphically depicted in a series of Opportunities and Constraints Maps included as Appendix A. Figure 2.15 on the following page provides an example Opportunities and Constraints Map. These exhibits depict existing conditions such as landscaping, lighting, fencing, sidewalks, bike lanes, intersections, crosswalks, bus stops, etc. This graphic exhibit is intended as a tool for the reader to locate and evaluate these existing conditions and to be used by designers as detailed design of the Master Plan is commenced.

Figure 2.14. View looking north near Arden-Garden Connector. Existing large expanse of ROW on the west side that could be utilized for a significant gateway landscape treatment.
NORTHGATE BOULEVARD STREETSCAPE MASTER PLAN

Analysis of Existing Conditions

Figure 2.15. Example of the Opportunities and Constraints Maps
Traffic Analysis

In addition to inventorying and evaluating physical conditions and appearance, a qualitative traffic analysis of existing traffic conditions was conducted. A preliminary assessment of the baseline transportation conditions was conducted. This assessment included descriptions and observations about the setting, travel lanes, parking, bike lanes, sidewalks, signage, transit, and traffic volume and operations of the existing boulevard. The observations noted and data provided by the baseline conditions information were used as criteria for developing the Master Plan.

Based on City records, the daily traffic volume between San Juan Road and West El Camino Avenue is currently around 20,000 vehicles per day, with an expected increase of approximately 20% by 2025, which represents a one percent increase annually and is considered a reasonable increase in traffic volume for this corridor.

The traffic analysis report is included for reference as Appendix B.
Analysis of Existing Conditions

Northgate Boulevard Existing Intersection Level of Service

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</table>

Source: Draft Environmental Impact Report, Redevelopment Plan for Northgate Project Area, 2002
Notes: LOS based on intersection counts taken in December 2001. Average delay is in seconds per vehicle.

Figure 2.17. Northgate Boulevard Existing Intersection Level of Service Table
The project team and the community realize that the image, character, viability, and even perceived safety of an area is influenced by the type of land uses. So, as part of this master planning effort, the existing land uses were evaluated and alternative land use designations were explored. The intent was to identify new zoning designations that may serve as a catalyst for change.

**Existing Land Use**

Existing parcels along Northgate Boulevard are within the Northgate Special Planning District (SPD). On the east side of Northgate Boulevard, the SPD generally includes the parcels between Patio Avenue and the Arden-Garden Connector. These parcels are currently zoned commercial (C2 under the SPD) and most are currently commercial uses, although there are some vacant parcels as well as some residential uses within this area. With the current zoning, residential is a nonconforming use; hence, a zone change is required to respond to the desire to promote more residential development along the corridor. On the west side of Northgate Boulevard at the north end of the corridor, the SPD includes the commercial parcels from just south of Turnstone Drive to just south of Rio Tierro Road. At the south end of the corridor, the SPD includes the commercial parcels on the west side from just north of West El Camino Avenue to the Arden-Garden Connector. Refer to the Current Zoning Designation Map shown in Appendix C, Figure C-1, for delineation of the SPD.

**Criteria**

The overall objective of this land use assessment was to examine the possibility of zoning and land use changes from commercial uses to residential or office uses in order to create a more pedestrian-oriented environment that provides greater opportunities to “energize” existing commercial uses along the corridor. In addition, based on community input, more housing is desired along the corridor. The evaluation assessed existing uses and made recommendations for possible modifications to the existing land uses. A number of criteria were identified to rate potential conversion of property from a commercial designation to a residential or office designation.

These criteria included:

- **Parcel Configuration:** lot depth and size
- **Utilization:** fully utilized, under utilized, or vacant
- **Condition**
- **Viability**
Zoning Options

Initial thoughts regarding new land use designations revolved around identifying areas for rezoning to medium or high density housing; however, a couple of key issues were raised that led the team away from this approach. One was that most of the parcels were too small and/or not deep enough to be suitable for medium or high density residential development. Assembling several smaller parcels would be required to create a viable medium or high density project. The other issue was that medium or high density residential zoning would generally preclude commercial use, which is not entirely desirable.

Considering the above issues, rezoning portions of the area to Residential Mixed Use (RMX) was considered. The City of Sacramento created the RMX zone designation to allow a mix of moderate density residential and neighborhood-serving commercial uses to be developed together. Under RMX zoning, residential densities would be generally the same as that of the R-3A, which allows up to 36 units per acre. Commercial uses permitted with an RMX zone would be similar to those of the C-1 zone.

Given the concentration of existing commercial uses at the north and south ends of the corridor, maintaining commercial zoning at these locations seemed to be the most logical option.

Benefits Of RMX Zoning

The proposed Residential Mixed Use (RMX) designation responds to the desire to create a walkable and vibrant streetscape environment. Concentration of residential units together with neighborhood-serving commercial should result in significantly more “people-oriented” activity on the street. This type of development will be much more likely to occur if the RMX is supported by development and design guidelines that encourage generous and comfortable pedestrian accommodations along the corridor and development of off-street parking in the back of new development. Further, the residential component will ensure that there are people present throughout the corridor at all times of day and night. This 24-hour presence of people provides a higher sense of community and with that comes a higher sense of security. With appropriate development and architectural design guidelines, the RMX zoning provides a great opportunity for establishing a sense of place with a unique character that reflects the local community.

In addition to the positive benefits RMX has on the design and character aspects of a neighborhood, the flexibility within this zoning designation should allow market forces to ultimately drive transition along the corridor. As development occurs over time, the proportion of residential to retail to office can be more easily adjusted to meet current market conditions than under more traditional zoning regulations.
Proposed Zoning Designation

Upon review of the RMX zoning option and its potential benefits to the community, the Team determined that a large part of the east side of Northgate Boulevard should be rezoned to RMX. However, as each parcel was evaluated for rezoning, it was determined that some parcels should be zoned commercial due to their current use, condition, and location. As noted above, the north and south ends are proposed to remain commercial, as shown in the Proposed Zoning Designation Map in Appendix C, Figure C-2. Existing non-conforming uses shall be addressed as per the Sacramento Municipal Code Section 17.88.030 and the RMX Zoning Code Section 17.28. All proposed zoning shall become a component of the existing SPD.

Effect Of RMX Zoning

Rezoning large areas as RMX will not change the character of the corridor overnight, nor will it require existing business to cease operation or be forced to relocate. However, the RMX designation will establish the framework within which creative redevelopment can occur. It will allow more flexibility for property owners who choose to convert their parcels to residential uses or create a combination of residential and commercial uses.

The Residential Mixed Use zone is well suited to the conditions along Northgate Boulevard. With appropriate community-driven development and design guidelines and other possible incentives, it sets the stage for establishing a highly desirable street edge and walking environment along the boulevard.
Block- by- Block Descriptions

Following is a block by block description of the proposed zoning recommended for implementation as part of the Master Plan.

The references in the following paragraphs are to block numbers identified in the Proposed Zoning Designation Map located in Appendix C, Figure C- 2.

Blocks A, B, C, A- 1 and B- 1

These blocks are proposed as primarily Commercial as they are the very core of the Commercial node at San Juan Road and Northgate Boulevard. The center portion of Block A is proposed as Residential Mixed Use as it is currently part of the mobile home park that extends back beyond the Special Planning District Boundary and into a larger mobile home park area to the east. The mobile home park is an under utilized use for this property and Residential Mixed Use is an appropriate designation that may spur economic reuse of the property.

Block D

This block is proposed as RMX as it is currently a mini- storage facility that is virtually maximized on the parcel. This zoning will allow it to remain in use as a mini- storage facility as a non-conforming use; however, it will allow for the introduction of residential uses in the future if redeveloped. Residential at this location would be within close proximity to the Commercial node being created in this location.
**Block E**

This block is a relatively committed Commercial Use and is close enough to the commercial node to be justified to remain as commercial.

**Block F**

Block F has a variety of underutilized uses on the parcels in this vicinity. Properties identified as underutilized include developed parcels containing vacant buildings or undeveloped parcels. Block F also backs up to a new residential subdivision to the east. There is, in fact, access to that subdivision through Block F. Therefore, the proposed Land Use for this frontage is a very compatible and suitable use to interface with the adjoining residential.

**Blocks G, H and I**

These blocks have a series of underutilized or vacant properties that afford the opportunity to promote the Residential Mixed Use land use designation.
Blocks J and K

With the exception of the two corner parcels on Wisconsin Avenue and Northgate Boulevard these blocks are proposed as Residential Mixed Use. The parcels on each side of Wisconsin Avenue are currently neighborhood-serving commercial uses. The location is at present a good opportunity to provide convenience shopping for the adjacent neighborhood and as such will promote walking, rather than driving, for convenience shopping.

Blocks L and M

Block L is proposed as RMX with the exception of the two parcels at the corner of Bowman Avenue and Northgate Boulevard. This corner, along with the majority of the Block M, either has an existing neighborhood-serving commercial use or approval of a viable commercial use that serves nearby residents. Viable commercial uses may be defined as small neighborhood centers offering neighborhood service retail or professional services (e.g., dry cleaners, beauty parlors, medical and dental offices, financial services, real estate offices, etc.) that create commercial nodes throughout the SPD. The proposed Commercial designation responds to this situation.
Block N
Block N is substantially under utilized property. Other than a small church, the area is mostly vacant. RMX zoning is proposed for this block as it includes one of the larger underdeveloped parcels and would be suitable for a sizable mixed use development with little or no lot consolidation required. Further, it is directly across from the elementary school, allowing for convenient pedestrian access for school children who might live in the residential units.

Block O
Block O is proposed to be mostly RMX in response to the conditions of existing land uses. The parcels on which the existing market and Rico’s Pizza are located are proposed as commercial as these are established local businesses.
Figure 3.10. Proposed Land Use for Blocks P, Q, R, S, T, V, R-1, S-1 and T-1
Blocks P, Q, R, S, T, V, R-1, and S-1

These blocks represent the southern concentrated commercial mixed-use node of the Northgate Boulevard corridor and are proposed to remain predominantly zoned as commercial. Portions of Blocks P, Q, and R are proposed to be rezoned as RMX to allow for and encourage the concept of bringing in higher density residential in proximity to the commercial uses.

Block T-1

A mini-storage use has been approved within this block; however, it is still proposed as RMX as it provides an opportunity to develop residential within easy walking distance of the existing commercial center. Further, if developed as a residential mixed use product it could architecturally establish a very strong entry statement for the Northgate Boulevard corridor.

Parks And Green Space

Part of creating a walkable community includes establishing urban open spaces such as pocket parks and plazas. The proposed land use plan identifies the need for these types of spaces along the corridor; however, specific parcels have not been identified for this use. Rather, a general location is noted with a symbol.

Development and design guidelines prepared as an overlay to the RMX zone should have provisions to encourage integrating quasi-public spaces such as these as redevelopment occurs.
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DRAFT MASTER PLAN ALTERNATIVES

Refinements to Draft Master Plan

Several alternative methods were explored to achieve the proper roadway geometry, pedestrian-friendly features, and design safety. These alternatives were reviewed and a preferred approach was developed for further study.

One of the most promising alternatives explored was leaving the easterly curb line and sidewalk in place and focusing all improvements to the west of this line. This scenario allowed for the landscape and pedestrian area along the west side to be maximized; however, it would have required an easement across the frontage of the properties on the east as well as conditioning those properties to make specific landscape and sidewalk improvements as redevelopment of each individual parcel occurred.

Although this concept had merits, it was agreed that since it was likely redevelopment would take many years and be fragmented, this concept was not necessarily the best scenario to pursue.

The solution that came out of exploring the various alternatives is generally illustrated in Figures 5.2 and 5.3 in the following chapter. This solution proposed replacing the 10' wide center turn lane with a raised 7' wide median and reducing lane widths to a minimum of 11' wide. The additional space gained by this approach allowed both the western and eastern curb lines to be moved toward the center of the road, freeing up landscape and walkway space.

In most segments on the west side a 5' wide planter strip and 5' wide walkway was achieved. In most segments along the east side a 5' wide planter was achieved, but a 4' walkway was settled on with the intent that an additional 4' of width would be added when adjacent parcels were redeveloped.

Stakeholder Input, December 2004

The Draft Master Plan was presented in a series of separate meetings with the Northgate Boulevard Business Association (NBBA), Smythe School, and the Gardenland Northgate Neighborhood Association (GNNA) for further input.

Northgate Boulevard Business Association

NBBA’s response to the proposed improvements was generally favorable. As expected, the introduction of raised landscaped medians was the topic of considerable discussion. The business owners present liked and appreciated the vast improvement to the appearance of the boulevard with the landscaped medians; however, they realized that the trade-off was eliminating mid-block left turns that were previously possible with the two-way turn lane. This discussion revolved around determining if openings in the median to allow mid-block left turn movements could be accomplished without significantly reducing the aesthetic affect.

The outcome of this discussion was a general consensus that the vastly improved aesthetics and image gained with the landscaped medians outweighed most of the perceived negative impact of limiting left turn movements; however, the design team was asked to add a northbound, mid-block turn lane into the shopping center on the southwest corner of West El Camino Avenue and Northgate Boulevard intersection. Further, this group suggested that if other left turn pockets were created, they should be created only at locations that provide a community-wide benefit as opposed to benefiting a single property.
Smythe School Meeting

Representatives of the School District met to review the proposed improvements in the Master Plan. Their main concerns revolved around accommodating ingress and egress for school buses. They indicated that the median proposed in front of the school would require them to alter their current bus routing, which would not be possible in the near future. In response to this, it was agreed that the proposed design should include an option for no median along this segment.

GNNA Meeting

The primary comments received from GNNA included the following:

- Need better street lighting (possibly lights in the median);
- Improvements need to consider interface with the east-west bicycle routes;
- The appearance of the various fences along the west side need to be improved;
- More openings in the proposed medians are needed;
- Gateway and theme elements should reflect a "Gardenland" character.

Regional Transit District Review

The preferred alternative was submitted to Regional Transit District for review and comment. Upon their review, they conveyed the following verbal comments via telephone conference in January 2005:

1. Provide lighting near bus shelters.
2. Bus shelters will require an 8’ deep x 8’ wide loading zone.
3. Try to shade bus shelters with canopy trees.
4. Regional Transit will provide bus shelters, benches and trash cans at bus stops and will provide maintenance.
5. More crosswalks near Rio Tierro Road and Potomac Avenue would be beneficial.

Recommendations 1-3 made by Regional Transit were incorporated into the Master Plan. The additional crosswalks recommended in item 5 was not incorporated because warrants have not been met to justify the installation of a crosswalk.
Further Refinement

Building on the input received from these meetings, the proposed improvements in the Master Plan were further refined in preparation for presentation to the general public. Specific refinements included:

- Addition of a northbound turn lane into the Manor Drug shopping center;
- Preparation of a no median option at the school frontage;
- Addition of a southbound U-turn at Jefferson Avenue;
- Addition of an optional southbound left turn lane into La Superior Market.

Public Meeting, February 2005

In February 2005, the proposed improvements in the Master Plan were presented at a public meeting. This presentation included a comprehensive review of the planning process to date, the proposed land use changes, and the proposed Master Plan. The format of the meeting was an informal open house followed by a formal presentation, followed by a question/answer period. In addition to the question/answer period, all participants were provided a “report card” on which to rate specific elements of the proposed improvements as well as to provide written comments. The Report Card is attached as Appendix D.

Comments were wide ranging, but one area of strong consensus (as evidenced in the results of the report card) was the need to provide more opportunities for turns through the medians to better serve the residential neighborhoods.

In response to the strong desire for more left turn opportunities as expressed at the public meeting, the project team reviewed potential left turn locations with regard to where these turn locations would provide the most community benefit as balanced against the communities’ desire for an improved aesthetic image. Potential left turn locations were also reviewed with regard to whether or not minimum engineering standards could be met. This process resulted in adding left turn opportunities at the following locations:

- Wilson Avenue (south bound left)
- Bowman Avenue (south bound left)
- Indiana Avenue (south bound left)
- Senator Avenue (merge lane)
- New Heritage Road (south bound left and merge lane)
- Manor Drug Shopping Center (north bound left)
## Northgate Blvd. Community Report Card Summary

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Figure 4.1. Community Report Card Summary
Improvements were ranked by attendees in order of priority as follows:

1. Lighting
2. Landscape
3. Neighborhood Identification
4. Site Furniture
5. Entry Monuments

Fifteen out of 20 report cards were in favor of the Smythe School option without a center median. One respondent preferred the median at this location, and four did not respond to the question.
PLAN OBJECTIVES

Developing this Master Plan required balancing many differing priorities as well as responding to significant physical constraints. However, as noted previously in the Analysis of Existing Conditions, very strong guidance was provided via the Gardenland-Northgate Strategic Neighborhood Action Plan (SNAP) that was prepared in 2003. To recap, one of SNAP’s key priorities regarding Northgate Boulevard was:

“Improve appearance, safety, and range of commercial services along Northgate Boulevard including:

- Provide landscaped medians;
- Create focused commercial areas;
- Improve safety in front of Smythe School;
- Improve landscaping and lighting;
- Promote housing on Northgate Boulevard;
- Expand architectural review.”

These SNAP priorities were a further validation of the 2002 Dan Burden Report:

- Create a true boulevard with medians
- Improve safety at Smythe School
- Promote mixed use development
- Establish easements for wider sidewalks
- Promote public/private partnerships
- Establish better links to adjacent neighborhoods

These priorities and objectives were again validated in the community and stakeholder meetings held during the master plan process.

The Master Plan that evolved from this planning process successfully addressed each of these specific priorities as best as possible within the constraints of the corridor. The Master Plan Conceptual Streetscape Plans are attached as Appendix E.

Land Use

With the introduction of RMX zoning, the proposed land use plan provides a means to promote housing along the corridor. Further, the proposed land use plan also clearly addresses the priority of creating focused commercial areas by maintaining the commercial centers at the north and south ends of the corridor and identifying only very specific locations within the middle segment for commercial zoning to address the SNAP priority of expanded architectural review. This land use plan should be supplemented with an appropriate architectural review process.
Safety

Physical design changes proposed in the Master Plan will increase safety and improve both pedestrian and vehicular circulation throughout the corridor. Sidewalks have been set back from the curb wherever possible to provide a physical separation between pedestrians and vehicles. Bike lanes will also be added north of San Juan Avenue. The Master Plan also proposes introducing landscaped medians throughout, which will improve pedestrian safety.

The proposed medians will reduce the number of points of potential pedestrian/vehicle interface by limiting mid-block left turns into driveways. These measures are reinforced by proposed improvements to signals, signs, and pavement markings at intersections and lighting improvements.

Appearance and Image

In addition to improving safety, the introduction of landscaped medians will dramatically improve the appearance of the boulevard. The medians, together with the parkway planter strips behind the curbs, allow a strong tree canopy to be developed, which will create more of a true boulevard character. This change in itself will establish a new, positive image for the area. Improved lighting, unified street furnishings at bus stops, and development of some type of “gateway” monuments that reflect the unique character of this community will enhance this new image.

Following are specific components of the Master Plan and a proposed phasing scenario described in more detail.

Roadway Geometry

The preferred option is designed to work entirely within the existing ROW except for selected locations on corners where 1’- 2’ of ROW acquisition is required to accommodate U-turns. This option maintains two northbound and two southbound lanes plus bicycle lanes in each direction. The middle turn lane is eliminated and replaced with a median that varies in width to a minimum of 6’. The median extends from Rosin Court to Arden-Garden Connector. Roadside parkways are intermittent along the boulevard where space is available to accommodate a 3’ planted area.

Sidewalks on the east side are a minimum of 5’- 0” wide and run continuously. Sidewalks on the west side are a minimum of 4’- 0” wide and are continuous throughout the project area. Property owners on the east side would be conditioned to provide an additional 4’- 0” of sidewalk adjacent to the proposed sidewalk when future development occurs, providing an overall 8’ wide sidewalk.
Adjustments to Utilities

To fully implement the improvements described in the Master Plan and to avoid potential physical conflicts, many existing utility structures will need to be relocated. These adjustments include:

- Utility undergrounding of phone, cable TV, and power lines will be necessary to avoid conflicts with poles and utility boxes in the new path of travel.
- Streetlight and traffic signal relocation may be necessary.
- Curb and gutter relocation will be required to meet the new road alignment.
- Fire hydrants will need to be relocated adjacent to new curbs.
- Existing drainage structures will be relocated to coordinate with the location of new curb and gutters.

Figure 5.1. Typical plan view of improvements
Figure 5.2. Typical Street Sections
Figure 5.3. Typical Street Sections continued
Major Intersections

Major intersections have been designed to accommodate U-turns based on the Sacramento Department of Transportation requirement of 44’ as measured from the outside of the turn lane to face of curb.

These major intersections are:

- Rosin Court
- San Juan Road
- Potomac Avenue
- Wisconsin Avenue
- Haggin Avenue
- West El Camino Avenue
- Jefferson Avenue (southbound only)

Pedestrian and accessible intersection features are intended to increase safety and promote improved pedestrian walkability. The items noted in Figure 5.5 are part of the Master Plan, including high visibility crosswalks, advance stop bars, and accessible curb ramps. Optional features which could be provided include countdown signals, audible devices, safety signage, and increased enforcement and education about pedestrian safety.

Figure 5.4. Major Intersections Map
Figure 5.5. Typical Intersection Diagram. Noted items represent potential features to be added at each intersection.
Landscape Concept

Tree Planting

As a long established arterial, Northgate Boulevard has mature landscaping in the form of well established trees along its perimeter. Varieties include several Oak and Pine species with occasional Sycamores and other ornamental species. There is no formal spacing or monoculture of species established along the corridor.

As a priority, the Master Plan seeks to better establish a tree canopy over sidewalks and paving to provide shade. Other goals are to select tree species that provide seasonal foliage color and seasonal flowering. The Master Plan does not seek to establish a monoculture and a formal tree planting regiment; rather it intends to use a mix of tree species and sizes in groupings to accentuate tree forms, textures, and colors. This design approach provides a maximum of flexibility for design and implementation over time.

For the purpose of fostering the healthiest root growth and development possible, a structural soil system shall be installed at each street tree where the planter is less than 6’ wide. This method shall be used for trees located in medians and parkways. The structural soil system, such as the Duck-bill Invisible Staking system illustrated in Figure 5.7, will deter uplifts in pavement from root structures. Duck-bill staking eliminates tree stakes and promotes healthier and stronger trees.

Shrub and Ground Cover Planting

The Master Plan identifies a range of shrub species that provide dense foliage growth and seasonal flower color and have low water consumption requirements. Shrubs are to be planted in mass free form groupings of similar species; contrast between groupings should be considered for seasonal color, texture, and plant form. Shrub massing should be contained to areas within 24 inches of all parkway and median islands.

Ground covers are to be planted in mass groupings, forming a unified carpet of plant material surrounding the shrub areas. A continuous non-planted 12” wide band of decomposed granite mineral mulch should be placed at the perimeter of all median islands. This non-planted perimeter provides a clear edge to the planter and shall provide a setback area to ensure plants do not encroach on the roadway.
**NORTHGATE BOULEVARD STREETSCAPE MASTER PLAN**

**Master Plan**

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**Figure 5.6. Plant List and Photos**

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<td>California Incense Cedar</td>
<td>10’-20’</td>
</tr>
<tr>
<td>Lagerstroemia indica</td>
<td>Crape Myrtle</td>
<td>10’-15’</td>
</tr>
<tr>
<td><strong>Medium Trees</strong></td>
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</tr>
<tr>
<td>Koelreuteria paniculata</td>
<td>Golden Raintree</td>
<td>15’-35’</td>
</tr>
<tr>
<td>Pistacia chinensis</td>
<td>Chinese Pistache</td>
<td>25’-35’</td>
</tr>
<tr>
<td>Robinia ambigua “Purple Robe”</td>
<td>Idaho Locust</td>
<td>20’-35’</td>
</tr>
<tr>
<td><strong>Large Trees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ginkgo biloba</td>
<td>Ginkgo</td>
<td>20’-40’</td>
</tr>
<tr>
<td>Quercus suber</td>
<td>Cork Oak</td>
<td>30’-60’</td>
</tr>
<tr>
<td>Tilia cordata</td>
<td>Little Leaf Linden</td>
<td>25’-40’</td>
</tr>
<tr>
<td>** Shrubs**</td>
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<td></td>
</tr>
<tr>
<td>Achillea millefolium ‘Fire King’</td>
<td>Red Yarrow</td>
<td></td>
</tr>
<tr>
<td>Agapanthus ‘Queen Anne’</td>
<td>Lily-of-the-Nile</td>
<td></td>
</tr>
<tr>
<td>Asparagus densiflorus ‘Myers’</td>
<td>Myers Asparagus</td>
<td></td>
</tr>
<tr>
<td>Astilbe arendsi ‘Glow’</td>
<td>False Spirea</td>
<td></td>
</tr>
<tr>
<td>Berberis buxifolia nana</td>
<td>Dwarf Barberry</td>
<td></td>
</tr>
<tr>
<td>Cistus ‘Sunset’</td>
<td>Rockrose</td>
<td></td>
</tr>
<tr>
<td>Hebe ‘Autumn Glory’</td>
<td>Dwarf Hebe</td>
<td></td>
</tr>
<tr>
<td>Helicotrichon sempervirens</td>
<td>Blue Oat Grass</td>
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<tr>
<td>Hemerocallis flava</td>
<td>Daylily</td>
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<tr>
<td>Heuchera sanguinea</td>
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<td>Lantana montevidensis</td>
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<td>Lavandula dentate</td>
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<td>Mahonia aquifolium</td>
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<tr>
<td>Muhlenbergia regens</td>
<td>Deer Grass</td>
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<tr>
<td>Phormium tenax ‘Bronze Baby’</td>
<td>Dwarf New Zealand Flax</td>
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<tr>
<td>Rhaphiolepis indica ‘Ballerina’</td>
<td>Indian Hawthorn</td>
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<tr>
<td>Rosmarinus officinalis ‘Prostratus’</td>
<td>Dwarf Rosemary</td>
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</tr>
<tr>
<td>Sollya heterophylla</td>
<td>Australian Bluebell Creeper</td>
<td></td>
</tr>
</tbody>
</table>

*Note: All shrubs listed are less than 3’ in height at maturity.*

**Ground Covers and Vines**

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ajuga reptans</td>
<td>Carpet Bugle</td>
</tr>
<tr>
<td>Arctostaphylos ‘Emerald Carpet’</td>
<td>Manzanita</td>
</tr>
<tr>
<td>Baccharis pilularis ‘Twin Peaks’</td>
<td>Dwarf Coyote Brush</td>
</tr>
<tr>
<td>Bergenia crassifolia</td>
<td>Winter-Blooming Bergenia</td>
</tr>
<tr>
<td>Carissa macrocarpa ‘Prostrata’</td>
<td>Natal Plum</td>
</tr>
<tr>
<td>Ceanothus griseus horizontalis</td>
<td>Carmel Creeper</td>
</tr>
<tr>
<td>Cistus callistegioides</td>
<td>Violet Trumpet Vine</td>
</tr>
<tr>
<td>Cotoneaster dammeri ‘Lowfast’</td>
<td>Bearberry Cotoneaster</td>
</tr>
<tr>
<td>Fragaria chiloensis</td>
<td>Wild Strawberry</td>
</tr>
<tr>
<td>Jasminum parkeri</td>
<td>Dwarf Jasmine</td>
</tr>
<tr>
<td>Juniperus horizontalis ‘Bar Harbor’</td>
<td>Bar Harbor Juniper</td>
</tr>
<tr>
<td>Stachys byzantina</td>
<td>Lamb’s Ears</td>
</tr>
<tr>
<td>Wisteria sinensis</td>
<td>Chinese Wisteria</td>
</tr>
</tbody>
</table>

---
Figure 5.7. Structural Soil Diagram. Trees in medians and parkways may require structural soil
Site Furnishings

Site furnishings will include historic decorative lighting at bus stops, medallion signs with district identification attached to streetlights, entry monuments at major intersections (Rosin Court, San Juan Road, West El Camino Avenue and Arden-Garden Connector), and preservation of the existing community built sign, now located at the south end of the boulevard. The feasibility of sign attachment to the streetlights will require analysis from a structural engineer.

Figure 5.8. Examples of Vehicular-Scaled and Pedestrian-Scaled Street Lighting
Benches

Bench type and style were selected to provide durability, vandal resistance, and attractive styling, with mid-bench armrest to deter sleeping on benches. Benches are constructed with a powdercoated steel frame and would be secured to the pavement with appropriate hardware. Locations for benches would be determined when construction documents are prepared. It should be noted that these benches are to be located in proximity to activity hubs and retail centers. These benches are in addition to the furniture provided by Sacramento Regional Transit (RT) and would be funded through the area BID.

Sample Monument

The example depicted in Figure 5.9 is an appropriate design reflecting the historical context of the Gardenland Northgate Neighborhood. Further design development of this feature should be pursued through a call for artists to implement this feature.
Figure 5.10. Example Gateway Entry Monument
Non-standard Improvements

During the master planning process, a wide variety of design ideas were proposed, some of which would not have been in conformance with current City standards. In response to the understanding that the community wanted a plan that could be implemented soon, the project team developed design solutions that fell within the current City standards as best as possible.

However, the proposed Master Plan does include some elements that deviate slightly from these standards, including:

- A 4’ wide walk on the east side of the boulevard is proposed; whereas the City standard walk in this situation would be 5’ wide. It is proposed that this deviation be remedied as properties along the east side are redeveloped. These properties fall within the RMX zone and can be conditioned that as the properties are redeveloped a requirement is to construct an additional 4’ width of sidewalk to achieve a total width of 8’, ultimately resulting in a comfortable walking environment adjacent to future residential/commercial/retail mixed use development.

- Bus turn outs are not provided at bus stops due to restricted horizontal distances that make it impossible to meet the required design template.

Proposed Phasing

Phasing was developed based on request from the residents during the community meetings. There was consensus among those in attendance to begin improvements at the Southern portion of the corridor and proceed north. Based on community requests the following phased implementations of the Master Plan are proposed:

- Phase 1 – West El Camino Avenue to Arden-Garden Connector
- Phase 2 – Potomac Avenue to West El Camino Avenue
- Phase 3 – Rosin Court to San Juan Road
- Phase 4 – San Juan Road to Potomac Avenue

Note: A pilot project will precede Phase 1 and is proposed for the medians beginning at Rosin Court and extending south for approximately one block.

The ability to construct partial segments or systems (i.e. medians only, etc.) of the Master Plan is limited. This approach, in most cases, would create conditions that are undesirable. Partially constructing systems would lead to interim conditions that may require significant temporary measures to mitigate unsafe conditions. The Master Plan relies on certain reductions of width at critical areas to achieve the proposed sidewalk, bike lane, travel lanes and median widths required. Since these improvements are dimensionally linked, partial construction of the Master Plan systems would require the bike lanes to be temporarily eliminated. This temporary condition is considered unacceptable.
The narrowing of the traveled way and the location of the existing curb prohibits partial construction of Master Plan road sections, as depicted in Figure 5.11. As monies are available to fully fund each identified phase, the Master Plan should only be considered for implementation of the entire cross section.
Figure 5.12. Phasing Map
Fencing Recommendations

Throughout the planning process, the need to dramatically improve the condition and appearance of existing fencing along the west side of the corridor was repeatedly raised by stakeholders and the community. This fencing was originally constructed as backyard fencing for the adjacent residential development that occurs generally between Rio Tierro Road and West El Camino Avenue.

Unfortunately, this fencing is on private property; therefore, addressing it directly is not a part of this master planning effort. However, during the planning process, it was recognized that the fencing should be addressed as a future separate project in an appropriate public/private partnership. Figure 5.13 is an example of a fencing treatment that would work well for this situation, as it can be constructed with minimal encroachment on either the ROW or private property.

Figure 5.13. Example Fencing. This is a suggested treatment of residential fences and is not a part of this Master Plan.
Public Meeting, July 2005

In July 2005, a public meeting was held to present modifications to the Draft Master Plan. This presentation included modifications implemented in response to comments received at the February 2005 public meeting. These modifications included: additional and optional left turn lanes, potential phasing, landscaping, lighting, furnishings, neighborhood identification, and entry monuments. The format of the meeting was an informal open house followed by a review of previous meetings, a formal presentation, a question/answer period. The meeting was well attended by the community; approximately 40 residents and property owners were present.

Questions from the community generally focused on the re-zoning process for the RMX zone, project cost, plan approval process, and project schedule. Questions were answered and responses from those in attendance seemed to indicate they were satisfied with answers provided.

A specific focus by community members were the additional left turn lanes added since the previous meeting. The design team provided information on why these locations where were selected and why other locations considered for turn lanes did not meet design criteria and were not included. Some community members present continued to voice concern over limiting left turns and the potential impact on their businesses; however, at the conclusion of the meeting, most were in support of the Master Plan and indicated they would like to see this plan continue to move forward.

A budget scenario for implementing the Northgate Master Plan was developed on a phase by phase basis based in mid-2005 dollars.
OPINION OF COST

Assumptions

The Opinion of Probable Cost has been prepared based on conceptual plans, aerial photographs, and field survey information. Roadway and civil items that could be quantified directly from plans, such as drain inlets, hydrants, and lighting, were tabulated from the available plans and survey data. The roadway quantities, such as curb, gutter, sidewalk, asphaltic concrete, and roadway excavation, were calculated based on assumed cross section quantities along the length of the project.

It was assumed that a majority of the existing pavement would remain and only 3’ adjacent to each curb would be removed and replaced to accommodate construction of the new curbs. A 2” AC overlay was assumed as preventative maintenance for the roadway. If it is found by future geotechnical investigation that the existing pavement section will not be sufficient to support future demand, it may be necessary to replace the entire roadway at significant additional cost.

Landscape and irrigation costs were developed from plan documents based on area takeoffs, and unit cost was applied as appropriate. Other items in the opinion of cost include water connections, structural soil, site furnishings, and entry monuments.

For incidental improvements that were not accounted for with the roadway items, a 20% contingency was added to the estimate.

The Pilot Project would consist of construction of the median beginning at Rosin Court and extending one block south along Northgate Boulevard. The probable cost of the Pilot Project is estimated at $729,000.

- Phase 1 would commence at Arden-Garden Connector and include improvements northerly to West El Camino Avenue. The probable cost of Phase 1 is estimated at $4,027,000.
- Phase 2 would commence at West El Camino Avenue and include improvements northerly to Potomac Avenue. The probable cost of Phase 2 is estimated at $6,294,000.
- Phase 3 would commence at San Juan Road and include improvements southerly to Potomac Avenue. The probable cost of Phase 3 is estimated at $4,648,000.
- Phase 4 would commence at Rosin Court and include improvements southerly to San Juan Road. The probable cost of Phase 4 is estimated at $4,122,000.

The total cost of probable construction is estimated at approximately $19 to $20 million dollars, estimated at mid-2005 dollars. A Preliminary Estimate of Probable Cost is attached as Appendix F.

Exclusions

Utility undergrounding costs have not been included in the cost estimate as this work should be completed under a franchise agreement with the utility company.
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MAINTENANCE ANALYSIS

To better understand the long term maintenance requirements of the proposed improvements this analysis will provide a description of the improvements and routine or special maintenance requirements anticipated in the Master Plan. The analysis is intended as a general tool for budgeting resources and is not intended as a comprehensive or definitive statement of all required maintenance for the noted improvements.

The City would be responsible for maintenance of landscape medians, street lighting, sidewalks, and the roadway. Maintenance of the proposed Master Plan would need to be allocated from City landscape and lighting district as a normal expectation of city maintenance for this type of road improvement.

A. City initiated Maintenance District can be developed. The City collects a fee from the owners to fund the maintenance of the proposed landscaping improvements. The formation of a Maintenance District to collect fees requires a 50% vote of the property owners.

The assessed fees will depend on the type of landscaping/aesthetic improvements that are proposed. The proposed landscaping will be maintained by City Streetscape forces through the Maintenance District.

B. Another option is that property owners would maintain the proposed improvements.

General Description of Improvements

Landscaping

Landscaping is confined to new medians and parkway planters ranging in width from a minimum of 2’ wide up to 25’ wide. Planting consists of low shrubs and ground cover. Trees will be deciduous and evergreen and will be located in the medians and in parkways as space allows. Shrubs will consist of largely evergreen varieties with selected perennial flowering plants for seasonal accent. Ground cover planting will exist where shrubs are not planted.

When planter space is less than 3’ wide no plant material will be used, and the space will be filled with hard surface material or mineral mulch (decomposed granite). Median islands will provide a 12” wide band of compacted mineral mulch around all edges of each median planter.

Routine maintenance would consist of:

- Tree pruning
- Shrub pruning and dead heading
- Raking, weeding, and removing of debris in planter beds
- Pest abatement as needed
- Seasonal fertilization

Irrigation

All landscape areas will be irrigated with an automatic system consisting of gate valves, controller, mainline, lateral lines, pop-up sprinkler heads and quick couplers. The system will be designed to apply sufficient water to promote healthy plant growth and to minimize unnecessary run-off or over watering.
Maintenance Analysis

Routine maintenance would consist of:

- Periodic sprinkler adjustments
- Replacing broken or damaged sprinkler heads, piping or control wire (as needed)
- Seasonal water application rates adjustment

Lighting

Public street lighting will be City of Sacramento approved light fixtures consisting of Type A Pole for general lighting and Ornamental Street Light Style II for pedestrian lights located at each bus stop.

Routine maintenance would consist of:

- Lamp replacement (based on lamp life)
- Replacing broken or damaged poles (as needed)
- Graffiti removal (as occurs)

Street Furnishings

Furnishings will consist of Sacramento Regional Transit (RT) provided bus shelters, benches, and trash cans. The RT maintains its own furnishings; therefore, the routine maintenance for these furnishings is not included. Benches identified on page 42 are in addition to those provided by RT and would be provided by other funding through the area BID.

District Signage

District identity signage will be attached to all designated light poles at a height of 14’ above finish surface. The signs will be made of 18” diameter powdercoated steel sheets and will be affixed to the light poles via a mechanical connection.

Routine maintenance would consist of:

- Replacing broken or damaged signs
- Graffiti removal (as occurs)

Monuments

At this time monuments are provided only in concept and have not been fully designed. Monuments would be designed under a separate scope of work and could be constructed of steel, masonry, or wood.

Routine maintenance would consist of:

- Replacing broken or damaged components
- Graffiti removal (as occurs)

Graffiti Abatement

For hard surfaces such as light poles, monuments structures, and district identity signage, etc., graffiti abatement may be achieved by the application of a sacrificial coating applied to the surface of noted materials. Sacrificial coatings must be replaced every five years or whenever unwanted graffiti is removed with approved solvents.

Infrastructure Impacts

Impacts of the Master Plan on existing infrastructure include the undergrounding of electrical utilities. Electrical utilities along Northgate Boulevard are a dominant visual and physical feature. Underground placement of these electrical utilities will be a significant project component. Successful undergrounding will remove physical obstacles along the roadway; reduce the visual blight caused by these structures, and improve safety. Additionally; it is possible that the proposed medians (with landscaping) may be constructed over existing domestic water, storm drain, and sanitary sewer pipes. These utilities would need to be relocated within the paved section of the street to avoid increased maintenance costs associated with utilities located in landscape areas and the potential impacts of root intrusion.
NEXT STEPS

To further strengthen the Master Plan, steps should be taken to change the zoning as proposed in the land use analysis and to implement additional architectural review procedures as recommended in the SNAP report. With these supporting measures in place, the groundwork will be in place to support redevelopment of the properties along this important Sacramento boulevard.

As subsequent phases of the Master Plan are considered for implementation, it is important that a detailed design development task be included in each scope of work. This task will be to further develop critical details before proceeding with final construction documents.

A key next step is to seek funding to implement each phase of the project. Each phase could be placed into the Transportation Programming Guide. Funding opportunities can be sought through redevelopment sources and state and federal grants.

Other steps would include the need for quantitative traffic analysis to measure the impacts of the proposed Master Plan, preparation of an environmental document to assess potential the environmental impacts, possible retention of an artist or establishment of a design competition for the entry monuments, and, finally, preparation of construction documents (plans, specifications, and estimates) by phase.
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NORTHGATE BOULEVARD STREETScape MASTER PLAN

Opportunities and Constraints

February 2006

City of Sacramento

LEGEND

EXISTING SIGNALIZED INTERSECTION
EXISTING 2 LANE PAVED ROAD
EXISTING 1 LANE PAVED ROAD
EXISTING SIDEWALKS
EXISTING POWER LINES
EXISTING BUS STOP (BUS ROUTE 12)
EXISTING STREET LIGHTING
EXISTING EASEMENT
EXISTING STREET MEDIAN
EXISTING SOIL METER

Key Map

Project Study Area

Sheet 3

City of Sacramento A-3
APPENDIX B

BASELINE TRANSPORTATION CONDITIONS

Introduction

The City of Sacramento is undertaking a project to create a concept plan and feasibility analysis for streetscape improvements along Northgate Boulevard from Garden Highway to Rosin Court. This section details existing conditions for pedestrians, bicyclists, transit users, and motorists along the project corridor.

Northgate Boulevard is a five lane arterial with bicycle lanes on both sides of the street beginning at San Juan Road and continuing south. There are two major cross streets in the study area: San Juan Road and West El Camino Avenue.

The street cross section of Northgate Boulevard varies at the northern and southern project limits but remains consistent from south of San Juan Road to Garden Highway (Figure B.1). Lane widths are generally 11', with an 11-foot two-way left turn lane in the center and five-foot bicycle lanes. Rolled curbs are present along much of Northgate Boulevard, and raised medians exist at the Northgate Boulevard/ Rosin Court intersection.

The pavement quality and striping along Northgate Boulevard are generally in good condition. However, on a field visit to the site on January 29, 2004, staff observed many locations with debris in the bike lane. Sidewalks have significant cracks in places, and several drainage grates were clogged with debris. Abandoned shopping carts and garbage dumping were also observed along the roadway and sidewalk.

Smythe School is located along Northgate Boulevard at Haggin Avenue. The City, in partnership with the neighborhood, identified the school as a key location for potential traffic safety improvements. School safety improvements are currently in design. Improvements include replacing rolled curb with vertical curb.

To discourage speeding in the vicinity of Smythe School, temporary school zone signs are placed in the two-way left turn lane on Northgate Boulevard during school hours. It is unclear if this has a significant effect in reducing traffic speeds near the school.
Figure B.1. Northgate Boulevard Cross Sections
Baseline Transportation Conditions

Pedestrians

Pedestrian conditions along Northgate Boulevard vary from adequate to poor. Some locations have wide sidewalks, curb ramps compliant with the Americans with Disabilities Act (ADA), and utility poles located away from the sidewalk. Other locations, however, have a severely constrained pedestrian right-of-way, with bus stop signs, utility poles, and traffic signal cabinets blocking the travel path, as shown in the photo to the left. Frequent driveways create additional motorist-pedestrian conflict points and potential challenges for persons with disabilities, parents with strollers, and others who must negotiate the cross-slope. Additionally, sidewalks are missing in places, generally along vacant lots adjacent to Northgate Boulevard at its northern end.

There are relatively few marked pedestrian crossings along Northgate Boulevard. The crossings that are marked are all located at signalized intersections with advance limit lines for vehicles, which creates a well-defined crosswalk. The volume and speed of traffic and the wide street cross section create a challenging environment for pedestrian crossings at unmarked locations. Signalized intersections have pedestrian signals, though most push buttons are non-ADA compliant. In the study area, there are eight crossing locations, for an average of one crossing every 0.25 miles (1,320 feet). Pedestrian crossings near Smythe School are limited to the striped crossing located at Northgate Boulevard/Haggin Avenue.

Collision data for pedestrians along Northgate Boulevard was requested in early February but will not be available for several weeks due to a system upgrade in progress at the Sacramento Police Department. When the data becomes available, it will be included in this section.
Baseline Transportation Conditions

Bicycles

Northgate Boulevard has bike lanes beginning at San Juan Road continuing south of the project limits (see Figure B.4). In addition, bicycle lanes cross or intersect Northgate Boulevard at West El Camino Avenue, Garden Highway, and the Arden-Garden Connector.

The bicycle lanes are generally 5’ in width, and the lane stripe and bicycle stencils are in good condition. In several locations, there is an uneven seam where the pavement abuts the curb. There were no loop detector symbols along Northgate Boulevard. Bicycle parking, especially at commercial locations, is minimal or non-existent. Frequent driveway access to commercial uses along the corridor creates additional conflict points for cyclists and drivers.

During the field visit, staff observed several cyclists using the bike lanes, although cyclists more often used the sidewalk, with many riding in the opposite direction of traffic.

Collision data for bicycles along Northgate Boulevard was requested in early February. When the data becomes available, it will be included in this section.

Figure B.4. Site photo of a cyclist riding on the sidewalk

Figure B.5. Pedestrian and Bicycle Collisions
Figure B.6. Bicycle, Pedestrian, and Transit Conditions
Transit

Sacramento Regional Transit (RT) operates one bus route along Northgate Boulevard. Route 13 provides service every 30 minutes during the morning peak period and every 60 minutes at all other times. Bus stops along Northgate Boulevard typically consist of a signed pole without a bench; however, some stops do have shelters. Staff observed garbage dumping at a bus stop at the intersection of Northgate Boulevard/West El Camino Avenue. Regional Transit also operates bus Routes 87 and 88 along San Juan Road and West El Camino Avenue, respectively.

Motor Vehicles

Traffic volumes on Northgate Boulevard average approximately 20,000 vehicles per day. The posted speed is 40 miles per hour. The concentration of commercial establishments and access points along the corridor result in frequent turning movements onto and off of the roadway, which may increase the potential for bicycle and pedestrian conflicts.

Existing Traffic

Traffic volumes for Northgate Boulevard were obtained from the City of Sacramento and are shown in Figure B.7. Existing volumes are based on counts taken from 1998-2001. Traffic volumes are relatively constant from West El Camino Avenue to Interstate 80, though substantially less traffic uses Northgate Boulevard south of West El Camino Avenue.

The City of Sacramento has conducted speed surveys at various locations along Northgate Boulevard. Average speeds are at or below the posted speed limit of 40 miles per hour, and eighty-fifth percentile speeds do not exceed the speed limit by more than five miles per hour.

Intersection levels of service (LOS) on Northgate Boulevard were analyzed as part of the Environmental Impact Analysis for the Northgate Redevelopment Project Area. Level of Service is a quantitative measurement of an intersection’s operation, ranging from LOS A (indicating free flow traffic conditions with little or no delay) to LOS F (representing oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). Existing intersection LOS levels are shown in Figure B.8.

Although there are no level of service calculations for existing conditions along the Northgate Boulevard corridor or roadway segments (as opposed to intersections), the Florida Department of Transportation’s (FDOT) Generalized Tables...
were applied in order to get a baseline for future comparisons. The Generalized Tables are based on the definitions and planning methodology of the 2000 Highway Capacity Manual.

The Generalized Tables present maximum service volumes, which are the highest acceptable number of vehicles for a given level of service. The FDOT tables are appropriate for use as broad planning tools. As with any roadway, the major capacity constraints are at intersection locations, and the LOS calculations in Figure B.8 provide a quantitative measurement of conditions at these critical bottlenecks. Based on daily volumes and intersection spacing, Northgate Boulevard presently experiences LOS B. With the addition of future traffic (see below), the corridor will experience between LOS B and C, although specific intersection locations may experience congestion, as shown in Figure B.8.
## Baseline Transportation Conditions

### Northgate Boulevard Existing Intersection Level of Service

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<th>Intersection</th>
<th>AM Peak Hour</th>
<th>PM Peak Hour</th>
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<tr>
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<td>Average Delay</td>
<td>LOS</td>
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<tr>
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<td>14</td>
<td>B</td>
</tr>
<tr>
<td>Northgate Boulevard/San Juan Road</td>
<td>27</td>
<td>C</td>
</tr>
<tr>
<td>Northgate Boulevard/El Camino Avenue</td>
<td>27</td>
<td>C</td>
</tr>
<tr>
<td>Northgate Boulevard/Garden Highway/Jefferson Avenue</td>
<td>4</td>
<td>A</td>
</tr>
<tr>
<td>Northgate Boulevard/Arden-Garden Connector</td>
<td>28</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes: LOS based on intersection counts taken in December 2001, Average delay is in seconds per vehicle.

Source: Draft Environmental Impact Report, Redevelopment Plan for Northgate Project Area, 2002

Figure B.8. Northgate Boulevard Existing Intersection Level of Service Table
Parking

Parking is not permitted along Northgate Boulevard in the project area. Many commercial establishments have dedicated parking lots with ample off-street parking available. Residential parking is unrestricted, and on-street parking on side streets near Northgate Boulevard is readily available.

Large trucks parking on side streets was mentioned as a concern. Columbus Avenue and Rosin Court each have trucks parked inappropriately on the side of the street. Trucks parking on Columbus Avenue appear to result from a landscape materials business.
Current Zoning Designation

Aerial Photo

Current Land Use and Zoning

Legend
- Study Area
- Zoning Commercial FM
- Low Density Residential
- Accidental Mixed Use
- Commercial
- Industrial Intensive (Business Park)
- Public Facility
Proposed Zoning Designation

Aerial Photo

Proposed Land Use

Legend
- Study Area
- Existing Commercial BPD
- Low Density Residential
- Moderate Density Residential (1-2 Ac)
- Residential Mixed Use
- Neighborhood Park
- Commercial
- Industrial Limited (Occupied Permits)
- Public Facility
- Paddle Pool Site

Proposed Land Use
- Commercial

Land Use Calculation
- Medium Density Residential
  - 5.17 Acres
- Residential Mixed Use
  - 36.74 Acres
- Commercial
  - 5.08 Acres
The Project Design Team is seeking your comments on the Northgate Boulevard Master Plan. We have prepared this REPORT CARD for you to offer your comments on the proposed design. Please note your comments in the space provided. Written comments are strongly encouraged! We thank you for your contribution to this important community project.

**Landscape:**
Parkway planter strips, medians, trees and shrubs

- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvement

**Lighting:**
Historic replica "acorn-style"

- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvement

**Site Furnishings:**
Benchs & bus shelters

- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvement

**Neighborhood Identification:**
Medallion signs on light poles with community logo

- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvements

**Entry Monuments:**
Community theme entry monuments

- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvements

---

Figure D.1. Report Card
### Walkability:

- 5'-wide sidewalks next to parkways

- ☐ Exceeds Expectations
- ☐ Acceptable
- ☐ Needs Improvement

### Accessibility:

- New accessible ramps at all corners

- ☐ Exceeds Expectations
- ☐ Acceptable
- ☐ Needs Improvement

### Crosswalks:

- Proposed in three new locations

- ☐ Exceeds Expectations
- ☐ Acceptable
- ☐ Needs Improvement

### Smythe School Access:

- Option A with median

- ☐ Exceeds Expectations
- ☐ Acceptable
- ☐ Needs Improvements

### Smythe School Access:

- Option B with median

- ☐ Exceeds Expectations
- ☐ Acceptable
- ☐ Needs Improvements

### Controlled Turning Movements:

- Controlled left and u-turns at intersections

- ☐ Exceeds Expectations
- ☐ Acceptable
- ☐ Needs Improvements
### Report Card

#### Bus Stops:
- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvement

#### Benches:
New accessible ramps at all corners
- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvement

#### Focused Commercial Areas:
Located at north and south ends of corridor
- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvement

#### Proposed Zoning:
Commercial to RMX (Residential Mixed Use) allows mix of residential and commercial on same property
- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvements

#### Proposed Special Development Standards:
Support increased architectural review on new projects in RMX zone
- [ ] Exceeds Expectations
- [ ] Acceptable
- [ ] Needs Improvements

---

Figure D.3. Report Card continued
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APPENDIX E

CONCEPTUAL STREETSCAPE PLANS

LEGEND

- Existing Drain Inlet
- Existing Drain Inlet Relocated
- Proposed Monument Type 1
- Proposed Monument Type 2
- Bus Stop Type #1: Bench, Shelter, Sign and Trash Receptacle
- Bus Stop Type #2: Sign and Trash Receptacle
- Proposed Tree Grate
- Accessible Ramp
- Proposed Stamped Asphalt Crosswalk
- Existing Tree to be Saved at Possible
  (Determined at Final Design Stage)
- Proposed Street Tree- 10’ Spread
- Proposed Street Tree- 20’ Spread
- Proposed Street Tree- 30’ Spread
- Proposed Landscape Area

NOTES: Site distance at intersections shall comply with Sacramento Department of Public Works Plate 15-24 and Section 405.1 of the Caltrans Highway Design Manual.

City of Sacramento
LEGEND

- Proposed Pedestrian Streetlight, Type 2
- Existing Streetlight Relocated, Type 1
- Proposed Streetlight, Type 1
- Existing Signal Light with Street Light
- Existing Signal Light with Street Light Relocated
- Proposed Signal Light with Street Light
- Existing Signal Light
- Existing Power Pole
- Existing Power Pole Relocated
- Existing Utilities
- Existing Utilities Relocated
- Existing Fire Hydrant
- Existing Fire Hydrant Relocated
- R.O.W. Take

- Existing Drain Inlet
- Existing Drain Inlet Relocated
- Proposed Monument Type 1
- Proposed Monument Type 2
- Bus Stop Type #1: Bench, Shelter, Sign and Trash Receptacle
- Bus Stop Type #2: Sign and Trash Receptacle
- Proposed Tree Grate
- Accessible Ramp
- Proposed Stamped Asphalt Crosswalk
- #1 Proposed New Residential Area Wall
- Proposed Street Tree - 10' Spread (Determined at Final Design Stage)
- Proposed Street Tree - 20' Spread
- Proposed Street Tree - 30' Spread
- Proposed Landscape Area

NOTE: Site distance at intersections shall comply with Sacramento Department of Public Works Plate 15-24 and Section 405.1 of the Caltrans Highway Design Manual.
Proposed Streetscape Plans

Legend:
- Proposed Pedestrian Streetscape, Type 2
- Existing Streetlight Relocated, Type I
- Proposed Streetlight, Type I
- Existing Signal Light with Street Light
- Existing Signal Light with Street Light Relocated
- Proposed Signal Light with Street Light
- Existing Signal Light
- Existing Power Pole
- Existing Power Pole Relocated
- Existing Utilities
- Existing Utilities Relocated
- Existing Fire Hydrant
- Existing Fire Hydrant Relocated
- R.O.W. Take
- Existing Drain Inlet
- Existing Drain Inlet Relocated
- Proposed Monument Type 1
- Proposed Monument Type 2
- Bus Stop Type #1: Bench, Shelter, Sign and Trash Receptacle
- Bus Stop Type #2: Sign and Trash Receptacle
- Proposed Tree Curb
- Accessible Ramp
- Proposed Stamped Asphalt Crosswalk
- Proposed New Residential Area Wall
- Existing Tree to be Saved as Possible (Determined at Final Design Stage)
- Proposed Street Tree- 10' Spread
- Proposed Street Tree- 20' Spread
- Proposed Street Tree- 30' Spread
- Proposed Landscape Area

NOTE: Site distance at Intersections shall comply with Sacramento Department of Public Works-Plate 15-24 and Section 405.1 of the Caltrans Highway Design Manual.

City of Sacramento
E-6

rm design group
creating environments people enjoy

Date: 01-25-05
Revised: 06-30-05
* See Following Page 7a for Alternate Condition.

NOTE: Site distance at intersections shall comply with Sacramento Department of Public Works Plate 1S-24 and Section 405.1 of the Caltrans Highway Design Manual.
NORTHGATE BOULEVARD STREETSCAPE MASTER PLAN
Conceptual Streetscape Plans
Sheet 7a

NOTE: Site distance at intersections shall comply with Sacramento Department of Public Works Plate 15-24 and Section 405.1 of the Caltrans Highway Design Manual.

Legend:
- Existing Drain Inlet
- Existing Drain Inlet Relocated
- Proposed Monument Type 1
- Proposed Monument Type 2
- Bus Stop Type #1: Bench, Shelter, Sign and Trash Receptacle
- Bus Stop Type #2: Sign and Trash Receptacle
- Proposed Tree Groove
- Accessible Ramp
- Proposed Stamped Asphalt Crosswalk
- Proposed New Residential Area Wall
- Existing Tree to be Saved as Possible (Determined at Final Design Stage)
- Proposed Street Tree - 10' Spread
- Proposed Street Tree - 20' Spread
- Proposed Street Tree - 30' Spread
- Proposed Landscape Area

Key Map

February 2006
City of Sacramento
NORTHGATE BOULEVARD STREETSCAPE MASTER PLAN

Conceptual Streetscape Plans

Sheet 9

February 2006
City of Sacramento
E-10

Legend

- Proposed Pedestrian Accommodations
- Proposed Sidewalk, Type 2
- Existing Sidewalk, Type 1
- Proposed Sidewalk, Type 1
- Existing Sidewalk
- Existing Signal Light with Street Light
- Proposed Signal Light with Street Light
- Existing Sidewalk
- Existing Signal Light
- Existing Power Pole
- Existing Power Pole Relocated
- Existing Utilities
- Existing Utilities Relocated
- Existing Fire Hydrant
- Existing Fire Hydrant Relocated
- R.O.W. Take

- Existing Drain Inlet
- Existing Drain Inlet Relocated
- Proposed Monument Type 1
- Proposed Monument Type 2
- Bus Stop Type #1: Bench, Shelter, Sign and Trash Receptacle
- Bus Stop Type #2: Sign and Trash Receptacle
- Proposed Tree Grate
- Accessible Ramp
- Proposed Stamped Concrete Curb/Walk
- Proposed New Residential Area Wall
- Existing Tree to be Saved as Possible (Determined at Final Design Stage)
- Proposed Street Tree- 10' Spread
- Proposed Street Tree- 20' Spread
- Proposed Street Tree- 30' Spread
- Proposed Landscape Area

NOTE: Site distance at intersections shall comply with Sacramento Department of Public Works-Phase 15-24 and Section 405.1 of the Caltrans Highway Design Manual.
NOTICE: Site distance at intersections shall comply with Sacramento Department of Public Works 15-24 and Section 405.1 of the Caltrans Highway Design Manual.

Legend:
- Proposed Pedestrian Streetlight, Type 1
- Existing Pedestrian Streetlight, Type 1
- Proposed Signal Light with Pedestrian Streetlight
- Existing Signal Light with Pedestrian Streetlight
- Proposed Signal Light with Street Light
- Existing Signal Light
- Proposed Power Pole
- Existing Power Pole
- Proposed Power Pole Relocated
- Existing Power Pole Relocated
- Proposed Streetlight
- Proposed Monument: Type 1
- Proposed Monument: Type 2
- Bus Stop Type #1: Bench, Shelter, Sign and Trash Receptacle
- Bus Stop Type #2: Sign and Trash Receptacle
- Proposed Tree Grant
- Accessible Ramp
- Proposed Stamped Asphalt Crosswalk
- Proposed New Residential Area Wall
- Existing Tree to be Saved as Possible (Determined at Final Design Stage)
- Proposed Street Tree: 10' Spread
- Proposed Street Tree: 20' Spread
- Proposed Street Tree: 30' Spread
- Proposed Landscape Area
APPENDIX F

PRELIMINARY ESTIMATE OF PROBABLE COST

In providing this opinion of probable cost, it is recognized that neither the Client nor RRM Design Group has control over the costs of labor, equipment, or materials, or over the Contractor's methods of determining prices for bidding. This opinion of probable costs is based on RRM Design Group's reasonable professional judgment and experience and does not constitute a warranty, express or implied, that the Contractor's bids or negotiated price of work will not vary from the Client's budget or from any opinion prepared by RRM Design Group.

<table>
<thead>
<tr>
<th>PHASE</th>
<th>LOCATION</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot Project (1)</td>
<td>Median from Rosin Court extending south 1 block</td>
<td>$729,000.00</td>
</tr>
<tr>
<td>Phase 1 (Includes Alternative 10a) (1)</td>
<td>Arden Garden Parkway to West El Camino</td>
<td>$4,027,000.00</td>
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<tr>
<td>Phase 2 (Includes Alternative 7a) (1)</td>
<td>West El Camino to Potomac Avenue</td>
<td>$6,294,000.00</td>
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<tr>
<td>Phase 3 (1)</td>
<td>San Juan Road to Potomac</td>
<td>$4,648,000.00</td>
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<td>Phase 4 (1)</td>
<td>Rosin Court to San Juan Road</td>
<td>$4,122,000.00</td>
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<tr>
<td><strong>GRAND TOTAL</strong></td>
<td></td>
<td><strong>$19,820,000.00</strong></td>
</tr>
</tbody>
</table>

(1) Includes 10% mobilization, 20% contingency, 30% Engineering and Inspection Fees.

Figure F.1. Preliminary Estimate of Probable Cost
This page intentionally left blank.
In providing this opinion of probable cost, it is recognized that neither the Client nor RRM Design Group has control over the costs of labor, equipment, or materials, or over the Contractor's methods of determining prices for bidding. This opinion of probable costs is based on RRM Design Group's reasonable professional judgment and experience and does not constitute a warranty, express or implied, that the Contractor's bids or negotiated price of work will not vary from the Client's budget or from any opinion prepared by RRM Design Group.

<table>
<thead>
<tr>
<th>BID ITEM/QUANTITY</th>
<th>UNIT PRICE</th>
<th>COST</th>
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<tbody>
<tr>
<td><strong>ROADWAY</strong></td>
<td></td>
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</tr>
<tr>
<td>1 Traffic Control System</td>
<td>1.00 LB</td>
<td>$25,000.00</td>
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<tr>
<td>2 Storm Water Pollution Prevention Plan</td>
<td>1.00 LS</td>
<td>$5,000.00</td>
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<tr>
<td>3 Roadway Excavation</td>
<td>1322.00 CY</td>
<td>$50.00</td>
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<tr>
<td>4 Asphalt Concrete (Median Curb Replace)</td>
<td>717.00 TN</td>
<td>$80.00</td>
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<tr>
<td>5 Asphalt Concrete (Widening)</td>
<td>479.00 TN</td>
<td>$80.00</td>
</tr>
<tr>
<td>6 Median Curb</td>
<td>2150.00 LF</td>
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<td>7 Lane Line Striping</td>
<td>2323.00 LF</td>
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<tr>
<td>8 Turn Lane Striping</td>
<td>402.00 LF</td>
<td>$1.30</td>
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<tr>
<td>9 Bike Lane Striping</td>
<td>2323.00 LF</td>
<td>$1.00</td>
</tr>
<tr>
<td><strong>LANDSCAPE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Shrub and Groundcover Planting Areas</td>
<td>12,174 SF</td>
<td>$8.50</td>
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<tr>
<td>11 Irrigation (not including water connection fees)</td>
<td>12,174 SF</td>
<td>$5.00</td>
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<tr>
<td>12 Water Connection (excluding fees)</td>
<td>1 EA</td>
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<tr>
<td>13 Soil amendment &amp; mulch</td>
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<td>14 Trees Planting (24&quot; Box)</td>
<td>19 EA</td>
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<td>15 Structural Soil for Trees (excavate &amp; export native)</td>
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<td>$15.00</td>
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<tr>
<td>16 Structural Soil for Trees (import &amp; place)</td>
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<tr>
<td>17 Medallions to attach to street lights</td>
<td>EA</td>
<td>$900.00</td>
</tr>
<tr>
<td>18 Benches for Bus Stops</td>
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<tr>
<td>19 Covered Bus Stops</td>
<td>EA</td>
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<td>20 Trash Receptacle at Bus Stops</td>
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<td>$600.00</td>
</tr>
<tr>
<td>21 Bus Stop Sign</td>
<td>EA</td>
<td>$900.00</td>
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<tr>
<td>22 Monument Type 1</td>
<td>EA</td>
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<tr>
<td>23 Monument Type 2</td>
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<td><strong>SUB-TOTAL</strong></td>
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<tr>
<td><strong>MOBILIZATION</strong></td>
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<tr>
<td><strong>CONTINGENCIES</strong></td>
<td>20%</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>ENGINEERING &amp; INSPECTION</strong></td>
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<td><strong>GRAND TOTAL</strong></td>
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<td>$729,000.00</td>
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</table>

**FOOTNOTES:**
* This unit cost assumes excavating clean fill & exporting within a 20 mile radius of the project site
** This unit cost requires source material within 20 miles of the project site
### Roadway/Landscape Items

#### Roadway

<table>
<thead>
<tr>
<th>BID ITEM/QUANTITY</th>
<th>UNIT PRICE</th>
<th>COST</th>
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<tbody>
<tr>
<td>1 Traffic Control System</td>
<td>LS</td>
<td>30,000.00</td>
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<td>2 Storm Water Pollution Prevention Plan</td>
<td>LS</td>
<td>5,000.00</td>
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<tr>
<td>3 Roadway Excavation</td>
<td>CY</td>
<td>50.00</td>
</tr>
<tr>
<td>4 Asphalt Concrete</td>
<td>TN</td>
<td>80.00</td>
</tr>
<tr>
<td>5 Aggregate Base</td>
<td>CY</td>
<td>50.00</td>
</tr>
<tr>
<td>6 Sidewalk</td>
<td>SF</td>
<td>6.50</td>
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<tr>
<td>7 Curb Ramps</td>
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<td>3,500.00</td>
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<tr>
<td>8 Curb &amp; Gutter</td>
<td>LF</td>
<td>22.00</td>
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<tr>
<td>9 Median Curb</td>
<td>LF</td>
<td>15.00</td>
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<tr>
<td>10 Driveway</td>
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<td></td>
</tr>
<tr>
<td>11 Stamped Asphalt Crosswalk</td>
<td>SF</td>
<td>18.00</td>
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<tr>
<td>12 Right Of Way</td>
<td>SF</td>
<td>25.00</td>
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<tr>
<td>13 Pavement Marking</td>
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<td>3.00</td>
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<tr>
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<td>0.50</td>
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<td>1.30</td>
</tr>
<tr>
<td>17 Bike Lane Striping</td>
<td>LF</td>
<td>1.00</td>
</tr>
<tr>
<td>18 Fire Hydrants</td>
<td>EA</td>
<td>2,500.00</td>
</tr>
<tr>
<td>19 Drop Inlets</td>
<td>EA</td>
<td>8,000.00</td>
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<td>20 Relocate Street Lights</td>
<td>EA</td>
<td>3,000.00</td>
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<tr>
<td>21 Construct Street Lights</td>
<td>EA</td>
<td>10,000.00</td>
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<tr>
<td>22 Relocate Traffic Signal</td>
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<tr>
<td>23 Construct Traffic Signal</td>
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<tr>
<td>26 Adjust Manhole</td>
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<td>10,000.00</td>
</tr>
<tr>
<td>27 Upgrade Loop Detectors to Video Detection</td>
<td>EA</td>
<td>10,000.00</td>
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</table>

#### Landscape

<table>
<thead>
<tr>
<th>BID ITEM/QUANTITY</th>
<th>UNIT PRICE</th>
<th>COST</th>
</tr>
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<tbody>
<tr>
<td>28 Shrub And Groundcover Planting Areas</td>
<td>SF</td>
<td>8.50</td>
</tr>
<tr>
<td>29 Irrigation (Not Including Water Connection Fees)</td>
<td>SF</td>
<td>5.00</td>
</tr>
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<td>30 Water Connection (Excluding Fees)</td>
<td>EA</td>
<td>750.00</td>
</tr>
<tr>
<td>31 Soil Amendment &amp; Mulch</td>
<td>SF</td>
<td>1.00</td>
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<tr>
<td>32 Trees Planting (24” Box)</td>
<td>EA</td>
<td>350.00</td>
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<tr>
<td>33 Structural Soil For Trees (Excavate &amp; 6“sport festive) *</td>
<td>CY</td>
<td>15.00</td>
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<tr>
<td>34 Structural Soil For Trees (Import &amp; Place) **</td>
<td>CY</td>
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<tr>
<td>35 Medallions To Attach To Street Lights</td>
<td>EA</td>
<td>900.00</td>
</tr>
<tr>
<td>36 Benches For Bus Stops</td>
<td>EA</td>
<td>2,400.00</td>
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<tr>
<td>37 Covered Bus Stops</td>
<td>EA</td>
<td>12,000.00</td>
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<td>38 Trash Receptacle At Bus Stops</td>
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<tr>
<td>41 Monument Type 2</td>
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</tbody>
</table>

**Construction Cost Sub-Total**: $2,407,096.00

**Mobility**: 10%

**Contingencies**: 20%

**Construction Cost Total**: $3,129,000.00

**Engineering and Inspection**: 30%

**Grand Total**: $4,068,000.00
In providing this opinion of probable cost, it is recognized that neither the Client nor RRM Design Group has control over the costs of labor, equipment, or materials, or over the Contractor's methods of determining prices for bidding. This opinion of probable costs is based on RRM Design Group’s reasonable professional judgment and experience and does not constitute a warranty, express or implied, that the Contractor’s bids or negotiated price of work will not vary from the Client’s budget or from any opinion prepared by RRM Design Group.

### MASTER PLAN BUDGET - PRELIMINARY ESTIMATE OF PROBABLE COST

**PHASE 1: EL CAMINO TO ARDEN-GARDEN**  
**TOTAL LENGTH 2150 LF**

**CITY OF SACRAMENTO**  
**DEPARTMENT OF TRANSPORTATION**  
**SHRUB AND GROUNDCOVER PLANTING AREAS**  
**DATE: AUGUST 15, 2005**

#### ROADWAY / LANDSCAPE ITEMS

<table>
<thead>
<tr>
<th>BID ITEM/QUANTITY</th>
<th>UNIT PRICE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn Lane Lines</td>
<td>70 LF</td>
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<td>Asphalt Concrete</td>
<td>16.54 TN</td>
<td>$80.00 $</td>
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<tr>
<td>Pavement Marking</td>
<td>34 SF</td>
<td>$3.00 $</td>
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<tr>
<td>Roadway Excavation</td>
<td>49 CY</td>
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<tr>
<td>Shrub and Groundcover Planting Areas</td>
<td>1,723 SF</td>
<td>$8.50 $</td>
</tr>
<tr>
<td>Irrigation (not including water connection fees)</td>
<td>1,723 SF</td>
<td>$5.00 $</td>
</tr>
<tr>
<td>Water Connection (excluding fees)</td>
<td>1 EA</td>
<td>$750.00 $</td>
</tr>
<tr>
<td>Soil amendment &amp; mulch</td>
<td>1,723 SF</td>
<td>$1.00 $</td>
</tr>
<tr>
<td>Trees Planting (24&quot; box)</td>
<td>1 EA</td>
<td>$350.00 $</td>
</tr>
<tr>
<td>Structural Soil for Trees (excavate &amp; export native)</td>
<td>-12 CY</td>
<td>$15.00 $</td>
</tr>
<tr>
<td>Structural Soil for Trees (import &amp; place) **</td>
<td>-12 CY</td>
<td>$40.00 $</td>
</tr>
</tbody>
</table>

**SUB-TOTAL** - $24,543.50

**MOBILIZATION** 10%  
- $2,454.35

**CONTINGENCIES** 20%  
- $4,908.70

**ENGINEERING & INSPECTION** 30%  
- $9,571.97

**TOTAL COST SAVINGS FOR 10A** - $41,000.00

**GRAND TOTAL** $4,027,000.00

---

**FOOTNOTES:**

* This unit cost assumes excavating clean fill & exporting within a 20 mile radius of the project site

** This unit cost requires source material within 20 miles of the project site
**ROADWAY / LANDSCAPE ITEMS**

<table>
<thead>
<tr>
<th>BID ITEM/QUANTITY</th>
<th>UNIT PRICE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROADWAY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Traffic Control System</td>
<td>1.00 LS</td>
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<tr>
<td>2 Storm Water Pollution Prevention Plan</td>
<td>1.00 LS</td>
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</tr>
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<td>6900.00 CY</td>
<td>$50.00</td>
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<tr>
<td>4 Asphalt Concrete</td>
<td>7900.00 TN</td>
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<td>25 Adjust Water Line</td>
<td>1.00 EA</td>
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<td>26 Adjust Manhole</td>
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<td>27 Upgrade Loop Detectors to Video Detection</td>
<td>3.00 EA</td>
<td>$10,000.00</td>
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<tr>
<td><strong>LANDSCAPE</strong></td>
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**CONSTRUCTION COST SUB-TOTAL** $1,863,915.50

**MOBILIZATION** 10% $386,391.55

**CONTINGENCIES** 20% $377,783.10

**CONSTRUCTION COST TOTAL** $5,023,000.00

**ENGINEERING AND INSPECTION** 30% $1,506,900.00

**PHASE 2 TOTAL** $6,530,000.00
In providing this opinion of probable cost, it is recognized that neither the Client nor RRM Design Group has control over the costs of labor, equipment, or materials, or over the Contractor's methods of determining prices for bidding. This opinion of probable costs is based on RRM Design Group's reasonable professional judgment and experience and does not constitute a warranty, express or implied, that the Contractor's bids or negotiated price of work will not vary from the Client's budget or from any opinion prepared by RRM Design Group.

### ROADWAY / LANDSCAPE ITEMS

**DATE:** AUGUST 15, 2005  
**PHASE 2 - POTOMAC TO EL CAMINO**  
**TOTAL LENGTH 3950 LF**  
**CITY OF SACRAMENTO**  
**PUBLIC WORKS AGENCY**  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT NUMBER:**  
**CONTRACT NUMBER:**

#### MASTER PLAN BUDGET - PRELIMINARY ESTIMATE OF PROBABLE COST

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<tr>
<th>BID ITEM/QUANTITY</th>
<th>UNIT PRICE</th>
<th>COST</th>
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<tr>
<td>Centerline Striping</td>
<td>1000 LF $2.00</td>
<td>$2,000.00</td>
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<td>Asphalt Concrete</td>
<td>33.98 TN $80.00</td>
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<tr>
<td>Median Curb</td>
<td>-1000 LF $15.00</td>
<td>$(15,000.00)</td>
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<tr>
<td>Roadway Excavation</td>
<td>-371 CY $50.00</td>
<td>$(18,550.00)</td>
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<tr>
<td>Shrub and Groundcover Planting Areas</td>
<td>-5,369 SF $8.50</td>
<td>$(45,695.00)</td>
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<tr>
<td>Impervious Area (including water connection fees)</td>
<td>-5,369 SF $5.00</td>
<td>$(26,845.00)</td>
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<tr>
<td>Water Connection (excluding fees)</td>
<td>1 EA $750.00</td>
<td>$750.00</td>
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<tr>
<td>Soil amendment &amp; mulch</td>
<td>-5,369 SF $1.00</td>
<td>$(5,369.00)</td>
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<tr>
<td>Trees Planting (24&quot; Box)</td>
<td>-1 EA $350.00</td>
<td>$(350.00)</td>
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<tr>
<td>Structural Soil for Trees (excavate &amp; export native)</td>
<td>-1,025 CY $15.00</td>
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<tr>
<td>Structural Soil for Trees (import &amp; place)</td>
<td>-1,025 CY $40.00</td>
<td>$(41,000.00)</td>
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</table>

**UNIT PRICE**  
**COST**

**MASTER PLAN BUDGET - SUB-TOTAL**  
$139,425.50

**MOBILIZATION 10%**  
$13,942.55

**CONTINGENCIES 20%**  
$27,885.10

**ENGINEERING & INSPECTION 30%**  
$54,375.95

**TOTAL**  
$181,253.15

**TOTAL COST SAVINGS FOR 7A**  
$235,629.10

**GRAND TOTAL**  
$6,294,000.00

### COST SAVINGS FOR ALTERNATIVE 7A

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<tr>
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<th>UNIT PRICE</th>
<th>COST</th>
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<tr>
<td>Pavement Marking</td>
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<td>$147.00</td>
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<tr>
<td>Centerline Striping</td>
<td>1000 LF $2.00</td>
<td>$2,000.00</td>
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<tr>
<td>Asphalt Concrete</td>
<td>33.98 TN $80.00</td>
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<td>Median Curb</td>
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<td>$(15,000.00)</td>
</tr>
<tr>
<td>Roadway Excavation</td>
<td>-371 CY $50.00</td>
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<tr>
<td>Shrub and Groundcover Planting Areas</td>
<td>-5,369 SF $8.50</td>
<td>$(45,695.00)</td>
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<tr>
<td>Impervious Area (including water connection fees)</td>
<td>-5,369 SF $5.00</td>
<td>$(26,845.00)</td>
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<tr>
<td>Water Connection (excluding fees)</td>
<td>1 EA $750.00</td>
<td>$750.00</td>
</tr>
<tr>
<td>Soil amendment &amp; mulch</td>
<td>-5,369 SF $1.00</td>
<td>$(5,369.00)</td>
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<td>Trees Planting (24&quot; Box)</td>
<td>-1 EA $350.00</td>
<td>$(350.00)</td>
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<td>Structural Soil for Trees (import &amp; place) **</td>
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<td>$(41,000.00)</td>
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</tbody>
</table>

**SUB-TOTAL**  
$139,425.50

**MOBILIZATION 10%**  
$13,942.55

**CONTINGENCIES 20%**  
$27,885.10

**TOTAL**  
$181,253.15

**TOTAL COST SAVINGS FOR 7A**  
$235,629.10

**GRAND TOTAL**  
$6,294,000.00

**FOOTNOTES:**  
* This unit cost assumes excavating clean fill & exporting within a 20 mile radius of the project site  
** This unit cost requires source material within 20 miles of the project site
## Project: Phase 3 - San Juan to Potomac

**Total Length**: 2800 LF

**Project Number**: 

**Department of Transportation**

**Public Works Agency**

**City of Sacramento**

### Master Plan Budget - Preliminary Estimate of Probable Cost

In providing this opinion of probable cost, it is recognized that neither the Client nor RRM Design Group has control over the costs of labor, equipment, or materials, or over the Contractor's methods of determining prices for bidding. This opinion of probable costs is based on RRM Design Group's reasonable professional judgment and experience and does not constitute a warranty, express or implied, that the Contractor's bids or negotiated price of work will not vary from the Client's budget or from any opinion prepared by RRM Design Group.

### Roadway / Landscape Items

<table>
<thead>
<tr>
<th>Bid Item/Quantity</th>
<th>Unit Price</th>
<th>Cost</th>
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<tr>
<td><strong>BID ITEM/QUANTITY</strong></td>
<td><strong>UNIT PRICE</strong></td>
<td><strong>COST</strong></td>
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<td><strong>ROADWAY</strong></td>
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<td>1 Traffic Control System</td>
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<tr>
<td>10 Driveway</td>
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<td>11 Stamped Asphalt Crosswalk</td>
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<tr>
<td>20 Relocate Street Lights</td>
<td>9.00 EA</td>
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<td>24 Flashers</td>
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<tr>
<td>25 Adjust Water Line</td>
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<tr>
<td>26 Adjust Manhole</td>
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<tr>
<td>27 Upgrade Loop Detectors to Video Detection</td>
<td>2.00 EA</td>
<td>$10,000.00</td>
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<tr>
<td><strong>LANDSCAPE</strong></td>
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<tr>
<td>28 Shrub and Groundcover Planting Areas</td>
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<td>29 Irrigation (not including water connection fees)</td>
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<td>35 Medianline to attach to street lights</td>
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<td>36 Benches for Bus Stops</td>
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<td>37 Covered Bus Stops</td>
<td>1 EA</td>
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</tr>
<tr>
<td>38 Trash Receptacle at Bus Stops</td>
<td>3 EA</td>
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<td>39 Bus Stop Sign</td>
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<tr>
<td>40 Monument Type 1</td>
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<tr>
<td>41 Monument Type 2</td>
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**Construction Cost Sub-Total**: $2,749,664.00

**Mobilization**: 10%

**Contingencies**: 20%

**Construction Cost Total**: $3,375,000.00

**Engineering and Inspection**: 30%

**Phase 3 Grand Total**: $4,648,000.00

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**Footnotes:**

- This unit cost assumes excavating clean fill & exporting within a 20 mile radius of the project site.
- This unit cost requires source material within 20 miles of the project site.

**Phase 3**

6  

**Engineer's Estimate rev 10-18-05.XLS**
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<td>12 Right Of Way (None Required This Phase)</td>
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</tr>
<tr>
<td>33 Structural Soil for Trees (excavate &amp; export native) *</td>
<td>8,523 CY</td>
<td>$15.00</td>
</tr>
<tr>
<td>34 Structural Soil for Trees (import &amp; place) **</td>
<td>8,523 CY</td>
<td>$40.00</td>
</tr>
<tr>
<td>35 Medallions to attach to street lights</td>
<td>9 EA</td>
<td>$900.00</td>
</tr>
<tr>
<td>36 Benches for Bus Stops</td>
<td>2 EA</td>
<td>$2,400.00</td>
</tr>
<tr>
<td>37 Covered Bus Stops</td>
<td>1 EA</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>38 Trash Receptacle at Bus Stops</td>
<td>2 EA</td>
<td>$600.00</td>
</tr>
<tr>
<td>39 Bus Stop Signs</td>
<td>2 EA</td>
<td>$900.00</td>
</tr>
<tr>
<td>40 Monument Type 1</td>
<td>0 EA</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>41 Monument Type 2</td>
<td>1 EA</td>
<td>$42,000.00</td>
</tr>
</tbody>
</table>

**CONSTRUCTION COST SUB-TOTAL** $2,439,087.40

**MOBILIZATION** 10% $243,908.74

**CONTINGENCIES** 20% $487,817.48

**CONSTRUCTION COST TOTAL** $3,171,000.00

**ENGINEERING & INSPECTION** 30% $951,300.00

**PHASE 4 GRAND TOTAL** $4,122,000.00

FOOTNOTES:
* This unit cost assumes excavating clean fill & exporting within a 20 mile radius of the project site
** This unit cost requires source material within 20 miles of the project site