City of Reno
Redevelopment District No. 1
Streetscape Master Plan
(Amended)
CITY COUNCIL/
REDEVELOPMENT AGENCY BOARD

Robert A. Cashell, Sr., Mayor/Chairman
   Pierre Hascheff
   Dan Gustin
   Sharon Zadra
   Jessica Sferrazza
   Dwight Dortch
   David Aiazzi

CITIZENS ADVISORY COMMITTEE
TO THE REDEVELOPMENT AGENCY OF THE
CITY OF RENO

Richard Bartholet
James Litchfield
James Hunting
James Mickey
Michele Attaway
Dick Scott
Peter Stremmel

PLANNING COMMISSION

Darrin Georgeson, Chair
   Tod Brabbin
Douglas D. Coffman
   Foster, Lisa A
   Dennis Romeo
   Jim Newberg
   Elizabeth (Liz) Ford

REDEVELOPMENT AGENCY STAFF

Charles McNeely, Executive Director/City Manager
   Mark Lewis, Redevelopment Administrator
Scott Edwards, Economic Development Program Manager
James Graham, Economic Development Program Manager
Kristin Rossiter, Economic Development Program Manager
Gillian Pollard, Redevelopment Project Manager
Jodi Royal-Goodwin, Community Resources Program Manager
Lisa Newberg, Management Assistant
I. Introduction

The purpose of the Streetscape Master plan is to establish and clarify the extent of sidewalk improvements within the public right-of-way with respect to pavement treatment, landscaping, lighting fixtures and street furniture. This document is intended to establish streetscape standards to strengthen the identity of the Downtown Redevelopment District by providing a common linkage of streetscapes in creating a visually interesting and appealing streetscape for both pedestrian and vehicular traffic.

This plan is based upon a hierarchy of street functions within the context of the distinct sub-areas that comprise the Downtown Redevelopment Area, (Redevelopment District No. 1). For example, more elaborate streetscape design features (stained and stamped concrete) are concentrated in the downtown Entertainment Core where high levels of pedestrian traffic occur in a vibrant casino setting continuously day and night throughout the year. An even higher level of design features have been applied to Virginia Street from the Truckee River in the south to Interstate 80 in the north. A less intense streetscape standard is provided for in the residential areas with more subtle lighting and smooth finished pavement with an emphasis on landscaping.

This document augments City standards in more explicit detail, essentially building upon the pattern of development set forth in The Blueprint: A Revitalization Strategy for Downtown Reno (1992) and the Amendment to the Redevelopment Plan for the Downtown Redevelopment Area (1990). New roadways are not expected to be built in the Downtown Redevelopment District because the street pattern is essentially built out.

II. Goals and Objectives

The mission of this plan is to accomplish the following:

Establish a hierarchy of streetscapes and street functions which strengthens the identity of the district while optimizing financial resources, minimizing maintenance expenses and promoting the sense of safety and serenity for residents and visitors.
As a means to accomplish this mission, the following goals and objectives have been established for the plan:

- Complete the construction of the Entertainment Core
- Create safe, hospitable and logistical pedestrian circulation zones and linkages primarily through improved street lighting.
- Develop a common “thread” of unity which ties all sub-districts together visually and thematically.
- Develop a priority based system for evaluating public expenditures for streetscape improvements over the greatest distance.
- Encourage private investment in façade upgrades by leveraging public expenditures in streetscape improvements.
- Create a clean, visually simple and unifying streetscape.
- Reflect historic themes in the streetscape palette
- Define design variations to achieve the greatest benefit from monies invested.
- Establish treatments for landscaping an pedestrian utilization of the railroad corridor.

III. Planning Framework

The Planning Framework for the Downtown Redevelopment District was essentially set in place with the adoption of 

*The Blueprint: A Revitalization Strategy for Downtown Reno* (The Blueprint) in December, 1992. The Blueprint recognized that the pattern of existing development in the downtown area was characterized by distinct sub-areas or districts. These districts include the Entertainment Core, Riverfront District, Civic/Office District, and outlying areas of support commercial and residential neighborhoods. Central to the “Blueprint” is the reinforcement of the Casino and Entertainment Core as the economic engine that drives the local economy.

Since the writing of the original Streetscape Master Plan, major changes to the fabric of downtown have taken place. An original goal of the Downtown Redevelopment District was to develop marketable housing in the Entertainment Core. To date there is one new condominium project completed and five new projects under construction. These residential units abut the Downtown Entertainment Core and will affect pedestrian and vehicular traffic patterns. In addition, Virginia Street, the spine of the Entertainment Core, has been improved with wider sidewalks, fewer traffic lanes, more street trees and uniform street lights from the Truckee River to the north side of 4th Street.

The Streetscape Master Plan is intended to complement and reinforce the identity of each of these distinctive areas. The streetscape treatment assigned to the respective streets is based upon their function as a street for circulation purposes and the existing/proposed land uses. More elaborate detail is provided for in the Entertainment Core while more subdued Streetscapes conducive to a residential environment are provided for the neighborhoods.

The existing and newly adopted streetscape elements within the core frequently clash. Previous black cherry colored street
furnishings intermingle with the newly adopted paving standard. Other areas within the core and along the river blend with other styles. At the present, no single theme weaves throughout the district. Existing furnishings have a useful “lifespan” in the sense of capital improvements. A plan of action for replacing the existing elements to the new streetscape standards with a common theme must be devised.

The Virginia Street Improvement Project has made a major step forward in embracing the Streetscape Standards adopted in 1996. It was also determined by the City Council in October 2006 that all remaining Black Cherry street furniture would be painted flat black. By painting existing structures, the City of Reno achieved a considerable savings by not having to replace perfectly functional fixtures.

To a certain extent, streetscapes “create value” to the adjacent stores and properties fronting the streets. By introducing streetscape improvements, such as the Virginia Street Improvement Project, East and West 4th Street Improvements and the River District Lighting Improvements, the process of upgrading and remodeling adjoining facades can in fact be facilitated by anchoring private capital improvement investments of businesses. The image and appeal of the street is significantly enhanced when both streetscapes and building facades are upgraded.

Outlying areas from the Entertainment Core suffer from visual blight and outright neglect. Property owners have allowed many buildings to decay, along with the paving materials and associated landscaping. Many older structures are built directly on the right-of-way boundary and thus have no building setback. Additional visual disturbance results from overhead electrical and telephone lines, as well as, sign clutter. Many street scenes are harsh, uninviting and intimidating to pedestrians. Additionally, few street trees are present to soften the environment.

An important aspect of the Streetscape Master plan is to provide pedestrian linkages for safe, secure and improved circulation. A primary objective is to create a pedestrian friendly atmosphere in the Downtown Redevelopment District, particularly on routes that have frequent use and exposure to residents and visitors alike. In effect, the Streetscape Master Plan sets the stage for the creation of safe, hospitable and logical circulation zones and patterns.

Themes and Guidelines

A primary goal of the Streetscape Master Plan is to establish a hierarchy of streets and corridors with established design themes appropriate to that hierarchy in the Downtown Redevelopment District. The objective is to strengthen the identity of the Downtown Redevelopment District by introducing a rhythm of street lights and trees on decorative sidewalk pavement. The conceived hierarchy of streetscape elements follows below:

**Entertainment Core Standard**

- Arlington Avenue
- Sierra Street
- Virginia Street
- West Street
- Center Street
- Lake Street
Major Arterial Standard with and without Medians

Fourth Street
Second Street

Urban Transition Standard
(a variation of the Major Arterial Standard)

Stevenson Street
West side of Arlington Avenue
East side of Sierra Street, south of Court Street
Center Street, south of State Street
State Street, between Center and Lake Streets
Pine Street, between Virginia Street and Sinclair Street
Third Street
Liberty Street
Mill Street
Third Street, north side
Fifth Street

Neighborhood Standard

Ralston Street
Washington Street
Holcomb Avenue
Rock Street
Ryland Street, east of Sinclair Street

River Corridor Standard

Riverside Drive
Island Avenue
Truckee River Lane

Railroad Corridor Standard

Third Street
Commercial Row

Gateways

North Virginia Street
West Fourth Street
West Second Street
Virginia at the Truckee River

The hierarchy rationale places importance upon particular elements that will provide immediate visual identity to the street. Light fixture types and spacing, light levels, and street trees create a visual image which is immediately recognizable.

Themes of the streetscape are essentially derivatives of the Entertainment Core standard, as follows:

- Verde green finished candy cane lights with banner arms in a Victorian Style
- Verde green finished bollards
- Street trees planted with cast iron tree grates and guards
- Dark tinted and stamped concrete paving with tinted, brick, soldier course, stamped bands
- Terra cotta styled trash receptacles and planter
- Benches with cast iron frames and recycled plastic slats
As the street scenes change with land use and distance away from the Entertainment Core, so does the streetscape treatment. In all cases, the street widths remain unchanged; only striping may be different, as detailed in The Downtown Traffic and Parking Study (1996). Differences lie in the application of parkways, medians, sidewalk widths, street light heights; styles, the presence of stamped or tinted concrete; spacing and illumination levels; and the extent of street trees and planting.

DESIGN GUIDELINES

The following design guidelines are intended as the design standard, however in certain situations, modifications may be necessary, depending upon existing and proposed development. These conditions shall be subject to approval by the Redevelopment Agency staff.

Entertainment Core Standard

Wide sidewalk (minimum) tinted and stamped concrete, gray ashlar slate pattern field; and single row of red brick soldier course banding behind sidewalk, except a double red brick soldier course will be used on Virginia Street where the sidewalks have been widened. The soldier course will be attached to the sidewalk by dowels to alleviate future separations. Every effort will be made to match the proper color by using proper mix “recipes.”

Street trees planted with cast iron tree grates and guards, outlined with tile red tinted, brick soldier course stamped concrete, no more than 50 feet on center (o.c.). Tree grates shall be 4–6 feet square, depending upon the sidewalk width. On Virginia Street, street trees will be planted in 5’ x 5’ x 5’ concrete tree boxes with appropriate irrigation and electrical resources.

Verde green finished candy cane lights with banner arms, spaced at no more than 50 feet intervals, providing not more than 3 foot candles (f.c.) on pavement.

Verde green finished light bollards, placed at points of potential conflict between pedestrians and vehicles, i.e. drop off zones, beneath skybuildings, etc.

Each trash receptacle would have a large capacity (50 gallons +), a hinged lid, the lid being painted flat black to match other street furniture, sufficient in weight to prevent being moved. Receptacles will be located near each intersection.

Options for an integrated entertainment or special events system on Virginia Street.
Plan – Entertainment Standard

Major Arterial Standard

Ten (10) foot wide tinted concrete without stamping and banding, the length of Fourth Street, west of Arlington Avenue and east of Lake Street.

Five (5) foot wide tinted and stamped concrete on all streets other than Fourth Street between the east side of Arlington Avenue and the west side of Lake Side.

Verde green finished candy cane lights with banners the entire length of Fourth Street through the Downtown Redevelopment Area, spaced no more than 50 foot o.c. providing no more than 3 f.c. average light level.

Verde green finished candy cane lights without banner arms on streets other than Fourth Street.

Medians located between Vine Street and Arlington Avenue.

Street trees planted no more than 50 feet o.c. in cast iron tree grates with tree guards.

A minimum 9 foot wide planted median with two travel lanes in each direction and turning pockets at each end.

Medians shall be planted with deciduous trees, ± 20 feet o.c. evergreen shrubs not exceeding 3 feet in height and mulched with river cobble.
Urban Transition Standard

A minimum 5 foot wide sidewalk, tinted concrete.

Verde green finished candy cane lights without banner arms; no bollards.

Street trees planted no more than 50 foot o.c. in cast iron tree grates with tree guards.

Each trash receptacle would have a large capacity (50 gallons +), a hinged lid, the lid being painted flat black to match other street furniture, sufficient in weight to prevent being moved. Receptacles will be located near each intersection.

Cast iron benches with tinted, HDPE slats at pedestrian congregation points.

Neighborhood Standard

Five (5) foot wide parkways planted with street trees spaced no more than 50 foot o.c. and mulched with 6 inches of coarsely chipped bark mulch.

River Corridor Standard

Adopted Riverfront Development Standards shall apply.

Trees and lights installed at 20 foot intervals, 40 feet o.c.

Pole lights shall be black aluminum, poles 12 feet tall with single white luminaires, approximately 40 feet o.c.

Wall mounted lights shall be black, aluminum poles, with single white luminaire, mounted at 12–13 feet, spaced 40 feet o.c., mounted to wall pilasters.

Trees planted in cast iron tree grates, as per adopted Standards.
Railroad Corridor Standard

Six (6) foot black vinyl, chain link fence at edge of right-of-way.

Minimum 5 foot wide planter between parking edge treatment or pathway.

Five (5) foot minimum width, meandering pedestrian path with turf and plantings; incorporation of public art where appropriate and feasible.

Parking within the Entertainment Core, alternating north and south sides of the tracks.

Entertainment Core standard for sidewalk paving and lighting within the Entertainment District.

Lights levels at 3 f.c. average

Street Tree Standard

Street trees shall be deciduous in nature, minimum 2 inch caliper at the time of planting.

Trees shall either be field grown or container grown and conform to the Reno Urban Forester’s standards for acceptable quality.
Columnar trees shall be used in the Downtown Redevelopment District. Columnar trees provide an open area in the vicinity of the pedestrian flow and allows for the full spread of adjacent street lighting. Columnar trees also interfere less with adjacent building facades and signage. Columnar tree branches “point” upward. This allows a more open appearance at lower levels and provides shading higher. The trees will reach roughly 25’ to 30’ in height at maturity.

Columnar trees shall be specified and approved by the City of Reno Urban Forestry Division for downtown. The following is a possible selection of columnar trees:

- Columnar Norway Maple
- Crimson Sentry Maple
- Armstrong Maple
- Bowhall Maple
- Pyramidal European Hornbeam
- Prairies Spire Ash
- Princeton Sentry Ginkgo
- Columnar Sargent Cherry
- Capital Pear
- Corinthian Linden

Conditions may vary within each area, necessitating modifications to the species list. However, consistency in the plant palette along the street scene is the goal. To prevent the possibility of death among all trees of a particular species, subtle variety changes are suggested. For additional information on acceptable substitutes, please contact the Urban Forester at (775) 334–2270.

V. Implementation Plan & Maintenance

The implementation plan is an important element of the Streetscape Master Plan because it establishes priorities for constructing streetscape improvements. In many cases, limited public funds are available for use to construct streetscape improvements. The implementation plan is intended to be used as a guide in allocating public expenditures by identifying priorities for streetscape improvements.

The implementation program accepts the presumption that removing existing streetscapes in good physical condition is premature and an inefficient use of funds. Therefore, sidewalks, streetlights and street furniture would remain until new development triggered compliance with the streetscape standards or specific decisions are made to phase out older streetscapes.

There are three levels of priority in completing the streetscapes in the Downtown Redevelopment District based upon their importance and location. The purpose in structuring a priority based system for implementation of the Streetscape Master Plan is to ensure that basic objectives are evaluated and accomplished. Consequently, recommendations for actual streetscape improvements will be evaluated in comparison to the priority of improvement.
Priority 1: Completion of the Entertainment Core

Completion of key linkages to the central activity spine of Virginia Street from activity generators in the Entertainment Core. Activity generators can be a host of public and private facilities, i.e. museums, casinos, parks, etc., that generate large volumes of pedestrian traffic. Whenever possible, it is strongly recommended that public investments for streetscapes be leveraged with private investments in façade remolds or projects seeking Redevelopment Agency assistance to encourage redevelopment of blighted areas and immediately improve the image of entire frontages or blocks. Also within this priority is the completion of any missing links or segments within the entire Entertainment Core.

Sidewalk paving in the downtown area is largely a combination of the older quartzite pavers, standard smooth-finished sidewalks, and the current standard of stamped/tinted concrete. In keeping with the principle of utilizing older streetscapes to their fullest extent, removing the older streetscapes is not recommended until they need extensive repair and replacement, or new development occurs adjacent to the streets in question. Instead, the implementation plan and maintenance program calls for replacing the older quartzite pavers in the “high impact” areas which are primarily located at street corners and alleys. These high impact areas continually require repairs. Replacing the pavers with stamped concrete incrementally over the years through the maintenance program would eventually complete a substantial portion of the Entertainment Core streetscapes.

Where feasible and necessary, or where new development dictates, the introduction of new paving and lighting should occur. Older fixtures which are approaching the end of their “life cycle” are suitable candidates for retrofit. These fixtures include the older streets lights, cobra luminaires and eventually the black cherry fixtures. In addition, areas poorly illuminated, are of higher priority for replacement, retrofit or addition.

Priority 2: Completion of Major Arterials, East/West Linkages, Gateways and Corridors

The second priority for implementation of the plan is the completion of the major arterials and gateways which include Fourth and Second Streets, and the Interstate 80 gateway entrance into downtown. Key east/west linkages include First, Fifth, Sixth and Seventh Streets.

The railroad and river corridors stand independently in terms of implementation. The Downtown Riverfront District would be governed by a separate set of guidelines and implementation of those guidelines is specified in the draft Design Standards for the river corridor. The railroad is currently being studied for the feasibility of relocation. Despite the outcome of that effort, and in the interim, the proposed standards are being recommended for implementation at any time new development occurs.
Priority 3: Neighborhood Standards

Providing streetscapes can be a considerable incentive to development of housing in the downtown area, especially when Redevelopment Agency assistance is sought. New development and upgrades to existing property would trigger the installation of the Neighborhood Standard Streetscape.

VI. Cost Comparison and Analysis

The following streetscape cost comparison provides a brief analysis of the differences between the construction costs of various streetscape standards. As discussed earlier, one of the primary goals of the Streetscape Master plan is to minimize the unnecessary investment in constructing streetscapes while maximizing the public benefits received from a completed streetscape program.

For example, extending the Entertainment Core standard throughout the entire Redevelopment Area could be prohibitively expensive in contrast to the less-intensive design formats specified in the Streetscapes Master Plan. These alternative standards achieve the same look and appearance especially when viewed from a vehicular perspective on the arterial streets.

For purpose of cost comparison, it is estimated that the Major Arterial Standard with broom finished, unstamped, tinted concrete paving is approximately half the cost of the Entertainment Core Standard with stamped, tinted, concrete paving. Similarly, the Neighborhood Standard with un-tinted, unstamped, broom-finished concrete paving is roughly one-third the cost of the Entertainment Core Standard. This savings in construction costs can often be more effectively utilized in illuminating neighborhoods for greater safety and security with additional street lights. Furthermore, attaining a build-out of the entire Streetscape Master Plan is more feasible and likely to occur at an accelerated rate due to the reduced construction costs.

Time Frames

Time frames for completing the streetscapes are affected by and vary depending upon the amount of private improvements constructed each year. A time frame and cost analysis for completing the Entertainment Core streetscapes was prepared because the Entertainment Core is the highest priority.

Furthermore, development in the Entertainment Core is not nearly as speculative as estimating the build-out of the remainder of the streetscapes in the Redevelopment Area. A more detailed cost analysis and comparison is provided in the Appendix. Private improvements on redevelopment projects may shorten the build-out schedule. Possibilities of leveraging private participation with incentives to promote completion of the Entertainment Core streetscapes could accelerate the schedule. Examples involve a 50/50 public to private participation, façade improvements programs, loan programs and the like.
The following time frames are provided with assumptions necessary to complete the streetscapes in the Entertainment Core:

15 Years
Assumes 50% of the streetscapes are completed by the private sector with new or remodeled projects. Would require a public commitment of approximately $420,000 per year.

10 Years
Assumes 35% of the streetscapes are completed by the private sector with new or remodeled projects. Would require a public commitment of approximately $820,000 per year.

8 Years
Assumes 50% of the streetscapes are completed by the private sector through incentive programs and development projects. Would require an average public commitment of approximately $780,000 per year.

Ten years after the adoption of the Streetscape Master Plan, roughly 65% of the Entertainment Core has had the new standards applied. In some cases only a portion of the standards have been applied, such as lights and trees, or just lights, etc. In most cases the full treatment has been applied. Since the adoption of this plan in November 1996, the following projects, and type of investment, in the Entertainment Core have been completed:

- AT & T Improvements (Private)
- 10 N. Virginia Street Improvements (Public)
- Century Theatre Project (Private)
- Reno City Hall Improvements (Public)
- Ross Manor Improvements (Private)
- 1st United Methodist Church Improvements (Private)
- Arlington Tower Improvements (Private)
- Harrah’s Plaza Project (Private)
- ReTRAC Trench – Vine to Sutro Street (Public)
- ReTRAC Street Improvements – 4th to 2nd Streets (Public)
- Downtown Events Center (Public)
- Downtown Pavilion/Plaza (Private)
- Circus Circus Parking Garage (Private)
- Circus Circus Parking Lot (Private)
- W. 4th Street Improvement Project (Public)
- E. 4th Street Improvement Project (Public)
- Sands Regency Improvements (Private)
- Sundowner Parking Lot Improvement (Private)
- Foster Shell Station Improvements (Private)
- Eldorado Parking Lot Improvements (Private)
- World Mark Timeshares/Trends West (Private)
- Residences At The Riverwalk Condominiums (Private)
- Walgreens Drugs (Private)
- Siena Hotel Casino (Private)
- Riverside Artist Lofts (Public/Private)
- Courtyard Centre Apartments (Private)
- Corner Parcel Development (Private)
- Virginia Street Improvement Project, I & II (Public)
- River’s Edge Retail Project (Private)

Other projects recently completed in the Entertainment Core:

- Palladio (Private)
- Montage (Private)
- Belvedere (Private)
- Riverboat Apartments/Longs Drugs (Private)
- Downtown Ballroom/Kitchen (Public/Private)
**ENTERTAINMENT CORE:**
The area north of the Truckee River generally bordered by Arlington Avenue on the west, Lake Street on the east and Interstate 80 on the north.

**MAJOR ARTERIAL:**
A major street in the hierarchy of streets within the Downtown Redevelopment District, creating connections from the eastern and western boundaries of the Downtown Redevelopment District.

**NEIGHBORHOOD:**
The area on the perimeters of the Downtown Redevelopment District which are residential or office in land usage and characterized by narrow roadways, detached sidewalks, parkways and street trees. The designation is not the same as “neighborhood” defined in Article 18 of the City Code.

**HDPE:**
High density polyethylene; a post consumer recycled plastic product.

**VERDE GREEN:**
Verdigris finish used for bollards and street lights; resembles patina found on weathered copper.

**FOCAL NODE:**
A visual point of interest, suitable for specialty signage, public art or paving, located along the railroad corridor, facing Third Street.

**FOOT CANDLE, F.C.:**
Measured light level at the ground surface; average required light levels on the ground within the City are 1 f.c.

**STREETSCAPE:**
Landscape and design treatment for those areas of a street scene which affect pedestrian activity, paving, signage, lighting, and landscaping.

**BOLLARDS:**
Low level ±42 inch tall vertical light element which is used to define edges and boundaries at a pedestrian scale, prohibit vehicle activity, and provide lighting at points where tall standards are impractical.

### Cost Comparison Analysis

#### Streetscape Construction Cost Estimates for Completing the Entertainment Core 1996

<table>
<thead>
<tr>
<th>Streetscape</th>
<th>Stamped Concrete</th>
<th>Lights &amp; Trees</th>
<th>Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain Sidewalks</td>
<td>$3.3 Million</td>
<td>$6.7 Million</td>
<td>$10.0 Million</td>
</tr>
<tr>
<td>Quartzite Pavers</td>
<td>$1.4 Million</td>
<td>$1.2 Million</td>
<td>$2.6 Million</td>
</tr>
</tbody>
</table>

**Entertainment Core Streetscape Completion Total:** $12.6 Million

**ASSUMPTIONS:**
- Average Downtown Block Length: 390 l.f.
- Stamped Concrete (includes removal of old concrete): $13.00 per sq.ft.
- Lights and Trees (electrical outlets and irrigation): $94,000 per block
- Plain Sidewalk Area and Length: 254,000 sq.ft. and 28,000 l.f.
- Quartzite Paver Area and Length: 108,000 sq.ft. and 7,500 l.f.

#### Streetscape Construction Cost Estimates for Completing the Entertainment Core 2007

<table>
<thead>
<tr>
<th>Streetscape</th>
<th>Stamped Concrete</th>
<th>Lights &amp; Trees</th>
<th>Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain Sidewalks</td>
<td>$5.7 Million</td>
<td>$3.1 Million</td>
<td>$8.8 Million</td>
</tr>
<tr>
<td>Quartzite Pavers</td>
<td>$1.3 Million</td>
<td>$.7 Million</td>
<td>$2.0 Million</td>
</tr>
</tbody>
</table>

**Entertainment Core Streetscape Completion Total:** $10.8 Million

**ASSUMPTIONS:**
- Average Downtown Block Length: 390 l.f. (N/S streets), 300 l.f. (E/W streets)
- Stamped Concrete (includes removal of old concrete): $25.00 per sq.ft.
- Lights and Trees (electrical outlets and irrigation): $11,000 per 50 l.f.
- Plain Sidewalk Area: 127,220 sq.ft.
- Quartzite Paver Area: 51,186 sq.ft.
## Streetscape Construction Cost Estimates for “Build-out” of the Entertainment Core 2007 by Street

<table>
<thead>
<tr>
<th>N/S Streets</th>
<th>Plain Cost</th>
<th>Tile Cost</th>
<th>S/W Per Street Cost</th>
<th>Tree Costs</th>
<th>Light Costs</th>
<th>T/L Per Street Cost</th>
<th>Grand Total Per Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Street</td>
<td>$1,014,825</td>
<td>$0</td>
<td>$1,014,825</td>
<td>$486,000</td>
<td>$455,000</td>
<td>$941,000</td>
<td>$1,955,825</td>
</tr>
<tr>
<td>Center Street</td>
<td>$337,200</td>
<td>$36,800</td>
<td>$374,000</td>
<td>$166,500</td>
<td>$240,500</td>
<td>$407,000</td>
<td>$781,000</td>
</tr>
<tr>
<td>Virginia Street</td>
<td>$459,025</td>
<td>$248,425</td>
<td>$707,450</td>
<td>$153,000</td>
<td>$221,000</td>
<td>$374,000</td>
<td>$1,081,450</td>
</tr>
<tr>
<td>Sierra Street</td>
<td>$74,250</td>
<td>$238,550</td>
<td>$312,800</td>
<td>$81,000</td>
<td>$117,000</td>
<td>$198,000</td>
<td>$510,800</td>
</tr>
<tr>
<td>West Street</td>
<td>$849,800</td>
<td>$0</td>
<td>$849,800</td>
<td>$99,000</td>
<td>$52,000</td>
<td>$151,000</td>
<td>$1,000,800</td>
</tr>
<tr>
<td>Arlington Avenue</td>
<td>$539,275</td>
<td>$0</td>
<td>$539,275</td>
<td>$175,500</td>
<td>$253,500</td>
<td>$429,000</td>
<td>$968,275</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$3,274,375</td>
<td>$523,775</td>
<td>$3,798,150</td>
<td>$1,161,000</td>
<td>$1,339,000</td>
<td>$2,500,000</td>
<td>$6,298,150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E/W Streets</th>
<th>Plain Cost</th>
<th>Tile Cost</th>
<th>Per Street Cost</th>
<th>Tree Costs</th>
<th>Light Costs</th>
<th>Per Street Cost</th>
<th>Grand Total Per Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Street</td>
<td>$62,900</td>
<td>$128,600</td>
<td>$191,500</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$191,500</td>
</tr>
<tr>
<td>2nd Street</td>
<td>$363,800</td>
<td>$477,950</td>
<td>$841,750</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$841,750</td>
</tr>
<tr>
<td>Commercial Row</td>
<td>$124,700</td>
<td>$0</td>
<td>$124,700</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$124,700</td>
</tr>
<tr>
<td>3rd Street</td>
<td>$91,350</td>
<td>$0</td>
<td>$91,350</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$91,350</td>
</tr>
<tr>
<td>Plaza Street</td>
<td>$37,625</td>
<td>$34,875</td>
<td>$72,500</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$72,500</td>
</tr>
<tr>
<td>4th Street</td>
<td>$293,400</td>
<td>$34,525</td>
<td>$327,925</td>
<td>$36,000</td>
<td>$52,000</td>
<td>$88,000</td>
<td>$415,925</td>
</tr>
<tr>
<td>5th Street</td>
<td>$622,400</td>
<td>$35,075</td>
<td>$657,475</td>
<td>$135,000</td>
<td>$195,000</td>
<td>$330,000</td>
<td>$987,475</td>
</tr>
<tr>
<td>6th Street</td>
<td>$459,375</td>
<td>$17,550</td>
<td>$476,925</td>
<td>$180,000</td>
<td>$260,000</td>
<td>$440,000</td>
<td>$916,925</td>
</tr>
<tr>
<td>Elm Street</td>
<td>$36,625</td>
<td>$0</td>
<td>$36,625</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$36,625</td>
</tr>
<tr>
<td>7th Street</td>
<td>$261,800</td>
<td>$27,300</td>
<td>$289,100</td>
<td>$135,000</td>
<td>$195,000</td>
<td>$330,000</td>
<td>$619,100</td>
</tr>
<tr>
<td>Maple Street</td>
<td>$52,150</td>
<td>$0</td>
<td>$52,150</td>
<td>$54,000</td>
<td>$78,000</td>
<td>$132,000</td>
<td>$184,150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$2,406,125</td>
<td>$755,875</td>
<td>$3,162,000</td>
<td>$540,000</td>
<td>$780,000</td>
<td>$1,320,000</td>
<td>$4,482,000</td>
</tr>
</tbody>
</table>

**Grand Totals:** $5,680,500 $1,279,650 $6,960,150 $1,701,000 $2,119,000 $3,820,000 $10,780,150
PHOTO GALLERY -

Previously Existing Conditions (1996)
Current Condition (2007)
Center Street (circa 1996)

Pine Street (circa 1996)

Center Street (circa 2007)

Pine Street (circa 2007)
W. 1st Street @ Arlington Avenue (circa 1996)

4th Street @ Washington Street (circa 1996)

W. 1st Street @ Arlington Avenue (circa 2007)

4th Street @ Washington Street (circa 2007)
DESIGN SPECIFICATIONS

312 CONCRETE ALLEY APRONS, SIDEWALKS, AND PEDESTRIAN RAMPS

312.01 Description

This work shall consist of the removal and replacement of the existing tile sidewalk, pedestrian ramps, and alley approaches with stamped concrete. All of the said items shall be constructed in conformance with the Standard Details. The pedestrian ramps and sidewalk for individual locations shall be bid and subsequently constructed together. In all instances, the Contractor shall match the existing top of curb and the existing tile sidewalk. All work shall conform to Section 312 of the Standard Specifications and as specified in these Special Provisions.

312.02 Materials

All stamped concrete shall be Class DA, which shall have a course aggregate gradation conforming to Size No. 67 in Subsection 200.05.03 of the Standard Specifications. It shall also have between 6 and 8 sacks of cement per cubic yard, a maximum of 5 gallons of water added per sack of cement, a 1 to 4 inch slump, 4.5 to 7.5 percent entrained air, and have a minimum 28 day compressive strength of 4,000 psi. No water shall be added to the concrete after leaving the plant. No water shall be added in the truck or to the surface of poured concrete other than is normally incidental to maintaining the cleanliness of tools utilized in the achievement of a smooth and even finish. Super plasticizer additives may be allowed if approved as part of the submitted design.

Base material shall conform to Subsection 308.02 of the Standard Specifications or as specified in the Special Provisions.

To ensure integral color schemes in the areas designated for colored, stamped concrete in the plans or specifications, the concrete shall contain Chromix Admixture for Color-Conditioned Concrete (L.M. Scofield Company), QC Integral Color (QC Construction Products Company), or Bomanite. The admixture shall be C-14 French Gray for those areas designated to be Random Ashlar Stone pattern “no relief” and C-22 Coral Red for those areas designated as the Soldier Course Pattern, unless specified otherwise in the Special Provisions. The color-conditioning admixture shall be a single component, pigmented, water-reducing concrete admixture, factory formulated, packaged in cubic yard dosage increments, not multiple additives and pigments to be dosed separately into the mix. It shall comply with ASTM C979 and ASTM C494.

Color Hardener–Non–Vehicle Areas

All concrete designated as stamped (either random ashlar stone random pattern or soldier course pattern) shall be color hardened with Lithochrome Color Hardener (L.M. Scofield Company), QC Color Hardener (QC Construction Products Company), or Bomanite in accordance with manufacturer’s recommendations. The random ashlar stone random pattern “no relief” will use Classic Gray at a minimum of 60 pounds per 100 square feet. Additionally, Slate Gray will be broadcast intermittently (flashed) as an accent color. The application rate shall be a minimum of one (1) 60 pound bag per 100 square feet. The soldier course pattern will use Tile Red at a minimum of 60 pounds per 100 square feet. The
color hardener shall be formulated for optimum surface hardening with aggregates graded through a wide particle-size range and selected for hardness and purity.

Color Hardener—Vehicle Areas

All concrete designated as stamped (either random ashlar stone random pattern or soldier course pattern) and located in vehicle traffic areas shall be color hardened with Emerchrome Floor Hardener (L.M. Scofield Company), QC Heavy Duty Hardener (QC Construction Products Company), or Bomanite. The colors shall correspond to those listed in the previous section on non-traffic areas. The hardener shall be applied at a minimum of 120 pounds per 100 square feet. The hardener shall be formulated with graded, non-slip, non-rusting, emery aggregate.

Eucobond (Euclid Chemical Company), or an approved equal, shall be used as a concrete bonding agent between all new concrete and existing concrete surfaces.

The area representative of the L.M. Scofield Company is Robert Torres, 1550 Bryant Street, Suite 600, San Francisco, CA 94103 (415-255-2728) or (707-449-4155). The main L.M. Scofield office is located at 6533 Bandini Boulevard, Los Angeles, CA 90040. The area representative for QC Construction Products Company is Steve Maydock, P.O. Box 599, Madera, CA 93939, (1-800-453-8213). The area representative for Bomanite is Anchor Concrete, 1750 Marietta Way, Sparks, NV 89431 (775-359-4969).

Antiquing Release Agent:

All concrete designated as stamped (either random ashlar stone random pattern or soldier course pattern) and utilizing color hardener, whether located in vehicle or non-vehicle area, shall receive a clear liquid release agent from either L.M. Scofield, QC Construction Products Company, or Bomanite.

The color and hardening admixtures, bonding, antiquing and sealing agents shall be compatible and designed to form one complete system. All stamped concrete shall be constructed in accordance with the products/procedures listed herein or an approved equal. A contractor desiring to use “an approved equal” must submit the necessary information to the City Engineer a minimum of 15 working days prior to its proposed use. Any “equal” product will need to provide a 5 year documented performance record for each specific product. In particular, said product must have performed in a climate similar to the City of Reno. The City Engineer will be the final judge as to whether the proposed product and/or method will be accepted.

312.08 Placement

During the demolition of the existing designated areas, the contractor shall be responsible for the repair or replacement of any loose or damaged tiles. The materials for the repair will be provided by the Redevelopment Agency. The Contractor shall salvage all 8 inch by 8 inch white and red mauve tiles.

The Type II base material shall be well-drained and be uniformly graded below finish grade. It must be moistened to a nominal depth, compacted to 95% relative density, and be free of frost at the time of concrete placement. If necessary, it should be dampened with water just prior to concrete placement, but shall be free of standing water.
The pedestrian ramps shall have a slope of 1 inch per 12 inches. The slope shall begin at the existing top of curb and will daylight out of the sidewalk. The pedestrian ramps and sidewalk shall be constructed together.

The concrete shall be placed and consolidated so as to completely fill spaces in the forms and to provide a suitable surface for finishing. The concrete adjacent to the forms shall be spaded. All surrounding surfaces or walls shall be protected to prevent discoloration. Water must not be sprayed on the surface to retemper the plastic concrete for additional trowelling. Hard steel trowelling shall be minimized to avoid trowel burns. There will be "no relief" in the surface of the concrete for the Ashlar Stone Random pattern areas.

Representatives of Bomanite (775-359-4969) and L.M. Scofield (415-255-2728) can furnish information regarding the appropriate stamp for the "no relief" Ashlar Stone Random pattern. The surface shall be broom finished (light) and have a Flat Surface finish as described in sub-section 312.11.02 herein, unless specified otherwise by the City Engineer and/or special provisions.

When concrete is placed in hot/cold and windy situations, precautions must be taken to prevent plastic cracking, which would result from excessive rapid drying or freezing at the surface. Rejection and/or mitigation of concrete that shows evidence of plastic cracking will be at the sole discretion of the City of Reno. The pattern for the sidewalk shall be Ashlar Stone Random, which ranges in size from 16 inches by 4 inches rectangular and square.

The Soldier Course shall be 4 inches by 8 inches in size and may be either a single or double row as specified on the plans. Furthermore, the Soldier Course will be placed along the outside edges (transverse to sidewalk) of the pedestrian ramp and along the top edge of the pedestrian ramp (opposite curb ramp area) as depicted in the applicable standard detail.

Stamped Concrete Test Section Required

The Contractor will be required to construct a test section for the stamped concrete sidewalk. Once the mix design for the stamped concrete sidewalk has been approved, the contractor will construct a test section. The test section will consist of a portion of the final sidewalk work, full width and a minimum length of 10 feet. The City Engineer reserves the right to increase the length of the test section to 20 feet if the situation warrants such. The Contractor may construct the test section between expansion joints to become a portion of the final sidewalk work.

Acceptance of the stamped concrete test section shall be in accordance with these Special Provisions and the Standard Specifications. The Contractor shall construct the test section to demonstrate the ability to supply, place and consolidate, finish, cure and texture, and seal stamped concrete. The color shall be uniform and conform to the manufacturer’s color chips. The stamped lines shall not be skewed and shall have lines that are continuous across contraction and expansion joints. Once accepted by the City Engineer, this test section will be the standard used for judging the remainder to the work.
The Contractor shall not commence work on the remainder of any of the stamped concrete until the test section has been completed and accepted by the City Engineer. If deemed necessary by the City Engineer, the Contractor may be required to construct additional stamped concrete test sections, if the initial test section is not acceptable. All stamped concrete placed in the final work shall be accepted based on the Contractor’s ability to produce the same quality as that shown in the test section and in accordance with the Standard Specifications and these Special Provisions. Areas not having uniform color, stamping, or other specified requirements shall be removed and replaced at the Contractor’s expense.

312.09 Edging and Jointing

312.09.01a Expansion Joints—Expansion joints as shown on the plans shall consist of a ½ inch pre-molded expansion joint with white cap or backer rod and caulk. The pre-molded expansion joint material is an asphalt coated fiber expansion joint, the white cap/backer is a closed backer rod and the caulk shall be Lithoseal Trafficalk-3G (L.M. Scofield Company), or Sikaflex 2C SL (D.M. Figley Company in Deep Charcoal, or an approved equal.

Expansion joints (transverse to the street centerline) shall be constructed in the stamped concrete sidewalks and driveway approaches at intervals not exceeding thirty (30) feet. The Contractor shall also provide an expansion joint between the concrete and any existing buildings encountered as part of the prescribed work. Such joints shall be filled with pre-molded joint filler as described above.

Expansion joints ½ inch in width shall be located in curb and gutters at each side of structures, at the end of all curb returns and abutting hardened in-place curb and gutter. However, expansion joints shall not be installed within 20 feet of an island nose. Expansion joints shall be ½ inch thick shaped to the cross section of the curb and gutter and shall be constructed at right angles to the curb and gutter.

312.09.01b Sidewalk Expansion Joints—Transverse expansion joints ½ inch wide shall be constructed at all sidewalk returns, opposite expansion joints in adjacent curb and at regular intervals not to exceed 30 feet. Transverse expansion joints shall also be constructed at transition points that would normally crack due to angle points or similar occurrences. Isolation joints shall be installed around all structures.

312.09.01c Saw Cuts—Saw cuts will be required between expansion joints as specified hereinafter:

1. From all angle points including, but not limited to pull boxes, vaults, manholes, pillars, drop inlets, steel inserts, stair-wells, etc., or any angle point from an adjoining structure.

2. The area between saw cuts and an expansion joint shall not exceed 100 square feet.

3. Saw cuts shall be 1¾ inches deep and 1/8 inches wide. Any deviations to this requirement must be approved by the City Engineer.
312.11 Curing and Sealing

312.11.01 Curing—Under no circumstances will the Contractor apply a curing compound to stamped concrete unless authorized by the City Engineer. The use of curing blankets or other acceptable measures will be required. Under no circumstances will vehicular traffic be permitted on stamped concrete surface until the concrete has cured for a minimum of 72 hours, or longer as directed by the City Engineer. The Contractor will be required to ramp and plate the sections of stamped concrete in vehicular areas as necessary to protect the concrete during cure time.

312.11.02 Sealing—The Contractor shall have the option of using the following products for sealing the stamped concrete depending on whether a glossy or flat surface appearance is specified or directed by the City Engineer.

Glossy Surface Appearance:

Cemetone Clear Sealer (L.M. Scofield Company), or QC Solvent Seal (QC Construction Products Company) shall be applied at a minimum rate of one gallon per 350 square feet of surface. It may be necessary to apply 2 or 3 applications of said sealer if deemed appropriate by the City Engineer. The concrete shall not be covered with plastic sheeting or burlap.

Flat Surface Appearance:

Euco-Guard VOX or Eucoguard 100, QC Solvent Seal (QC Construction Products Company) shall be applied in accordance with the manufacturer’s recommendations.

The curing compound and sealer compound listed above are available from the following local suppliers for the respective products:

**Scofield or Eucoguard**

Sierra Supply
1830 E. Lincoln Way
Sparks, NV 89431
Phone: (775) 353-3333

**QC**

LaForge Construction Supply
1007 Greg Street
Sparks, NV 89431
Phone: (775) 331-7876

Hydroza Coatings—The sealer available through this company shall be Hydroza Enviroseal 20. It shall be applied in accordance with the manufacturer’s recommendations. Furthermore, the applicator shall be certified by Hydroza Coatings Company. The applicator shall submit with their quotation, a copy of the applicator’s certifications by Hydroza Coatings Company.

The sealer as manufactured by Hydroza Coatings is available from the following supplier:

Construction Sealants and Supply
7 Glen Carran Circle
Sparks, NV 89431
(775) 331-3144
312.11.02a Sealing, General Requirements

All stamped concrete to be sealed shall be sufficiently cured prior to application of said sealant. Also, all caulking and expansion joint work shall be fully cured prior to application of the sealant. The coverage rate shall be 100 to 125 square feet per gallon, unless otherwise specified by the manufacturer and approved by the City Engineer.

The materials involved in this application shall be guaranteed by the manufacturer. The guarantee shall ensure the moisture performance of the system for a period of five years from the date of application. Provisions of the guarantees shall include responsibility for water penetrations, chloride (salt), and freeze-thaw damage through structurally sound areas, otherwise no liability is to be required for defects in the substrate. Liability for damage, in any respect, to the adjacent buildings or contents thereof is specifically from these requirements.

The Contractor will be required to apply sealer to the test section mentioned in Sub-section 312.08. Application of the sealer will be in accordance with the manufacturer’s recommendations. Application methods may range from brush/push broom to airless spray. It should be noted, that there may be a need to broom the sealing compound into the surface even with an airless application. The City Engineer will determine the need for brooming an airless application.

The Contractor will be required to submit a quart sample of the proposed sealing compound to the City Engineer a minimum of two weeks prior to its proposed application to the test section. The City Engineer shall have the sample evaluated by an approved independent laboratory to ensure the material conforms with the specified performance criteria.

All materials shall be delivered in the original manufacturer’s sealed containers. Materials shall be stored to prevent damage to the containers. The sealer shall be thoroughly stirred before and during use. Surface, air and material temperatures shall not be less than 50 degrees Fahrenheit during application or within 4 hours after said application. Areas not subject to natural ventilation shall have positive ventilation provided throughout application. Personnel shall be warned against prolonged breathing of vapors and contact of materials with the skin or eyes. Protect other surfaces not sealed as necessary during the application process.

The Contractor shall not allow foot or vehicular traffic on surfaces which have been sealed until such time they are thoroughly dry as determined by the City Engineer.

312.15 Measurement of Quantities and Basis of Payment

The contract bid item for “Concrete Sidewalk with Pedestrian Ramp (Stamped),” or “Concrete Alley (Stamped),” shall be measured for payment on a square foot basis. Construction of the test section(s) shall be per the same unit price bid for the overall stamped concrete included in the project. The location of the test section shall be under the direction of the City Engineer.

The accepted quantity of “Concrete Sidewalk with Pedestrian Ramp (Stamped)” or Concrete Alley (Stamped), measured as provided above, shall be paid for at the contract unit price bid per square foot. The price shall be considered full compensation for furnishing all labor, materials, supplies and any incidentals necessary to complete the work as directed by the City Engineer.
CITY OF RENO STREETSCAPE MASTER PLAN

"THE BIGGEST LITTLE CITY IN THE WORLD"

NOTES:

1. DIMENSION TOLERANCES:
   1) LENGTH = 1/4"±1/8"
   2) WIDTH = 3/8"±1/8"
   3) DEPTH = 1/4"±1/8"

2. SIZES OF DESIGN AT END/EDGE VARY AND/OR ADJUSTED TO FIT THE LENGTH AND WIDTH OF SIDEWALK, AND WILL REQUIRE HAND TOOLSING.

3. FINAL ALIGNMENT OF THE PATTERNS WILL BE REVIEWED AND APPROVED BY THE CITY DURING TEST POUR.

4. PATTERN DESCRIPTION: PATTERN IS FORM OF RECTANGULAR STONES IN VARIOUS SIZES LAID IN A RANDOM MANNER. THE SIDES OF THE STONES VARY FROM 5 1/4" TO 20 5/8". EDGES ARE BEVELED FORMING A V-SHAPE GROOVE WITH THE APPEARANCE OF UNGROUTED JOINT. 1/2" WIDE AND 1/4" DEEP. OUTER BEVELED EDGES ARE 1/4" WIDE WHICH MATCH THE INSIDE JOINTS WHEN TOOLS ARE JOINED. THE COMPLETED PATTERN IS FORMED BY THE USE OF 3 TOOLS, B, R AND Y, EACH WITH DIFFERENT RANDOM ARRANGEMENT OF STONES.

---

City of Reno
Redevelopment District No. 1
Streetscape Master Plan (Amended 7/2007)
325 STREET LIGHTING AND LIGHTED BOLLARDS

325.01 Description

All street lights and bollards will be installed as indicated on the plans or as indicated in the specifications. Locations shown are generally approximate only and field verification will be necessary.

325.02 Materials

The street lights shall be a twin arm unit. Pole and bracket arm assembly sections shall be a one piece welded assembly from base casting through the heavy fixture fitter. Slip fit and/or set screws mounting of bracket arm assembly to pole will not be permitted.

Cast aluminum base to be .250 to .188 wall and fitted with matching cast aluminum door held with stainless steel recessed Allen Head tamper resistant screws. Floor base to be .750 thick O.D. of base to be 11/1/2". Four galvanized foundation bolts to be located inside the base. Base section to be 41" high.

The shaft will be 4" diameter-.125 wall of 6061-T-6 structural grade aluminum welded both inside and outside to the cast base. Top of shaft to be 12"-0" off grade.

Banner arms, 20" long to be on each side of the pole, parallel to fixture arms at 8'-3" and one pair of banner rings at 11'-3" above grade and painted to match pole. The detachable banner arms and rings shall be held with ½" x 20" s.s. bolts threaded through pm castings welded to the side of the pole and threaded through the pole wall.

The bracket arms to be a modified tee shape. It is to be 2" O.D. with .125 wall. Top of the tee to be 17'-6" above grade. The horizontal section to extend 14" to each side and then turn down on a radius of 14". Bottom of the globe to be 14'-0" above grade. Grade to be 6061-T-6 aluminum. The shaft section of the bracket arm shall extend into the shaft section of fluted shaft at least 18". It shall be internally fastened at that point without visible appearance of any fastening device. The bracket arm shaft section shall then be circumferentially welded to the fluted section at the point of intersection.

The cast fitter, .250 wall thickness, shall contain the ballast assembly.

The reflector – acorn assembly shall attach to the fitter with four stainless steel set crews with an interference fit. The reflector shall have a welded metal ring to acorn fitter attachment. The entire assembly to be fitted with neoprene gaskets. The underside of the reflector to be finished in high reflectivity white enamel.

The acorn shape globe will be of a polycarbonate 12" to 12".

A glass refractor will be in each fixture. Light distribution of Type III of V as required.

The luminaire to be manufactured by the pole manufacturer and to be U.L. listed as an assembly fixture.

The exterior of the assembly will first have a two part catalytic primer followed by a matte black base coat. The final finish is a hand applied verde green to look like oxidized brass.
Each luminaire shall contain a multi-tap ballast suitable for a 175 watt metal halide medium base lamp. Voltage as shown on the plans, CWA design.

Lamp to be clear metal halide, designation MS-175/BU/MED.

Each pole shall be individually cartoned after being shock pad wrapped.

Assembly to be Catalog #2-1910/MRRT/RE/175 MH/4900-T-14 AG/2BA manufactured by Sternberg Lanterns or approved equal.

Lighted bollard to be 42” high in the same pattern and color as the street light assembly Catalog #3901-LB-70MH-VG manufactured by Sternberg Lanterns or approved equal.

Street lights to be powered from buildings with a shut-off located on the exterior of the building accessible for maintenance and emergency situations.
BOLLARD BASE DETAIL

MONUMENT FRAME AND COVER
NEENAH- R-1975- A
OR APPROVED EQUAL

12" 12"
24"

12 1/2" 12 1/2"
18" 18"
3 3/4"
2 1/2"

OPTIONAL CONSTRUCTION JOINT

4 1/2" I.D. X 18" SCH 40
STEEL BOLLARD SLEEVE

REMOVABLE CAP SECURED BY 3
STAINLESS STEEL ALLEN HEAD SCREWS
70 WATT MH
120 VOLT
MEDIUM BASE SOCKET
VENETIAN GREEN
FINISH

WHITE ACRYLIC LENS

5 1/4" DIA. FLUTED SHAFT .250 TO .168 WALL

GFI DUPLEX RECEPTACLE IN
BASE OPPOSITE ACCESS DOOR (OPTIONAL)

.250 WALL

ACCESS DOOR WITH FLUSH STAINLESS STEEL
ALLEN HEAD SCREWS

1 1/2" DIA. BASE .750 FLOOR THICKNESS
& ANCHOR BOLts

WELDED FOR SINGLE UNIT CONSTRUCTION

RENO REDEVELOPMENT

300I LB
STERNBERG LANTERNS INC.

NO. REVISION DATE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION SECTION REINO

BOLLARD BASE DETAIL

DRAWING NO. R-29

APPROVED BY: S.V.

DATE 10906 PAGE 29
Street Furniture

Neighborhood Standard Street Light

15' X 32' Avenue B750/508
Luminaire with Metal Halide lamp

12' tall Richmond Pole 4900-FP by Sternberg
PRE-CAST PLANTERS

Description

All planters shall be installed as indicated in the plans or as indicated in the specifications. Locations shown will be field verified.

Materials

All planters shall be made of reinforced concrete. Planters will be round and measure a minimum of thirty-six (36) inches across and measure no more than twenty-four (24) inches in height. They will be stained a flat-black color. Planters will be located on the “building” side of the street lights. In the case of “Hanging” flower baskets, the planters will be located directly below to catch run-off irrigation water.

PRE-CAST TRASH RECEPTACLES

Description

All trash receptacles shall be installed as indicated in the plans or as indicated in the specifications. Locations shown will be field verified.

Materials

All trash receptacles shall be made of reinforced concrete. Trash receptacles will be square and measure a maximum of thirty-six (36) inches across and measure no more than forty-two (42) inches in height. They will be stained a flat-black color. The internal dimensions will allow for a minimum of a 50 gallon trash can insert, provide a flip-top lid and weight no less than 1,500 lbs. The City of Reno logo will be embossed on each side of the trash receptacle. Trash receptacles will be located near each street corner.
BIBLIOGRAPHY

1. The Blueprint: A Revitalization Strategy for Downtown Reno (December 1992)


3. Downtown Riverfront District plan—Draft (December 1995)

4. Reno, Nevada Downtown Redevelopment Plan (March 1983)

5. Plan Report, Downtown Redevelopment Area (1990)

6. Amendment to the Redevelopment Plan for the Downtown Redevelopment Area (November 1990)

7. Reno Downtown Traffic/Parking Study (December 1995)


9. City Council Staff Report for May 24, 2006 to Adopt Streetscape Master Plan Amendments (attached)
STAFF REPORT
May 24, 2006

To: Chairman and Agency Board Members
Thru: Charles E. McNeely, Executive Director
From: Steve Varela, Public Works Director/City Engineer
        Peter Gillon, Redevelopment Administrator
        Stephen L. Hardesty, Assessment District Coordinator
Re: AMENDMENTS TO THE REDEVELOPMENT DISTRICT STREETSCAPE MASTER PLAN
Date: April 21, 2006

Summary: The Agency Board is being asked to approve certain amendments to the Redevelopment District Streetscape Master Plan and refer any amendments which require an amendment to Title 18 to the Planning Commission.

Previous Council Action:
November 4, 1996 Redevelopment Agency Board adopted the Redevelopment District Streetscape Master Plan.

May 10, 2006 Council instructed staff to review colors of the various downtown streetscapes with a local group of architects and report back with recommendations (the first meeting was held May 15, 2006).

Discussion:
During the past few years, many changes have been made to the downtown landscape. In the next few years even more changes are planned. The Streetscape Master Plan that was adopted in November 1996 was an effort to standardize streetscape treatments, such as lights, trees, and other street furniture. The ReTRAC Project plus anticipated improvements to Virginia Street and other developments will greatly enhance the standardization of the streetscapes by eliminating a major portion of the “older” Black Cherry designed furniture and lights.

Over the past 9 ½ years, the current streetscape furniture and design guideline have been evaluated for suitability and practicality. The amendments being suggested do not alter the intentions of the previously adopted Plan which was to “…establish streetscape standards to strengthen the downtown Redevelopment Area by providing a common linkage of streetscapes in creating a visually interesting and appealing streetscape for both pedestrian and vehicular traffic.”

Amendment #1:
The soldier course behind the curb shall be attached to the sidewalk by dowels.

Reason: The soldier course, which is the red brick colored course behind the curb and the sidewalk are currently installed separately and allows each to “float” independently. By using dowels they will “float” together thus reducing safety issues.

Amendment #2:
The color of the concrete used will be similar to what is called out in the standard details. Use of a different vendor will not exempt contractors from this requirement.

Reason: The use of various vendors, whether they are concrete suppliers or color suppliers, cause a variation in the color of the stamped concrete product. By specifying mix “recipes” a closer match can be achieved. It is also important that the proper stamp is used.

Amendment #3:
In those areas where the standard curb is not used, commercial treatment of the sidewalk (more steel and thicker concrete) will be used.

Reason: Areas where vehicles have easier access or are expected to encroach upon the sidewalk will require a stronger construction. By using a commercial level construction method, more steel and thicker concrete, damage to the sidewalk and safety issues will be abated.

Amendments #1 thru #3: The specifications will be developed by Public Works and included in the Streetscape Master Plan and the Public Works Standard Details.

Amendment #4:
Eliminate the 3 foot candle light level requirement.

Reason: The 3 foot candle light level requirement does not take into consideration ambient light. In some areas studied, such as the new Downtown Events Center, the foot candle readings exceeded 22 foot candles. Light levels can be achieved by not exceeding a 50’ spacing distance and the use of columnar trees.

City of Reno
Redevelopment District No. 1
Streetscape Master Plan (Amended 7/2007)
Amendment #5:
Increase spacing between the street lights to a distance not to exceed 50'. This would require and amendment to Title 18 in Appendix A-Downtown Riverfront Guidelines.

Reason: This amendment affects both the lighting and functionality of the street lights. Light levels with little or no ambient light registers roughly 2.8% at a point equidistant between two decorative candy cane lights spaced at 50' on center. The increased spacing allows for the reduction in the lighting levels experienced when the spacing is much closer and there is adjacent ambient light. In addition, the spacing reduces the sidewalk “clutter” and allows for increased activities, such as special events, to encroach upon the sidewalk.

Amendment #6:
Columnar trees shall be specified and approved by the City of Reno Urban Forestry Division for downtown.

Reason: Columnar trees provide an open area in the vicinity of the pedestrian flow and allows for the full spread of adjacent lighting. Columnar trees also interfere less with adjacent building facades and signage. Columnar tree branches “point” upward. This allows a more open appearance at lower levels and provides shading higher. The trees will reach roughly 25' to 30' in height at maturity.

Columnar Norway Maple
Crimson Sentry Maple
Armstrong Maple
Bowhall Maple
Pyramidal European Hornbeam
Prairie Spire Ash
Princeton Sentry Ginkgo
Columnar Sargent Cherry
Capital Pear
Corinthian Linden

Fastigate Beech

The classic tree of our imagination grows straight up, stretching its branches to the sky. While some trees actually spread sideways, or even droop and weep, it is the fastigate class of trees with their tall trunks, that extend their branches straight up to form a leafy canopy, or a fastigia, lentis for rooftops! Their narrow trunks and leafy tops make them ideal for urban gardens.

Amendments #4 thru #6: Changes will be made in the Redevelopment Streetscape Master Plan and in the care of Amendment #5 also to Title 18.

Amendment #7:
Street trees designated to be planted within the “Entertainment Core” shall be planted in a 5' x 5' x 4' in-ground planter box.

Reason: The in-ground planter boxes eliminate adjacent damage to the infrastructure by spreading roots. They also provide a well defined planter area so proper soils can be used and fertilizers and water can be directed at the tree. If a tree fails, the planter box will allow for easier removal and replacement. Tree grates will also have a well defined rim to be placed upon the solid concrete edge of the tree box eliminating the upheaval of the grates which may cause a tripping hazard.

Amendment #8:
In cases where underground vaults prevent the planting of street trees, a 4' x 4' x 3' above-ground planter box will be used.

Reason: There are several underground vaults that extend out under the sidewalks. In these instances, above ground planter boxes can be used to carry on the theme of tree-light-tree-light. These planters would be designed to match the existing streetscape.

Amendments #7 and #8: Specifications will be prepared by Public Works and included in the Streetscape Master Plan and the Public Works Standard Details.

Amendment #9:
Terra cotta planters and trash receptacles would be eliminated.

Reason: The terra cotta planters and trash receptacles look good for a very short period of time. The Northern Nevada climate quickly fades the original color. Damage to the terra cotta easily occurs and repairing the damage seldom matches the faded areas. The terra cotta trash receptacles also are very light weight and can be
Amendment #10:
Each trash receptacle would have a large capacity (50 gallons +), a hinged lid, painting to match color theme specified by the Black Rock Institute consultants, and sufficient weight to prevent being moved. These receptacles will be installed near each intersection.

Reason: The existing large concrete trash receptacles provide all of the requirements needed for downtown. At roughly $2,500 each, these receptacles have lasted in excess of ten (10) years. The hinged lid allows for easy dumping and keeps trash inside, even on windy days. The metal portions could be painted to blend with the color of the lights. The smaller trash receptacles located on North Virginia Street Plaza and around City Hall are sufficient for normal trash. However, the amount of daily trash in the downtown core and during special events would overwhelm the smaller receptacles.

Amendment #11:
Eliminate the requirement to install benches in the “Entertainment Core.”

Reason: Benches have been used for the homeless to congregate in the downtown core producing an increase in trash accumulation.

Amendment #12:
Direct staff to develop a year-round banner program, including the feasibility of using triangular banners in conjunction with the City of Reno’s banner policy.

Reason: Banner arms are called out as a part of the street light specifications. However, the design of the banner arms provides an inviting article on which to jump and swing. This bends and/or breaks the arm. If a banner happens to be attached, by grabbing the “ball” on the end of the banner arm, both the upper and lower arms are now bent or broken. It may be possible to install triangular banners and eliminate the lower banner arm. By directing staff to look into a year-round banner program, either filling all of the arms or removing the arms not being used, and or using triangular banners, future damage may be reduced. A program to effectively manage the banner arms will improve the appearance and ambiance in the downtown.

Amendments #9 and #12: Changes will be made in the Redevelopment Streetscape Master Plan.

Recommendation: Staff recommends that the Redevelopment Board adopt the amendments and refer any which require an amendment to Title 18 to the Planning Commission.

Proposed Motion: I move to approve the staff recommendation.