

**CITY COUNCIL  
COMMUNICATION:**

**ITEM \_\_\_\_\_**

**02-295**

**OFFICE OF THE CITY MANAGER  
CITY OF DES MOINES, IOWA**

**AGENDA:**

JUNE 3, 2002

**SYNOPSIS -**

**SUBJECT:**

DOWNTOWN  
STREETLIGHT  
UPGRADES-  
SOLITAIRE  
STREETLIGHT  
DESIGN FOR  
GATEWAY PARK  
AND SURROUNDS/  
ARCHETYPE  
STREETLIGHT  
DESIGN FOR  
COBRAHEAD  
REPLACEMENT  
THROUGHOUT THE  
REST OF  
DOWNTOWN

Primarily because of the Western Gateway project, and projects directly associated with the Gateway Park including Allied Insurance, the new Central Library, and the Masonic Temple rehabilitation, City staff has worked in close collaboration with the Gateway Park design consultants, the Gateway Steering Committee, and the Gateway Implementation Sub-committee to develop streetscape design guidelines for the streets around the Gateway Park which have been designated "Tier 1 streets". Both the Gateway Steering Committee and Gateway Implementation Sub-committee have reviewed and recommend to the City Council for approval the Streetscape Design Guidelines for Tier 1 streets. These groups have also reviewed and recommend to the City Council for approval the recommended streetlight for use as a replacement of the existing cobrahead fixtures throughout the balance of downtown.

The Architectural Advisory Committee and Urban Development Board have also reviewed the Streetscape Design Guidelines and recommended streetlights and recommend approval by City Council.

The Streetscape Design Guidelines specifically address streetlights, landscaping, and sidewalk paving. The focus was these three elements because they cannot easily be added or changed later, although the streetscape improvements may include features such as street furniture and/or public art.

**TYPE:**

Timing is critical to approve the Tier 1 streetscape design guidelines and both types of streetlights in order to allow the projects currently under construction to move forward and implement these improvements as part of their project development.

**RESOLUTION**  
ORDINANCE  
RECEIVE/FILE

**SUBMITTED BY:**

RICHARD CLARK  
DEPUTY CITY  
MANAGER

The streetlights around the Gateway Park are encouraged to use metal halide as a light source due to its more pedestrian-friendly light quality. This requires an exemption to the existing Iowa State Code, Section 364.23, but meets the conditions required for an exemption.

JIM GRANT  
COMMUNITY  
DEVELOPMENT  
DIRECTOR

JEB BREWER  
CITY ENGINEER

DON TRIPP  
PARK AND  
RECREATION  
DIRECTOR

## **FISCAL IMPACT -**

### Tier 1 Streetscape Improvements, Including Twin Solitaire Streetlights, Landscaping, and Sidewalk Paving

Streetscape improvements around the Gateway Park, the south side of Locust and north side of Grand, are anticipated to cost between \$170,550 and \$188,575 per block face as per initial preliminary cost estimates. Upon approval of an implementation plan, the City will be responsible for these improvements around the Park and private development will be required to pay for the initial cost of the streetscape improvements as part of their project costs. The City will be responsible for ongoing operations and maintenance costs of the streetlights, landscaping, and sidewalks. An additional cost is involved in upgrading the streetscape to a quality appropriate to the development in and around the Park. City staff, in conjunction with the Gateway Steering Committee, will also explore the various options of financing the costs over and above the costs required to maintain the current conditions before full implementation of the streetscape improvements. An example of a funding mechanism for the operating and maintenance costs is the Self-Supporting Municipal Improvement District (SSMID).

### Archetype, Roadway Lighting for Other Areas of Downtown

The upgrade of existing cobrahead streetlights to the Archetype throughout the balance of downtown may be paid for in one of two ways. One is to pay the difference for the upgraded pole and fixture through an ongoing tariff rate increase. The second option is to buy down the cost difference rate and maintain the standard rate applied to a cobrahead style streetlight. Funding sources will be explored before fully implementing this streetlight replacement program.

## **RECOMMENDATION -**

**1. Approve design standards for Tier 1 streets which are identified as the perimeter of the Gateway Park; more specifically, both sides of Grand and Locust from 10th Street to 15th Street, the west side of 10th Street, the east side of 15th Street, and both sides of 12th and 13th Streets. The standards include:**

**- Use of the black Solitaire twin-headed streetlight fixture and pole assembly on all streets identified as Tier 1 streets around the Gateway Park.**

**- The "palette" of landscape design identified which calls for a range of quantity of trees per block face, acceptable planting**

conditions, planting beds, and/or moveable potted plants.

- A 20' sidewalk width on Grand and Locust from the face of curb to building face to accommodate a reasonable planting and amenity zone (e.g., street furniture) and maintain a comfortable pedestrian zone in keeping with the scale of activity and development targeted for the Western Gateway Park. It is recognized that the 20' sidewalk standard must be modified around existing buildings (e.g., Masonic Temple and Arlington Apartments), and will need to be evaluated as part of the final plans for the new Library and Higher Education Center.

- Sidewalk widths on cross streets (10th, 12th, 13th, and 15th Streets) between 12' and 20' from face of curb to building face except where existing conditions (e.g., Arlington Apartments) prohibit.

- Sidewalk paving to be concrete with approximately 10 percent accent paving.

2. Approve the design of the Archetype streetlight fixtures and pole assemblies to be implemented in phases to replace existing cobraheads for the balance of downtown.

3. Authorize staff to:

- Pursue preparing an implementation plan for anticipated phasing of streetlights and streetscape improvements for the Gateway Park area.

- Further explore phasing implementation of the Archetype streetlights to change out existing cobrahead streetlights to the proposed black Archetype light fixture and pole assembly throughout downtown.

- Discuss an agreement and cost related issues with MidAmerican Energy Company, including tariff rates and/or buy down costs for streetlights upgrades.

4. Authorize staff to proceed with preparing amendments to the current Urban Renewal Plan for formal adoption of streetscape design standards as outlined above.

**BACKGROUND -**

Streets in downtown vary from those with higher visibility and image, such as Locust Street, to more utilitarian streets, such as Mulberry. Given this fact, it is recommended that a high-quality streetscape design be implemented around Gateway Park and the blocks along Grand and Locust facing the Park. The primary elements include:

- A feature-type streetlight be used for the Gateway Park to complement the landmark-quality of the new Central Library and Gateway Park development as well as the targeted signature-type development on the perimeter, such as Allied Insurance. The recommended light source is metal halide.
- Landscaping has been outlined with trees, planting beds or tree grates, and/or moveable potted plants.
- Sidewalk paving to be concrete with approximately 10 percent accent paving.
- The general standards call for 20' sidewalk widths but recognize there are existing exceptions, such as the Masonic Temple and Arlington Apartments, and final decisions have not been made on the Higher Education Center or the new Central Library.

Streetscape design guidelines, other than the streetlights, focus primarily on landscaping and sidewalk paving to establish a general palette of elements intended to offer flexibility to accommodate a specific project's design.

Metal halide is a whiter light that offers a more desirable, pedestrian-friendly quality than the current yellowish high pressure sodium light. One major goal of the Western Gateway Park area is to promote development and activities that support an increased level of pedestrian activity well beyond typical office hours. Therefore, the metal halide light source is considered an important factor to help accomplish this goal.

Iowa Code Section 364.23 requires that all City-owned street and exterior security lighting be high pressure sodium, unless the lighting is "era or period lighting which has a minimum efficiency rating of fifty-eight lumens per watt". The black Solitaire, twin headed metal halide fixture recommended for the area around the Gateway Park, the south side of Locust and north side of Grand, is a period lighting fixture reminiscent and complimentary of the historic role that this area has played in Des Moines' history, and has a minimum efficiency rating in excess of fifty-eight lumens per watt. It is, therefore, exempt from the requirement to use high pressure sodium. The balance of the

streetlighting upgrades being proposed will be high pressure sodium.

Traffic signal improvements to complement the streetlight upgrades need to be explored, an implementation program and cost estimates prepared and recommended to City Council.

#### Solitaire, Twin Headed Feature Light Around Gateway Park

City staff has explored a variety of options for streetscape improvements, including appropriate lighting, around the Gateway Park and prepared the "Recommended Streetscape Design Guidelines for Gateway Park". The report has been reviewed and endorsed by the Architectural Advisory Committee, the Urban Development Board, Gateway Implementation Sub-committee, and the Gateway Steering Committee. The "Recommended Streetscape Design Guidelines for the Western Gateway Park" report (distributed to Council in March 2002) explored the three items considered to be the most critical to define at this time. These items are streetlighting, landscaping, and sidewalk paving. These are considered critical because they cannot be easily changed or added later. The report established a baseline condition using the current cobraheads, existing landscaping and concrete sidewalks. From this baseline, five alternatives were developed using varying levels of quality for streetlighting, landscaping, and sidewalk paving.

The recommended streetscape design, which was endorsed and recommended for approval by City Council by the Architectural Advisory Committee, Urban Development Board, Gateway Implementation Sub-committee, and Gateway Steering Committee, calls for the twin Solitaire light fixture around Gateway Park and the single headed version of the Solitaire along paths in the Park.

The black twin Solitaire light fixture (KIM manufacturer) and pole is proposed to be used on Locust and Grand from 10th Street to 15th Street, on the west side of 10th, 12th, and 13th Streets, and the east side of 15th Street between Grand and Locust. The City will be responsible for the installation of the Solitaire streetlights in conjunction with park development on the north side of Locust, south side of Grand, west side of 10th Street, east side of 15th Street, and both sides of 12th and 13th Streets between Grand and Locust.

Property owners and/or developers will be required to install the Solitaire fixtures on the north side of Grand and the south side of Locust from 10th Street to 15th Street in coordination with project development, such as Allied.

The City will also be responsible for the ongoing maintenance of the

Solitaire streetlights due to the use of metal halide as a light source. MidAmerican Energy Company is limited to only being able to own and maintain high pressure sodium light systems at this time due to slightly more efficient energy consumption.

The manufacturer representative to KIM Lighting has offered a five-year guarantee on the black twin Solitaire light and pole assembly of \$2,910 per assembly. This price does not include contractor mark up or installation.

#### Archetype, Roadway Lighting for Other Areas of Downtown

All other streets beyond the Gateway Park, or not otherwise targeted for feature-type lighting, are recommended to replace the existing cobraheads with a cleaner, more contemporary and easier to maintain streetlight. The recommended streetlight is a black, Archetype light fixture (manufactured by KIM Lighting) and pole assembly with banner-strength poles. The light source will be high pressure sodium. Other streetscape elements on these streets, such as landscaping and sidewalk paving, offer flexibility to accommodate specific project designs.

In the process of exploring and recommending a streetlight design for the Gateway Park, it was decided that a larger view of the downtown streetlight system as a whole needed to be considered. The recommendation is to use a black Archetype light fixture (KIM manufacturer) and Valmont pole assembly. The pole strength will be designed to accommodate banners.

Streets not identified for feature streetlighting, either existing, such as Court Avenue and Walnut Street Transit Mall, or committed projects, such as East Locust and Gateway Park, are recommended to use the Archetype light fixture (KIM manufacturer). These lights will use a high pressure sodium light source and will be added to the inventory of streetlights MidAmerican Energy owns and maintains. If/when the Iowa State law changes to allow metal halide as an acceptable form of light source for MidAmerican Energy to own and maintain, or some other opportunity arises that allows the use of metal halide, the Archetype light can easily be converted from high pressure sodium to metal halide with modest cost.

The Archetype is proposed to be installed throughout downtown on a five-year replacement program to be coordinated with MidAmerican Energy. Installation of the Archetype streetlights should be coordinated with construction projects wherever possible.

The Archetype is proposed to be installed at approximately the same

height (30') and similar spacing (150' on center, staggered across the street) as the current cobrahead streetlights. This approach is intended to use existing bases and service to maintain cost efficiency for the conversion program.

The KIM manufacturer's representative is willing to offer a five-year guaranteed price to the distributor. City staff will coordinate with MidAmerican Energy as this price will affect the rates to the City. Pricing will be set through MidAmerican Energy. The City can pursue the streetlight conversion program as a buy down cost or tariff rate increase. These will be negotiated between City staff and MidAmerican Energy staff and brought back to the City Council for review, discussion, and action.

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