Roadway Elements

The roadway element represents the first level of highway furniture. These are the objects that are normally found throughout the roadway in the form of highway markings, reflectors, mileage markers, guardrails, lighting standards, signs, directions markers, rest facilities, toilets and toll booths, etc. These are the objects that are most readily viewed by the motorist as well as being the furniture elements the most frequently replaced. The opportunity of periodically replacing furniture elements is a means by which the visual continuity of the roadway may be enhanced. Each element offers to the motorist, a small-scale sculptural element, whose aesthetic lies in the uniqueness of its form.

This section on roadway elements, as highway furniture, emphasizes the object quality. All possibilities are not represented, however, those presented are intended to focus interest on the objects themselves in contrast to the sensuous movement of the landscape. Lighting standards are designed to enhance the continuity of movement by being interconnected along the route. Signage takes on another meaning by using super-scale letters that function both day and night. Guardrails are designed to protect the driver as well as conform to the shape of the embankment. Trees, shrubs, ground-cover and ornamental
plantings are placed at random intervals in sufficiently large areas to enhance visual interest. According to Tunnard and Pushkarev, the placement of small-scale sculptural forms or blocks can enhance the "kinesthetic sensation of tilting, turning, dropping, and climbing." The plastic harmony inherent in the small-scale sculptural object can contribute to the larger "expressive content" of the roadway.

The nighttime roadway is perceived quite differently from that of the daylight hours. Through the careful placement of lights, signs, electronic information displays and limited access radio transmissions, the motorist can be informed, educated, stimulated, and encouraged to be aware of the roadway and the events that are occurring during the voyage.

Tollbooths and plazas, which are a normal part of the driving experience, should be designed as highly visible sculptural objects. By selecting better designed and more dynamic forms, the plaza environment could be transformed from a purely functional accessory to a visual and spatial experience.

Opportunities for the use of artistic talent in the design of roadway elements is almost unlimited. The sameness of the existing infrastructure must be modified. Every once in a while, it is a pleasant surprise to see a unique sculptural form or a piece of highway furniture break the visual and mental monotony of the highway passage. The "designed" roadway element is one of many means by which that goal can be accomplished.
Roadway Elements

Signage

Illuminated planar sign elements provide short, intermediate and long distance information for the motorist. Automated signs provide changing information about road conditions or information relative to distance, region, time and weather.

Lighting

Lighting elements placed along linear elements can provide visual information about the direction of movement to the motorist. Properly placed, linear lighting can create nighttime sculptural forms or electronic signage.
Roadway Elements

Lighting

These integrated lighting standards not only provide continuous illumination for the roadway, intersections and bridges but can be used to enframe areas of interest such as historic places.

Lighting

The use of carefully spaced lighting standards can suggest direction and continuity or statically mark time and place. Standards can range in height and be varied in terms of height and color to control visual interest.
Roadway Elements

Signage

Using a rigid frame, sign element can be suspended or integrated within the frame. The sign can convey meaning through form. Readily recognized forms, even if only implied, deliver information that is commonly understood.

Signage

Electronic information delivery is fast becoming a new method for communicating with the motorist. Using solar energy cells for power, these signs can provide the motorist with instant changes in weather, road conditions or warnings.
Roadway Elements

Signage Elements

Electronic information displays can be integrated into rigid frames to provide speed limit information. These signs can be used both day and night and when used in a sequence, can alert drivers to upcoming hazards.

Signage Element

Rigid steel frames are used to span the highway on which a variety of signs are attached. These same frames may be used in a variety of heights to provide signage parallel to the direction of traffic flow.
Roadway Elements

Sculptural
Abstract geometric planar or volumetric elements can provide an unusual or unexpected event along the highway corridor. Using random spacing or formal placements, these sculptural objects contribute visual interest to increase highway safety.

Signage
Super-graphics are readily comprehended at high speed and extend the visual information necessary to communicate direction, speed limit or upcoming exits to the driver. An oversize arrow, plain or illuminated is one example of this type.
Roadway Elements

Signage Elements
Many signs are often obscure and visually boring offering the motorist little visual change from sign to sign. Super graphics letters, used in random situations, offer great visual stimulation and interest to the road user.

Lighting Elements
Highway lighting performs a necessary role in highway safety. The repeating pattern of identical lighting standards offers the driver little visually. Sculptural aerodynamically designed standards can contribute to the aesthetic form of the highway.
Roadway Elements

Screens

To protect residential communities, large scale walls are built along the edge of the urban highway corridor to isolate the roadway. The screen can effectively hide the highway and isolate the area from acoustical interference.

Signage

Modular graphic systems can provide flexibility and freedom to the the demands of highway signage. Using a combination of electronic, illuminated and static signage, greater visual awareness will be drawn to the highway directive.
Roadway Elements

Signage

The use of free-standing vertical sign frames has become a permanent part of the highway environment. By introducing a variety of sign frames, the signage can take on a particularity unique to a state, regional or local community.

Shelter

Shelter along the highway strip is often limited to rest areas with toilet facilities or minor leanto shelter. Providing more substantial shelter facilities, such as this view of a space frame roof shelter, will substantially reduce the highway accident rate.
Roadway Elements

Columnar

The use of columnar elements set in a particular style to represent an historic period can provide a potent reference point along the highway corridor. This Neolithic stone column can highlight a particular historic place of national interest.

Columnar

The vertical illuminated column can become a beacon if used in relationship to a specific locale or area. As a lighthouse announces a safe harbor, the illuminated column can become one of many symbols used to denote a rest stop.
Roadway Elements

Classical

This classical style column, incomplete and free-standing, plays an important role in highway design. Through the repetitive placement of single columns in a variety of geometries, stable landmarks may be established along the route.

Classical

This free-standing column is over 40 feet tall and stands alone next to the roadway. Its large scale can be seen from a distance. Made from concrete or stone, this classical column can provide visual interest along a rural or urban stretch of highway.
Roadway Elements

Earth Sculpture

Earth sculpture of monumental proportions such as this design, connect time an space and seem to look beyond man's limit. Placed on a tilted plane to the roadway, the large-scale earth sculpture become the subject, mixing meaning and identity.

Earth Sculpture

To develop the expressive content of the roadway environment, the introduction of large scale earth sculptures placed on a pedestal become anomalies to the highway and thus generate a level of visual interest and landmark potential.
Roadway Elements

Towers

Tall structures do double duty by functioning in their functional mode as well as acting as sculptural elements and three-dimensional reference points along the highway corridor. The windmill and the radio tower are excellent examples.
Roadway Elements

Sculpture

While the use of roadside sculpture is not new to European highways, it is seldom found on our national highways. Placing a large scale element within the center median strip or simply in adjacent fields or right-of-ways creates a visual aesthetic.

Sculpture

The rest areas that populate our highway system are often so stripped of any visual amenity that they offer the greatest potential for placing roadside sculpture. Small environmental pieces such as this one provide a unique identity to the place.
Roadway Elements

Sculpture

The roadside rest area or scenic overlook presents a unique opportunity to view environmental sculpture. By placing artistic works in selective locations, the automobile trip becomes something far more informative as well as interesting.

Columns

Radio and television towers, silos, water towers, and smoke stacks have a distinct recognizability on the horizon. Expressive content may be enhanced by populating selected areas with vertical columnar elements.
Roadway Elements

Columnar

Environmental sculpture is dedicated to making the viewer far more aware of the natural landscape. Often, the contrast between the man-made and the natural landform reinforce the unique aesthetic qualities of each.
Roadway Elements

Gateway

The use of single or paired objects such as stelae or large scale fencing to announce arrival or entry into a specific zone of activity. Gateways are a means of preparing the driver for a change in vehicle motion.
Roadway Elements

Gates and Trees

The use of plants, trees, and shrubs in combination with portal elements can add meaning or visual interest to a specific setting. The application of these elements to small scale areas at rest stops would enhance the highway experience.
Roadway Elements

Wall

The protection of the highway corridor is often relegated to chain link fencing. While effective and inexpensive, it lacks the aesthetic value while wall elements of various styles, sizes and colors would provide a more solid definition to the roadway.

Wall

The requirement for protection of the highway strip works to keep people and animals out for safety reasons, it also keeps people, animals and cars contained. It is important that a wall be used as a sculptural element with the landform.