CORRIDOR OF LIGHT

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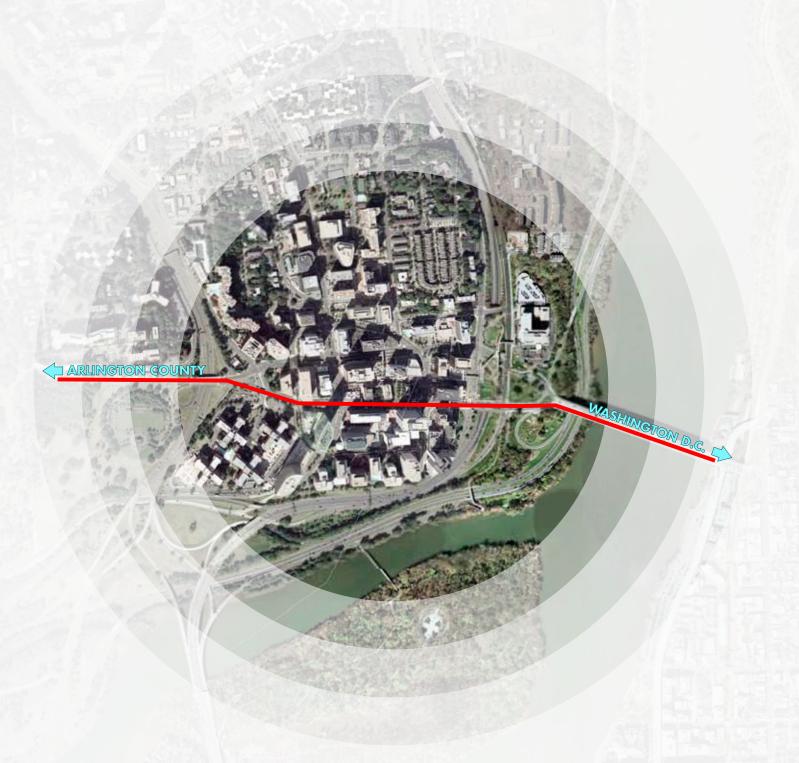
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Rosslyn A New Presence for Lynn Street

Rosslyn is a neighborhood that has been subject to the economic growth and urban expansion of the Washington DC area. With its buzz of commerce it has the feeling of a condensed version of a much larger city. The demand for office

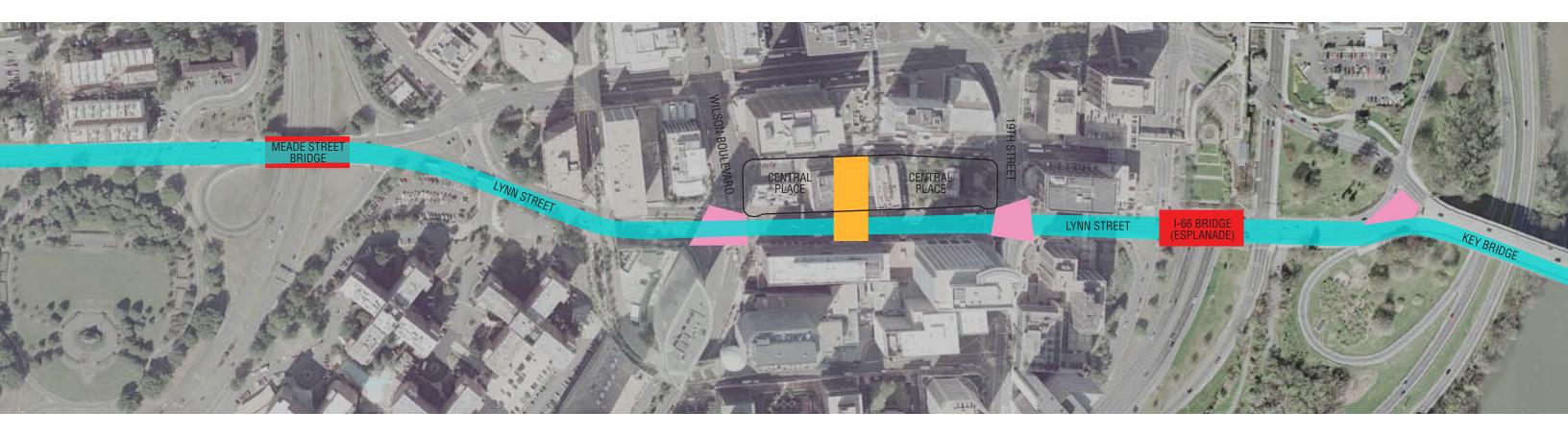
space and the expanding concerns of the District of Columbia are likely to effect an architectural environment that will continue to increase in scale and to challenge Rosslyn's pedestrian environment.



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The North Lynn Street corridor needs public art to keep pace with the changing scale of the urban environment and to establish a memorable public space. As a connection to Key Bridge and Meade Street Bridge, Lynn Street is a commercial, transportation, and pedestrian artery in Rosslyn. The I-66 overpass bridge, soon to be refurbished as part of Arling-

ton County's Esplanade project, will enhance the entry from the District of Columbia adjacent to Key Bridge. In addition, Meade Street Bridge, adjacent to the Iwo Jima Memorial, is also slated for renovation. These two bridges are anchors at the north and south ends of the street and mark entries from Arlington to the south and from Washington D.C. to the north.



Lynn Street



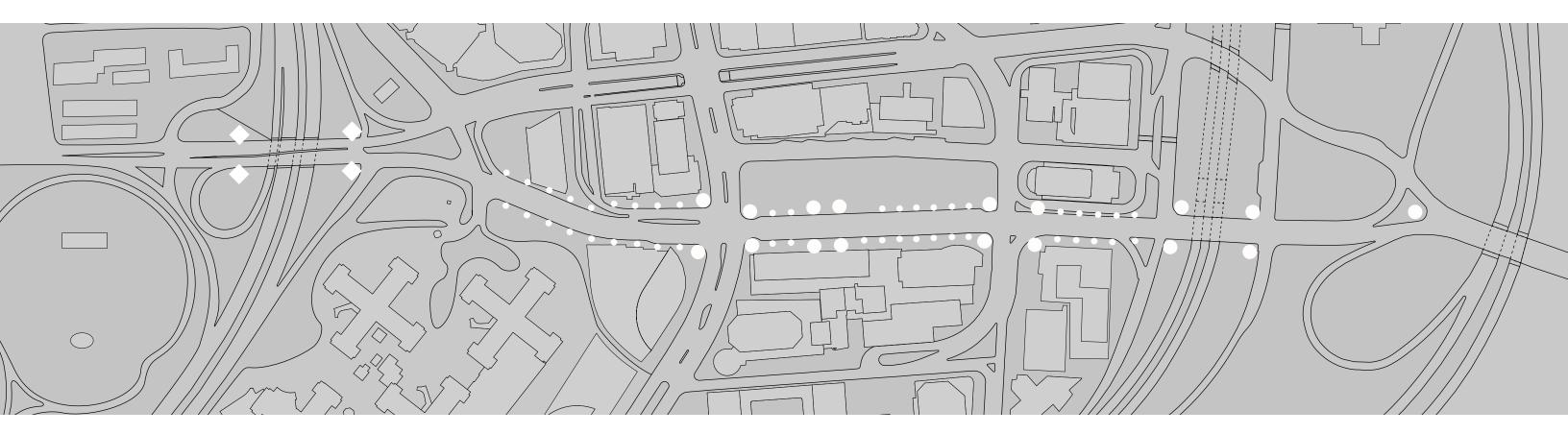
Intersections



* The JBG Companies are erecting two towers and creating a public plaza which will reshape Lynn Street between 19th Street and Wilson Boulevard. This development will help to transform Lynn Street into an urban center. It creates the opportunity to address Lynn Street as a destination unto itself. Public art will mark this vibrant residential and commercial place.

The Corridor of Light, a synthesis of public sculpture and lighting infrastructure, embraces and defines Rosslyn's urbanity. Illuminated sculptures of different scales appear at significant junctures along the corridor to create a series of linked points from Key Bridge to Meade Street Bridge.

The typical pedestrian light is integrated into this ensemble which is an urban event comprised of a series of public sculptures. The periodic placement of the sculptures gives rhythm to traveling Lynn Street and a comprehensive urban vision to the corridor.



- Street Lanterns
- 26' Luminous Body Sculptures
- 21' Luminous Body Sculptures

A Tradition of Sculpture Monumentality in the Washington D.C. Area

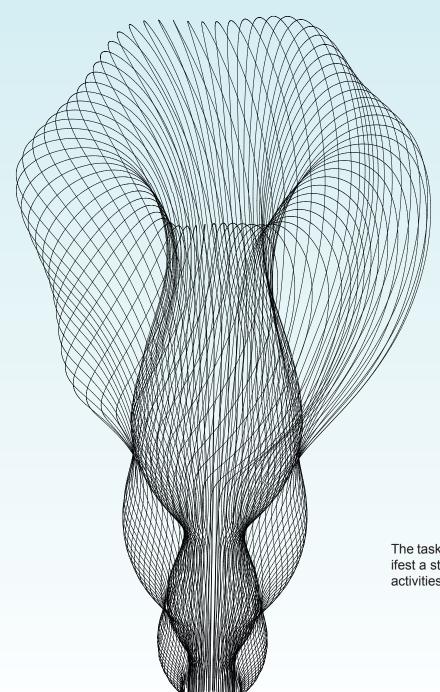
The District of Columbia and its surroundings play host to a rich tradition of commemorative sculpture. From the Washington Monument on the National Mall to the Iwo Jima Memorial in Arlington, Virginia, the region is defined by the grand classicisms of 19th and 20th century America. Often built from bronze and stone, the forms that populate the nation's capital are marked by a material gravitas in accord with the many events they immortalize. Rosslyn is bracketed by these traditions.





When establishing Rosslyn's urban identity, it is possible to embrace Washington's monumentality in a way that represents Rosslyn's expansion as an urban center in the 21st century.

The development of a family of sculptures that would create a memorable and enjoyable urban environment sprang from past work by Cliff Garten Studio (CGS) where illuminated forms are used to mark an urban district.*

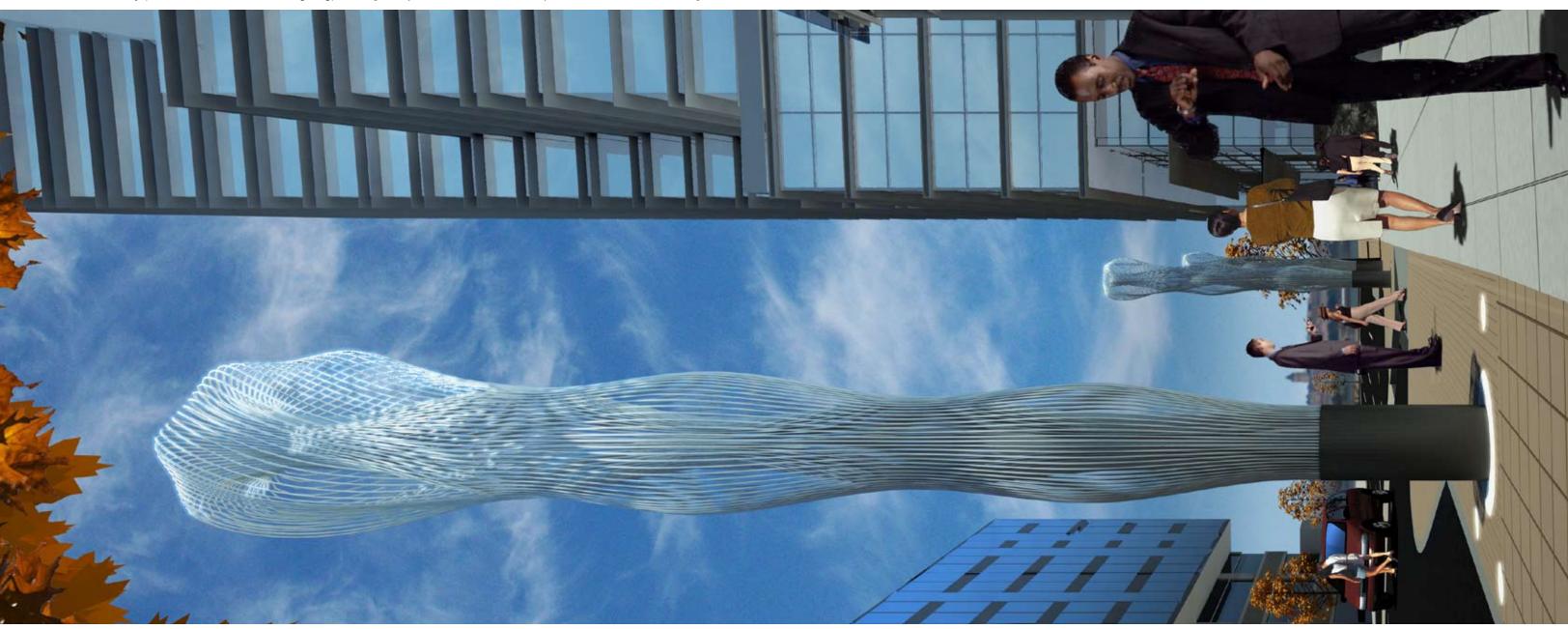




Light Column (18')
Sharon Road West Light Rail Station
Charlotte, North Carolina
Copyright 2007
Cliff Garten Studio

The task was to generate a type of object that would manifest a striking form and retain a physical openness to the activities of Lynn Street.

26' Luminous Body (stainless steel, bronze, LED lighting) marking the Lynn Street entrance to the plaza at Central Place- looking south



The *Luminous Body* sculptures parallel the verticality of neighboring architecture. They employ form and light to create a vibrant energy on Lynn St. In repetition they emphasize the gesture of a grand boulevard, creating urban continuity and linking Meade Street Bridge and the Esplanade.

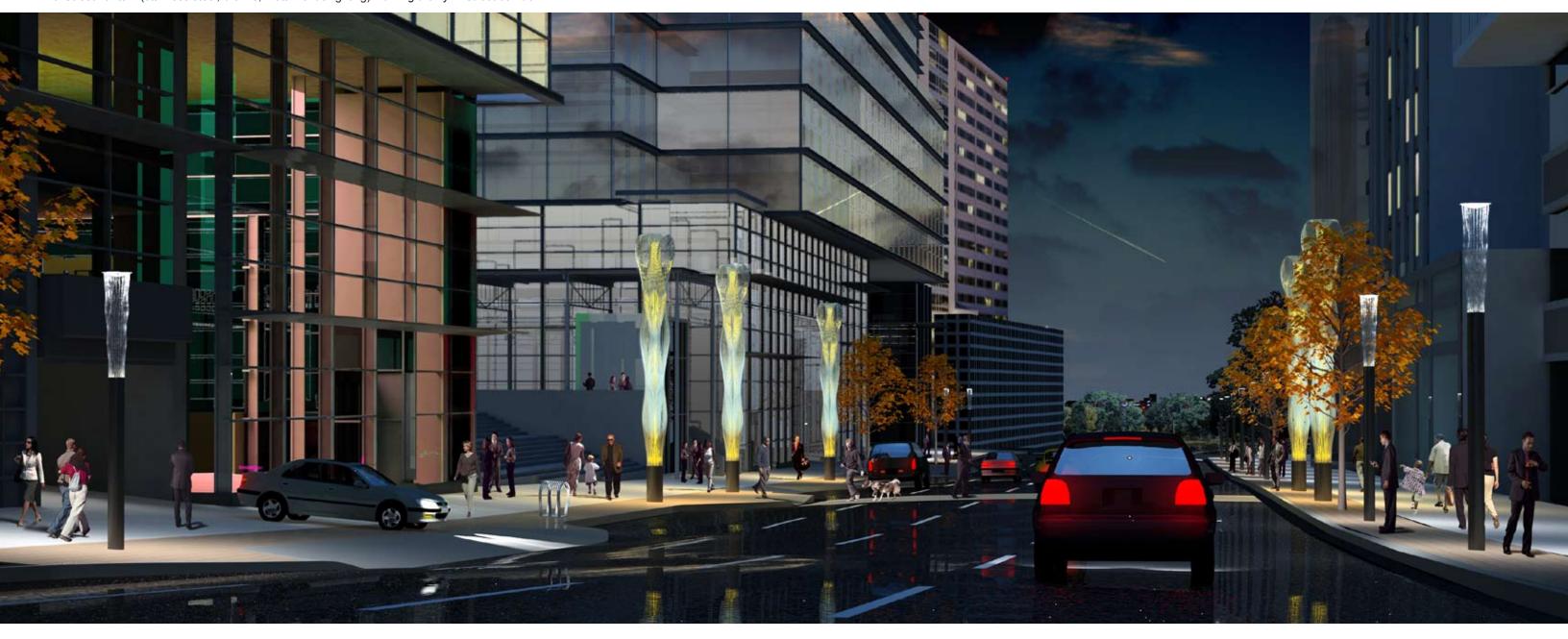
The sculptures are monumental in scale yet intimate in character. They are defined by the open tracing of one volume residing within another. Like the Klein Bottle with no distinction between its interior and exterior surfaces, the *Luminous Bodies* turn in on themselves, creating a continuous transparent surface that can be filled with light.

They have a different presence during the day than they do during the night. During the day the slender rods which define their surfaces reflect sunlight that passes through the sculptures' volumetric layers. At night they are illuminated with colored LED lights.

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Corridor of Light Urban Identity

26' Luminous Body (stainless steel, bronze, LED lighting) marking the Lynn Street entrance to the plaza at Central Place-looking north 16' Street Lantern (stainless steel, bronze, metal halide lighting) marking the Lynn Street corridor



What do we mean when we speak about urban identity? American cities often assume a derrière garde position whereby they adopt the image of a historicism that never was, to avoid the risk of having to imagine what could be. Conversely, this project will allow Rosslyn to invent a fresh perspective towards its streets and infrastructure. In contrast to the hierarchy and opacity of the monumental traditions that bookend the Rosslyn neighborhood, The *Corridor of Light* offers a transparent monumentality which opens to Lynn Street.

Perhaps the most important aspect of any street is its urban scale. Rosslyn is a neighborhood whose scale has taken it by surprise. Its burgeoning commerce and what will surely be a demand for more commercial space are challenging the pedestrian environment. While the community of public and private partnerships in Rosslyn would surely like to grow, this community just as surely desires to create a distinctive identity and a positive experience on its streets where public and private interests meet in the face of this rapid growth.

Rosslyn desires an urban identity that states its difference from its neighbors and its arrival as a new urban center amongst older traditions. In contrast to its neighbors, Rosslyn should assert a new monumentality and the possibility of a vibrant street life and a street with a distinctive image. The *Luminous Bodies* are monumental in scale, but possess a diaphanous quality that plays with sunlight during the day and with LED's at night, making the course of North Lynn Street an exciting district.

What engages the pedestrian at a fine-grained scale should also be evident to vehicles where the streets length is taken in at a rapid pace. Scale and repetition are essential to making an impression that one has arrived at a significant urban district. The *Luminous Bodies* have been developed as three different illuminated forms. Two illuminated types of street furnishings compliment the ensemble.

There are five types of illuminated sculptures, each with a different form and each operating at a different elevation.

The *Luminous Benches* and the *Luminous Bike Racks* are similar in scale to bollards. They illuminate a 2'-3' zone above the sidewalk and translate the form of the *Luminous Bodies* to the scale of the pedestrian.

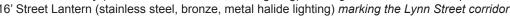
The first order of sculpture is the *Street Lantern*. At 16' tall it is built to illuminate the sidewalks. The *Street Lanterns* are designed to replace the existing pedestrian lighting and to establish a series of sculptural lights that are part of the same family of forms which create a continuous corridor of light. These *Street Lanterns* will meet the foot candle requirements and the rigorous maintenance requirements of Arlington County.

The second order of sculptures is the 21' Luminous Body. These sculptures mark the four corners of the Esplanade and Meade Street Bridge. They rest atop a concrete pedestal which is part of each bridge, lifting them 3' to 5' higher than the sidewalk, and topping them out at 24' to 26' in height. They adapt themselves to the bridges' structures and change our perception of these roadways from engineered structure to urban entrance.

The third order is the 26'Luminous Body. These objects are found at the intersections of Lynn Street and Wilson Boulevard, Lynn Street and Central Place, and Lynn Street and 19th Street. Four 26'Luminous Bodies frame each of these intersections. They operate at the scale of the street for the pedestrian and the motorist. Though these large sculptures hold their space against the architecture, their materiality is of a fine-grained nature and offers an intimate quality visible to the pedestrian.

Esplanade A Photosensitive Response

21' Luminous Body (stainless steel, bronze, LED lighting) *marking the corners of the Esplanade- looking north* 16' Street Lantern (stainless steel, bronze, metal halide lighting) *marking the Lynn Street corridor*







When marked by four 21' Luminous Bodies, the Esplanade and Meade Street Bridges will become memorable entry points for Rosslyn. The sculptures will be positioned on the ends of the two abutments of each bridge.

Cliff Garten Studio will work with the bridge engineer to design these concrete ends, raising the 21' tall sculptures 3'-5' above the sidewalk on each of the four concrete abutments.

The Luminous Bodies have a different presence during the day than they do during the night. During the day the slender rods which define their surfaces reflect sunlight that passes through the sculptures' volumetric layers. At night they are illuminated with colored LED lights.

Lynn Street- looking north



The rhythm and cadence of the *Corridor of Light* is established by the scale and sequencing of the *Luminous Bodies* along Lynn Street. The series of illuminated sculptures will create a sense of arrival when entering or leaving the Rosslyn neighborhood from the Esplanade or Meade Street Bridge as well as a sense of continuity and arrival along the length

of the Lynn Street corridor. The following are video stills from a fly-through along Lynn Street produced by CGS. Fully programmable LED lights in each of the fixtures will allow infinite variation of colored light to occur over time along the *Corridor*. A light show can be programmed from one end of Lynn Street to the other.

Esplanade roadway- looking south



Meade Street Bridge- looking north



Meade Street Bridge- from the roadway looking north



Lynn Street and Wilson Boulevard- looking north



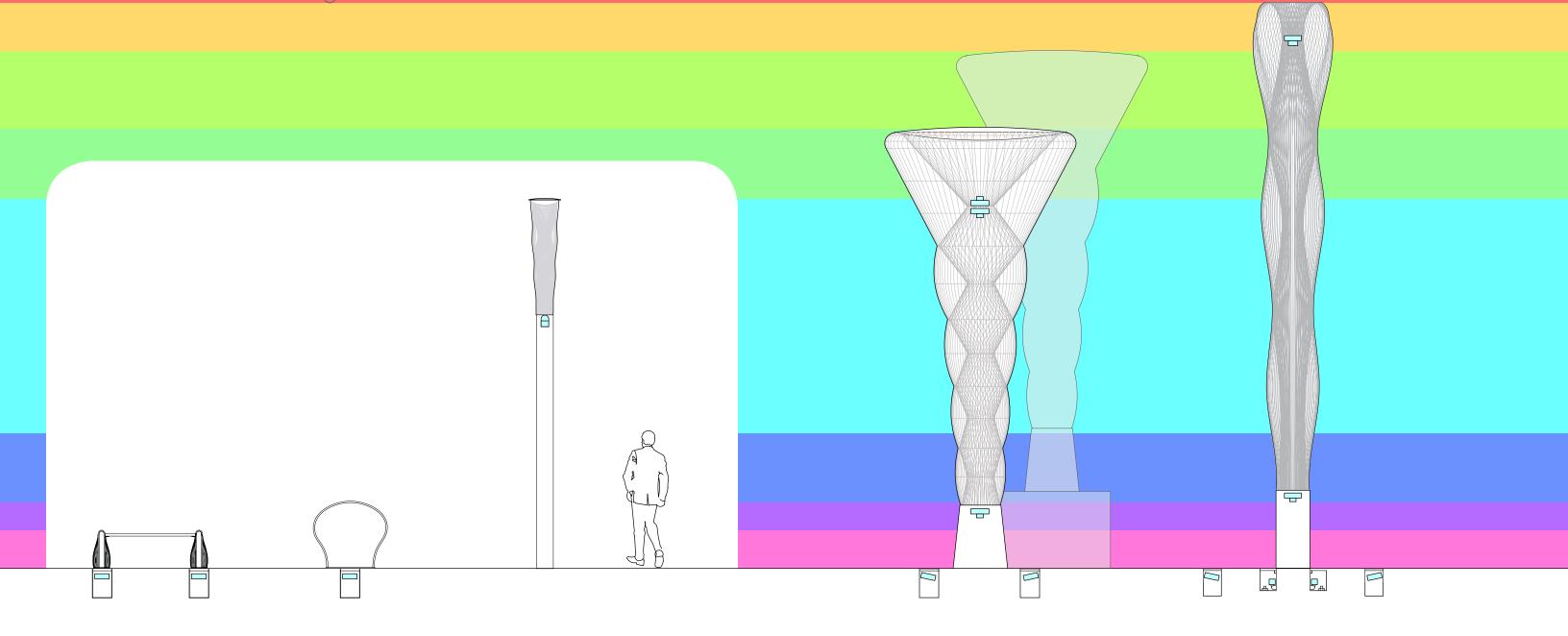
Lynn Street- looking north from the intersection of Lynn Street and Wilson Boulevard



Street Ensemble Materials and Lighting

MATERIALS: A. 3/32" Formed Stainless Steel Rods B. 3/8" Formed Stainless Steel Rods C. 1/2" Formed Stainless Steel Rods D. 1-1/2" Stainless Steel Structure/ Power Feed E. 3/4" Formed Stainless Steel Rods F. Bronze G. Concrete Footing H. Parabolic Reflector I. Frosted Glass (D) LIGHTING: 1. 150W Metal Halide 2. LED Spot 3. LED In-grade Spot 4. LED Mini 5. LED Controller 6. LED Power Supply <u>(c)</u> 3 (G) (G)

Street Ensemble Orchestrating Color



The Street Ensemble provides functional street lighting and celebratory urban lighting. Street lighting necessary for the pedestrian is provided by *Street Lanterns*. They create a visual ceiling at approximately 16' above the street, illuminating the space below to define and add warmth to the pedestrian experience.

The *Street Lanterns* use energy efficient HID lighting of approximately 150 watts, typical of Rosslyn's present standards in terms of color, energy efficiency, and maintenance requirements. Relamping is done as with any existing street fixture in Rosslyn. Additionally, this pedestrian space is populated with benches and bike racks. They are also self-illuminated (LED) for increased aesthetic and security benefits.

The 21' and 26' Luminous Bodies are grand urban gestures. They activate intersections, important public spaces, and bridge entries. The Luminous Bodies have integral light-emitting diode fixtures (LED). Two lamps are mounted internally, one shining up from the bottom and one shining down from the top. They illuminate the interior volume with light. Three in-ground lamps shine upward, bathing the exterior surfaces in a contrasting light. The 26' Luminous Bodies have three additional in-ground lamps mounted beneath an at-grade glass ring to create a glowing band of light around the base.

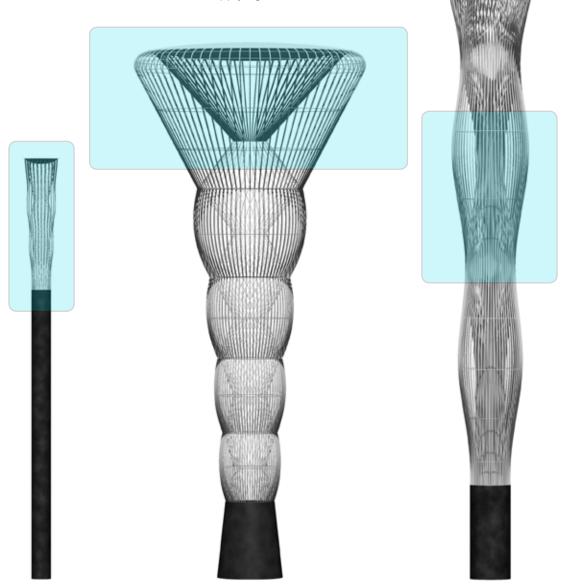
These LED fixtures offer fully programmable multi-color light displays. With the this capability Rosslyn will be able to orchestrate any number of lighting programs for holidays or other special events. Sculptures may be synchronized to change color in unison or they may be sequenced to heighten the experience of moving along Lynn Street.

The LED fixtures are 25-40% more energy efficient than HID with 5 times the lamp life. Savings in energy and maintenance costs are significant. All but the top LED fixtures in the *Luminous Bodies* are accessible from the ground for relamping. Relamping the top fixtures is the same as for any large street light.

Luminous Bodies Structure and Maintenance

The diaphanous nature of the *Luminous Bodies*, *Street Lanterns*, and *Luminous Furnishings* belie the inherent physical strength of the sculptures. In the *Luminous Bodies* the formed stainless steel rods define both exterior and interior surfaces with continuously undulating volumes. The 3/8" and 1/2" stainless steel rods converge and are welded to stainless steel supports that integrate the rods for strength in torsion, bending, and compression. The stainless steel superstructure is structurally integrated into the bronzesheathed stainless steel base of each sculpture which in turn is secured to a concrete foundation. The *Street Lanterns* are similarly conceived with 3/32" and 3/8" rods. They create a top lantern that rises from a bronze or stainless pipe. Finally, the *Luminous Benches* and *Luminous Bike Racks* use 1/2", and 3/4" formed stainless steel, applying

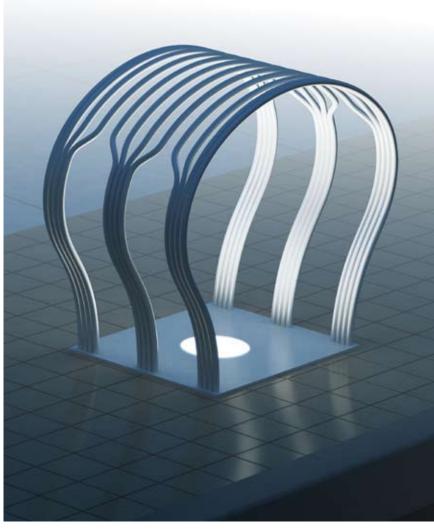
the vocabulary and language of the larger pieces to the most intimate pedestrian elements. The sculptures will stand up to the abuse of the street because they are made of stainless steel. Periodic cleaning of airborne debris may be required. However, the sculptures themselves require little maintenance and there is no continuous surface to mar or graffiti.



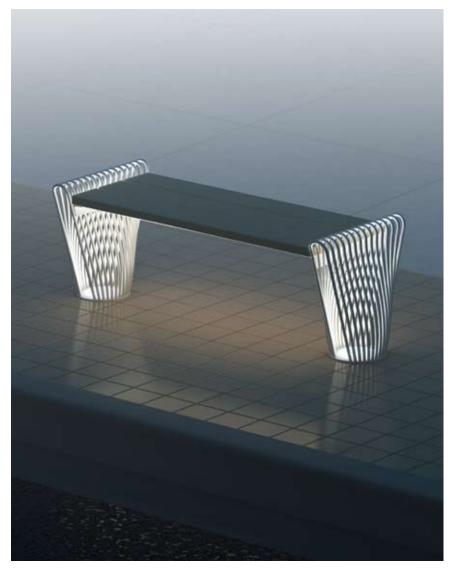








Self-illuminated street furnishings contribute to a unified pedestrian experience. They allow small and large elements to act together to influence the image of the street.



As utilitarian objects they allow passersby to interact with the work beyond having a solely visual experience.

26' Luminous Body (stainless steel, bronze, LED lighting) marking the Lynn Street entrance to the plaza at Central Place-looking west Luminous Bench (stainless steel, wood, LED lighting) installed along the Lynn Street corridor



Public art is about our public life. Good public art is usually good urbanism and a good public art plan is also a good urban plan because a better looking city always equates to a better business and residential environment. *The Corridor of Light* will establish dramatic and memorable entries into Rosslyn connected by an engaging linear progression of illuminated sculptures. The conscious decision to clearly delineate and celebrate the public realm with sculptures that are integrated into Rosslyn's lighting infrastructure ex-

hibits a sophisticated urbanism. The decision demonstrates that good urban form is built around sculptures that make people think and feel because there exists the possibility of stimulating peoples' imagination, thereby defining an identity for Rosslyn. Over time the *Luminous Bodies* on Lynn Street will take on a life of their own. The *Corridor of Light* will become a part of the Rosslyn experience because it will merge with the activities of the neighborhood. A chain of illuminated sculptures capable of changing color, from the

Esplanade to Meade Street Bridge, will create a powerful imprint on the public's imagination. The *Luminous Bodies* that comprise the *Corridor of Light* are forms that are classically iconic yet egalitarian and open. They offer the possibility for Rosslyn to build a new image and identity that sets Rosslyn apart for its distinctive public art and innovative urban form.

Technical Specifications

HOUSING:

Aluminum

Powder coat grey finish IP66 rating (Dry, Wet, Damp)

UNIT DIMENSIONS (L x W x H): 137mm (5.39") x 178mm (7.00") x 238mm (9.38")

UNIT WEIGHT:

3.50 kg (7.71 lbs)

LEADER CABLE:

1.83 m (6.0 ft.) High voltage, plenum rated

SOURCE:

Selected High Performance 3-watt LED

LIFE EXPECTANCY:

75,000+ hours

BEAM SPREADS:

8, 24, 48, and 120 degree

LENS:

Clear tempered glass

COLOR RANGE:

16.7 million additive colors (DMX512 protocol)
Independent red, green, and blue LEDs for a full range of smooth saturated colors

FIXTURE POWER REQUIREMENTS: 24VDC

FIXTURE OUTPUT:

POWER CONSUMPTION:

Compatible illumivision power supplies: PS- 100, PS- 150, PS- 300, and PS- 600

POWER SUPPLY INPUT VOLTAGE: 85-264VAC

CONTROL INTERFACE:

DMX Addressable

CONTROL SPECIFICATIONS:

Controlled by illumivision or approved third party DMX controllers

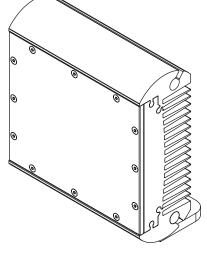
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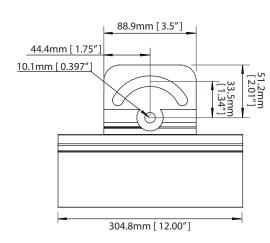
-22 deg. C to +55 deg. C (-7.6 deg. F to + 131 deg. F)





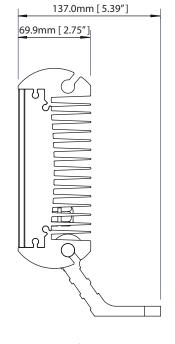
Physical Dimensions

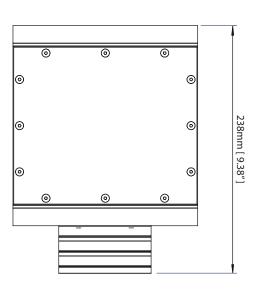




Isometric Elevation

Top View





Side View

Front View

Technical Specifications

*illumi*vision

Physical Dimensions

HOUSING

Compression molded, fiber-reinforced polymer housing provides high strength and UV stability Rated for cement, soil, and drive-over installations

Drive-over rating: 6000 PSI

Meets or exceeds UL, C-UL, CSA, and CE safety standards

Warranted against corrosion for 5-years

HOUSING FINISH

Housing and standard slip-resistant composite lens retainer: Black

Optional aluminum accessories are available in Black or Clear polyester powder coat Brass accessories have a natural cast finish

HOUSING FASTENERS:

All exposed fasteners are captive, black oxide coated, stainless steel

UNIT DIMENSIONS (DIAMETER x HEIGHT):

330.2 mm (13.34") x 431.8 mm (17.00")

UNIT WEIGHT:

10.43 kg (23 lbs)

FIXTURE CONNECTORS:

Weather proof data and power connectors

SOURCE:

Selected High Performance 3-watt LED

LIFE EXPECTANCY:

75,000+ hours

COLOR TEMPERATURE:

Adjustable and addressable

 $\label{eq:continuous} \textbf{Available in the following monochrome options: red, green, blue, white, yellow, and amber}$

OLOR RANGE:

16.7 million additive colors (DMX512 protocol)

Independent red, green, and blue LEDs for a full range of smooth saturated colors

BEAM SPREADS:

8, 24, 48, and 120 degree

LENS:

Clear tempered glass lens on both fixture and housing

FIXTURE POWER REQUIREMENTS:

24VD(

FIXTURE OUTPUT:

84W

108W

POWER CONSUMPTION:

120W

POWER SUPPLY:

Compatible illumivision power supplies: PS- 100, PS- 150, PS- 300, and PS- 600

POWER SUPPLY INPUT VOLTAGE:

85-264VAC

CONTROL INTERFACE:

DMX Addressable

CONTROL SPECIFICATIONS:

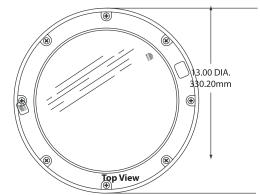
Controlled by illumivision or approved third party DMX controllers

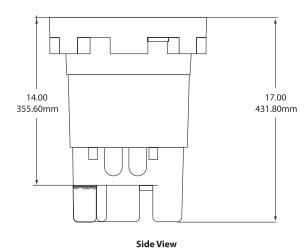
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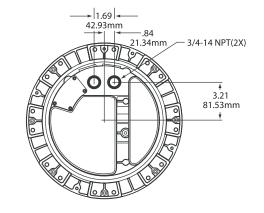
-22 deg. C to +55 deg. C (-7.6 deg. F to + 131 deg. F)











Inside Top View

Technical Specifications

HOUSING:

Aluminum

Powder coat grey finish IP66 rating (Dry, Wet, Damp)

UNIT DIMENSIONS (W x H): 88.1mm (3.47") x 142.5mm (5.63")

UNIT WEIGHT:

0.96 kg (1.45 lbs)

LEADER CABLE:

1.83 m (6.0 ft.) High voltage, plenum rated

SOURCE:

Selected High Performance 3-watt LED

LIFE EXPECTANCY:

75,000+ hours

BEAM SPREADS:

8, 24, 48, and 120 degree

LENS:

Clear tempered glass

COLOR RANGE:

16.7 million additive colors (DMX512 protocol)
Independent red, green, and blue LEDs for a full range of smooth saturated colors

FIXTURE POWER REQUIREMENTS:

24VDC

FIXTURE OUTPUT:

21W

POWER CONSUMPTION:

Compatible illumivision power supplies: PS- 100, PS- 150, PS- 300, and PS- 600

POWER SUPPLY INPUT VOLTAGE: 85-264VAC

CONTROL INTERFACE:

DMX Addressable

CONTROL SPECIFICATIONS: Controlled by illumivision or approved third party DMX controllers

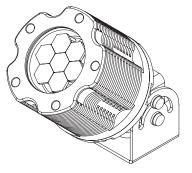
OPERATING TEMPERATURE:

-22 deg. C to +55 deg. C (-7.6 deg. F to + 131 deg. F)





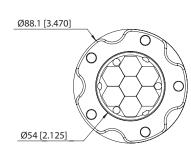


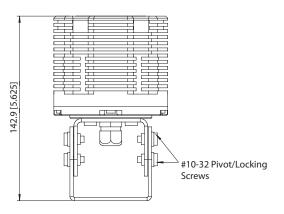


Ø5.1 [0.201] (Clearance hole for #10 screw) 63.1 [2.485] 38.1 [1.500] Ø15.5 [0.609] 50.8 [2.000]

Isometric Elevation

Mounting Bracket Detail





Top View

Side Elevation

