

City of Roeland Park



DESIGN GUIDELINES

for the Former City Pool Site



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Introduction

Purpose of the Design Guidelines

These Design Guidelines are intended to define the City's expectations for future redevelopment of the public property to create a landmark and promote a positive image of Roeland Park. These broad-based Guidelines should be used as a road map to higher performance and enhanced design.

The area generally known as the "old pool site" located on the north side of W. 48th Street between Roe Blvd and Roe Lane originally was a rock quarry and later donated to the City by the Roe Sisters' Estate for park purposes. After decades of use as the City's pool facility it was closed in 1993 and is now available for the development of a distinctive world class landmark and an icon for the Kansas City area.

These Design Guidelines are **the recommended approach** to implement the Community Identity Strategies and redevelopment concepts identified by the City of Roeland Park Comprehensive Plan. However, possible land uses associated with future development in the property should be considered flexible with the understanding that such development **should** consist of a multi-story iconic structure and meets the spirit and intent of the Guiding Principles. **The various images included in the guidelines are intended for illustrative purposes and represent various architectural and site design features recommended by the design guidelines. The images do not necessarily represent specific architectural styles to be implemented in Roeland Park.**

Acknowledgements

The Design Guidelines for the Johnson Drive Corridor were prepared under the direction of an appointed Oversight Committee, and adopted by the Roeland Park City Council by Resolution No. _____ on _____, 2008.

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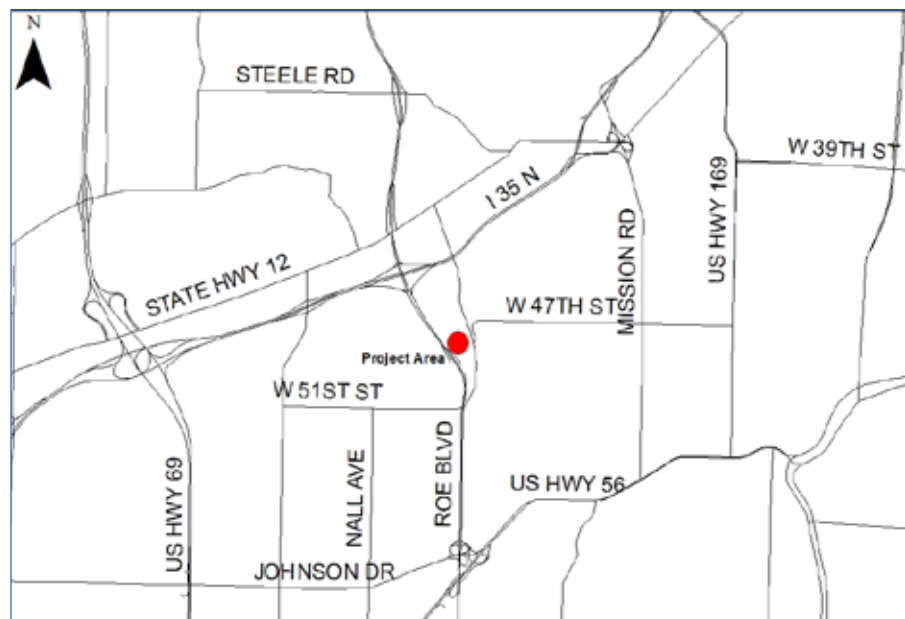


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Project Area and Site Development Considerations

Much of the area consists of an abandoned quarry and mine. The boundary of the area available for development consists of approximately four acres, from Roe Lane on the east to Roe Blvd on the west, and may also include abandoned right-of-way along Roe Blvd. The adjacent City Public Works facility serves as the northern edge of the property and is not included in the redevelopment area.

- The preferred development scenario provides a mix of residential, office, and limited retail in a high rise structure. An acceptable mix of uses does not include conventional low-rise commercial or residential structures. Retail uses are expected to be accessory to the building's functions.
- Roe Pkwy, which extends through the eastern portion of the property, is an access easement and is not dedicated as street right-of-way. A traffic impact study should be conducted with future redevelopment planning to determine acceptable access and circulation in the area based on the desired intensity of development, and the need to maintain access for the Public Works facility and other privately owned properties located north of the project area. The preferred development concept identifies possible new access from Roe Blvd to provide suitable vehicular access to the redevelopment site and other properties in the area, in lieu of maintaining existing or realigned access through the site intersecting NE 48th Street near Roe Lane. Removal or realignment of Roe Pkwy would facilitate an enhanced development plan for the public property.
- Various levels of site mitigation will be necessary throughout the property, particularly for areas proposed for development. Coordination must occur related to the mine area located on the northern portion of the property adjacent to the Public Works Facility which is believed to have been filled partially with material from a recent road improvement project.



Guiding Principles

The following Guiding Principles serve as the framework for the Design Guidelines and outline the expectations for future redevelopment of the property.

1. Create a distinctive place with a signature mixed-use building design serving as a world class landmark and an icon for the Kansas City area.
2. Incorporate dynamic and flowing architecture delivering a powerful and dramatic statement on the building exterior, while maximizing the experience and comfort of the occupants.
3. Incorporate state-of-the-art sustainable 'green' practices in building and site design, achieving a higher level LEED™ certification.
4. Create a building design vocabulary unique in its intent and progressive in its approach that is threaded into the environment and existing rock formations.
5. Create exhilarating new experiences by integrating public art and sculpture as a substantial component of the building, site design, and the overall landscape.
6. Integrate unique and energy efficient lighting approaches that add beauty and strength to the overall design.
7. Incorporate state-of-the-art parking systems fully integrated with the environment and the building architecture.



Urban Design Concept

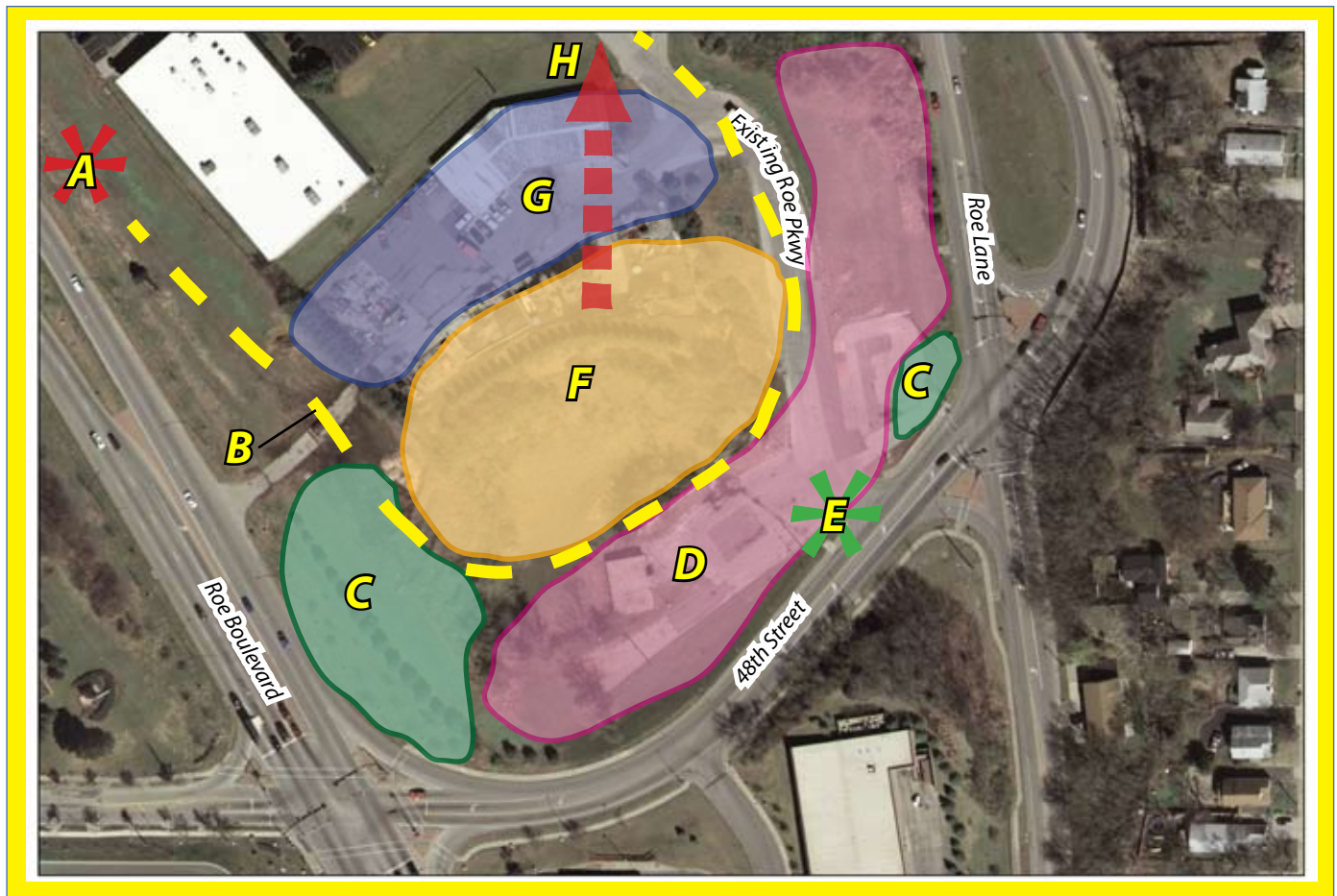
The urban design concept provides a recommended approach for redevelopment of the area. Alternatives to this concept plan **should** be considered, provided they meet the spirit and intent of the vision for the area.

The concept plan provides an innovative approach integrating a dynamic mixed-use high rise development with the terrain on a signature site near the entrance to the city. The **concept could include** a multi-level parking structure serving the development area that is tucked under much of the surrounding grade. It also **could accommodate** places for unique associated low-rise building **structures or “cubes”** rising from the landscape around the perimeter of the site. These potential green roof **structures offer** opportunities for dramatic enclosed connected spaces located partially underground, as well as provide sculptural features projecting above the structures.

An articulated and innovative building tower with views to downtown Kansas City **could** sit above the parking, and rise above the cubes and landscape beyond. Interwoven throughout the fabric of the site are trails, sculpture, and functional water **features**.



In the spirit of the Bloch Building addition to the Nelson-Atkins Museum of Art in Kansas City, MO, a series of building “cubes” could rise above the ground along the southern and eastern portions of the former pool site property below an articulated and innovative building tower.

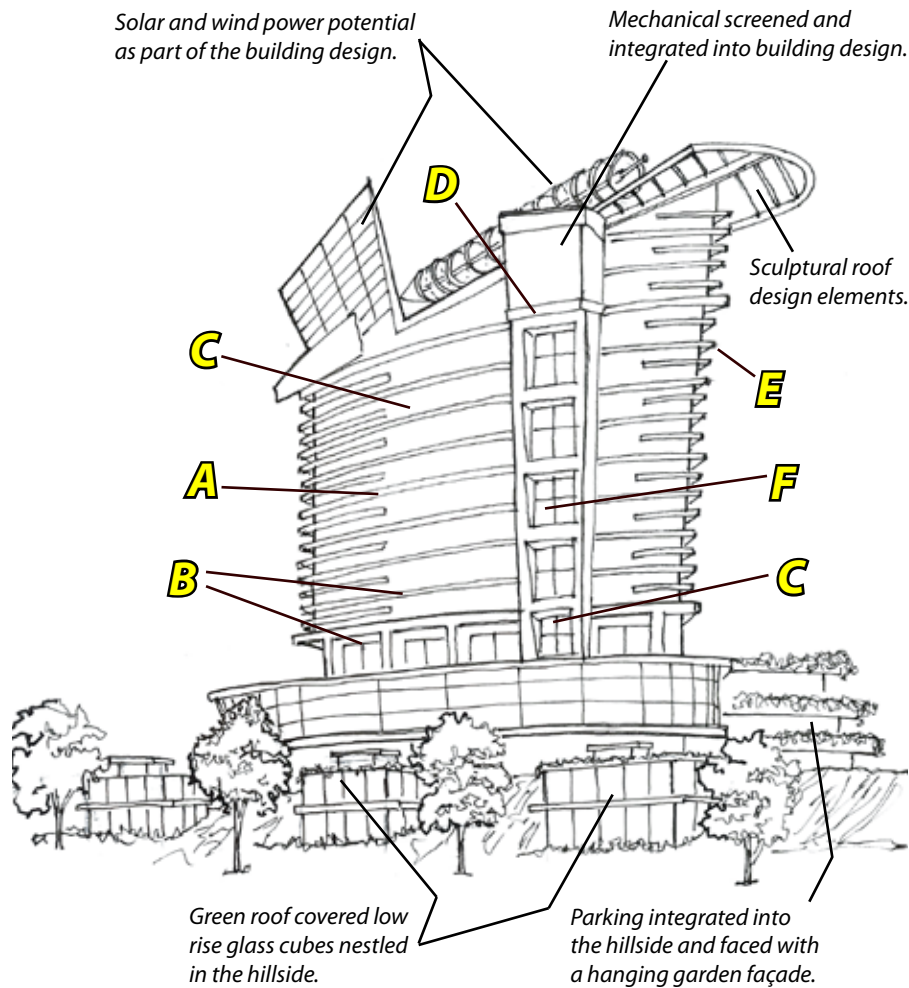


- A** Potential new drive entrance and median break on Roe Blvd based on future traffic study
- B** Possible internal circulation drive
- C** Focal point areas with possible sculpture garden
- D** Possible earth covered or low-rise structures
- E** Potential removal of existing Roe Pkwy and intersection on 48th Street, based on future traffic study
- F** Potential parking garage with tower above
- G** Existing Public Works facility and possible redevelopment area
- H** Orientation and design of the tower to take advantage of scenic design vistas and neighboring influences

Urban Design Concept - Building Form and Articulation

Buildings should be well-proportioned and animated with windows varied across the façade. Exterior façade articulation should create rhythm and variety with a differentiated bottom, middle, and top thus avoiding scale-less facades that are long, flat, and unarticulated. The shape and orientation of the structures should be flexible. However the vertical façade should include articulation elements consistent with energy efficient design technologies, and should be substantial in order to achieve shadowing and material off-sets.

- A** The use of building materials and their integration into the building envelope should facilitate and encourage energy efficiency and respond to solar and wind influences.
- B** Building materials, shadowing, patterns and textures should respond to a scale appropriate to the building's height and mass and provide a visual recognition and identity appropriate to the Guiding Principles.
- C** Building materials should be of high quality and evoke a sense of steadfastness and timelessness in design. Windows should be grouped to establish rhythms across the façade and hierarchies at important places on the façade.
- D** From the outside, windows should provide human scale to buildings and animate facades with their varying sizes, patterns, arrangements, and treatments. From the inside, they should provide natural light and views. Operable windows **should be considered to** provide natural ventilation **and reduce energy consumption for cooling**. Windows within solid walls (walls not designed as glass and stick curtain wall systems) should not sit in the same plane as the wall surface. They should be recessed at least 4-inches, with the wall material turning the corner at the window jambs, in order to demonstrate materiality of the wall thickness.
- E** **Exterior** curtain wall systems should be designed with projecting vertical and/or horizontal mullions, or other modulating features.
- F** The location of the glass line should be varied across the façade, to create depth and shadow effects.



The building envelope should provide a variety of materials, patterns, and textures.



The materials of the building envelope should be high quality and encourage energy efficiency.



Mullions that project from the surface should be designed on curtain walls to enhance the depth of the wall.



Building materials in a context indicating shadowing patterns and textures sympathetic to scale.



Many types of methodology can be used to achieve sunscreening.



Awnings should be both functional and contribute to the artistic features of the building.



The width of an overhang should be carefully calculated for the most advantageous degree of solar control.

Urban Design Concept – Canopies, Awnings, and Sunshades

Of the many sun screen elements of façade design, canopies, awnings, and sunshades have a combined role of providing shade for both human activity and for the building itself. Canopies and awnings provide cover for people from sun and rain. Sunshades in the form of vertical or horizontal fins, operable louvers, or other types of sunshades keep the direct sunlight from entering or hitting the façade (exterior) of a building, thereby keeping it cool and ensuring more comfortable interior environment.

- Sunshades are recommended on at least the south and west sides of the buildings. They may be an integrated part of the façade system, or act as applied or detached elements.
- Durable materials should be used for all shading elements, while avoiding the use of vinyl, and shiny or flimsy fabrics.



The appropriate use of exterior shading devices and glazing parameters can directly reduce heat gain and loss of the building, and are potential technologies and strategies for LEED certification.

Urban Design Concept - Distinctive Top

Buildings should be terminated with a distinctive top, to contribute to an architecturally dynamic skyline.

- The high-rise structure should have a terminative top distinctive from the lower portion of the building.
- Companion low-rise structures integrated with the high rise should incorporate roof sculptural design elements, including the potential for innovative wind power devices and dramatic night lighting features.
- Mechanical penthouses should be screened and integrated into the form of the building.



Taller buildings should have a distinctive top and incorporate technologies for LEED certification. For example, this roof provides shade, harvests rainwater, and enhances the architectural quality of the overall design.



Structures should create a distinctive image for Roeland Park and provide dramatic night lighting features.



Low-rise structures should incorporate design elements that add to the overall appearance of the building.



On-site renewable energy can be generated at the top of the building through the use of wind turbines or photovoltaic panels.



Multi-level parking structure tucked under the surrounding grade.

Urban Design Concept - Structured Parking

Parking on the site is expected to accommodate interior parking solutions integrated into the building design, and located below the grade of Roe Boulevard and 48th Street to the greatest extent practical. Any surface parking would be limited to short-term accessory auto court parking areas. Parking structures should:

- be designed with articulation and fenestrations consistent with the overall building design, or incorporate significant public art features to avoid exposed parking levels **above ground.**
- provide a 'green roof' and/or other amenities for the occupants of the building, such as a pool, plaza, or outdoor recreation for any portion(s) of the parking structure not located beneath a building.



Green roofs can provide amenities for building occupants, as well as enhance site sustainability by reducing heat islands and managing storm water runoff.

Urban Design Concept - Public Art

Art and sculpture will enhance the development by being integrated into the architecture of the structure and the landscape of the site. The site will be expected to incorporate public art in the range of 1-2 percent of the total construction cost.

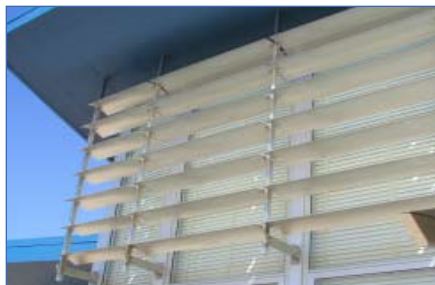
- Public art should be integrated as a component into the building architecture. Strategies include sculptural relief panels, integrated architectural ornaments, signage, entablatures, wall paintings or mosaics, ornamental ironwork, and ornamental window screens or sunshades.
- Public art should be integrated as a component of the site / landscape design to serve as distinctive gateway features, including integration of a sculpture garden along the perimeter street frontages.



The building exterior materials and design components should integrate artistic features.

Multiple opportunities for permanent and temporary works of art should be integrated into the site and landscape design.

The site offers an opportunity to create a sculpture garden around the perimeter with smaller works of art integrated throughout the terrain and around the building(s). Prominent intersections such as Roe Blvd at W 48th St and Roe Ln at W 48th St provide opportunities for dramatic works of art.



Design Guidelines

Using the framework of the Guiding Principles and Urban Design Concepts, the Design Guidelines provide whole-project objectives consisting of five environmental categories which are based on the U.S. Green Building Council's (USGBC) Leadership in Energy Efficiency (LEED™) Green Building Rating System. The guidelines reference the current LEED™ 2.2 Building Rating System for new construction. Development should reference any newer versions of LEED™ that are adopted by the USGBC in the future. While there are many potential technologies and strategies possible under the LEED rating system, the following guidelines are identified as priorities to implement on the former pool site property.



Site Sustainability

Intent

To integrate design features that limits the environmental impact of buildings on local ecosystems.

Guidelines

- **Construction Activity and Pollution Prevention:** Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities associated with the project.
- **Alternative Transportation:** Design the building with transportation amenities such as bicycle racks and shower / changing facilities;
- **Alternative Transportation:** Provide transportation amenities for low-emitting and fuel-efficient vehicles, including preferred parking for these vehicles.
- **Protect and Restore Habitat:** Restore or protect a minimum of 50% of the site area (excluding the building footprint) with native or adapted vegetation.
- **Maximize Open Space:** Reduce the development footprint (defined as the total area of the building footprint, hardscape, access roads, and parking) by stacking the building and using tuck-under parking to maximize open space.
- **Stormwater Quantity and Quality Control:** Manage storm water runoff by reducing impervious cover and increasing on-site infiltration through methods such as vegetated roofs, pervious paving, and reuse of storm water for non-potable uses including landscape irrigation, toilet and urinal flushing, and custodial uses.
- **Stormwater Quantity and Quality Control:** Capture and utilize storm water flows using design elements such as ledges, roofs, and setbacks which capture water sheeting off buildings.
- **Heat Island Effect:** Reduce heat islands (thermal gradient differences between developed and undeveloped areas) through methods such as shade, roofs and covered parking with high-albedo or vegetated surfaces, and open grid paving or high-albedo materials to reduce heat absorption.
- **Light Pollution:** Minimize light trespass from the buildings and site and reduce site glow.



A unique and interesting bicycle rack.



Use native plant species, which require less water, to landscape around the building.



Heavily shaded and landscaped areas near the building help reduce the heat island effect.



Pervious pavers provide a hard, reliable walking and driving surface, while still allowing 100% rainwater infiltration.



Filtration areas below downspouts help reduce stormwater runoff and improve water quality.



A "living machine" filters water by using chemical processes found in nature, thus helping to reduce the amount of wastewater a building produces by up to 70 percent.

Water Efficiency

Intent

To optimize use of storm water, waste water and potable water, and provide a coordinated management plan in conjunction with full site development.

Guidelines

- **Water Efficient Landscaping:** Limit or eliminate the use of potable water for landscape irrigation.
- **Water Use Reduction:** Reduce generation of wastewater and potable water demand in the buildings and for exterior irrigation using methods such as water-conserving fixtures, using indigenous plant materials, and the reuse of rainwater and recycled wastewater or graywater.



Constructed rain gardens can help alleviate stormwater runoff, improve water quality, and add to the landscaping design of a public park or plaza.

Energy and Atmosphere

Intent

To optimize energy performance and reduce energy demand.

Guidelines

- **Optimize Energy Performance:** Maximize energy performance by designing the building envelop, HVAC, lighting, and other systems to reduce environmental and economic impacts from excessive energy use.
- **On-Site Renewable Energy:** Incorporate technologies for on-site, non-polluting, and renewable energy using methods such as solar, wind, and geothermal.
- **Green Power:** Utilize on-site or purchased renewable energy for a significant amount of the site requirements, and prepare a development plan for further transition to renewable technologies as these become more cost-effective.
- **Ozone Layer Protection:** Reduce emission of ozone depleting chemicals. Specify building HVAC systems and materials with zero levels of CFC refrigerants.



Clerestory windows allow natural light to reach all parts of the building, reducing the need for artificial light.



The advantages of photovoltaic glazing are twofold: it helps produce solar energy, and reduces the intensity of sunlight inside the building.



Solar panels in this instance are performing a dual function: helping generate solar power and providing shade over the entrance of this building.



An indoor, heavily glazed walking space or "sunroom" on the south side of a building, such as this one above, act as a buffer for the building interior, reducing the workload on the building's cooling system.



Natural stone and masonry used on facades.



Locally quarried stone and other natural materials give buildings and the landscape a unique feel, and impact the environment less than manufactured materials.

Materials and Resources

Intent

To use local materials supporting the local economy and reducing environmental impacts.

Guidelines

- **Regional Materials:** Integrate the use of building materials or products extracted, harvested or recovered, or manufactured in the region
- **Recycled Content:** Integrate materials with recycled content to reduce impacts resulting from extraction and processing of virgin materials.
- **Storage and Collection of Recyclables:** Facilitate the reduction of waste generated by building occupants, including accommodating areas to collect and store materials for recycling.



Recycled metals in innovative ceiling treatment.

Indoor Environmental Quality

Intent

To increase the comfort, well-being, and enhanced productivity of building occupants.

Guidelines

- **Ventilation**: Provide increased use of natural ventilation to improve occupant comfort, well-being and productivity, and to reduce energy consumption. Provide capability for 100% outside air where practicable and balanced with energy conservation to support the comfort and well-being of building occupants.
- **Low-Emitting Materials**: Reduce the quantity of indoor chemical and pollutants originating in materials. Specify materials with no or low volatile organic compounds (VOCs) and other toxic characteristics which affect indoor air quality.
- **Daylighting and Views**: Provide for the building occupants a connection between indoor spaces and the outdoors by maximizing interior daylighting and views.
- **Thermal Comfort**: Provide occupants with a high level of thermal, ventilation, and lighting system control.



Abundant glazing and natural light, coupled with plentiful vegetation, enhances the quality of the indoor environment.



The use of operable windows made of low-emission glass should be considered as a means of increasing ventilation through the building and reduces heat gain.



Indoor environmental quality can be greatly enhanced by the presence of vegetation and water. This filtration pond cleans water for reuse, saving on the need for potable water.



Innovative use of materials should be used to achieve LEED certification as well as create exceptional architectural design.

Innovation and Design Process

Intent

To encourage innovative building design features and exceptional performance, such as energy performance, water efficiency, and site sustainability.

Guidelines

- Develop innovative design solutions composed of select building elements with green roofs and parking facilities integrated into the natural landscape.
- Integrate existing rock formations and existing natural springs into the design of the building wherever possible, such as within a lower level entry atrium.
- Maximize views to regional points of interest including downtown Kansas City.



Architectural features can blur the separation between the interior and exterior spaces.



Interiors should provide exceptional experiences for building occupants.



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