

Design Excellence and Sustainability for New York City

Excellence in urbanism and design will be part of New York's competitive advantage in the coming century. New York City should aspire to the highest possible quality of urban planning, architectural and environmental design in rebuilding Lower Manhattan. An architecture that is compelling, meaningful over the long term and culturally ambitious not only respects the past, but also takes great risks to create the future. In the past twenty years exciting projects all over the world have begun to shape a vision for the 21st century. New York belongs to this process, with a rich and varied architectural inheritance to build on. New York should actively seek to apply to architecture the same drive for excellence that is abundantly evident in its support of music and art and other creative fields. It cannot be overemphasized that the commitment that is made to implementing quality planning, urban design, and architecture on the World Trade Center site will set the tone for the entire redevelopment of Lower Manhattan and other areas of the city.

Make New York a design leader

As a leader in major business sectors and many of the arts and sciences, New York City should lead the world in endorsing superior architecture, if for no other reason than its ability to attract people and investment and raise the value of all it touches. The opportunity to open discussion on this topic and push the city to new heights has been provided by the reconstruction effort that is about to take place in Lower Manhattan. It would compound the tragedy if the occasion to build better were written off.

Lower Manhattan in particular has been cited as "arguably the most important cultural landscape in the United States" by the World Monuments Fund, which included it on its 2002 watch list of world monuments. From the Brooklyn Bridge to the early 20th century skyscrapers to the late 20th century mega-projects, the area represents a sweep of 19th and 20th century history that is more than the sum of its structures or colonial roots. Other major cities in the world have endured war and terrorism, such as London and Berlin, but have countered tragedy with commitment, creating some of the most dynamic urban environments in the world, even with heightened security measures in place.

Enlarge the definition of quality design

Creative building is not necessarily dependent on cost, and while creating exciting contemporary architecture is about icons, it is also about high performance and environmental sustainability at every level. It is an endeavor that should employ the greatest minds of our generation, which are capable of thinking across categories and fields at the interface of culture, technology, and urban life to build a satisfying relationship among these elements.

A significant architecture would be truly public in its exteriors and interiors, in its integration with transportation and infrastructure, respectful of both site and context, connecting to the physical and visual world around it. It would fit into the larger picture of the city, the skyline, the waterfront, the grid of streets and attend to its details, its place on the ground, its materials and structure working in unison. It would push forward new ideas and become

Five Point Approach to Sustainability

<p>People</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Enhance community participation with a transparent design process. <input type="checkbox"/> Create a secure pedestrian-friendly self-policing environment. <input type="checkbox"/> Provide enhanced access to light and air beyond current green models. <input type="checkbox"/> Promote a healthy environment through the use of alternative materials, high filtration standards and positive balance of green space.
<p>Ecology</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Use productive landscapes and bioremediation to reduce pollution and support biodiversity. <input type="checkbox"/> Use new metrics to measure the amount of pollution leaving the site. <input type="checkbox"/> Quantify global warming, acid rain and pollution impact of designs during design development to optimize building performance within a set budget. <input type="checkbox"/> Perform full computer simulations of seasonal shade, shadow and radiant loads.
<p>Energy</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Capitalize on New York City's "energy edge" by exploiting energy-efficient density and mass transit. <input type="checkbox"/> Create a new "highest best performance" energy model for 2002 and beyond. <input type="checkbox"/> Design and orient buildings for future transition to 100% renewable fuels in anticipation of affordable photovoltaics, bio-fuels and new technologies. <input type="checkbox"/> Encourage decentralized energy systems, which are inherently less vulnerable to blackouts and more efficient.
<p>Materials</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Drive market forces by directing the flow of local materials to the nearest location for best reuse and reduced pollution and pressure on landfills. <input type="checkbox"/> Screen out materials that contain toxins and carcinogens to protect health and improve productivity and worker retention. <input type="checkbox"/> Support new and retrofitted air systems that can perform at filtration levels which screen out a wide range of biotoxins. <input type="checkbox"/> Expand recycling to reuse, design for disassembly, and waste harvesting to create jobs and lessen landfill impact.
<p>Money</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Fund all projects under the New York State Green Building Tax Credit. <input type="checkbox"/> Quantify soft dollars with an expanded spreadsheet for improved return-on-investment (ROI) analysis to create a new understanding of long-term value, proving that low first-cost models are no bargain. <input type="checkbox"/> Create new financial models that quantify employee productivity, student performance, tenant retention, absenteeism and other intangibles. <input type="checkbox"/> Compensate developers and landlords for supporting point-of-use metering system that rewards tenants for individual energy-saving efforts.

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a place and a reason for public assembly, supporting art, education, and civic activities as well as commercial ones.

Embrace technology for high performance

An architecture that is art, with roots in engineering and science, is truly cause for celebration. It would employ new engineering strategies that advance the cause of security without barriers and bunkers. It would apply the lessons learned from the World Trade Center disaster and other building failures to ensure safety, and encompass sustainable building concepts to provide optimal quality of life. It would employ 21st century communications technology and redundant systems.

Design excellence doesn't just happen: The greatest architects and engineers in the world cannot create exceptional urbanism and design without knowledgeable public and private clients with a clear vision, who will set the agenda, stimulate dialogue, and invite the participation of a wide spectrum of talent and initiative across the design and planning disciplines. Once New York City aspires to the highest goals, the best urban environments and buildings will follow.

Create a sustainability revolution in New York

Sustainability is emerging as a quality revolution in planning, design and construction. It is a results-driven process that produces quantifiable financial and quality-of-life rewards within any set of economic constraints. We suggest strongly that an international model of humanistic and sustainable design principles be created in the re-visioning of Lower Manhattan. It would be a powerful and appropriate response to the devastation of September 11 and its importance on the world stage.

Establish sustainable guidelines for Lower Manhattan

The United Nations World Commission on Environment and Development (Agenda 21) defines sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." The built environment makes the biggest impact on the natural environment. Sustainability represents multiple strategies that create value by releasing the potential of the natural environment to support the integrity of the built environment. In planning the redevelopment of Lower Manhattan, we endorse consulting with the various offices responsible for the UN sustainability initiatives.

Building on their prior visionary leadership, New York State and New York City should create an international model of urban sustainability. The immediate baseline is defined by three recent initiatives: the New York City High Performance Guidelines; the New York State Green Building Tax Credit; and the Battery Park City/Green Guidelines. We strongly recommend that all new buildings designed in 2002 be configured to qualify for the New York State Green Building Tax Credit, with appropriate financial incentives.

Beyond 2002, a dynamic "highest best performance" sustainable model for continuous improvement should be developed to capture the specific potentials of each project in Lower Manhattan. This new model will carry us through the decade and beyond, since it will be responsive to economic flux, policy changes, technological improvements, and advances in the field.

All projects profit to a greater or lesser degree from sustainability. For Lower Manhattan that means that each new project around the World Trade Center site — be it a building, a park, a subway station, or the replanning of the site — should balance concerns in five areas: people, energy, materials, natural resources and money.