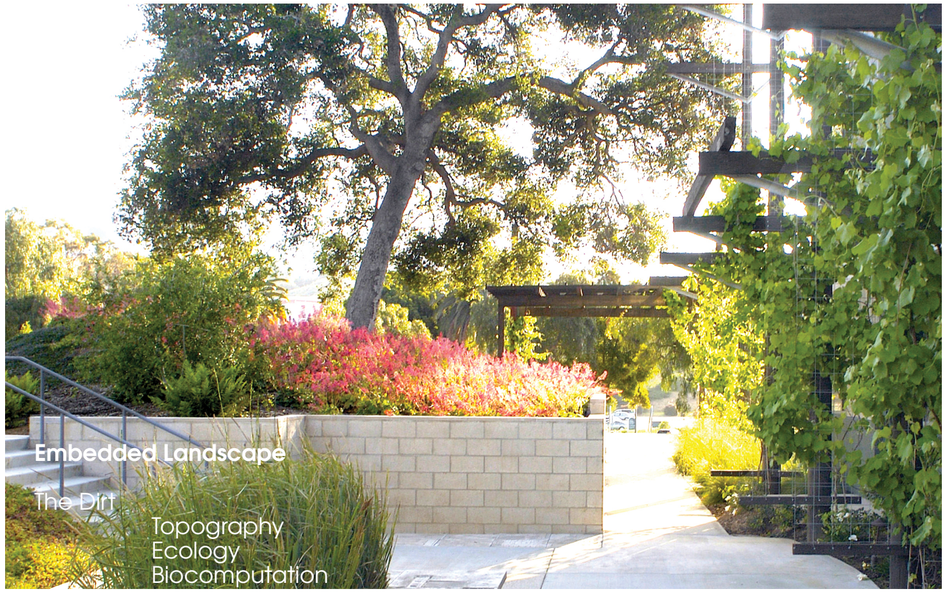
Open Space + Embedded Landscape
Presentation 12.01.20
Taylor Newman

Open Space: The Steel Yard



Embedded Landscape: Casa Nueva: Working in the Garden

The Pleasure Ground: Typically large and located on the edge of the city, focusing on mental appreciation of the natural landscape in contrast to the city.

Transportation infrastructure aside, the isolation of these parks without the city resulted in their exclusive use by the upper class, resulting in a movement for inner city parks,

1850-1900

Central Park: Frederick law Olmstead - 1857

The Reform Park: A combination of inner city park and playground, the reform park often included play equipment, a symmetrical arrangement, and no illusion of coutryside or nature. Their principal architectural manifestation was the Fieldhouse, functioning as community shelter for the working class. These spaces were designed with reduction of class conflict, immigrant socialization, and education in mind.

This park typology would later be expanded upon to suburban and urban areas that had not yet received parks beginning in the 1930s as a public service.

1900-1930

Pulaski Field House: Jens Jensen - 1912

The Recreation Facility: An extension of the reform park in the 1930s, the recreation facility engaged suburban areas with uniform standards as a public service. Sport courts and fields were the principal designed components of these spaces, owing their lack of vegetation to their suburban environment,

The homogeneity of this typology was strongly opposed in the dialectic of the 1960s, calling into question the adaptability of the scheme to scattered urban sites of different character.

1930-1965

West 4th Street Courts: NYC Parks - ~1953

The Open Park System: The 1960s saw a dialectic regarding the sterility of recreation facilities, and their institutional nature. Parks are reclaimed as mechanisms of social reform, and are now considered within context, as well as part of a conceived network of diparate, though connected landscapes.

The open park system continues, allowing urban open spac to be recreation in almost any context, in streets, rooftops, on waterfronts, along railway lines, as well as in traditional plazas and parks.

1965- ?

Paley Park: Zion and Breen - 1967

The Sustainable Park: New characteristics of park design, building upon previous types, are native species, natural system restoration, infrastructure integration, recycling, sustainable construction, and maintenance practices.

1990- Present

Steel Yard: Klopfer Martin Design Group - 2011

Principle 1: Resource self sufficiency.

Sustainable Design Practices
Native Plant Species
Composting
Storm Water and Waste Management
Community Engagement

Principle 2: Integration into larger urban network.

Urban Infrastructure Integration
Post Industrial Land Reclamation
Social Wellbeing

Principle 3: New modes of aesthetic expression.

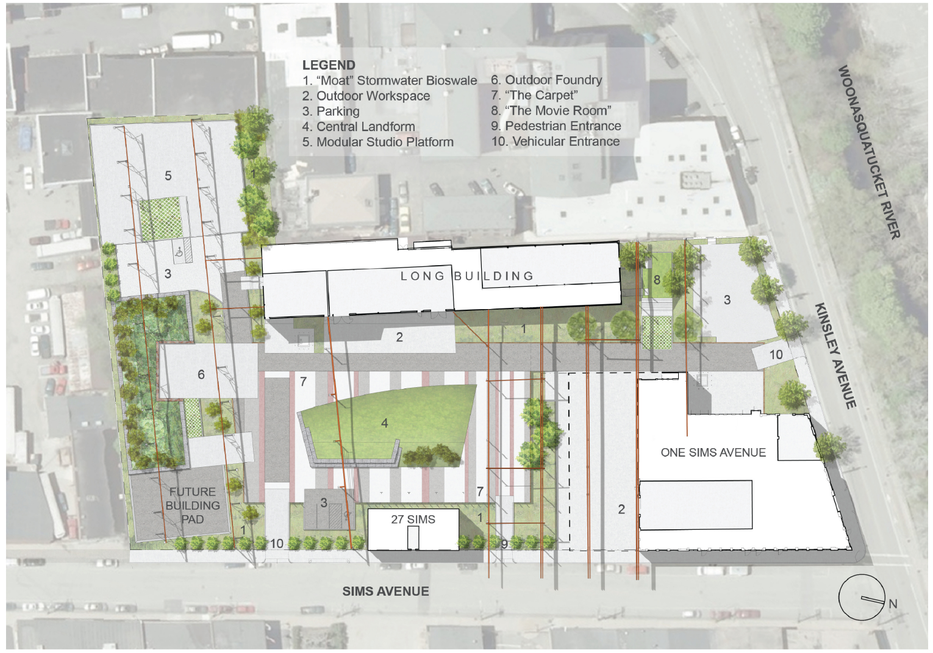
Evolutionary Aesthetic: Temporality
Ecology as Form
Ecological Systems Design

ECO-PARK/URBAN REHABILITATION

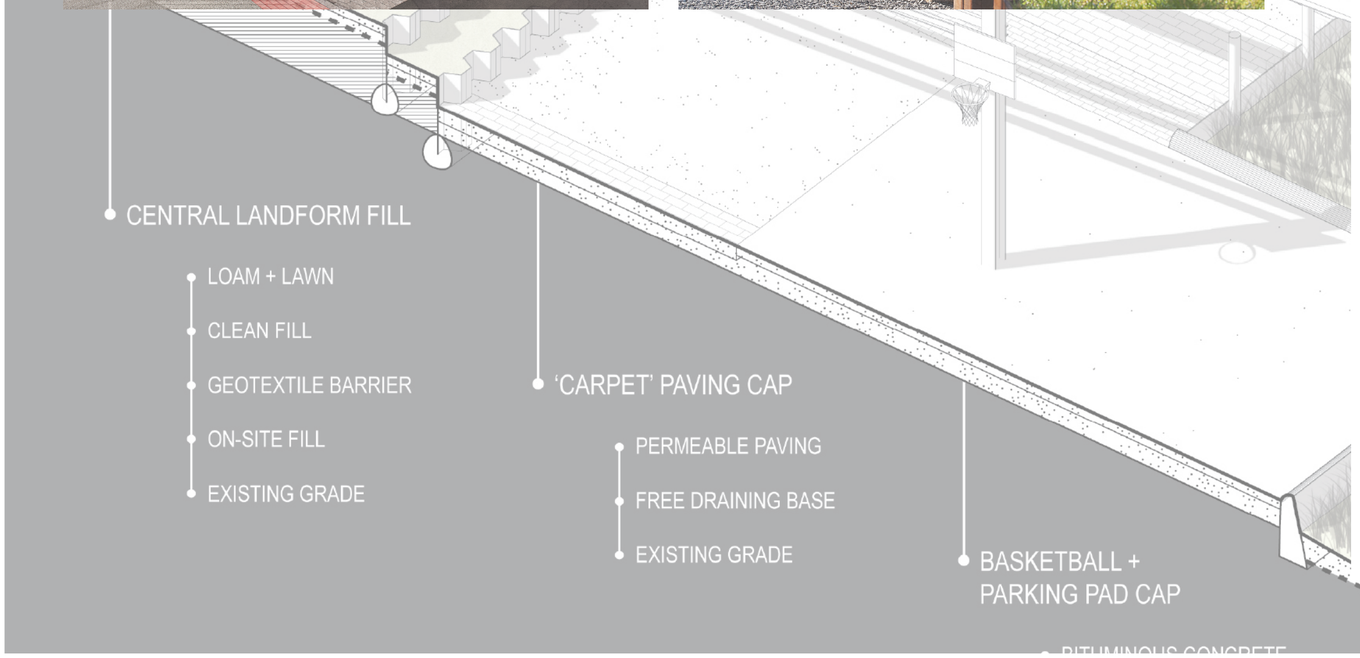
GREEN INFRASTRUCTURE

BUILDING/SYSTEMS INTEGRATION

The Steel Yard: The Steel Yard's landscape for learning embodies the non-profit's mission through innovative (and necessarily inexpensive) brownfield remediation, stormwater filtration/reduction, purposeful design and placemaking.



SITE PLAN



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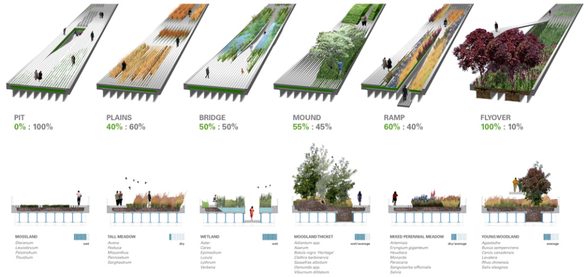
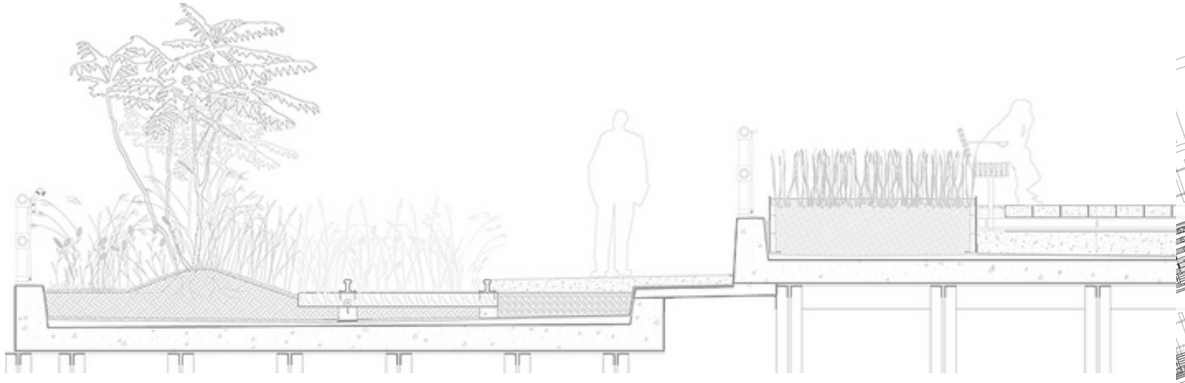
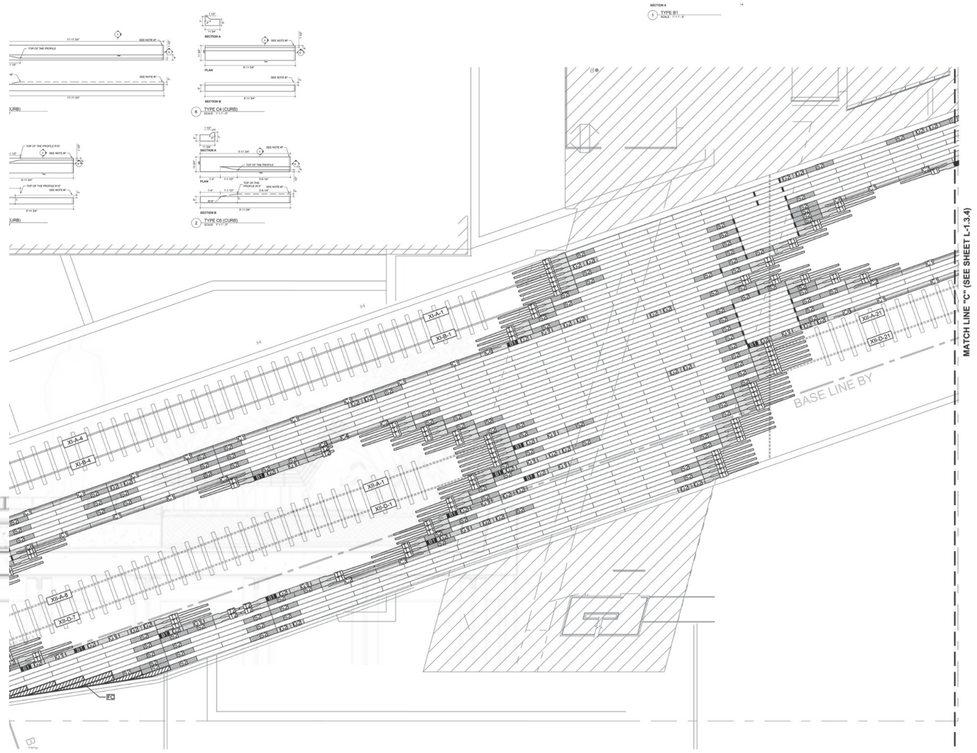


The High Line: The High Line is a precedent urban park that reclaims a former elevated railroad for new use, promoting timely principles of ecological sustainability, urban regeneration and adaptive reuse. Two hundred and ten species of perennials, grasses, shrubs and trees were carefully selected to produce a primarily native, resilient, and low-maintenance landscape, building upon the existing self-sown landscape and working with specific environmental conditions and microclimates.





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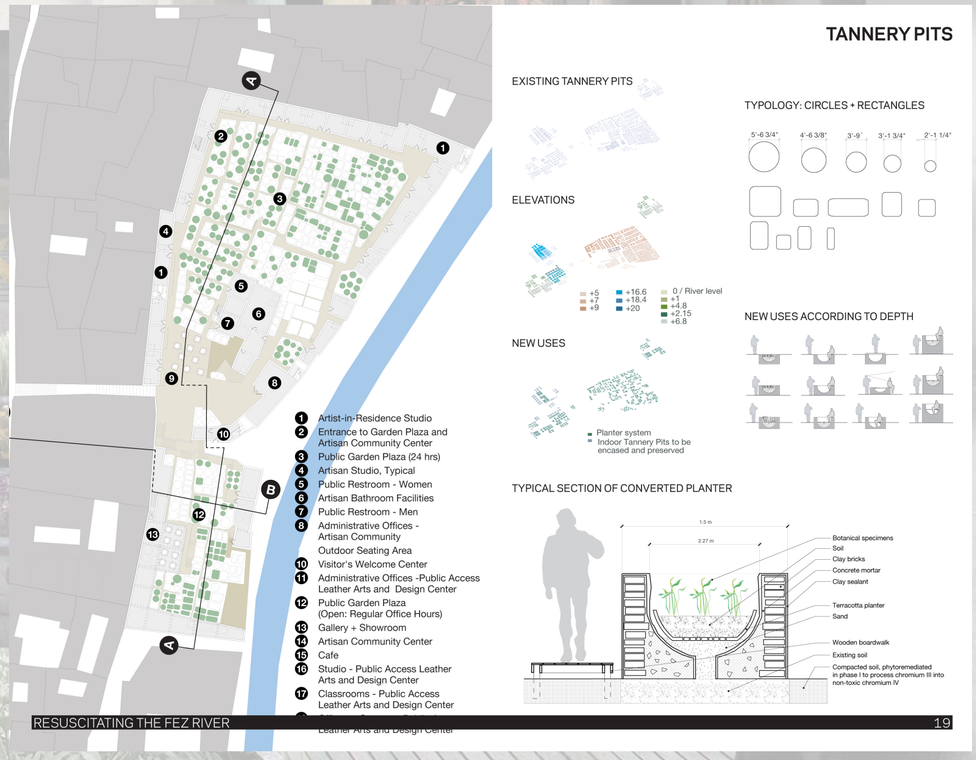
Fez River Rehabilitation: a strategic plan that simultaneously restores an urban river and addresses issues endemic to aging medieval fabrics such as the scarcity of open space, overcrowding, a weak economy, and the destruction of natural resources and places of cultural and historic significance.



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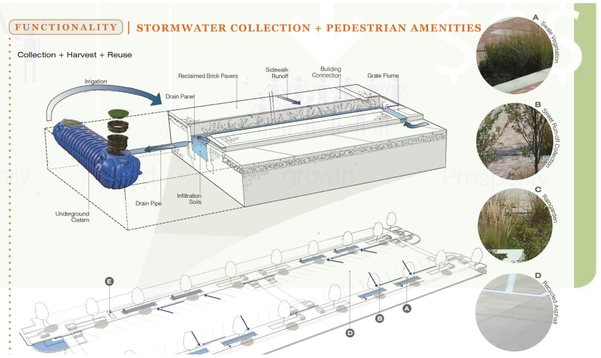
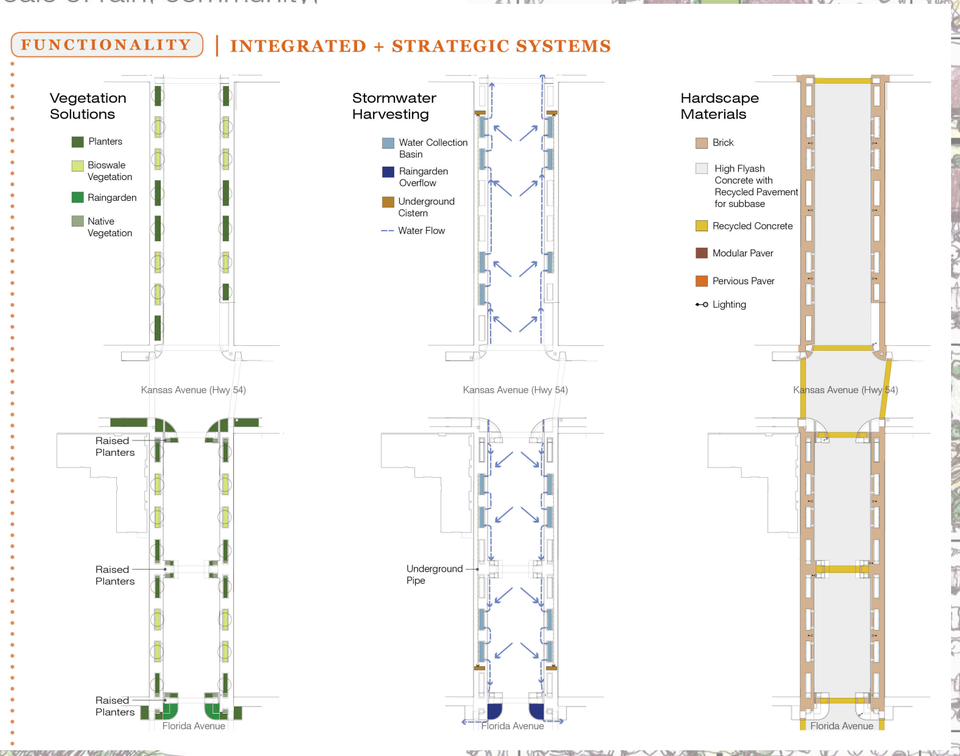
Greensburg Urban Plan: a downtown environment that not only provides a unique environment for residents and visitors, but that also provides creative features that capture and recycle stormwater.





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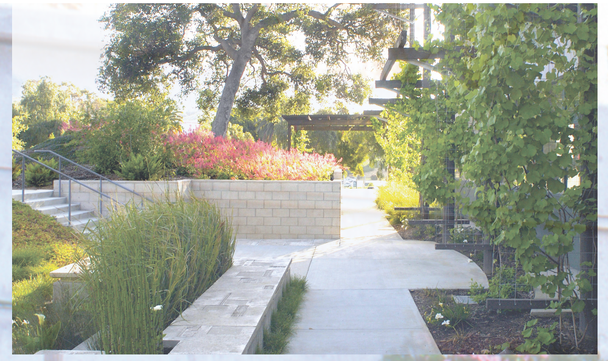
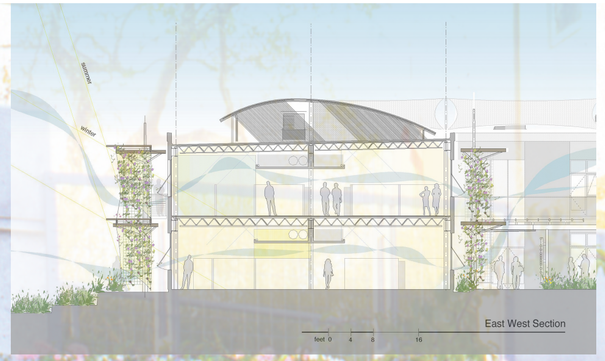
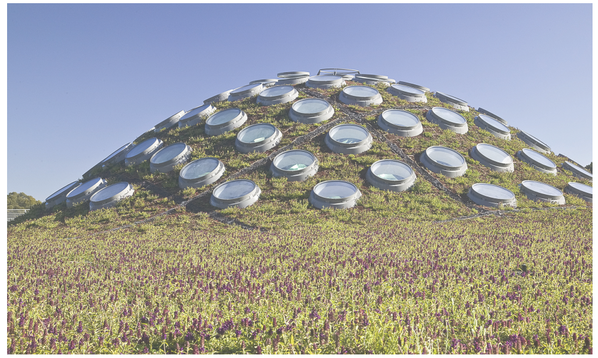




The Casa Nueva: environmental goals were met with site design, as well as the ecosystem services provided by the landscape. Taking best advantage of the regenerative nature of landscape, the landscape filters stormwater, provides climate control to the building, and conserves water with cisterns and a regionally native landscape.

Casa Nueva Site Plan

ECO-PARK/URBAN REHABILITATION



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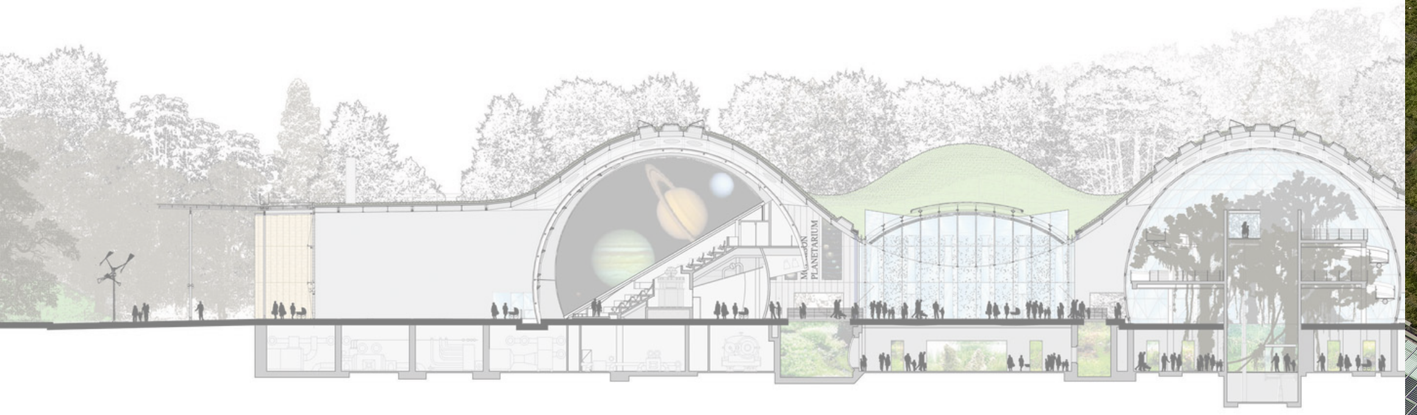
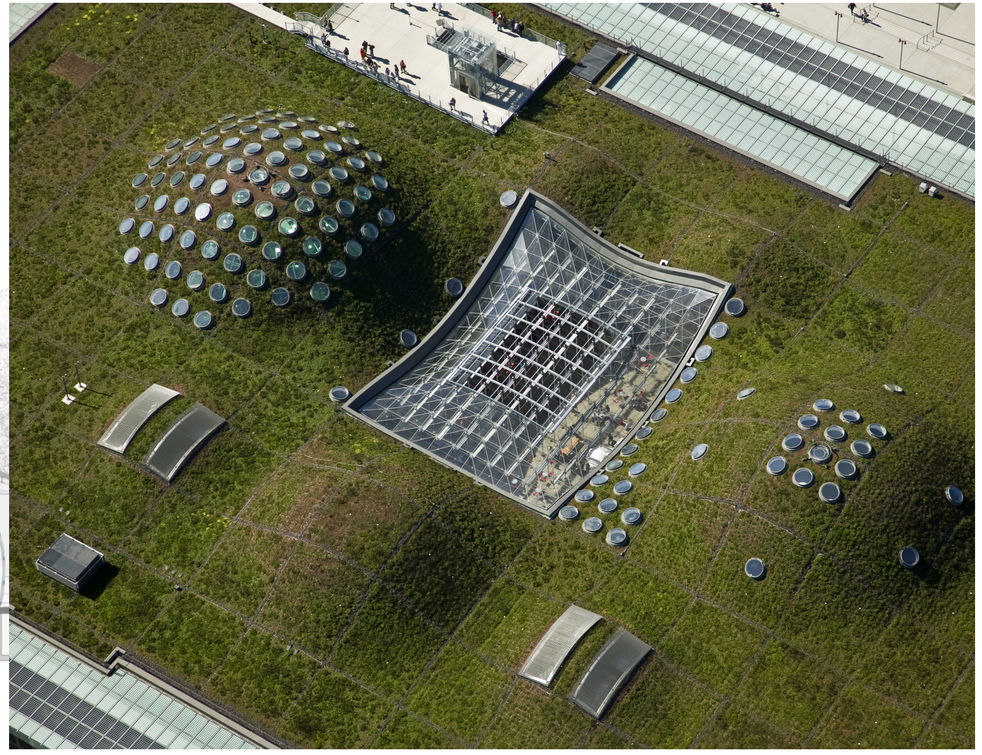


BUILDING/SYSTEMS INTEGRATION

The California Academy of Sciences: a reduction of storm water runoff by at least 90 percent (up to 2 million gallons of water per year), reduced energy needs for air conditioning, and longer roof life potentially doubling the life of the roof membrane. Additionally, the extended roof plane forms a broad shade canopy over the building's perimeter circulation and outdoor gathering spaces and houses 62,000 photovoltaic cells to supply almost 213,000 kilowatt hours of clean energy per year (about five percent of the new academy's needs), thereby preventing the release of more than 450,000 lbs of greenhouse gas emissions.



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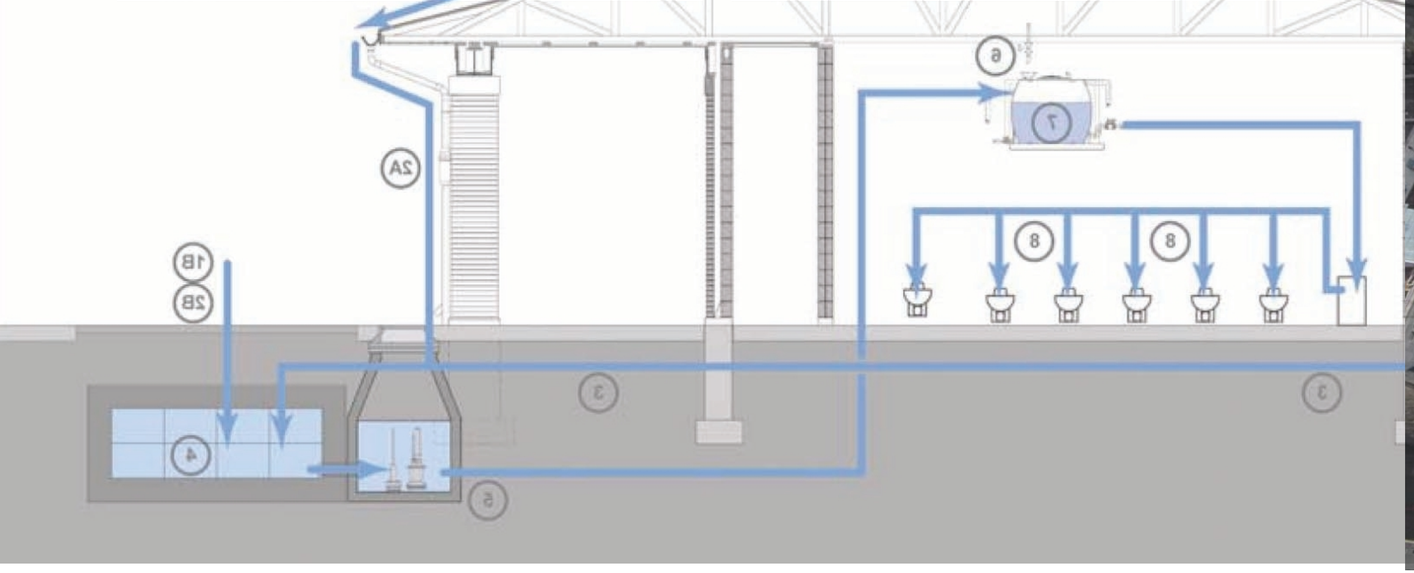
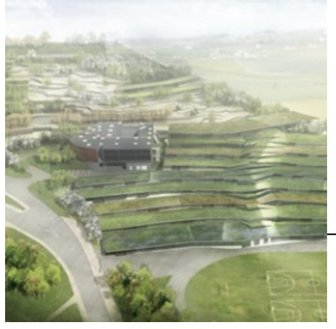


Chicago Green Plan: Nine City of Chicago departments and sister agencies, along with more than 50 professionals from various fields of expertise worked collaboratively to develop GUD's 21 key actions that maintain and improve Chicago's urban design to optimize its environmental benefits for current and future generations.

Embedded Landscape: Current Principles



Topographic Integration: Topographic integration attempts to manipulate the ground in an attempt to merge the elements of building and landscape by treating built form as inhabitable landform.

Lycee Jean Moulin: OFF Architecture - 2009

Ecological Integration: Ecological integration attempts to develop environments that both provide public space and address issues of natural resource management such as water retention, terrain remediation, and energy efficiency.

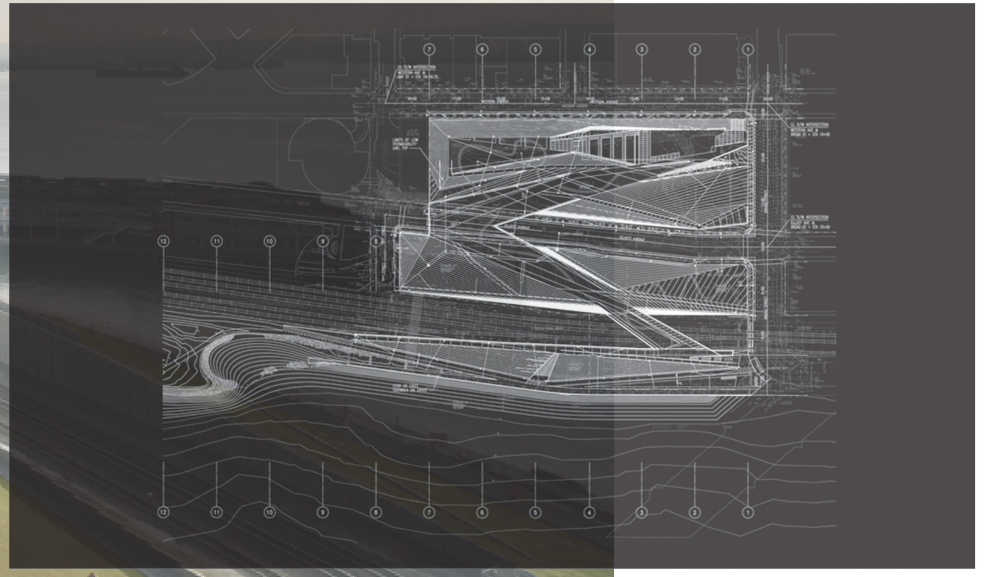
"Lost in Paris": R&Sie - 2009

Bio Computation: Bio computation attempts to employ computer-aided design to script digital codes to generate forms and patterns that capture the adaptive and self-organizing properties of living systems. One might consider this in as a neo-contextualist move.

Copse :House: EcoLogic Studio - 2009

ECO-PARK/URBAN REHABILITATION GREEN INFRASTRUCTURE **BUILDING/SYSTEMS INTEGRATION**

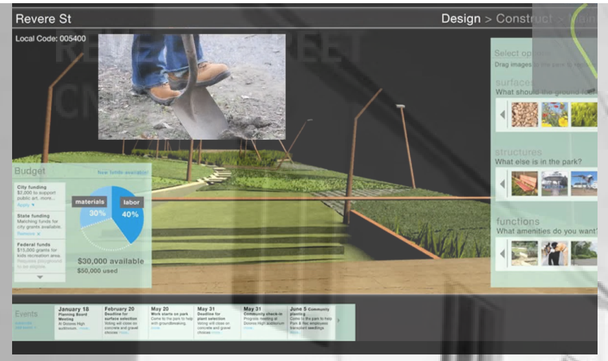
Seattle Olympic Park: an industrial brownfield site sliced by train tracks and an arterial road. The design connects three separate sites with an uninterrupted Z-shaped "green" platform, descending forty feet from the city to the water, capitalizing on views of the skyline and Elliott Bay, and rising over existing infrastructure to reconnect the urban core to the revitalized waterfront.

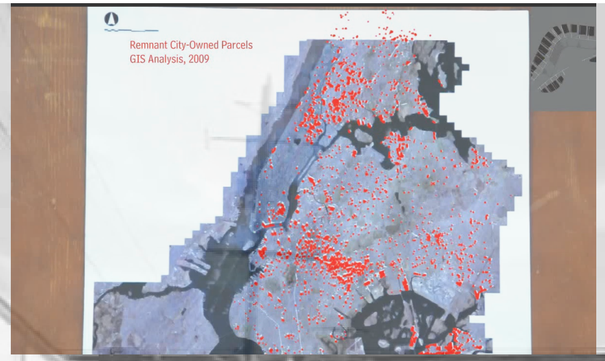


ECO-PARK/URBAN REHABILITATION GREEN INFRASTRUCTURE **BUILDING/SYSTEMS INTEGRATION**

Lost in Paris Residence: The green walls are hydroponic (sustained without soil) and include hanging acorn-shaped bottles that house a bacteria farm used to fertilize the house's 1,200 hanging ferns. The system is designed to be self-sustaining – water is collected via the roof, where tubes then carry water from the roof to the living wall. 300 glass containers, or "beakers", contain water and rhizobia bacteria, which brews in the sunlight and is later used to fertilize the ferns.

ECO-PARK/URBAN REHABILITATION **GREEN INFRASTRUCTURE** **BUILDING/SYSTEMS INTEGRATION**





Local Code: Begun as a digitalmapping of underutilized, civic owned land in cities, the project combines interactive GIS data to inform hyper-local design solutions to underused space. The project also proposes community interaction as a form of digital social equality and feedback.