

## Eternal Flame

In the center of the Garden of Memories is an Eternal Flame. The Flame guards a tomb containing the unidentified remains of those lost in these disasters [1].

Four paths converge on the Tomb, reminding visitors of the four events commemorated on the North Footprint [2].

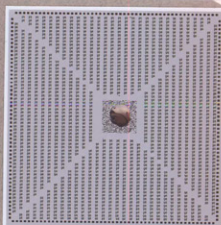
The Eternal Flame emerges from the Fritz Koenig Sphere, damaged but not destroyed by the September 11th attack.



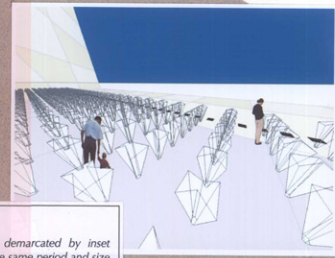
## Garden of Memories

We are a nation of individuals. Perhaps unique among the countries of the world, we cherish our differences and derive strength from our united diversity. The suddenness of the attack, its broad and indiscriminate consequences, the frantic search for the missing, the months of uncertainty, and the worldwide interest and concern each story evoked—all argue to place an unusually strong emphasis memorializing the person [3], and not merely their name.

The Garden of Memories honors each individual as their family and friends remembered them in life. A field of individual Memorial Cases are "planted" on the North Tower Footprint [4]. The Memorial Cases are inscribed with their name, date of birth and date of death. Within each case is a removable MEMORIAL TRAY. This tray can be filled by the family with photos, badges, and other mementos that capture, tangibly, a few facets of a unique life. If the family desires, a dedication ceremony can be arranged [5], to place the tray within the Memorial Case. Rolling screens may be placed for privacy, or visitors are likely to simply detour around the family during ceremonies—the cases affording a "virtual wall". A team of family members and professionals are available to assist them in the design and arrangement of their Memorial Trays.



The Memorial Cases are arrayed in sequence by date of birth, from youngest (at the southwest corner of the North Footprint nearest the Descent) to the oldest. Such an arrangement reminds us of the transitory and arbitrary nature of life. The juxtapositions between rows reflects how our lives are all interconnected, in life and in death. Since the names are not visible as one mass on a wall, the inscriptions can be appropriate and personal (e.g. Lt. John Edwin, 3rd Battalion or Susan "Sparky" Tarlin).



## Design Details:

The Garden of Memories perimeter is demarcated by inset squares of black marble every 1 meter, on the same period and size of the structural columns of the WTC [6]. A cantilevered roof, attached to the Cultural Museum, extends over the entire footprint, shielding the space from sun and weather. The interior roof is faceted and reflective, symbolically multiplying our losses. There is a void in the roof above the Eternal Flame, opening the flame to the sky. The clear glass Memorial Cases sit between 3 and 4 feet high, and are about 1x1.5 feet across at the top. Arrayed on the North Tower Footprint [7], in pairs, on a period of 3 by 6 feet, this arrangement provides space for over 3100 cases plus paths and room for the Eternal Flame. The cases are sealed from the weather, but can be opened to insert Memorial Trays.

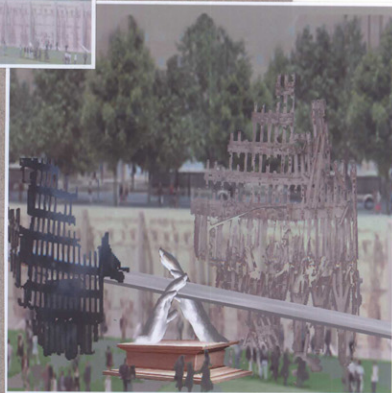
## Hands of Honor

Our faith in humanity was severely tested by these murderous events. But that faith was restored through the bravery and professionalism of the New York City and Port Authority Police, the Fire Departments and EMS of NY, PA and VA, and other uniformed officers who gave both their heart, and sometimes their lives, to save others. Countless doctors, construction workers, religious groups and individuals too numerous to mention, rushed in to help—tossing their private interests aside and dedicating months of their lives to aid the victims of these events.

These Heroes deserve their own special memorial [8]. Their actions were an integral part of history.

The Hands of Honor Memorial is situated on the ground, half way along the Descent Ramp. The Memorial recalls the helping hands of the Fireman digging fistful by fistful through the rubble. It recalls the helping hands of the volunteers opening their homes and restaurants to feed the rescue workers. It honors the hands which brought a plane full of terrorists to ground, before they could take even more innocent lives.

The Hands (shown realistically in these drawings for clarity, but more abstractly in the final monument) metaphorically hold back the tumbling debris from the World Trade Center. They sit on a base with appropriate inscriptions, with room to mention as many groups as possible—either by name of battalion or precinct or union, or by category such as chaplain or doctor or soup kitchen server [9]. Visitors can circumnavigate the Hands of Honor Memorial, touching the steel columns of the original towers with their own hands.



## World

## "Seek Stability, Embrace Change"

The attack on the World Trade Center signaled the beginning of a war on international anarchy, in much the same way the attack on Pearl Harbor signaled the beginning of a world wide battle against Fascism.

And this is the unique challenge facing a Memorial designed not at the conclusion, but in the midst of battle—how to honor the past before its history has been written? Memorials by their very nature are static—indeed, memorials seek closure with the past, allowing the living to move on, and society time to absorb the lessons of history. But those lessons are still being written, and the losses have only begun.

This Memorial Submission embraces change with respect, stability with inclusion. Visually, the site is split between the "past" and the "future", between loss and hope, between public and private, between concrete and grass, between static and dynamic, and between the immutable and transitory. The design extends beyond the footprint of the WTC to the NYC skyline, changing with the day and the decade—the most vibrant city in the world sustaining a monument that is both alive and responsive to its environment.

But the Memorial will always recall these tragic events with grace and power.

## Trade

**Goals:** This proposal integrates the stated goals of the commission with the additional theme of change and stability. The memorial can accommodate large crowds and special occasions, yet is filled with numerous private niches for personal reflection. In addition, the design makes tangible those images burned into our collective subconscious during the iconic, short history of September 11th. Such powerful images include the tortured envelope of the original WTC rising from the ashes, the somber empty bathtub with its simple geometric ramp, the "Missing" posters and the passionate focus on individual loss. The slurry walls are kept free of ornamentation, the bathtub left starkly open, the footprints preserved for a new mission, and the monument arranged as a story through time and space.

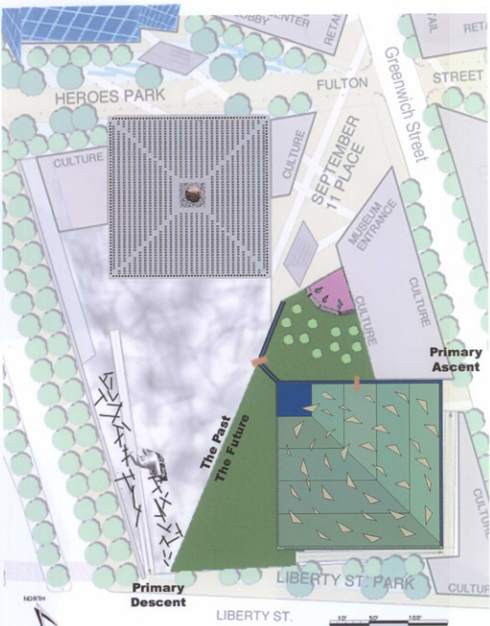
- 1 Recognize each individual who was a victim of the attacks
- 2 An area for quiet visitation and contemplation
- 3 An area for families and loved ones of victims
- 4 Final resting-place for the unidentified remains from the WTC site
- 5 Make visible the footprints of the original World Trade Center towers
- 6 Acknowledge all those who aided in rescue, recovery and healing

## Center

**Narrative and Circulation:** Although the Memorial can be accessed from more than six directions, the primary entrance and the first chapter in the story of September 11th is along the ramp on Liberty and West, called the DESCENT. The Descent passes along and through reclaimed exterior panels and rubble from the WTC towers—reminding the visitor of the horrible destruction on that day. The ramp leads down and along the exposed "bathtub" wall—and is directly aligned with the corner of the north footprint of the Trade Center containing the memorial case for the youngest of the victims. Visitors can circulate on the bare concrete floor to the left, taking the stairs to bedrock, or enter the GARDEN OF MEMORIES [10]. Within the Garden are memory cases for each victim [11], containing personal items bringing their lives and our loss into focus. At the center of the Garden is the ETERNAL FLAME, guarding the TOMB OF THE UNKNOWN's remains [12]. The Garden is both the formal and personal center of the Memorial [13].

Leaving the Garden, the visitor follows the Descent back to the HANDS OF HONOR Memorial, recognizing the professional guardians and volunteers [14] whose bravery and dedication counterbalanced the despair over the terrorist attacks. Those visitors who desire more detailed information on the history of the event, and recent progress against anarchy, can take the escalators up to the Museums of Culture. Then, with the story of the destruction, loss and renewal complete, the visitor returns to the memorial and walks across the concrete floor to a grassy area dedicated to the future. Here, they can visit the SANCTUM, where family members may gather [15] in a quiet and supportive environment. Finally, they can pause to contemplate the meaning of their visit by resting on the ASCENT [16] beneath the waterfall and above the reflecting pond—looking back into the "past". The Ascent is illuminated by the 1776 Tower mirrors. Five times daily, at the moment of each attack, reflected light is passed from the Memorial, across the horizon, and into the sky.

## Memorial



Final selection of materials, colors, lighting placement, etc. must be coordinated with Libeskind design. Grooves cut in the concrete slab delineate patterns of activity and memorial directions. Paths through the grassy area will be constructed to match the wear pattern from actual traffic flow.

## The Illumination

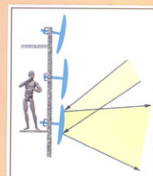
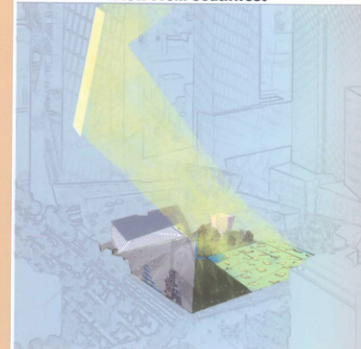
Memorials should not be forgotten or ignored. While the Libeskind plan is very powerful—sensitively preserving the "bathtub" and tower footprints—its impact remains muted away from the World Trade Center site. And, a static monument in the midst of a commercial plaza quickly fades into the background over time.

We can honor the spirit and the meaning of the World Trade Center Memorial by harnessing the purifying power of light—a nearly universal, cross-cultural theme. The WTC footprints and 1776 Towers face nearly due south. By replacing some of the windows in the towers with movable mirrors, light from the sun or moon can be steered to the South Footprint [17]—continuously tracking these orbits during their daily traversal of the heavens.

A beam of light, illuminating the normally shaded South Footprint (partially hidden by the bathtub walls and waterfall), conveys the possibility of hope for a better future. Five times every day, at the moments or each attack, the mirrors reverently shift position—lifting the footprint of light from the ground, towards the site of each event, and up to the sky. And so releasing the lost soul's spirits.

Visitors will congregate at the Memorial waiting for the illumination to rise skyward. Millions of inhabitants with a clear view of the new towers will see its facade ripple in color as the mirrors make their daily transit. At other times, the ramps on the South Footprint Ascent will be suffused with a remarkable glow—one that changes with the seasons and the weather. In this way, every day, the Memorial is an ever-present, ever-changing reminder of the events of September 11th, and a true icon on the Manhattan skyline.

The only sure thing in life, is change.



## Illumination Design Details

The three goals are safety, simplicity and effectiveness.

Each mirror is approximately 3-4 feet on a side. The mirrors are mounted on reliable, commercially available solar cell tracking actuators. The mirrors are curved slightly, so each mirror projects a 100x100 foot illuminated square on the ground. They are also coated to prevent reflecting UV light. In this way, sunlight is diluted by each mirror, ensuring eye safety—yet their combined power can illuminate the footprint as brightly as a beach on a summer day.

This concept was tested manually on a 30 story building, and works as described. There are typically 200 sunny or partially sunny days in NYC each year—but even with cloudy skies the footprints will glow subtly, yet powerfully.

Approximately 200 mirrors are required, covering 2000 ft windows in the tower. Preferably, the mirrors are the windows, so the actuators reside within the body of the towers for easy installation and maintenance.

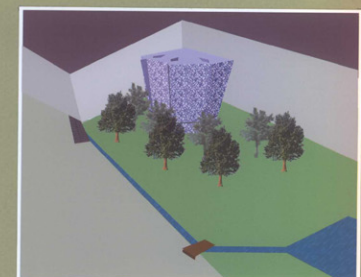
## Sanctum

The Sanctum and its surrounding gardens provides a formal, calming and restorative environment [18] for family members [19]. Nestled into a corner of the site and separated from the bulk of the memorial by a waterway, families may reserve access to the gardens and Sanctum building at any time. Access to the garden is mediated by two bridges, but when unoccupied by family members, is open to all visitors.

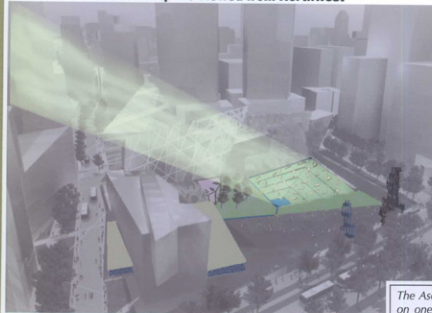
The Sanctum is a four-sided structure constructed of two parallel glass walls filled with various sized globes of translucent glass. Many of these spheres could be ornaments donated by the public, others will be special-made for this purpose. A cathedral-like space suffused with light, its glass walls shield the families from the distractions of noise and the public.

The outer-face of the Sanctum projects as four facets into the garden—one for each of the four events honored by this monument. About 60 feet on a side and 2800 sq. ft. in area, the building overlooks the terminus between the past and future. The interior will be designed in concert with family groups, to meet their special needs.

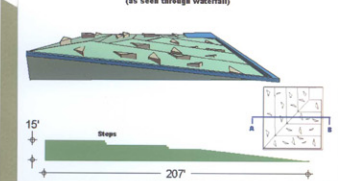
The Sanctum is reserved for family occasions—such as memorial tray dedication ceremonies, marriages, prayer meetings and christenings. Or as a place to meditate and reflect on what has been, and what will come.



## South Footprint Viewed from Northwest



## South Tower Footprint-Side View (as seen through waterfall)



The Ascent protects the South Tower Footprint [20]. Surrounded by grass on one side, and the Waterfall on the other, it is made from concrete aggregate infused with green and grey stone. At the lower corner is a 40x40 ft reflecting pool, fed by a stream from the Waterfall. The Ascent's perimeter is demarcated by inset squares of frosted glass every 1 meter, on the same period and size of the structural columns of the WTC. These squares will be softly illuminated at night. The overall shape is a dihedral series of ramps, rising toward the southeastern corner of the site, with the uppermost ramp parallel to the ramp off Liberty. The ramps, steps and seating are all oriented towards the Illumination.

## The Ascent

The Ascent represents the Future and our Hope for a better world. The Ascent is the last destination completing a visit to the Memorial. It is illuminated by reflected sunlight in daytime, and reflected moonlight at night. While the Ascent is a place to contemplate [21] the Memorial's message before transitioning back to our daily lives, it is also a destination unto itself.

The Ascent is part of the new World Trade Center's daily rhythm. People will bring their lunch and sit a quiet and thoughtful environment. Children, perhaps bored or unimpressed of the significance of the Memorial, have room to run. The space can be used for public events and ceremonies, acting as a reviewing stand facing the more formal PAST. The lower wall beneath the Culture Museum cantilever can double as a projection screen supporting those public events, or as a display surface (hidden and distinct from the Garden of Memories).

The Ascent also represents change. Most importantly, the illumination changes five times each day on the moments of the four attacks—the 1993 bombing, when the planes hit each tower, the Pentagon building and when Flight 93 fell from the sky over Pennsylvania.

Its use varies with time and the seasons. Inserted within each ramp are a swirling mass of triangular planting beds. Initially, these beds will be filled with flowers and bushes, while their lips serve as additional seating. Over time, perhaps once a decade, artists will be commissioned to design a sculpture reinterpreting the meaning of these events. Slowly, decade by decade, each planting bed will capture, in stone or steel, those moments in time.

