

# INTRODUCTION

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*"Alien Boy", Will van Overbeek*



# PROJECT APPROACH

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This project began with an Austin City Council initiative in 2006 that recognized that maintenance and improvements to Barton Springs Pool were overdue. Working from this initiative, staff worked internally and with stakeholders to develop a list of issues to be included in a master planning process. This consultant team was given that list when hired in early 2007.

The planning process has included a substantial public participation component, which, early on, yielded a goals statement that has served as a guiding principle throughout. The Goals Statement reads:

*Return the site to its rightful glory where the water was cleaner and the experience of the Pool was more enjoyable. Propose appropriate additions and renovations to the swimming pool, its buildings and its grounds that respect the fragility of this unique natural and historical setting, and also accommodate the significant user demands on Austin's most popular park amenity.*

The consultant team researched the history of Barton Springs, and investigated technical challenges. They met with constituent groups, taking verbal and written input throughout.

The team met with regulatory officials at multiple levels. For salamander habitat, aquifer and stormwater matters, they consulted with U.S. Fish and Wildlife Service officials and the City's Watershed Protection and Development Review staff. For historical and archeological matters, they consulted with the Texas Historical Commission and the City Historic Preservation Officer. For code compliance matters, they consulted with the City's Plan Review and Environmental Officer staff and for handicapped accessibility, they consulted with the Texas Department of Licensing and Regulation. Knowing that sustainability is an important City priority for all of its construction efforts, they consulted with the Green Building program at Austin Energy.

In addition, team members interviewed the staff at Barton Springs to learn the complexities of particular aspects of park operations and watershed management issues at the site. The PARD Aquatics staff provided information on pool operations and maintenance issues. The Watershed Protection staff provided information on salamander habitat, flow regime and watershed-specific matters. The Austin Nature Center staff (which operates the



Photo: Will van Overbeek.

## PROJECT SCOPE

### THE POOL

#### 1. IMPROVE FLOW REGIME

*Study concepts for improving flow regime that may include adding more operable gates to the downstream dam, introducing water recirculation features in strategic locations and installing operable gates in the upstream dam.*

#### 2. BYPASS INLET UPGRADE

*Redesign inlet grate so that it is less prone to clogging during floods.*

#### 3. UPSTREAM DAM

*Add openings to improve flow regime. Raise dam to mitigate “pop up” floods. Widen dam to improve clean-up equipment access.*

#### 4. NUISANCE ALGAE CONTROL

*Study algae control skimmer designs to remove floating algae.*

#### 5. GRAVEL BAR REMOVAL

*Remove gravel and sediment bar from deep end of Pool.*

#### 6. SEDIMENT and ALGAE DISPOSAL

*Consult with Pool cleaning and maintenance staff to improve methods for disposing sediment and nuisance algae.*

### THE GROUNDS

#### 7. ZILKER PONDS

*Rehabilitate Zilker Ponds with special attention to the several sets of steps leading from the upper parking lot to the Zilker Hillside Theater and the Bathhouse.*

#### 8. SIGNS and GRAPHICS \*\*

*Identify opportunities throughout the Barton Springs Pool site for the creation and installation of coordinated thematic material that fosters awareness of the cultural and scientific history of the park and its ecosystem. Propose a series of maps and signs for orientation and wayfinding. Propose signs at major entry points to direct visitors into the park and towards the Pool.*

#### 9. ELIZA SPRING

*Reconstruct spring run from Eliza Spring and possibly reconnect to the main body of the Pool. Rehabilitate the Elks amphitheater. Remove concrete slab under waters of Eliza. Add an operable gate to allow control over flows. Redesign areas around Eliza to mitigate flooding.*

#### 10. FENCE

*Recommend new fence design. Consider new fence locations to possibly include new areas within the perimeter.*

#### 11. TREES and GRASS

*Evaluate trees to determine number, distribution, species and condition. Make recommendations for replacing sick and damaged trees. Make recommendations for adding more trees throughout the campus. Consider more drought-tolerant grass options. Make recommendations for upgrading and extending the irrigation system. Make recommendations for grass care.*

#### 12. AREA BELOW DOWNSTREAM DAM

*Redesign the area below the downstream dam to make it more comfortable and more attractive.*

#### 13. ENLARGE THE POOL \*\*

*Study the possibility of making the Pool larger by relocating the downstream dam to a position below the Sunken Garden outflow. The concept is to bring all three salamander habitats into one uninterrupted body of water.*

#### 14. SUNKEN GARDEN

*Rehabilitate stone walls, reconstructing and stabilizing as required. Reconsider the fence, including its location and its design. Rehabilitate the basin to improve salamander habitat. Include a new, operable gate for flow control. Create stable walking surfaces to enhance access and enjoyment. Update landscaping to include new trees and groundcover recommendations.*

#### 15. INFRASTRUCTURE IMPROVEMENTS

*Recommend improvements to site electrical service to include buried lines and increased power. Recommend site lighting improvements*

### THE BUILDINGS

#### 16. HISTORIC BATHHOUSE

*Rehabilitate the historic Bathhouse to repair deteriorated condition and to return ticket-taking to its original location, at the central “glass cylinder”.*

#### 17. NEW SOUTH BATHHOUSE

*Consider the addition of a new, though modest, south bathhouse to provide shower and changing facilities.*

**\*\* Item added by public input**





*Barton Springs Salamander. Declared an endangered species in 1997, it lives in all three springs at Barton Springs as well as one upstream spring. Endangered species requirements have fundamentally changed the approach to Pool cleaning and maintenance.  
Photo: Laurie Dries*

Beverly S. Sheffield Center, home of “Splash! into the Edwards Aquifer Exhibit”) provided educational program advice and offered leadership in park interpretation matters.

The consultant team itself is composed of an appropriately diverse array of professionals including a landscape architect (who worked with an arborist and an irrigation specialist), two dam engineers, each bringing lengthy careers working on most dams in the Highland Lakes chain and experience working at Aquarena Springs (home to five endangered species). It included a sustainability consultant to advise on green building matters. It included civil engineers and mechanical, electrical and plumbing engineers plus structural engineers. The team was led by architects experienced in working on complex public projects with significant historic preservation components.

The Goals Statement has, indeed, served as the central guiding principal. But through the process of learning about the personalities, the history and the technical issues, a number of corollary observations emerged that can shed useful light on positions this plan has taken:

#### ***BALANCE***

Planning efforts should honor the state of tense balance between and among competing factors:

- The fragility of the grounds competes with the frank, practical impulse to use heavy, potentially destructive equipment for maintenance and repair.
- The nuisance algae could be managed more effectively if the Pool could only be cleaned with chlorine. But chlorine use will threaten the salamanders, so it is not used.
- The gravel could be more easily removed if trucks could be driven across the gravel Pool bottom. But much of the Pool bottom is salamander habitat, so trucks cannot be used there. The risk of leaks and accidental spills associated with driving trucks in creek and river beds is also a concern.
- The water level could be lowered more often to facilitate cleaning, except lowering water in the Pool also lowers it in Eliza Spring, and that does harm on the salamander population.
- The grass would be healthier if it could be fertilized occasionally, but fertilization--even organic fertilizer--could pollute the Pool.

This balance is very nearly intrinsic to the place. This plan recognizes that balanced, but less-than-obvious solutions should be anticipated.

### *LOGICAL ORDER*

A close examination of park operations reveals a number of sometimes curious interrelationships that explain “how things are the way they are”. The planning team found that understanding these was often a first step toward accomplishing planning goals. Some examples:

- The spring run at Eliza Spring should be restored and the concrete floor in the vessel should be removed. But construction work at Eliza might jeopardize our most robust salamander population, so any work at Eliza will have to wait for the development of larger populations at another habitat location, either Sunken Garden or the main spring.
- There is a strong sentiment for installing an algae skimmer along the south wall of the Pool. But preliminary indications show that during drought conditions, such a skimmer could skew much of the Pool’s flow regime. So the algae skimmer concept should be studied as one part of a comprehensive flow-regime solution.
- A part of the Bathhouse should be turned into a Visitor’s Center using a space currently assigned for educational programs. But those educational programs need to be reassigned first.
- Rainwater collection is a solid sustainability idea. But the existing irrigation system has the drinking fountains connected to it, which could create a health hazard for drinking if rainwater were used. So a new irrigation system, with drinking fountains plumbed separately, is a logical first step.

### *FRAGILITY*

The Goals Statement concept of “fragility” suggests a bias toward using the resources that currently exist, rather than looking to embark on adventurous new directions. So this plan recommends more trees, but no additional parking. It recommends rehabilitating the existing historic Bathhouse. It recommends using the existing historic dams, to the extent consistent with the results of the future structural analyses and modeling studies recommended in this plan, and it recommends against enlarging the Pool.

### *PUBLIC INPUT*

Because of its iconic status, Barton Springs will always be the subject of considerable public interest. This should be thought of as a planning and operations “fact of life”, and therefore a credible public process for input should be part of all changes and proposals.



*As part of the public participation process, an Open House was held at the Bathhouse on Saturday July 14, 2007. Ideas were exchanged and public input was sought. Consultants and City staff were on hand for questions.*



*Eliza Spring in the 1950s.  
ND-53-220-01, Austin History Center, Austin Public Library.*

### ***PLAN COMPLEMENTS OTHER EFFORTS***

Because the Pool is tied culturally, politically and environmentally to development struggles over the aquifer, discussions about water quality in the Pool are inevitably linked with water quality upstream. This planning team recognizes that cause-and-effect relationship, but at the same time, it acknowledges and accepts the limitations of this plan--it is a plan for Barton Springs Pool, not for the entire watershed. The planners understand that the future viability of the Pool depends on water quality stewardship upstream. Even so, this plan should be seen as a complement to the substantial efforts by others to buy land and development rights as well as other initiatives to protect the watershed.

### ***SUSTAINABILITY***

This planning team believes that sustainability considerations should be present in all decision making within the plan area. So it recommends rainwater collection as well as shower water reuse. It recommends sustainable landscape practices and it recommends solar hot water. It recommends the use of local natural materials and it recommends the rehabilitation of existing facilities seeking energy conservation opportunities. At the same time, it acknowledges the need for balance, even with sustainability decision making. So it favors placing solar collectors inconspicuously rather than making a more obvious display. It favors placing the rainwater collection vessel underground, because such vessels are large and could distract from the park ambiance.

### ***INTERPRETIVE PLANNING***

This park has fascinating stories to tell. Robert Redford learned to swim here. Water parades were popular in the 1930s here. Large-group dance performances used to happen here. Evangelical baptisms took place here. And, of course, there was topless bathing. These are but a few of the stories about people, but there are equally fascinating stories about flooding and the wildlife and other natural events and processes. Beyond simply enriching the park experience, these stories could also raise awareness on issues of environmental fragility and splendor. Seen in this light, interpretive planning is more than mere entertainment. It is integral to responsible stewardship efforts where deep appreciation of this unique historical and natural setting should be fostered. Therefore, the planning team sought opportunities for interpretive planning throughout the park, and made certain key decisions, like the Visitor Center and Gallery proposal for the Bathhouse and the reconfiguration of the Tree Court, to enhance the interpretive possibilities.

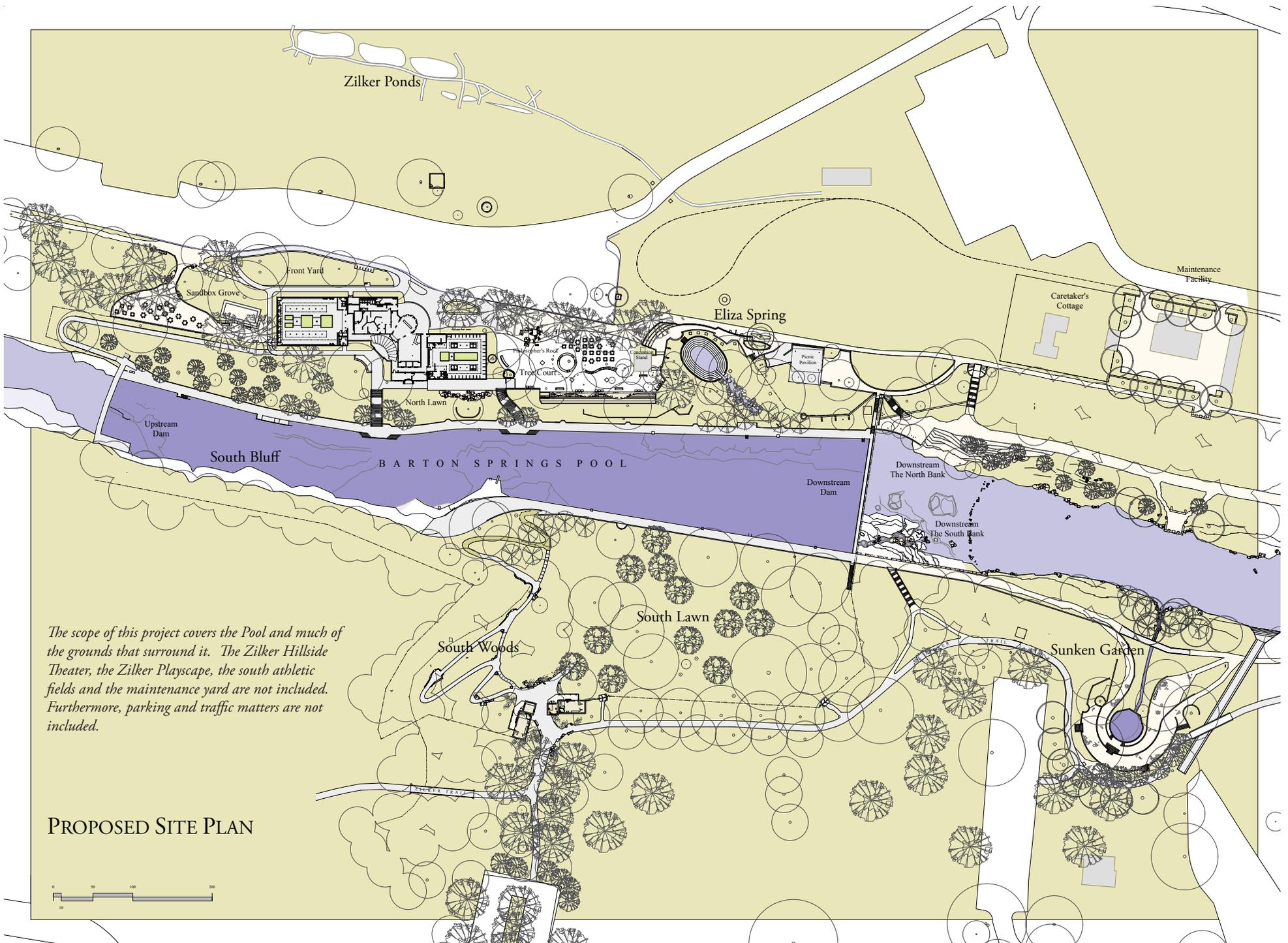


*Barton Springs Pool in the 1920s. The wooden bathhouse features an open-air dance pavilion on its upper level. Note that the upstream dam had not yet been built. C01825, Austin History Center, Austin Public Library.*

*A Note About Place Names:*

*As one might expect with a place as iconic as Barton Springs, the significance and history of the place is a very personal thing. This extends to the place names used for features at the site. Four primary springs make up what we today call “Barton Springs”. Upstream of Barton Springs Pool, there is a spring that flows during times of high discharge, called the Upper Spring. Within Barton Springs Pool is the Main Spring, also called Parthenia Spring. On the north bank of the pool is Eliza Spring, which was also called Walsh Spring and the Polio Pit in the past. On the south bank of the creek, downstream of Barton Springs Pool, is the Sunken Garden, which was also called the Old Mill Spring. For a time during the 1940s, the City of Austin publications referred to the entire site as Zilker Springs, as an homage to Andrew Zilker, who had donated the site for public use.*

*For clarity, we have used the following names for the various sites: the Upper Spring, the Main Spring, Eliza Spring and the Sunken Garden. These are the place names used by Brune in *The Springs of Texas* and are also the place names used in the “Barton Springs Archeological and Historic District National Register Nomination”.*



Zilker Ponds

Front Yard

Sandbox Grove

Eliza Spring

Maintenance Facility

Caretaker's Cottage

North Lawn

Upstream Dam

South Bluff

BARTON SPRINGS POOL

Downstream Dam

Downstream The North Bank

Downstream The South Bank

South Lawn

South Woods

Sunken Garden

*The scope of this project covers the Pool and much of the grounds that surround it. The Zilker Hillside Theater, the Zilker Playscape, the south athletic fields and the maintenance yard are not included. Furthermore, parking and traffic matters are not included.*

PROPOSED SITE PLAN

