

2. CONCEPT EVOLUTION



CONCEPT EVOLUTION

OVERALL GOALS

After listening to input from many sources, including the public in general, the Architectural team and the DDCS developed the following overall goals for the architectural design of the DDC:

- Be respectful to the site the DDC has the privilege to be integrated into.
- Complement the emerging typology of the existing architecture of the Preserve, as demonstrated in the other trailhead buildings.
- Be a tool for education and research.
- Enhance the interpretive experience through the Architecture.
- Promote an understanding, and appreciation for high quality architecture appropriate for the desert.
- Be a model of sustainability for arid climates by incorporating technologies of the past, present and future.
- Be a model of accessibility.
- Minimize visual impact.
- Be flexible to evolving programs and interpretive experiences.
- Have certain facilities available for non-paying visitors such as restrooms, and some interpretive experiences.
- Reinforce an understanding of the 4 organizing themes to the interpretive experience.
- Minimize on-going operational and maintenance costs through efficient design, and high quality material selections, and systems specifications.
- That the project has a strong local interest, but also a global stature.
- That the DDC could become a primary driver for tourism and educational interest.



MOVING BEYOND THE PHASE 2 FEASIBILITY STUDY

Swaback Partners was the lead consultant during the Phase 2 Feasibility Study, as such we are very familiar with its content, and the process that was used to conduct that Study.

We are also aware of the many public comments, both pros and cons, that were voiced regarding those results at the time it was presented to the City Council, as well as during the Phase 3 study. When the work for this study began, and the DDCS was made part of the process, we reviewed all those comments, as well as the Phase 2 and 3 reports. It was decided that rather than continue with developing the Phase 2 concept as presented in the Phase 2 report, that a modified direction would be pursued that addresses many of the concerns and new ideas that had emerged. The input of the experience designers, Thinc, and ASU added much to the discussion, as well as the many public comments. Some of the content of the concept developed within Phase 2 was still considered to be relevant, but a modified direction that looked to lowering the construction cost, making a smaller footprint, revising the architectural program to incorporate different interpretive experiences, and analyzing all the space allocations in light of the concept that was developed to locate only essential uses at the Gateway site

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LISTENING AND LEARNING

Throughout the design process Swaback Partners attended, and participated in many public meetings, read on-going social media comments about the project, and participated in meetings with a variety of individuals, and community organizations that contributed thoughts to the design.

We listened and responded in the design to what seemed prudent, given our contracted Scope of Work.

During that process, it was evident that some of the public strongly opposed the DDC being built at all, for a variety of reasons, while others supported the DDC, but just not located within the Preserve. Others supported it whole heartedly. While it was not within our Scope of Work to determine whether the buildings should be built or not, but rather to listen and respond with a Schematic Design at the Gateway that incorporated what we learned.



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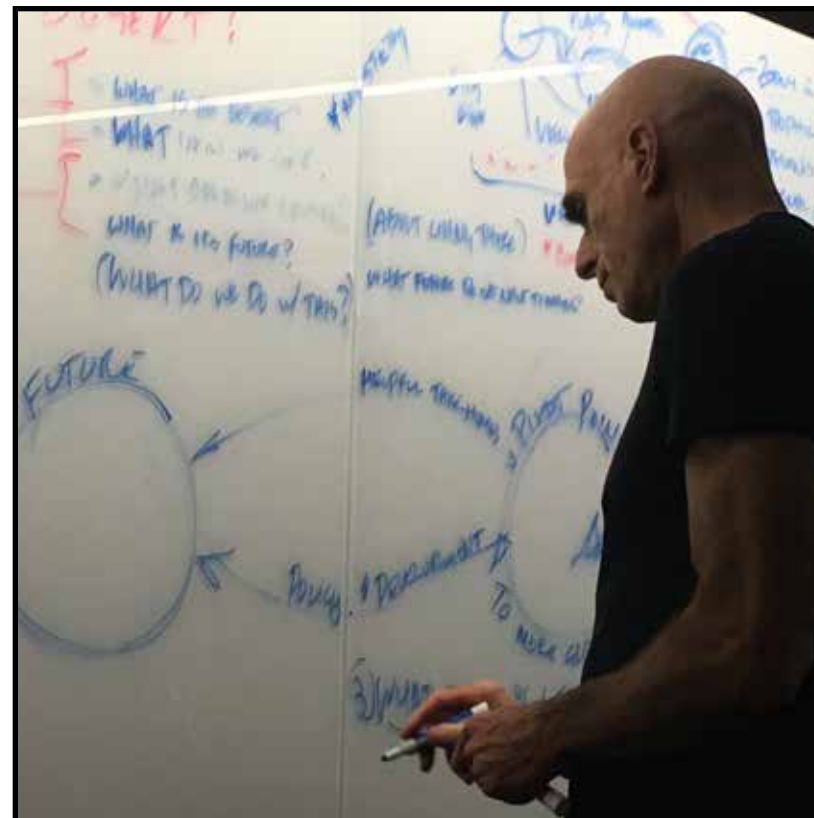


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CO-DESIGN PROCESS WITH THE CITIZENS OF SCOTTSDALE, CITY OF SCOTTSDALE STAFF, DDCS, THINC AND ASU

The Citizens of Scottsdale, City of Scottsdale Staff, DDCS, Thinc and ASU were major co-design collaborators, together with Swaback Partners, of the Architectural Programming and Schematic Design presented within this report.

Throughout the Programming and Design process, design sessions were held every two weeks, in addition to numerous other meetings to seek input and reaction to the emerging design. Each group contributed to the design through a different perspective. The Public voiced many comments both for and against the emerging concept. It was our job to listen to both sides. The City Staff gave input from the perspective of Preserve, City operations, current conditions on site, the public input process, and operational issues. DDCS gave input from the perspective of operations of the facility, programming needs, interpreting input from numerous agencies and organizations it sought out, construction costs, visitation projections, and overall design. Thinc contributed to the collaborative process as the Experience Designers, inputting on the character of the spaces needed to incorporate those experiences. ASU contributed with the input of its many research faculty on their potential programs and research functions that they would like to conduct at the DDC.

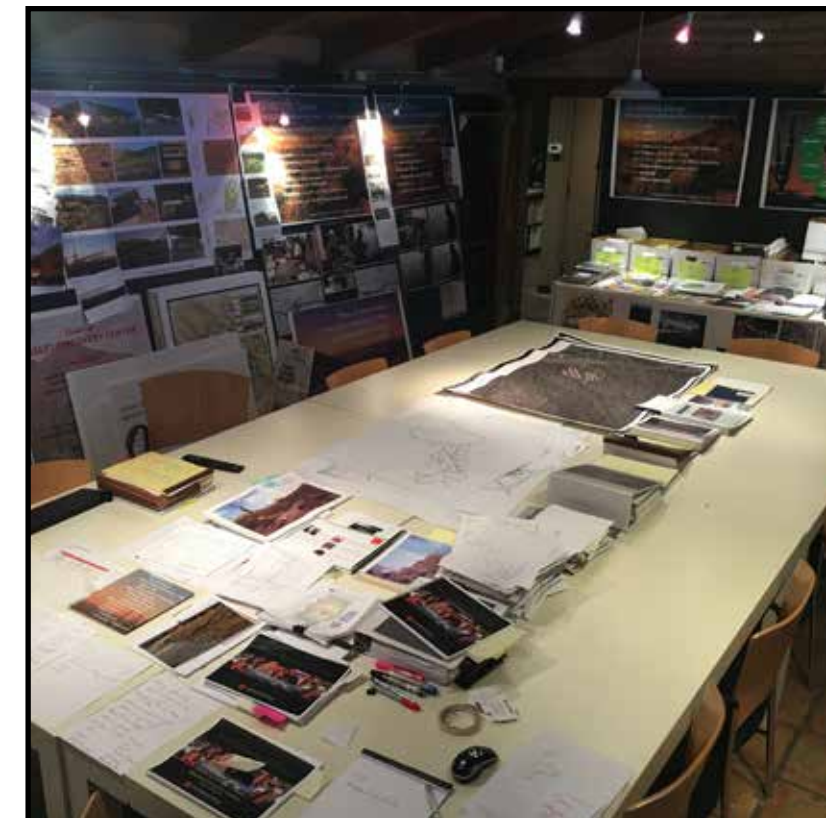
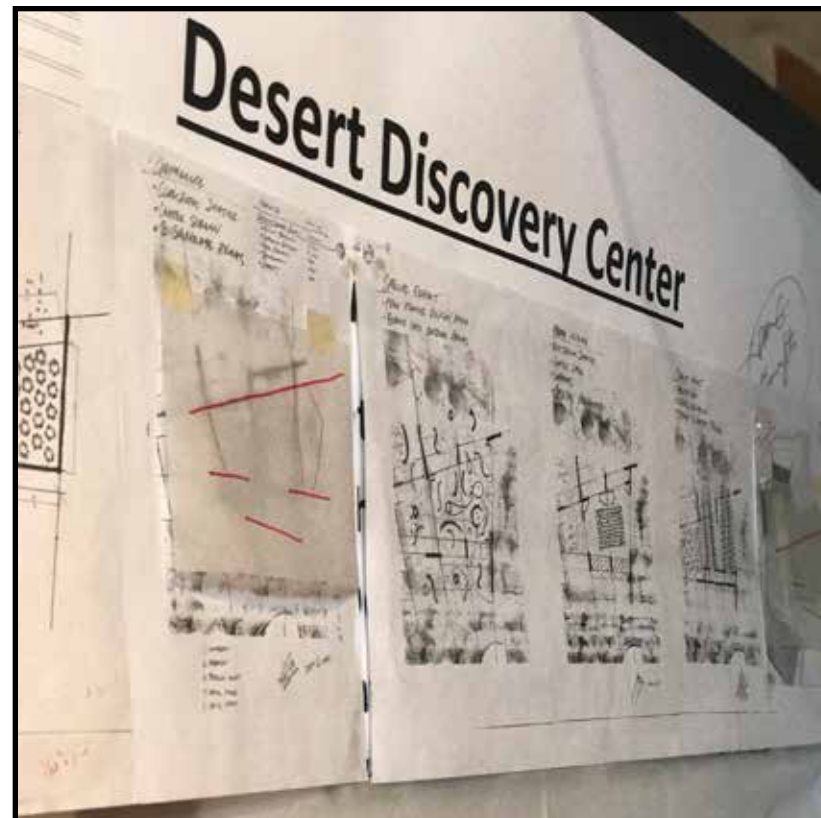


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THINC TANK

For the duration of the project, a special workroom was set up at Swaback Partners that contained all the on-going work, as well as all other DDC studies from the past.

Most of the design sessions, and all of the design work, was conducted within this room, which became known as the Thinc Tank, acknowledging the significant contribution of the Experience Designers. Considerable amount of design work was also carried out in the field at the site through numerous site visits. The public was invited to come and visit the ongoing work during the presentations made on December 5, 2016. That invitation was captured on video, and was on the City website during most of the design process. Some members of the public did visit. Many organizations within Scottsdale and the Phoenix area also came and contributed within the work space. It was our belief that to properly focus on the magnitude and importance of the work that a total, immersive space like what emerged during the process was necessary.

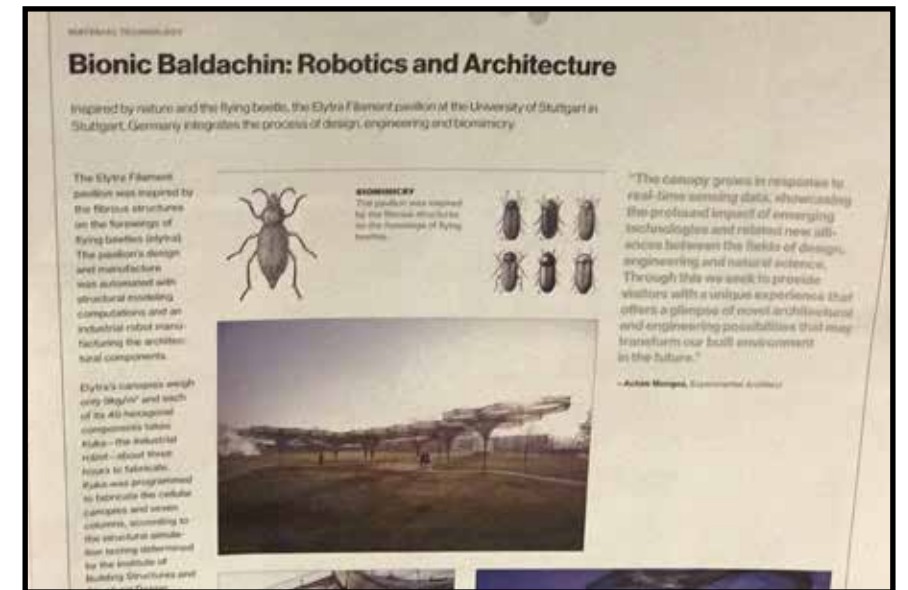
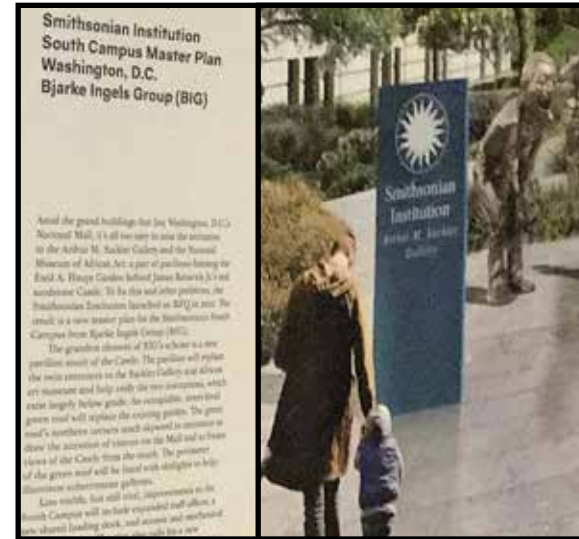


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RESEARCH OF ANALOGOUS PROJECTS, AND BUILDINGS CURRENTLY WITHIN THE PRESERVE

From the beginning of Phase 2 the desire was for the DDC to be a world class institution, and a place like no other.

A place that gave you an experience you could only get at the DDC and to experience it again you had to return. A place that incorporated not only interpretive experiences, but deep research into life in the desert. It is to be a place not only for education, but also for fun of all ages. A place that every time you returned you could count on a new experience. You could study the Sonoran Desert and the Preserve at many different levels, and from many different points of views. As such the design Team continued throughout the process to use the world as a text book, and study many other institutions, and centers of interpretive experiences. We looked locally at institutions such as the Desert Botanical Gardens, The Arizona – Sonoran Desert Museum, The Arizona Science Museum, The Heard Museum, The Phoenix Zoo, Arcosanti, Cosanti, Taliesin West, and Kartchner Caverns. We also looked nationally at the Monterey Aquarium, the Springs Preserve, Red Rock Canyon Interpretive Center, the Living Desert, The 911 Memorial Museum, and many more. We looked globally at the emerging design for the 2020 World Expo in Dubai, as well as environmental interpretive centers in Australia, Saudi Arabia, and Spain. We studied these institutions for a variety of reasons such as – architectural programs, unique aspects of design and interpretation, visitation counts, as well as a whole variety of operational issues. All of this was done not to find concepts to duplicate, but to help us understand what has worked and not worked in the past and then to stand on the shoulders of all that we had learned, and go beyond that to create a world class institution for Scottsdale that presents the Preserve and celebrates the beauty and unique nature of the Sonoran Desert unlike any other institution.



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ARCHITECTURAL TYPOLOGY

In addition to the research focused on the Architectural Program, we also researched what would be the most appropriate Architectural Design Response. With the project located within the Preserve we first studied each of the existing buildings in the Preserve. At the time of this report, there are 8 built trailheads within the Preserve, 4 of which have buildings that provided architectural guidance of the Preserve. Currently there are approximately 1,200 parking spaces that serve as a guide for integrating parking. We studied each building with respect to its plan-response to the site, its materials, its long-term maintenance issues, its space and flow, how the public seemed to be using it, what the MSC Stewards thought of the buildings, and what the visual impact was as viewed from the adjacent neighbors and trails. These images summarize what we see as an emerging Architectural Typology of the Preserve.

As one studies these photos and plans, certain similar characteristics are clear. The use of materials that withstand the harsh desert climate on these buildings, such as Corten steel and rammed earth seem to feel compatible with their context. The low slopes of the roof form feel appropriate to their mountain backdrop. The open nature of the spaces that help blur the line between indoor and outdoor spaces. The use of shade as a place of refuge on hot days and intense sun. Parking located slightly away from the trailhead buildings gives visitors a space to decompress and begin to enter the Preserve in an appropriate way.

Our designs address improvements on issues that included maintenance of certain materials not holding up to frequent use, materials exposed to the sun/heat, windows not properly located or shaded, as well as, interior spaces with poor acoustical qualities due to excessive metal. Parking surfaces were looked at as to their durability, and integration into their sites. Drainage issues caused erosion in some areas, and heavy use caused some surfaces to be paved where they initially were compacted soil. Parking separated by natural desert areas certainly helped minimize the visual impact.

Gateway Trailhead



Lost Dog Wash Trailhead



Tom's Thumb Trailhead



Brown's Ranch Trailhead

