DDC Consultant Team

- **Swaback Partners, pllc** - *Architecture*
- **ConsultEcon, Inc.** - *Economic Consultants*
- **Olinger Group** - *Market Research*
- **BRC Imagination Arts** - *Experience Design*
- **Exhibit Design Associates (EDA)** - *Exhibit Design*
- **Ten Eyck Landscape Architects, Inc.** - *Landscape*
- **Renaissance Companies** - *Cost Estimation*
DDC Contract Tasks

- **Task 1** - Define & Finalize the DDC Concept
- **Task 2** - Market Survey, Concept Testing & Refinement
- **Task 3** - Preliminary Architectural Design
- **Task 4** - Preliminary Project Cost Estimates
- **Task 5** - Preliminary Business/Marketing Plan/Budget
- **Task 6** - City Meetings
Desert Discovery Center Mission Statement

The Desert Discovery Center is a magical place providing a culture of educational wonder and recreational insights, inspiring both residents and visitors to understand, appreciate, sustain, and return to the McDowell Sonoran Preserve and the world’s richest, most amazing desert, which is its home.
Existing Gateway Site & Proposed DDC Location

Swaback Partners | City of Scottsdale: Desert Discovery Center
DDC Public Outreach

- Joint Sub-Committee
- McDowell Sonoran Preservation Commission
- Tourism Development Commission
- McDowell Sonoran Conservancy
- Focus Groups
- Public Open Houses
- On-Line Surveys
DDC Progress Since City Council June 15, 2010

- Joint Commission Meetings
- Public Open Houses
- Refined Concept Designs
- Cost Estimates
- Business Plan
- Marketing Plan
- Phase II Draft Final Report
- Phase II Final Report
Phase II Feasibility Study - Summary

**Site Size**
- Desert Discovery Center: 8-9 Acres
- New Parking: 4-5 Acres
- Existing Parking: 4-5 Acres

**Facility Size**
- Net: 61,610 SF
- Gross: 73,932 SF

**Parking**
- Existing Gateway Parking Req’d: 341-500 Spaces *
- DDC Parking Req’d: 428 Spaces
- Grand Total: 769-918 Spaces

* Onsite parking numbers will be further analyzed for possible shared parking and off-site alternative provisions
Phase II Feasibility Study - Summary

Capital Cost

- Buildings and Site: $35.1 M
- Exhibits: $13.1 M
- Permits, Design, Engineering: $4.0 M
- City Project Management & Public Art: $3.9 M
- Furniture, Fixtures, Equipment: $1.0 M
- Contingency (10%): $4.80 M
- Startup Budget: $5.8 M
- Operating Reserves/Endowment: $4.0 M
- Total Capital Cost: $74.0 M
Phase II Feasibility Study - Summary

Ticket Prices and Attendance
- Annual Mid-Range Attendance Potential: 333,000
- Ticket Price (Adult): $15
- Ticket Price (Child): $9

Personnel
- Full Time: 46
- Part Time: 60
- Volunteers: 250+
Phase II Feasibility Study - Summary

**Annual Revenue (stabilized year)**
- Operational Revenues: $5.55 M
- Operational Reserves Interest: $0.18 M
- Non-Operational Revenue *: $1.66 M
- Total Annual Revenue: $7.4 M

**Annual Operating Expenses (stabilized year)**
- Operating Costs: $7.04 M
- Capital Reserves: $0.35 M
- Total Annual Revenue: $7.4 M

* Non-Operational Revenue includes grants, gifts, corporate sponsorships, fundraising events, endowment proceeds, and other relevant sources.
A Prime Question...

What will draw people to this place, and what will inspire them to come back?
Program of Spaces

Welcome Pavilion
Public Restrooms
Public Lockers
Vending
Concierge Station
Ticketing
Security Desk

Hospitality Pavilion
Sonoran Market
Desert Cafe

Discovery Portals
History of the McDowell Sonoran Preserve
Orientation to the DDC

Hidden Desert
World Beneath Our Feet
Wildlife Cams
Snake’s Eye View Th eater
The Secret Sex Lives of Plants
Ant Habitat
Bee Habitat
Reptile Habitat

Seasons of the Sonoran Desert
Spiral Sculpture of the Seasons: A Year in the Life
Many-Colored Desert
Tom’s Th umb Th eater
Cacti/Agave Gallery
Woody Plant Gallery
Herbaceous Plant Gallery

Human Adaptation
Water Allocation
Hohokam Environment
Cowboy Environment
Fifties Environment
Contemporary/ Near-Future Environment (Sustainability)

Staying Alive
The Desert After Dark
Airborne Enemy
Twilight Wall / Dawn Wall
Couch’s Spadefoot Sculpture
Grasshopper Mouse/Beetle
Darkling Beetle Sculpture
Tortoise Combat Sculpture
Costa’s Hummingbird at Chuparosa Sculpture

The Tomorrow Pavilion
Walk-in Saguaro Cactus
Interactive Floor
Time Machine
Free Learning Space
Terrarium Listening Station
Small Animal Habitats

Mysterious World Exhibit

Rotating Exhibits

Resources
Volunteer Room
Library

Administration
18 Offices
2 General Work Areas
Reception
20 Work Spaces
Staff Breakroom/Kitchen
Employee Locker Room
Staff Bathrooms

Desert Great Room
Event Pavilion
Catering Kitchen
Bar Storage
Restrooms
Lobby

Exterior Spaces
Welcome Terrace
Orientation Courtyard
Event Terrace
Connecting Passages
Desert Dining Garden
View Terrace
Amphitheater
Group/School Kids’ Orientation

Back of House
Curatorial/Exhibit Shop
Storage
Landscape Maintenance Bldg.
Other/Mechanical

Swaback Partners | City of Scottsdale: Desert Discovery Center
The Tomorrow Pavilion
- Walk-in Saguaro Cactus
- Interactive Floor
- Time Machine
- Free Learning Space
- Terrarium Listening Station
- Small Animal Habitats

Mysterious World

Rotating Exhibits

Amphitheater

Desert Great Room

The Hidden Desert
- World Beneath Our Feet
- Wildlife Cams
- Snake’s Eye View Theater
- The Secret Sex Lives of Plants
- Ant Habitat
- Bee Habitat
- Reptile Habitat

Staying Alive
- The Desert After Dark
- Airborne Enemy
- Twilight Wall
- Dawn Wall
- Sculptures:
  - Couch’s Spadefoot
  - Grasshopper Mouse & Darkling Beetle
  - Tortoise Combat
  - Costa’s Hummingbird

Discovery Portals

Human Adaptation
- Water Allocation
- Hohokam Environment
- Cowboy Environment
- Fifties Environment
- Contemporary/Near Future Environment (Sustainability)

Seasons of the Sonoran Desert
- Spiral Sculpture of the Seasons: A Year in the Life
- Many Colored Desert
- Tom’s Thumb Theater
- Cacti/Agave Gallery
- Woody Plant Gallery
- Herbaceous Plant Gallery

DDC Phase II - Interpretive Themes & Exhibits
Swaback Partners | City of Scottsdale: Desert Discovery Center
DDC Landscape Interpretive Themes

- Water
- Microclimates
- Adaptation
- Plant Biomes
- Animal Habitats
- Senses of the Desert
DDC Evolving Conceptual Plan

Swaback Partners | City of Scottsdale: Desert Discovery Center
DDC Evolving Conceptual Roof Plan

Swaback Partners | City of Scottsdale: Desert Discovery Center
The Welcome Plaza

Swaback Partners | City of Scottsdale: Desert Discovery Center
DDC Conceptual Parking Plan
Outdoor Environment

Swaback Partners | City of Scottsdale: Desert Discovery Center
“Desert Seasons” Exhibit Pavilion

Swaback Partners | City of Scottsdale: Desert Discovery Center
Interconnecting Shaded Passages

Swaback Partners | City of Scottsdale: Desert Discovery Center
“The Hidden Desert” Exhibit Pavilion

Swaback Partners | City of Scottsdale: Desert Discovery Center
“The Tomorrow Pavilion” - Children’s Exhibit

Swaback Partners | City of Scottsdale: Desert Discovery Center
“Human Adaptation” Exhibit Pavilion

Swaback Partners | City of Scottsdale: Desert Discovery Center
“Mysterious World” - Immersive Experience

Swaback Partners | City of Scottsdale: Desert Discovery Center
“Mysterious World” Immersive Experience

Swaback Partners | City of Scottsdale: Desert Discovery Center
“Mysterious World” Immersive Experience
“Staying Alive” Exhibit Pavilion

Swaback Partners | City of Scottsdale: Desert Discovery Center
The Desert Great Room
Desert Discovery Center
Sustainable Strategies

DDC Emerging Sustainability Strategy

Swaback Partners | City of Scottsdale: Desert Discovery Center
DDC Emerging Sustainability Strategy

How Will the Desert Discovery Center...

**maintain a Sustainable Site?**
- By Selecting and Developing the Site Wisely
- By Reducing Emissions Associated with Transportation
- By Protecting Surrounding Habitats
- By Managing Stormwater Runoff
- By Reducing the Heat Island Effect
- By Eliminating Light Pollution
- By Planting Sustainable Landscapes

**conserve & protect Energy & Atmosphere?**
- By Improving Energy Performance
- By Tracking Building Energy Performance Through Design, Commissioning & Monitoring
- By Managing Refrigerants to Eliminate CFC’s
- By Using Renewable Energy

**integrate Water Efficiency?**
- By Reducing Indoor Potable Water Consumption
- By Reducing Water Consumption to Improve Environmental Well-Being
- By Monitoring Water Consumption Performance
- By Practicing Water Efficient Landscaping

**propose Innovation in Design?**
- By Proposing Desert Rooftops
- By Proposing Desert Living Walls

**ensure Indoor Environmental Quality?**
- By Managing Air Contaminants
- By Specifying Less Harmful Materials
- By Allowing Occupants to Control Desired Settings
- By Providing Daylight and Views
- By Improving Ventilation

**conserve Materials and Resources?**
- By Selecting Sustainable Materials
- By Practicing Waste Reduction
- By Reducing Waste at Its Source
- By Reusing and Recycling
Final 585 Page Report

Swaback Partners | City of Scottsdale: Desert Discovery Center