

aM
EDUCATION
PROGRAM
MARCH 23 2018

SSA | SAM STERLING ARCHITECTURE
SPADE DESIGN BUILD
VIBRANTCY
SUSSMAN / PREJZA & CO
BALIS & CO

Contact:

aM | Albuquerque Museum of Art & History

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Table of Contents

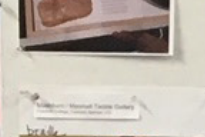
1.0	Project Team	1
2.0	Introduction	3
3.0	Concept Design / Program	6
3.1	Concept Narrative / Quick Facts	
3.2	Model Photos / Concept Diagrams / Renderings	
3.3	Building Program / Space Data Sheets	
4.0	Process: What We Heard - Workshops / Tours / Meetings	32
4.1	List of Workshops / Tours / Meetings	
4.2	Facilities Tour / "What We Heard"	
4.3	Workshop #1: Concepts / Case Studies / Wayfinding at SSA	
4.4	Workshop #2: Open House / Community Charrette at aM	
4.5	Sculpture Garden Tour	
4.6	Museum School Art Class Observation	
5.0	Zoning / Code Analysis	48
6.0	HVAC Report (Vibrantcy)	55
7.0	Signage & Wayfinding (Sussman Prejza & Co)	58
8.0	Preliminary Cost Estimate (Balis & Company)	66
9.0	Case Studies / References	67
10.0	Project Schedule	71



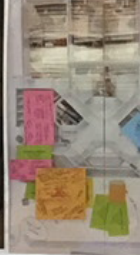
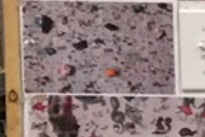
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Text-heavy document or poster with many small images and columns of text.



Row of colorful sticky notes (pink, orange, yellow) with handwritten text.



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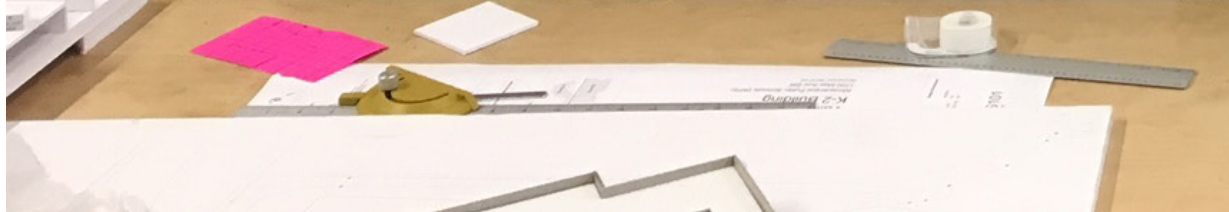
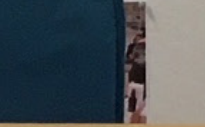
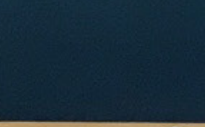


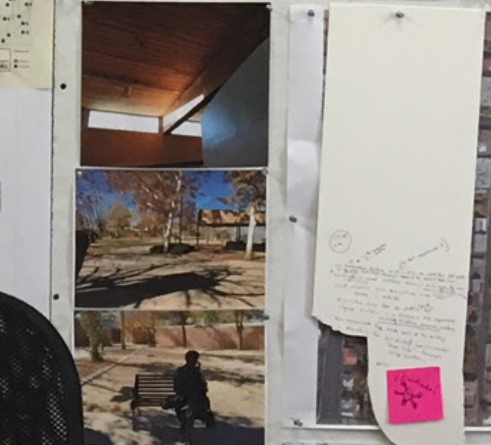
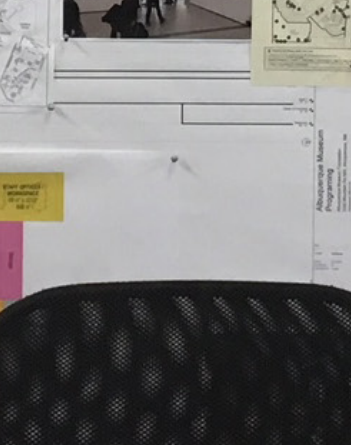
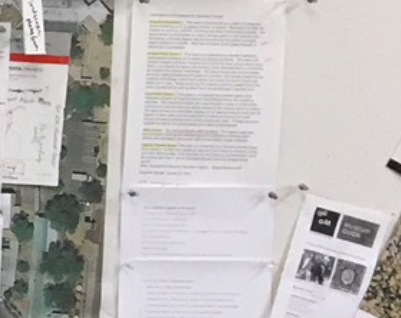
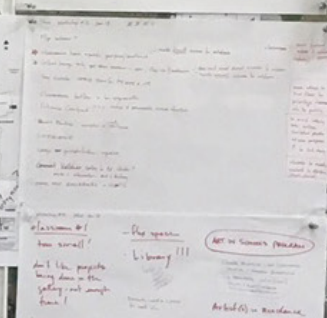
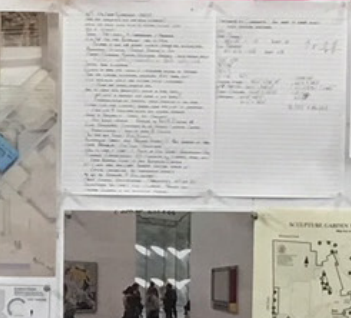
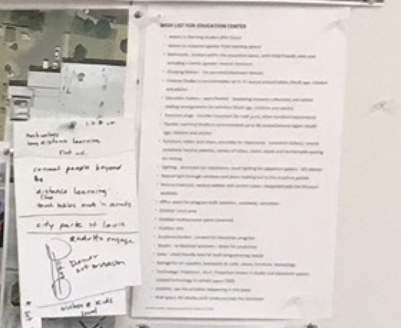
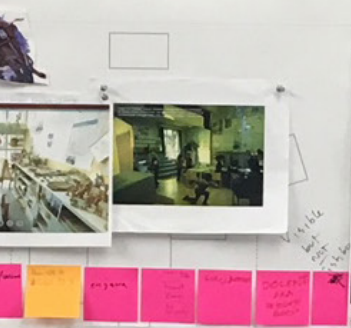
Table with multiple columns and rows of text, possibly a schedule or checklist.



Large colorful poster or chart with multiple sections in blue, green, pink, and orange, containing text and diagrams.

Text-heavy document or poster with many small images and columns of text.





1.0 Project Team

OWNER / CLIENT - ALBUQUERQUE MUSEUM FOUNDATION

Elizabeth Becker, Curator of Education, aM
Emily Fox - Executive Director, aMF
Cyndy Garcia - Interim Director, aM
Elizabeth Becker - Curator of Education, aM
Andrew Connors - Curator of Art, aM
Emily Fox - Executive Director, aMF
Garret Smith - Board Member, aMF
Karen Alarid - Board Member, aMF
David Kleinfeld - Former Board Member, aMF

ARCHITECTURE - SAM STERLING ARCHITECTURE. LLC

Sam Sterling, AIA - Principal
Julia Baca - Office Manager
Eliza Linde - Associate
Wesley Lansford - Project Manager
Wendell Montgomery - Project Designer
Leonard Perez - Project Designer
David Thompson - Project Designer

MECHANICAL, ELECTRICAL, PLUMBING & FIRE PROTECTION - VIBRANTCY

Matthew Higgins, Principal, Chief Analyst - CEM, HBDP, LEED-AP (BD+C)
Colin Evans, Principal Engineer - PE, LEED-AP (BD+C and O+M)
Rex Stockwell, PE, Senior Mechanical Engineer, LEED-AP
Tom Hughes, Electrical Design

LANDSCAPE ARCHITECTURE - SPADE DESIGN

Katya Crawford - MLA, Partner

SIGNAGE & WAYFINDING - SUSSMAN / PREJZA & CO

Miles Mazzie - Associate, Senior Project Manager

COST ESTIMATING - BALIS & COMPANY

Jon Balis, Principal

2.0 INTRODUCTION

Introduction

Sam Sterling Architecture (SSA) was hired in December, 2017 to provide programming services for Phase III of the Albuquerque Museum's (aM) masterplan - a multi-generational Education Center. Working with designated staff from the aM and the Albuquerque Museum Foundation (aMF - the private, non-profit organization dedicated to fundraising to support the museum's education, exhibition, acquisition and capital programs), SSA developed a Program / Concept Design for the Education Center over the course of 4 months from December, 2017 - March, 2018.

This program document will serve as a fundraising tool for the aMF, and as the foundation for the City of Albuquerque RFP that will be issued for the A / E design services.

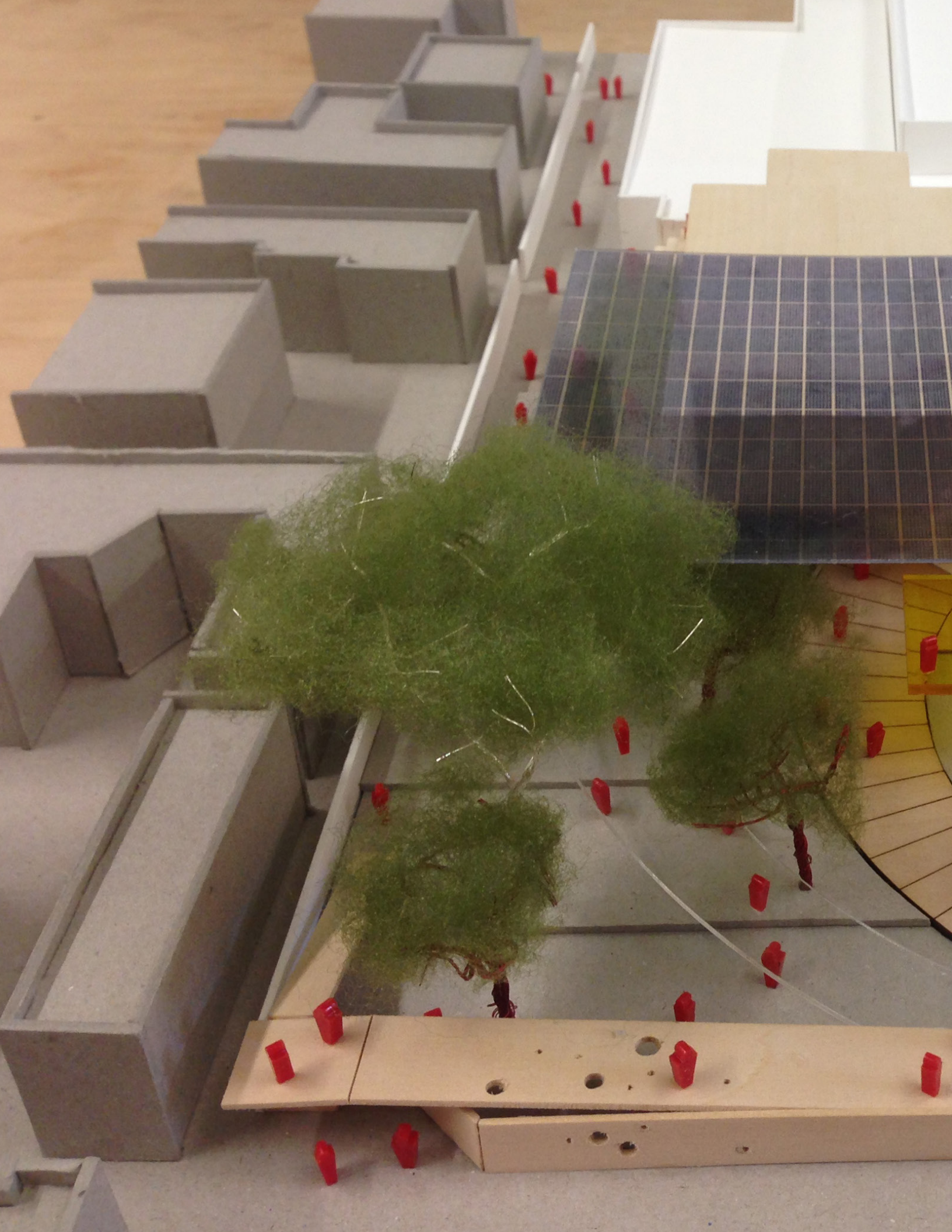
The Education Center is Phase III of a 3-phase masterplan spanning nearly 15 years to date. Phase 1 was completed in 2005 with the museum undergoing 40,800 sf of new construction and 8,200 rsf of renovation including the Entry / Lobby, Cafe, Museum Store, Ventana Salon, Gallery 1, outdoor amphitheater and Sculpture Garden. Phase 2 was completed in 2015 which saw a 30,000 sf renovation to the History Gallery, Keleher Gallery, Only in Albuquerque Gallery and the collections vault / storage in the basement of the museum.

Phase 3 provides for expansion at the southwest corner of the building for a space currently designated as the Education Center. The Center is envisioned as dynamic learning center for youth, families and adults. Initial plans include new art classrooms to provide expanded art making opportunities for children and adults, a classroom and gathering space for the Museum's school and community programs and a gallery for experiential learning about the museum's collections.

In the words of aM, the "Education Center is envisioned as a space to attract and retain core audiences; especially families and children. It is a space where visitors of all ages can get involved in art and history, where people gather to learn, create and contribute and where families and children can feel at home in the Museum".

Goals for the Education Center include:

- Art / activity classrooms to expand the current education program
- Create an environment for people of all ages and backgrounds to learn about, create, explore and contemplate art and history.
- Support art and culture in the community.
- Establish life-long engagement in art and culture within the community.
- Facilitate career development for people interested in the arts and culture industry.





3.0 PROGRAM



3.1 Concept Narrative

An Experiential Exploration of Art, Education, Nature and History

The new Education Center at the Albuquerque Museum of Art and History is intended to be a richly dynamic and surprising experience focused on education that also reinforces and emphasizes the Museums relationship with Old Town, functionally integrates new spaces with the existing museum, further integrates the courtyard / sculpture garden as part of the museum experience and also creates a place for multi-generational community engagement.

While the program is fairly simple, consisting primarily of art classrooms with exterior support spaces, a larger experiential hybrid teaching gallery (a counterpoint to the more formal Ventana Salon) and additional support space, the challenge was how to accommodate the addition while preserving the existing courtyard / open space and free public access sculpture garden. An additional challenge was how to give the addition its own identity (more visually communicative of its interior function) and clear after hours entrance while also connecting it more directly to the daily internal life of the museum and lower level collections storage.

The solution is the result of intensive dialogue with users, visitors and staff. The conceptual design and programmatic diagrams are based on an aggregation of many conversations and efforts to solve problems and create new opportunities. The core conceptual goals / responses and challenges that define the project are:

Maintain Existing "X" Circulation AND Exposed Structural Diagram

The Education Center is designed to retain the original "X" circulation diagram and strongly expressed structural framing (exposed glue laminated beams and exposed concrete beams) from the 1978 Predock museum. At approximately the midpoint of the 150' long corridor connecting the new Education Center to the lobby, the roof will be removed creating a new interior atrium that connects ground floor circulation to the Culture Lounge and deck, new Administration area and Conference Room on Level two, while prioritizing public space on the ground floor at the original museum crossroads intersection. New glass display walls further animate the original circulation patterns by wrapping existing spaces. The new atrium space and level two catwalks are derived from the geometry of the original museum.

3.0 PROGRAM

Preserve Open Space

The Education Center was developed as a two story building to have a compact footprint and is primarily built on top of the existing one story southern portion of the museum. This maximizes the amount of exterior space that can be retained while creating dynamic new interior spaces. Overlapping decks, roofs and the PV canopy in effect create an exterior atrium where the line between interior and exterior is blurred creating new types of outdoor work, education and social spaces.

Preserve Outdoor Exhibit / Sculpture Garden Public Access

The new "art on-ramp" leads visitors through and over the courtyard, up to a new, partially shaded second level green roof / sculpture deck overlooking Old Town. The Administration Wing also has secure access to the roof deck / sculpture garden. The art on-ramp provides new programmatic opportunities for the museum such as the tactile gallery and existing sculpture tours while also creating new vantage points for looking at art and understanding the museum's relationship to Old Town and the city. The art on-ramp is constructed like a large trellis to help shade courtyard / education space below.

Connect New with Existing

In addition to preserving open space, building the new Education Center over the existing building brings all of the Education functions closer to the daily life of the museum increasing opportunities for interaction and exchange.

The roots for the Old Town connections are built into the original Predock museum diagram with the large gallery openings aligned with both the San Felipe del Norte Plaza and Patio Escondido to the west of the museum. These openings are retained and the staff research library space located at the south opening is re-purposed and opened up as a "gallery refuge" for visitors to rest and enjoy views of Old Town. The Old Town amphitheater is built into the building and provides a second exit off the sculpture deck and also a public gathering place for sunsets, tour meeting area as well as additional outdoor classroom space.

Education Center Identity

As the new Education Center is related but functionally different from the traditional museum experience, it has an additional challenge to communicate to the visitor while still working as part of an integrated museum whole. The Education Center does this by making its functional content visible either through use - such as visibility of kids working on projects in classrooms and in the courtyard, on a roof deck or through the murals and sculpture that define the Education Center spaces.

Part of the Education Center identity is also using the architecture to illustrate the sustainable design approach. This is evident in the PV canopy which provides summer shade to the courtyard and the water collection cisterns organized around the classrooms. Similar to the original Predock museum, the building works as an environmental teaching tool. Vine covered walls, garage doors that open classrooms to exterior and murals help the building further communicate its functional mission.



3.0 PROGRAM

3.1 Quick Facts

INDOOR PROGRAM SPACE

- 3,600 sf of classrooms
- 3,480 sf Culture Lounge / Education Gallery
- Dedicated Education Center Staff Offices



OUTDOOR PROGRAM SPACE

- 3,280 sf of dedicated, shade outdoor classroom space
- 2,450 sf Green roof / Sculpture Garden / Deck
- Art On-Ramp / Trellis + Old Town Overlook / Ramp / Bleachers + Old Town Amphitheater
- Culture Lounge Deck engaged with Courtyard below



SPACE ACTIVATION / VISITOR ENGAGEMENT

- New interior 2-story atrium providing visual connection between Ground Floor, Level 2 & exterior spaces
- Ground Floor prioritized for public / art / education interactions with larger gathering space and easy classroom identification
- **Dedicated student display area** in the south Lobby

IDENTITY

- Clear wayfinding & differentiation of program spaces
- Clear After Hours Entry / Group Entry for Education Center
- Clear Special Events Access

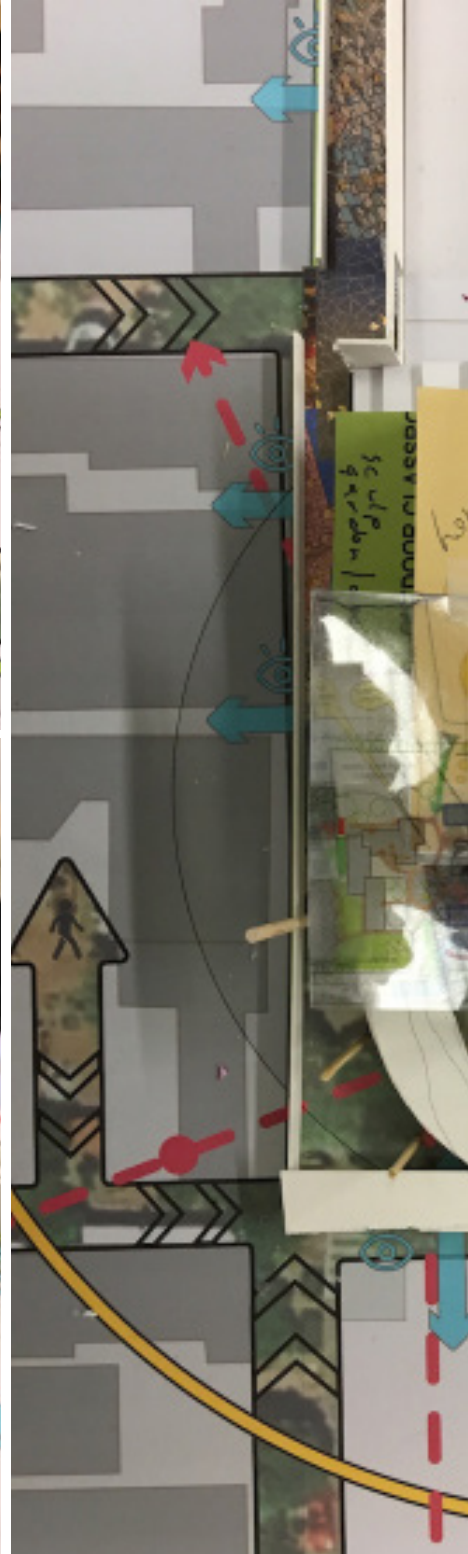
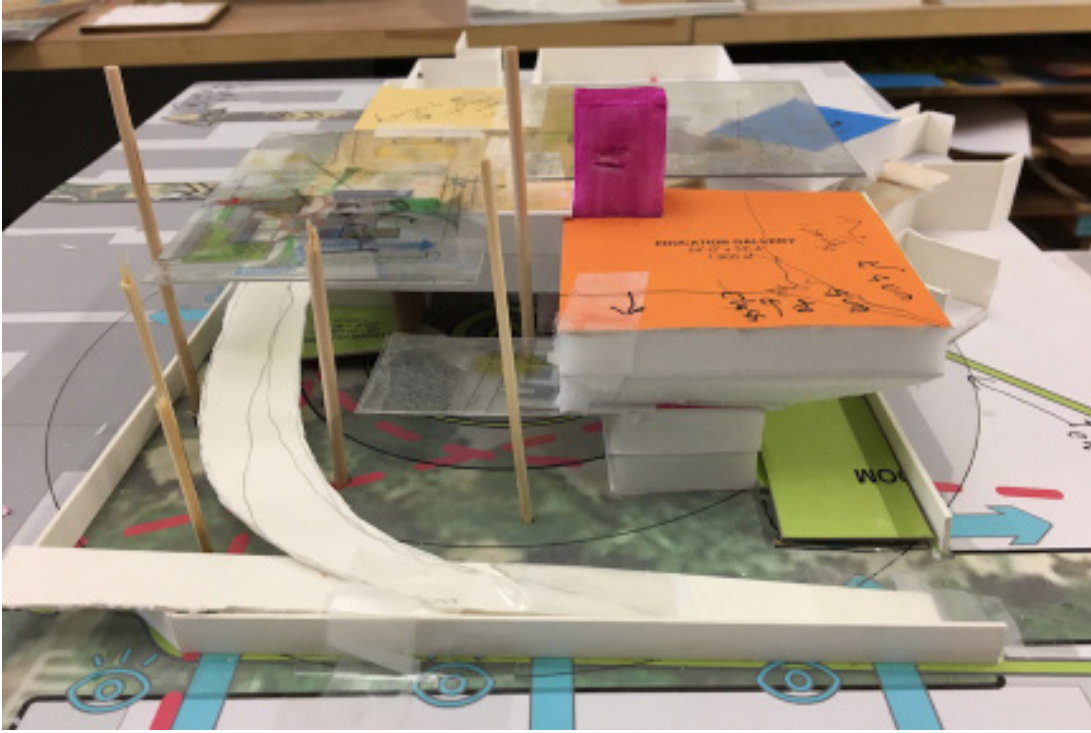
SUSTAINABILITY

- 30 - 60 kW Photovoltaic system
- Water harvesting system
- Low water use landscaping / shade trees

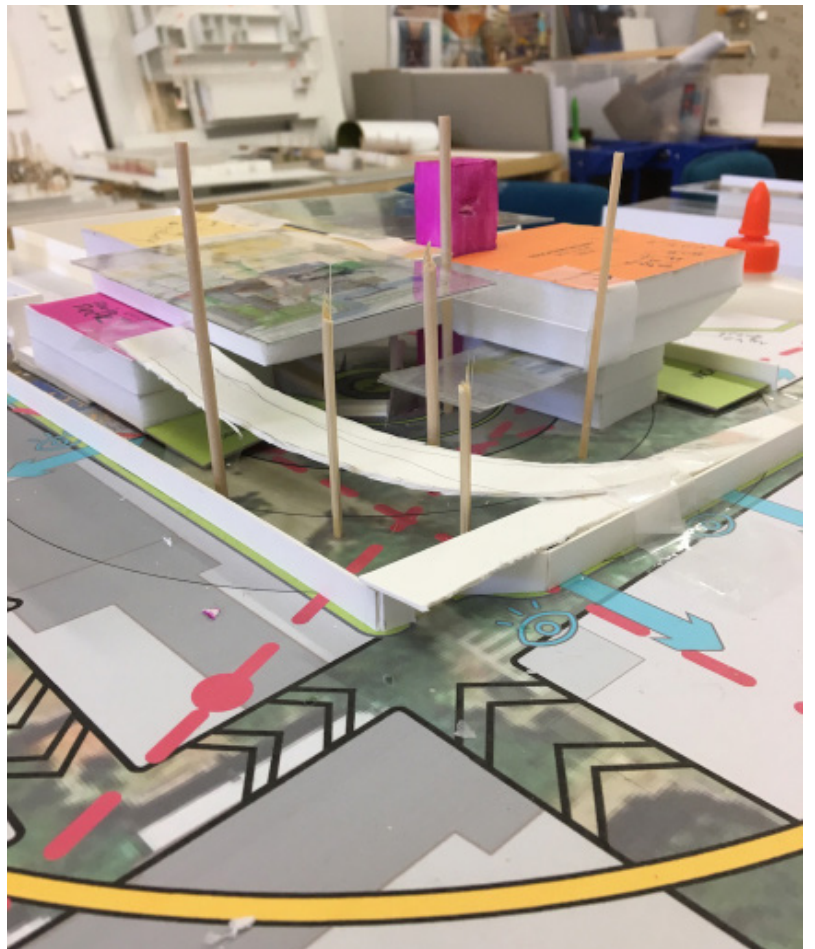


3.0 PROGRAM

3.2 Preliminary Concept Model, January 2018

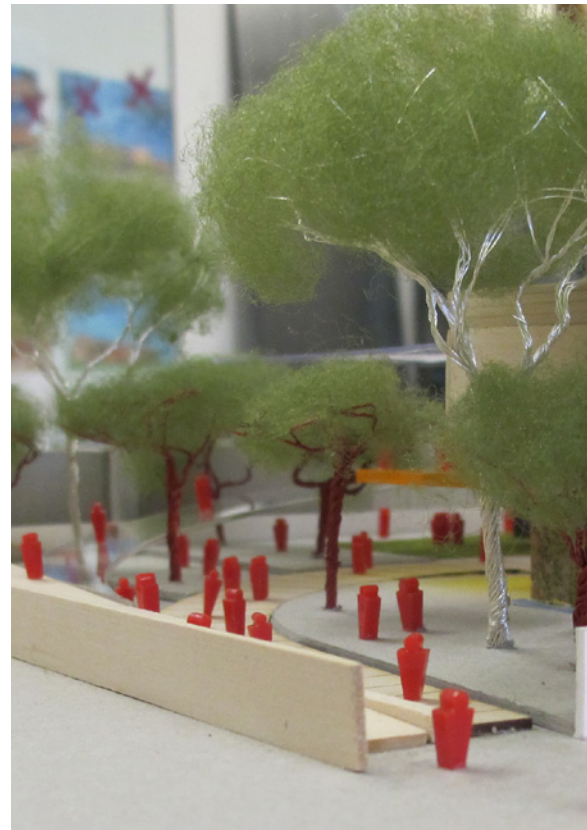


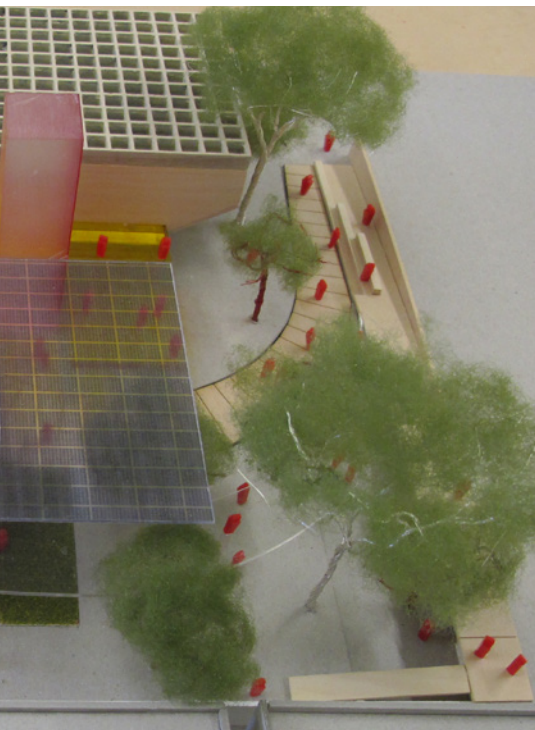
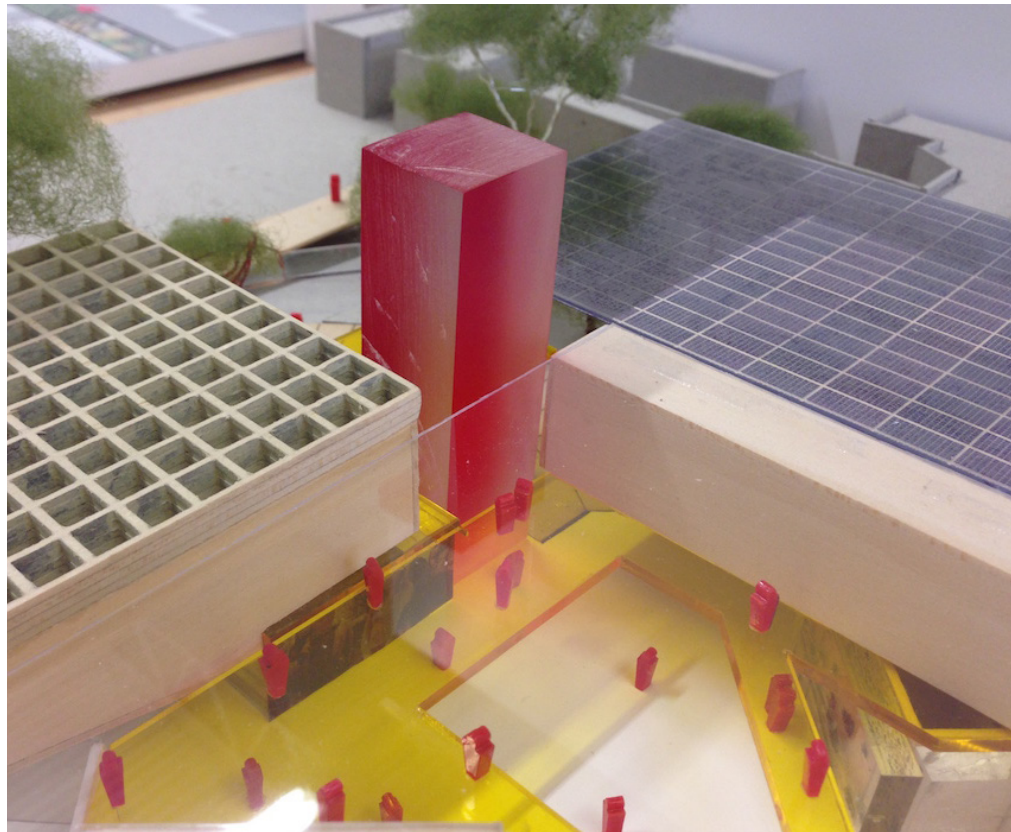
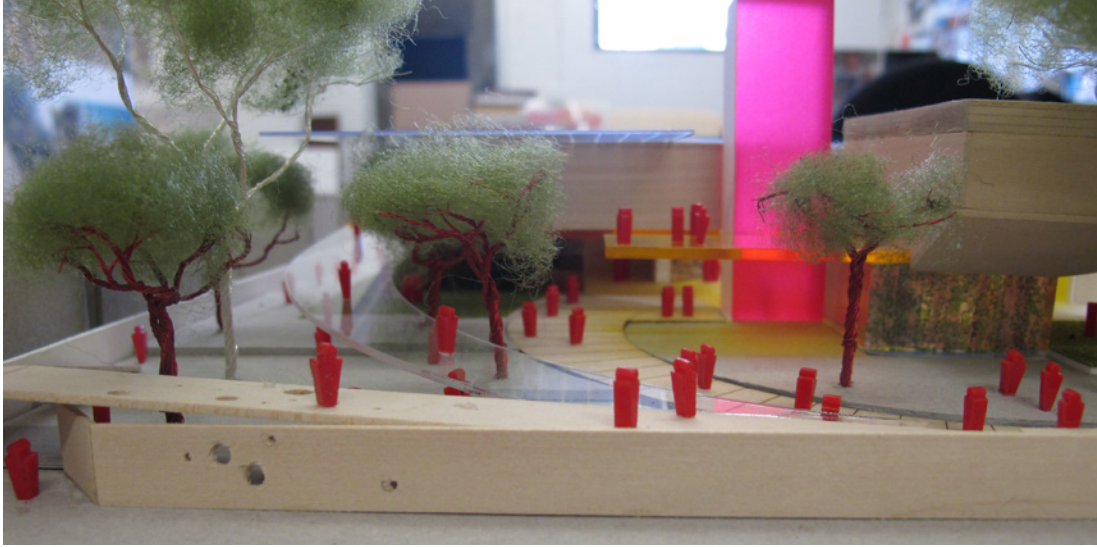
3.0 PROGRAM



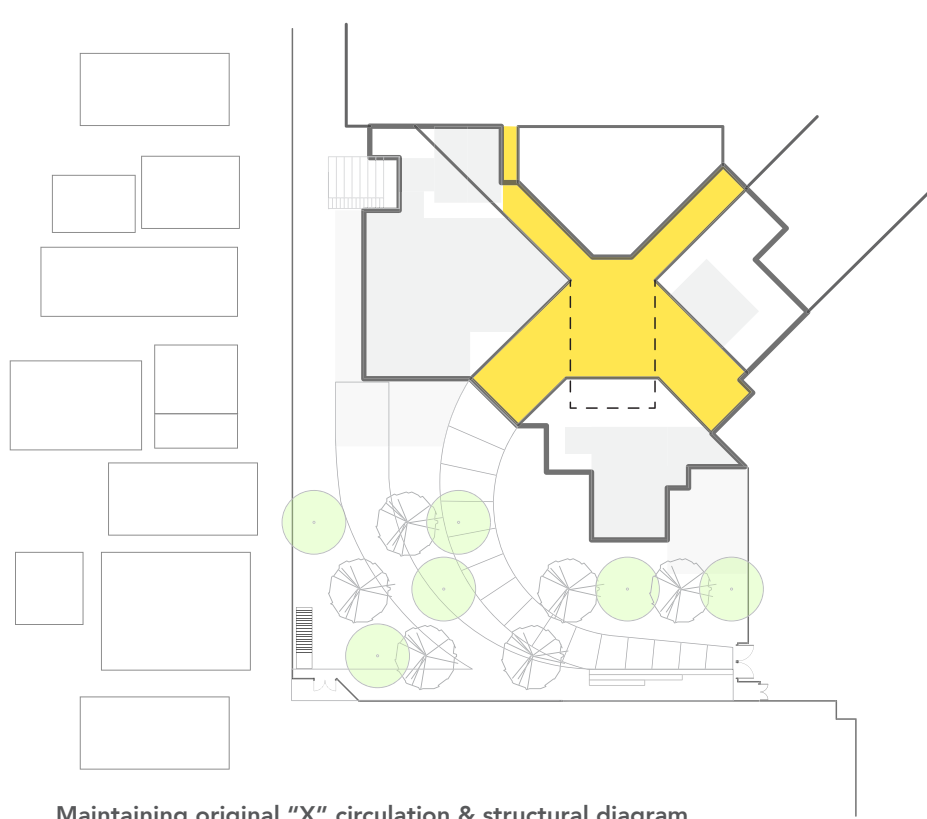
3.0 PROGRAM

3.2 Final Concept Model, March 2018

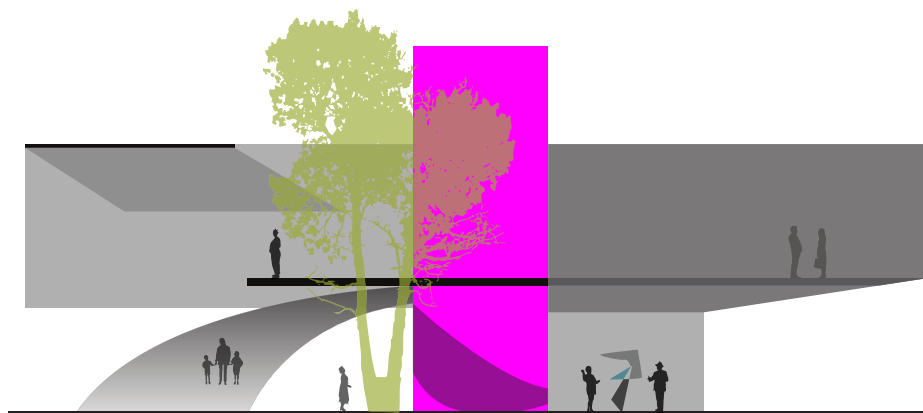




3.0 PROGRAM

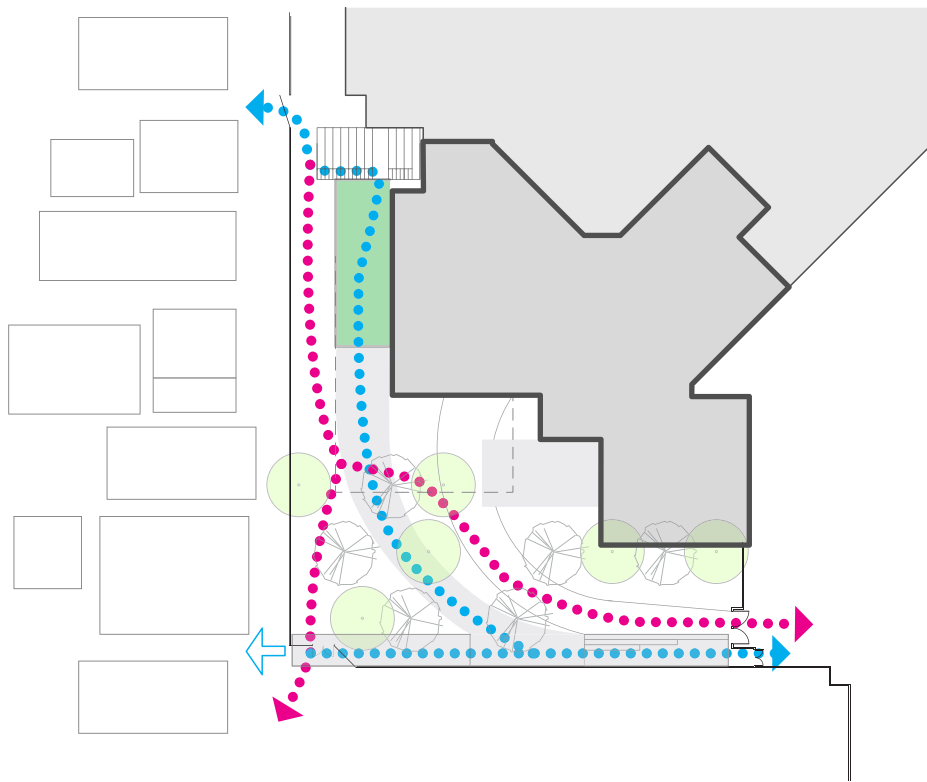


Maintaining original "X" circulation & structural diagram



Preserve open space (exterior atrium)

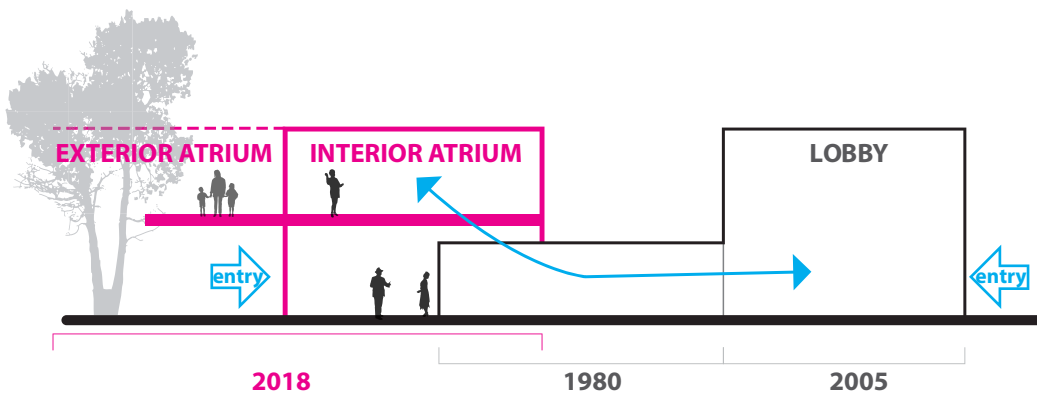
3.0 PROGRAM



Free outdoor exhibit route

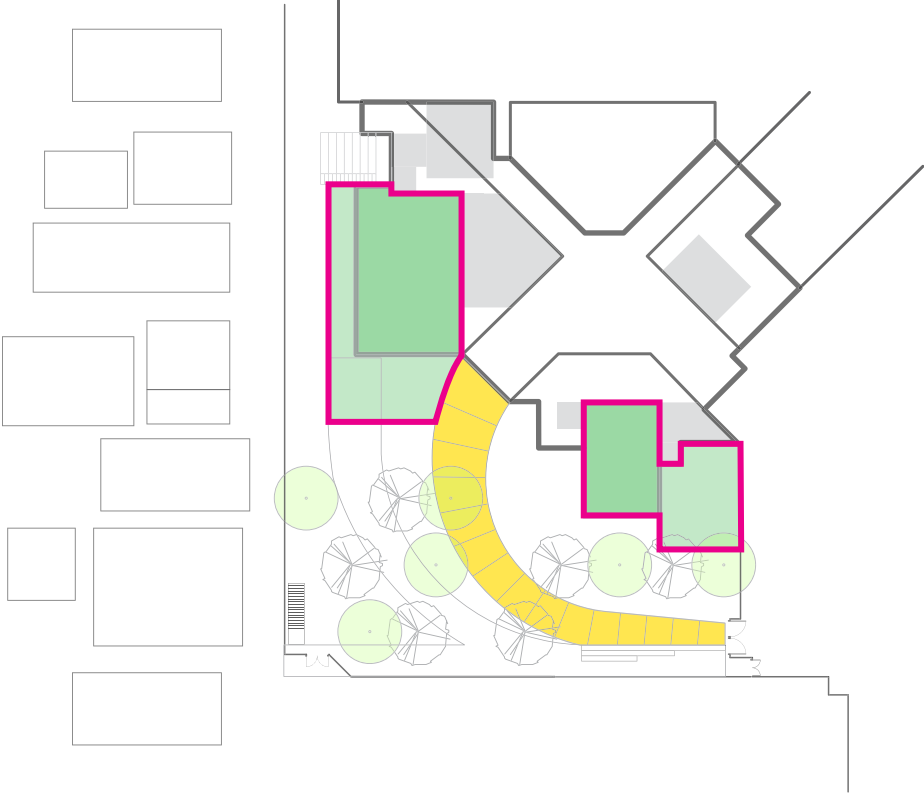
Ramp to Old Town Overlook and Sculpture Deck / Green Roof

Routes through Courtyard to Old Town



Connect new with existing

3.0 PROGRAM



Education Center / after hours entry
(classroom with address at entry)



LEGEND

	Building Entrance
	Room Entrance
	Demo

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 505 232-2520 samsterlingarchitect.com

Albuquerque Museum of Art & History Education Center
 2000 Mountain Rd NW
 Albuquerque, New Mexico 87104
 PHASE: Program
 DATE: March 21, 2018
 REV:

1 Ground Floor Diagram
 Scale: 3/32" = 1' - 0"

A.1 Ground Floor Diagram



- Legend**
- Deck Access
 - Room Entrance
 - Sliding Wall/Flexible Access

SSA
 SAM STERLING ARCHITECTURE, llc
 924 2nd Street NW Suite C Albuquerque, New Mexico 87102
 505.252.2520 samsterling@starchitecture.com

Albuquerque Museum of Art & History Education Center
 2000 Mountain Rd NW
 Albuquerque, New Mexico 87104
 PHASE: Program
 DATE: March 21, 2018
 REV:

1 Second Floor Diagram
 Scale: 3/32" = 1' - 0"

A.2 Second Floor Diagram

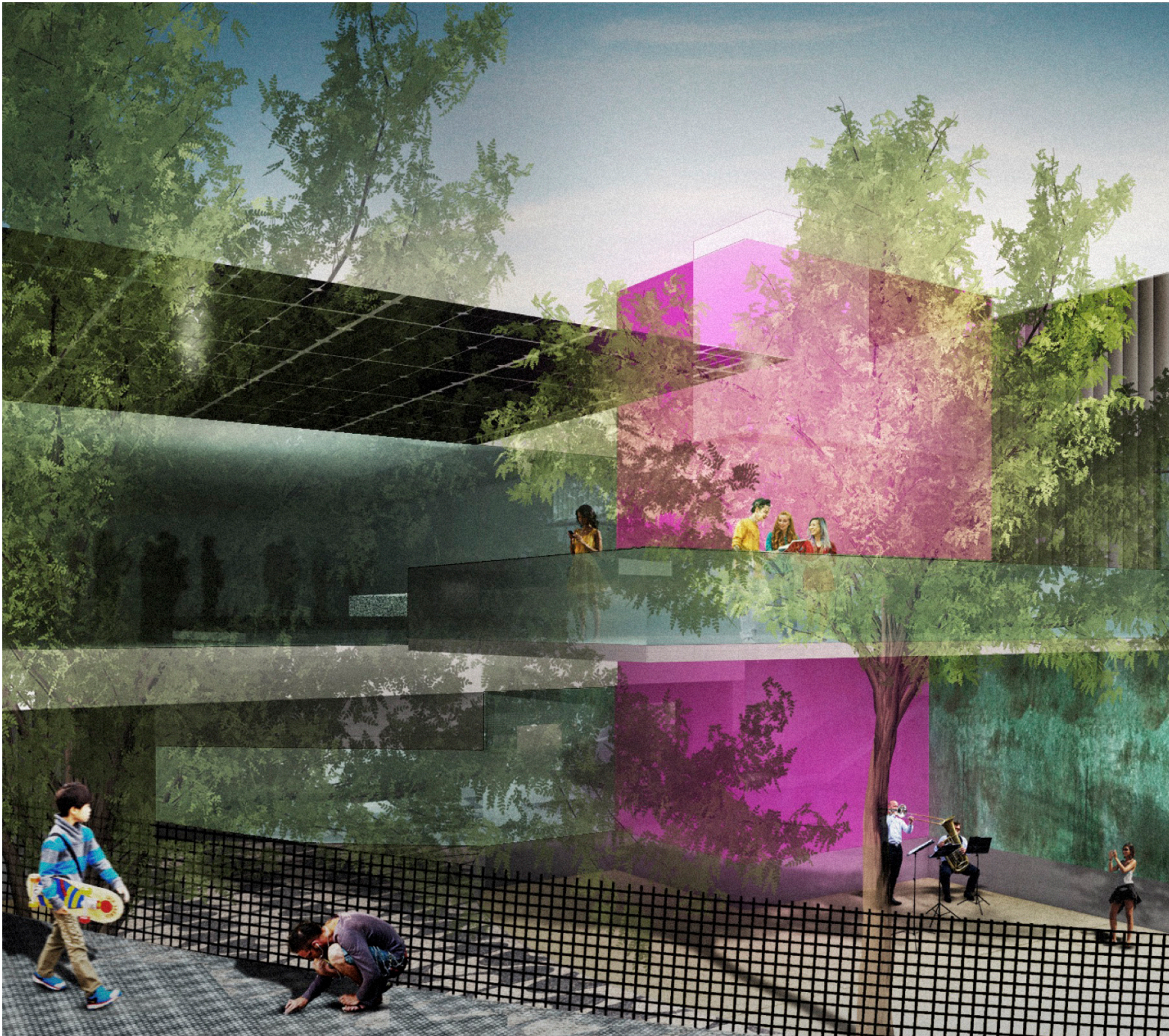
3.0 PROGRAM



Education Center entry / Courtyard



3.0 PROGRAM



View from Art On-Ramp to Education Center Entry / Atrium



3.0 PROGRAM



Corridor to Education Center Atrium



Education Center Atrium





Culture Lounge

3.0 PROGRAM

3.3 Building Program / Space Data Sheets

Building Program						
Rm ID	Space	# Spaces	@	Net SF	Total NSF (per Program)	
100	Classroom 1 (for 30)	1	@	1,200	1,200	
	Kid Gallery	1	@	325	325	
101	Classroom 2 (for 60)	1	@	2,400	2,400	
102	Staff Offices (for Teachers)	1	@	1,280	1,280	
200	Administration Suite (incl Break Room, Copy Room, Research Library)	1	@	5,074	5,074	
201	Culture Lounge	1	@	3,480	3,480	
202	Shared Work Space / Conference Rm	1	@	900	900	
Net Assignable Area SF					14,659	

TARE						
100A	Creative Studio / Classroom 1 RR	1	@	64	64	
101A	Creative Studio / Classroom 2 RR	1	@	64	64	
104	Women's Public RR (Ground Floor)	1	@	370	370	
105	Men's Public RR (Ground Floor)	1	@	370	370	
107	IT Room	1	@	165	165	
108	Custodial	1	@	93	93	
200A	Women's Staff RR (Admin Wing)	1	@	165	165	
200B	Men's Staff RR (Admin Wing)	1	@	165	165	
203	Women's Public RR (Level 2)	1	@	156	156	
204	Men's Public RR (Level 2)	1	@	156	156	
205	Custodial	1	@	140	140	
AA	Circulation Ground Floor	1	@	6,000	6,000	
BB	Circulation Level 2	1	@	4,100	3,370	
					11,278	

TOTAL GROSS SQUARE FOOTAGE	25,937
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Exterior Spaces						
E-100	Outdoor Classroom Space	1	@	1,140	1,140	
E-101	Outdoor Classroom Space	1	@	2,140	2,140	
					3,280	

***Existing Museum SF**
 Ground Floor: 87,675
 Basement: 29,222
TOTAL: 116,897

* Total Addition NSF	
Ground Floor:	1,300
Level 2:	15,730
	17,030

3.0 PROGRAM

aM Education Center Program SPACE DATA SHEET

SPACE NAME	SIZE (SF)
100 Creative Studio / Classroom 1	1,200

DESCRIPTION

This space is envisioned as a small art classroom accommodating up to 25 seated children or adults. The space will offer art classes on painting, drawing, sculpting and other multi-media projects. The space should accommodate art sinks, storage space for art supplies and technology, a flexible display and drying area and the ability to project digital images on a screen. After-hours access to this space through a secure door is preferred.

OCCUPANTS

1. 25 children / 5 adults seated around tables

ADJACENCIES:

1. 103 Creative Studio Staff Offices
2. 100B Outdoor Classroom (direct access)
3. Sculpture Garden (direct access)

ACCESS

1. Controlled access to museum visitors for classes and special events.

COMPONENTS

1. Storage closets & casework
2. Stackable / flexible tables & chairs (child & adult-sized furniture)
3. Display shelving / pin-up walls
4. Black-out shades
5. Flat files for supplies & art storage
6. Large overhead or sliding door to exterior
7. Rolling storage carts to take outside
8. "Time-out" space
9. Natural light
10. Natural materials
11. Neutral palette
12. Low ceiling

MEP SYSTEMS

1. Charging station for personal devices
2. Counter-mounted receptacles for craft guns and other hand-held equipment
3. Dimmable LED lights & track lighting
4. Large sinks

TECHNOLOGY

1. Internet access
2. Projector / Projection screen

EXTERIOR SPACE

1. 100B Outdoor Classroom.
 - Defined with minimal enclosure
 - Direct connection to interior classroom.
 - Outdoor sink & electrical power

3.0 PROGRAM

aM Education Center Program SPACE DATA SHEET

SPACE NAME	SIZE (SF)
101 Creative Studio / Classroom 2	2,400

DESCRIPTION:

This space is envisioned as a flexible classroom space accommodating up to seated 60 children or adults. This space will present multiple activities including art projects for large group school tours, drop in art classes for adults and families, artist demonstrations, community art projects and teacher workshops. The space should also accommodate art sinks, digital projection of images on a screen, and storage spaces for art supplies, technology, school back packs, and excess furniture (chairs and tables not in use). Direct access to the outdoor sculpture garden from this space is preferred as well as after-hours access through a secured door.

OCCUPANTS

1. 60 children seated around tables (Magic Bus school tours)
2. Up to 60 children / adults / families seated around tables

ADJACENCIES

1. 103 Creative Studio Staff Offices
2. 101B Outdoor Classroom (direct access)
3. Sculpture Garden (direct access)

EXTERIOR SPACE

1. Outdoor Classroom

ACCESS

1. Controlled access to museum visitors for classes and special events.

COMPONENTS

1. Storage cubbies for students / tour groups
2. Storage closets & casework
3. Stackable / flexible tables & chairs (child & adult-sized furniture)
4. Display shelving / pin-up walls
5. Black-out shades
6. Flat files for supplies & art storage
7. Large overhead or sliding door to exterior
8. Rolling storage carts to take outside
9. "Time-out" space
10. Natural light
11. Natural materials
12. Neutral palette
13. Low ceiling

MEP SYSTEMS

1. Charging station for personal devices
2. Counter-mounted receptacles for craft guns and other hand-held equipment
3. Dimmable LED lights & track lighting
4. Large sinks

TECHNOLOGY

1. Internet access
2. Projector / Projection screen

EXTERIOR SPACE

1. 101B Outdoor Classroom.
 - Defined with minimal enclosure
 - Direct connection to interior classroom.
 - Outdoor sink & electrical power

3.0 PROGRAM

aM Education Center Program SPACE DATA SHEET

SPACE NAME	SIZE (SF)
102 Education Center Staff Offices	900

DESCRIPTION

For two permanent staff members. This space might also accommodate working and storage space for temporary teaching staff, interns and volunteers who assist with the Education Center activities.

OCCUPANTS

1. 2 Full-time staff
2. 2 - 4 Interns / volunteers

ADJACENCIES:

1. 101 Creative Studio / Classroom 2

ACCESS

1. Limited access to aM staff and authorized personnel

COMPONENTS

1. Storage casework
2. Pin-up walls
3. Natural light
4. Natural materials
5. Neutral palette

MEP SYSTEMS

1. Dimmable LED lights & track lighting

TECHNOLOGY

1. Internet access

EXTERIOR SPACE

1. Sculpture Garden

3.0 PROGRAM

aM Education Center Program

SPACE DATA SHEET

3,480

SPACE NAME

SIZE (SF)

201	Culture Lounge / Education Gallery	3,480
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DESCRIPTION

This space is envisioned as a flexible gallery that integrates displays of original artwork and artifacts along with hands on activities. The interactive space will accommodate a range of small group activities for both families and adults related to the original works on display. The space should accommodate displays of 2D objects hung on walls and 3D objects in floor cases and arrangements of tables and chairs for small groups, as well as projects that include sound and video. Storage space art supplies as well as for excess tables and chairs is also desired.

OCCUPANTS

1. x

ADJACENCIES:

1. Terrace

ACCESS

1. Accessible to museum visitors during regular Museum hours and during special events.

COMPONENTS

1. "Time-out" space
2. Contained tactile play zone (for toddlers)
3. Browsing library
4. Parent zone
5. Storage closets & casework
6. Stackable / flexible tables & chairs (child & adult-sized furniture)
7. Display shelving / pin-up walls
8. Black-out shades
9. Flat files for supplies & art storage
10. Large overhead or sliding door to exterior
11. Rolling storage carts to take outside
12. Natural light
13. Natural materials
14. Neutral palette
15. Low ceiling

MEP SYSTEMS

1. Charging station for personal devices
2. Counter-mounted receptacles for craft guns and other hand-held equipment
3. Dimmable LED lights & track lighting
4. Large sinks

TECHNOLOGY

1. Internet access
2. Projector / Projection screen
3. Audio system

EXTERIOR SPACE

1. 100B Outdoor Classroom

3.0 PROGRAM

aM Education Center Program SPACE DATA SHEET

SPACE NAME	SIZE (SF)
202 Shared Work Space / Conference Room	900

DESCRIPTION

This space

OCCUPANTS

- 1 - 12 Staff / interns / volunteers
- 1 - 12 aMF Board Members

ADJACENCIES:

1. Work Space / Conference Room deck.

ACCESS

1. Limited to aM / aMF staff and authorized personnel.

COMPONENTS

1. Conference table / chairs
2. Storage casework
3. Pin-up walls
4. Natural light
5. Natural materials
6. Neutral palette

MEP SYSTEMS

1. Dimmable LED lights & track lighting

TECHNOLOGY

1. Internet access
2. Projector / projection screen
3. Audio system

EXTERIOR SPACE

1. Shared Workspace / Conference Room Deck

4.0 WORKSHOPS / TOURS / MEETINGS

4.1 List of Workshops / Tours / Meetings

1. December 5, 2017: Project Kick-Off Meeting
2. December 15, 2017: HVAC / Building Systems Tour
3. December 15, 2017: Facilities Tour
4. December 21, 2017: Case Study Review
5. January 11, 2018: Workshop #1
6. January 17 - 18, 2018: Workshop #2
7. January 30, 2018: Sculpture Garden Tour
8. February 2, 2018: Museum School Art Class Observation
9. February 13, 2018: Program Concept Review Meeting

4.0 WORKSHOPS / TOURS / MEETINGS

4.2 Facilities Tour

December 15, 2017 at the Albuquerque Museum

SSA's entire design team was led on a tour of the aM by Elizabeth Becker - Curator of Education, Andrew Connors - Curator of Art - Stephen Hutchins, Curator of Collections and Deb Slaney - Curator of History

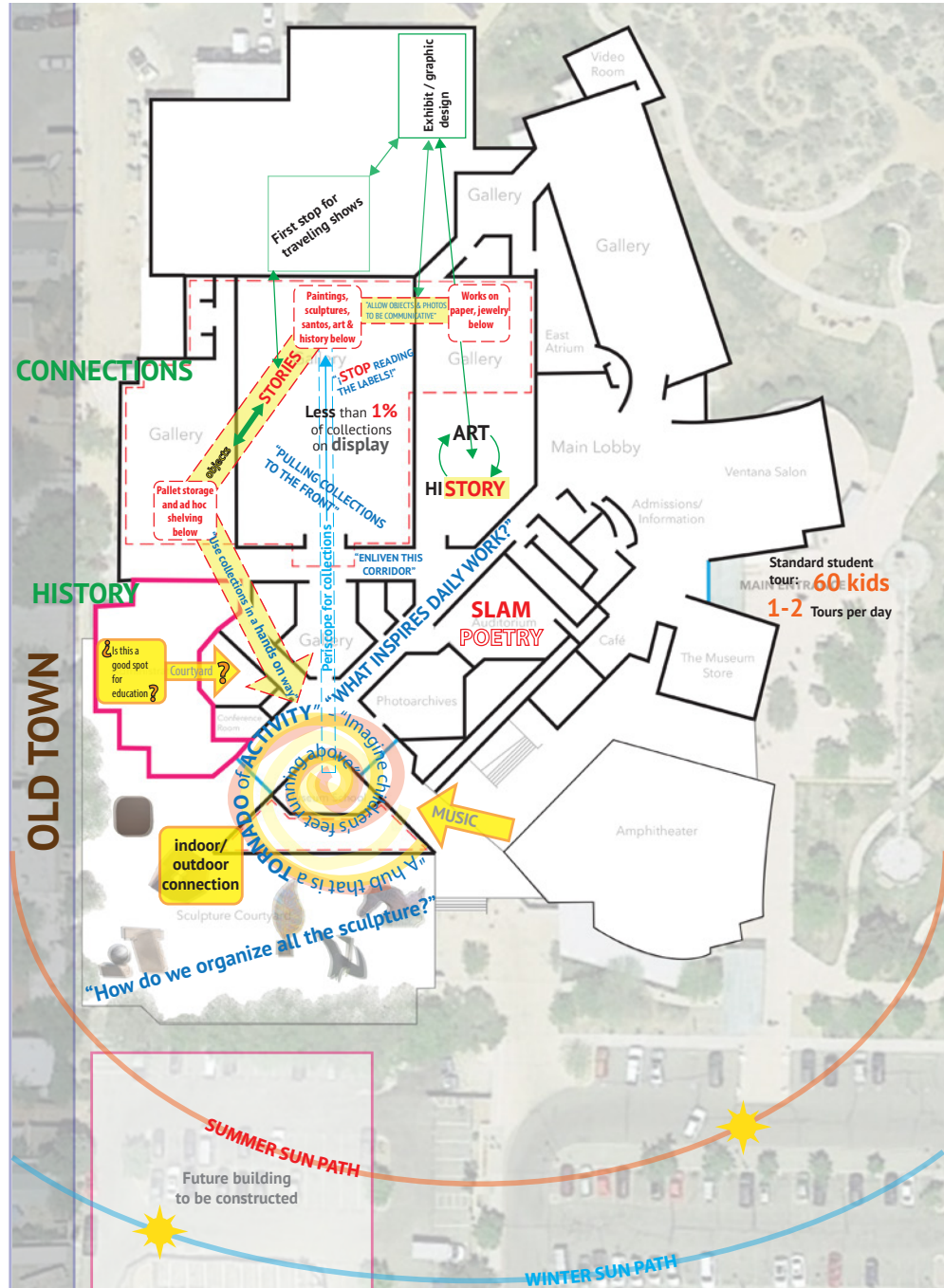
The Facilities Tour was an in-depth walk-through of the museum's supporting spaces; collections basement (three large vaults of stored art and historical artifacts), exhibit design workshop, graphic & exhibit design department, exhibit in-take, and crate storage. Seeing how the museum works behind the scenes, and being able to connect with a large portion of stored art/historical artifacts provided the SSA team with a rich context to which the Education Center will connect.



4.0 WORKSHOPS / TOURS

4.2 "What We Heard"

After the Facilities Tour, SSA distilled the information, desires, challenges and questions discussed during the tour into the "What We Heard" diagram below. With valuable input from our aM guides, we identified a centralized "tornado of activity" in the south lobby, identified the existing and potential connections between the galleries, collection storage and the classroom, and gained a better understanding of how the daily operations of the museum - including school tours, exhibit design / set-up and how the typical experience of a museum visitor unfolds.



4.0 WORKSHOPS / TOURS



4.0 WORKSHOPS / TOURS



4.0 WORKSHOPS / TOURS / MEETINGS

4.3 Workshop #1: Concepts / Case Studies / Wayfinding

December 15, 2017 at Sam Sterling Architecture

SSA hosted a programming workshop on January 11, 2018 where aM and aMF staff, APS art instructors, local artists and families regularly engaged with the aM Education School were invited to participate. The aim of this workshop was to provide a space for discussing the aspects of the program while brainstorming various ways of creatively resolving the program. The workshop was run as an open forum, with people offering suggestions to be discussed and contemplated by everyone. The strongest, most consistent theme throughout this first workshop was CONNECTIONS: connections between the Museum and Old Town, between museum visitors (children and adults) and the art / history collections, and between the Museum and the Education Program. The following paragraphs describe various ideas generated during the workshop.

Culture Lounge

The Culture Lounge is conceived of as being almost like a living room for the education spaces, and the Museum more generally. Discussion included topics such as the furniture (comfortable couches, lounge chairs), the feel of the space (welcoming, “a cool place for parents to hang out”, potential for exhibiting art work), and ceiling heights (there is a desire for this space to have higher ceilings than the education space). There was also brought up a desire for this space to connect back to the museum more generally - it should not be an island or satellite off on its own. Questions/ideas brought up during this part of the discussion: How do you engage with culture, history and art? How do you make the back of house front of house? Space to create and display art.

Educational Spaces

Two spaces are desired - one smaller and more rigid in terms of activities (a more instructional space with chairs around tables for art inspired activities), while the other space should be larger and more flexible - if there is an activity involving dance the tables and chairs can be removed, for example. As mentioned above, there is a desire for the ceiling to be lower in the education spaces, or even just to have some variety to help zone the room into small activity areas without compromising functionality. A variety of reasons were brought up in support for this desire - better acoustics, the ability to hang things, more ‘cozy’ feel. The aM staff brought up the desire for the Education Center to have a clearly-defined separate entry for limited access after hours so that they can host classes or workshops after the museum has closed. Questions/ideas brought up during this part of the discussion: Low walls, windows, a space that speaks to children; set up a two-way display case; the classic notion of the Library Pit - and then flip it to give children the promontory position and an “advantage over arbitrary adults”; chalk boards that can be raised and lowered for display; and spaces should be divided by materials, providing different feelings and allowing dynamic instruction - the difference between painting on a wooden floor, and sculpting on a brick floor, for example.





Outdoor Spaces

In hopes of designing outdoor space as opposed to it being an incidental leftover of designing the building, outdoor space was a large part of the discussion. The outdoor space should connect back to the museum and be an integral part of the museum experience. Even though the new program will impact the existing sculpture garden, there is a wish to maintain as much of that space as possible - both for outdoor educational opportunities and for general patrons to enjoy. Again, as related to the wider theme of connections, there was a lot of discussion around bringing that notion of half hidden, pocket plazas from Old Town into the museum's outdoor space. Currently, the east-facing sculpture garden is open to the public at all times - like a park. This is the only such garden in the Southwest region, and this open attitude should remain. With the strong southern exposure, an idea of growing an "Education Garden" was brought up. In hopes of preserving outdoor space, the idea of "going up" to preserve the open space of the south courtyard / sculpture garden was discussed to some extent. Questions/Ideas brought up during this part of the discussion: USDA Grant money available for making project sustainable, PV/Shade parking lot, cistern on roof/garden, PV panels on roof, etc. (Gabe mentioned this potential). "Height is good, but don't forget the [existing] museum!" Education garden can be a gathering space, has the potential to be dynamic. Allow sculpture to bring people up to multi-level spaces.

Interesting Ideas

1. Tactile Gallery - Could a path of nichos containing touchable objects be developed inside the museum to help guide kids in an exploration of museum content?
2. The role of technology:
 - While the Museum favors handmade and analog media, there is a desire for distance learning (via Skype, for example).
 - Ideum® touch tables.
 - Digital record of artwork created in classes to be maintained indefinitely - the hope being that a parent can one day take his or her child to the museum and share artwork that the parent created all those years ago.
 - Projecting images on the exterior walls of the museum, showing art created in the classrooms to advertise programming in the Education Center.
3. Wider use of color, for example throughout Old Town (and the city), to act as "bread crumbs" leading back to the museum and possibly connect to museum branding concepts.
4. "Hiking through the building" - a choreographed trail through the galleries, exhibits and collections to expand the education experience out of the classroom.

4.0 WORKSHOPS / TOURS / MEETINGS



4.0 WORKSHOPS / TOURS / MEETINGS

4.4 Workshop #2: Open House / Community Charrette December 17 & 18, 2017 at the Albuquerque Museum

The SSA team moved a portion of their office to the Museum (in the Ventana Salon) kicking off a two-day open house / charrette. The first day was primarily spent discussing the scope of the project and familiarizing passersby with what the aM is aiming to accomplish. A collection of models and program blocks helped SSA explain the scope, and enabled museum visitors to engage with the project, providing feedback and ideas for resolution. The first day could be considered as a day for disseminating and gathering information.

For day two of the charrette, SSA set up in the main lobby at the end of the corridor axis that connects the lobby to the south courtyard / sculpture garden. There was a steady flow of activity throughout the day - museum visitors and children attending art class accompanied by parents. There was also a Third Thursday event, enlivening the evening with artist, music and more visitors. The experience of having this second workshop at the Albuquerque Museum was invaluable for the information gathered, as well as the time spent participating in, and getting a better idea of, the general Museum culture.



4.0 WORKSHOPS / TOURS / MEETINGS



4.0 WORKSHOPS / TOURS / MEETINGS

4.5 Sculpture Garden Tour

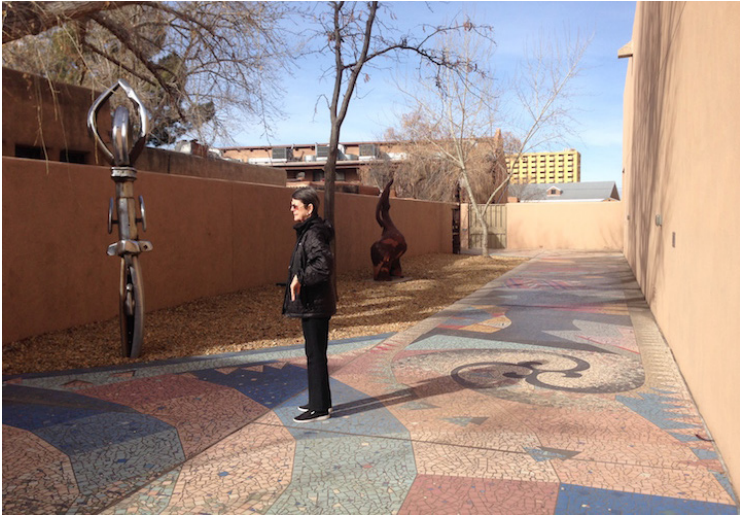
January 30, 2018 at the Albuquerque Museum

SSA team members spent the better part of an afternoon with aM and Old Town docents Joe and Mary McKinney to get a tour of the Sculpture Garden and surrounding Old Town. The tour was focused on the gated courtyard at the south side of campus (the proposed location for the Education Center) and along the west side of campus adjacent to Old Town.

Joe and Mary shared some background information on the sculptures, giving SSA a better understanding of the historical side to the sculpture collection, including the four gates in the south courtyard. In addition to providing context to the art, Joe and Mary shared useful information regarding how a typical Sculpture Garden or Albuquerque Old Town tour functions. This insight will prove beneficial in designing program that will ultimately affect the area surrounding the southern Sculpture Garden.



4.0 WORKSHOPS / TOURS / MEETINGS



4.0 WORKSHOPS / TOURS / MEETINGS

4.6 Museum School Art Class Observation

February 2, 2018 at the Albuquerque Museum

Members of the SSA team visited a Museum School Art Class conducted by Ophelia Adelia Cornet - Head Educator, to better understand how the instructors and students use the art space. Through observing the class, SSA took note of how different activities were conducted in various parts of the room; introduction/attendance was performed as a group sitting on the floor in a cozy corner, the instructor demonstrated a new technique at a lone table with all the students gathered around, and finally, students practiced that new technique at a group of tables centered in the room. Observing the class in action supported a notion brought up at Workshop #1 (January 11, 2018) which was that of providing different spaces for various activities in the classrooms. Furthermore, SSA was able to notice the visual connection between the classroom and an adjacent lobby where parents wait for their children, which is something that should be maintained in the new program.

In talking with Ophelia, a couple good points were brought up in regard to conducting art classes. Currently, the sink is against a wall and when the instructors need to clean supplies, their back is to the students. As a result, the instructors desire an island/ sink station for demonstrations and clean-up to better engage with the students throughout all aspects of the class. As mentioned above, the visual connection with the adjacent lobby is a benefit. However, the current classroom also maintains an auditory connection to the surrounding museum, which was described as distracting for the students, and should be mitigated in the new program. Finally, the instructor expressed a desire for an in-class projector for showing art history lectures, sharing digital images and videos and creating presentations of student work.





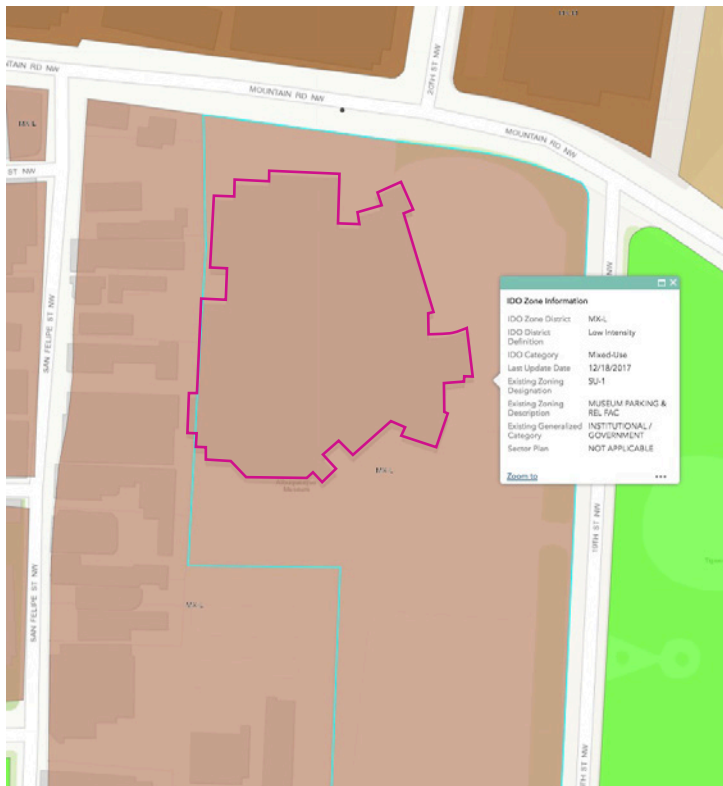
Hands-on



5.0 ZONING / CODE ANALYSIS

In November, 2017, the City of Albuquerque and Bernalillo County voted to adopt an updated Comprehensive Zoning Plan and newly created Integrated Development Ordinance (IDO). The IDO will become effective on May 18, 2018. Any project permitted after this date will need to comply with the IDO. This project is assumed to fall under IDO guidelines.

	IDO Zoning	Current Zoning
Zone District / Designation	Mixed-Use Low Intensity (MX-L)	SU-1
District Definition	Low Intensity	N / A
Zoning Description	N / A	Museum, Parking and Related Facility
Category	Mixed-Use	Institutional / Government
Sector Plan	N / A	Sawmill - Wells Park



Neighborhood Associations:

1. Historic Old Town Property Owners Association
2. Old Town Albuquerque Merchants Residents and Landlords Association
3. Old Town Business Association, Inc

IDO Zoning Districts

■ MX-FB-UD, -FX, -ID MIXED USE - FORM BASED DOWNTOWN DISTRICTS	■ NR-GM NON-RESIDENTIAL - GENERAL MANUFACTURING	■ PD PLANNED DEVELOPMENT	■ PC PLANNED COMMUNITY
■ MX-H MIXED USE - HIGH INTENSITY	■ NR-LM NON-RESIDENTIAL - LIGHT MANUFACTURING	■ R-1A, R-1B, R-1C, R-1D RESIDENTIAL SINGLE-FAMILY DETACHED	
■ MX-L MIXED USE - LOW INTENSITY	■ NR-PO-A CITY-OWNED OR MANAGED PUBLIC PARKS	■ R-A RURAL AND AGRICULTURAL	
■ MX-M MIXED USE - MODERATE INTENSITY	■ NR-PO-B MAJOR PUBLIC OPEN SPACE	■ R-MH RESIDENTIAL MULTIFAMILY - HIGH DENSITY	
■ MX-T MIXED USE - TRANSITION	■ NR-PO-C NON-CITY PARKS OR OPEN SPACE	■ R-ML RESIDENTIAL MULTIFAMILY - LOW DENSITY	
■ NR-BP NON-RESIDENTIAL - BUSINESS PARK	■ NR-PO-D CITY BIOPARK	■ R-MC MANUFACTURED HOME COMMUNITY	
■ NR-C NON-RESIDENTIAL - COMMERCIAL	■ NR-SU SENSITIVE USE	■ R-T RESIDENTIAL TOWNHOUSE	■ UNCL NOT CLASSIFIED

5.0 ZONING / CODE ANALYSIS

IDO Mixed-Use Low Intensity (MX-L) Zone District Standards

Dimensional Standards (IDO Table 2-4-3):

Setbacks:

Front: 5' minimum
Side: 0' minimum along interior /
5' minimum along side street
Rear: 15' minimum

Building Height:

35' maximum

Allowable Uses / Land Use Category (IDO Table 4-2-1): Museum or Art Gallery

Parking (IDO Table 5-5-1):

Off Street Parking Requirements:

3 spaces / 1,000 GSF

Building Design (IDO 5-11(D)):

Ground Floor Height:

12' minimum

Primary Building Façades: Each primary building façade facing a public street must incorporate at least 2 of the following features along at least 30% of the horizontal length of the façade. The features listed below shall be distributed along the façade so that each horizontal façade length of 40 linear feet contains at least one of the following features:

1. Ground floor display windows with sill height 30" max from finish floor.
2. Windows on upper floors.
3. Pedestrian entrances.
4. Elements that provide shade or protection from the weather (portals, trellises, awnings, etc).
5. Elements designed to reflect sunlight into the building (e.g. sun shelves).
6. Raised planters (12 - 28 inches above grade) with 75% vegetative cover at maturity.

Primary building façades longer than 100' must incorporate at least one of the following additional features:

1. Wall plane projections or recesses of at least 1 foot in depth.
2. Change in color, texture or material every 50 feet.
3. An offset, reveal, pilaster or projecting element no less than 2 feet wide projecting at least 6 inches from the façade every 30 feet.
4. 3-Dimensional cornice or base treatments.
5. Projecting gable, hip feature or change in parapet height.
6. Art such as murals or sculpture.

Outdoor Seating & Gathering Areas

Each primary building containing more than 30,000 square feet of gross floor area shall provide at least 1 outdoor seating and gathering area for every 30,000 square feet of building gross floor area, meeting all of the following standards:

1. Required seating and gathering area shall be at least 400 square feet in size for each 30,000 sf of gross floor area.
2. At least 25 percent of the required seating and gathering areas shall be shaded from the sun.
3. Seating and gathering area shall be provided with pedestrian-scale lighting, street furniture or seating areas, and trash receptacles.
4. Required seating and gathering area shall be linked to the primary entrance of the primary building and the public sidewalk or internal driveway or located adjacent to or to maximize views to public or private open space.

5.0 ZONING / CODE ANALYSIS

General Landscaping Standards (IDO 5-6(C)):

A landscape plan with designed landscaped areas shall be submitted as a part of all development applications where landscaping, buffering, or screening is required, unless the relevant decision-making body determines that compliance with the provisions of IDO Section 14-16-5-6 can be demonstrated without the use of a landscape plan. A landscape plan may be combined with other required application materials if compliance with IDO Section 14-16-5-6 can be demonstrated in the combined materials.

Minimum Landscape Area:

1. A minimum of 15 percent of the net lot area of each development shall contain landscaping.
2. Tree canopies and ground-level plants shall cover a minimum of 75 percent of the total landscape area as measured by canopy width or the area beneath the dripline of the mature size of the actual vegetation.
3. Of the required vegetative coverage, a minimum of 25 percent shall be provided as ground-level plants (shrubs, grasses, etc.) as measured of the mature size of the actual vegetation.
4. See also IDO Subsections 14-16-5-6(D) (Street Frontage Landscaping), 14-16-5-6(E) (Edge Buffer Landscaping), and 14-16-5-6(F) (Parking Lot Landscaping) for additional landscaping requirements.

HPO-5 Historic Old Town Development Standards & Guidelines (IDO14-16-3-4(J))

Historic Old Town Zone and in the 300 foot buffer zone surrounding Old Town:

Design Guideline #6: Contemporary design for new buildings and additions to existing buildings or landscaping in the 300 foot transition zone surrounding the Old Town Historic Zone should not be discouraged if such design is compatible with the size, scale, color, material, and character of the neighborhood, buildings, or its environment.



5.0 ZONING / CODE ANALYSIS

PRELIMINARY PROGRAM CODE ANALYSIS	
February 28, 2018	
aM Education Center Program	
2000 Mountain Rd NW	
Albuquerque, New Mexico 87104	

PROJECT GROSS SQUARE FOOTAGE	Existing	Addition	TOTAL PROJECT GSF
Total	8,907 gsf	17,030 gsf	25,937

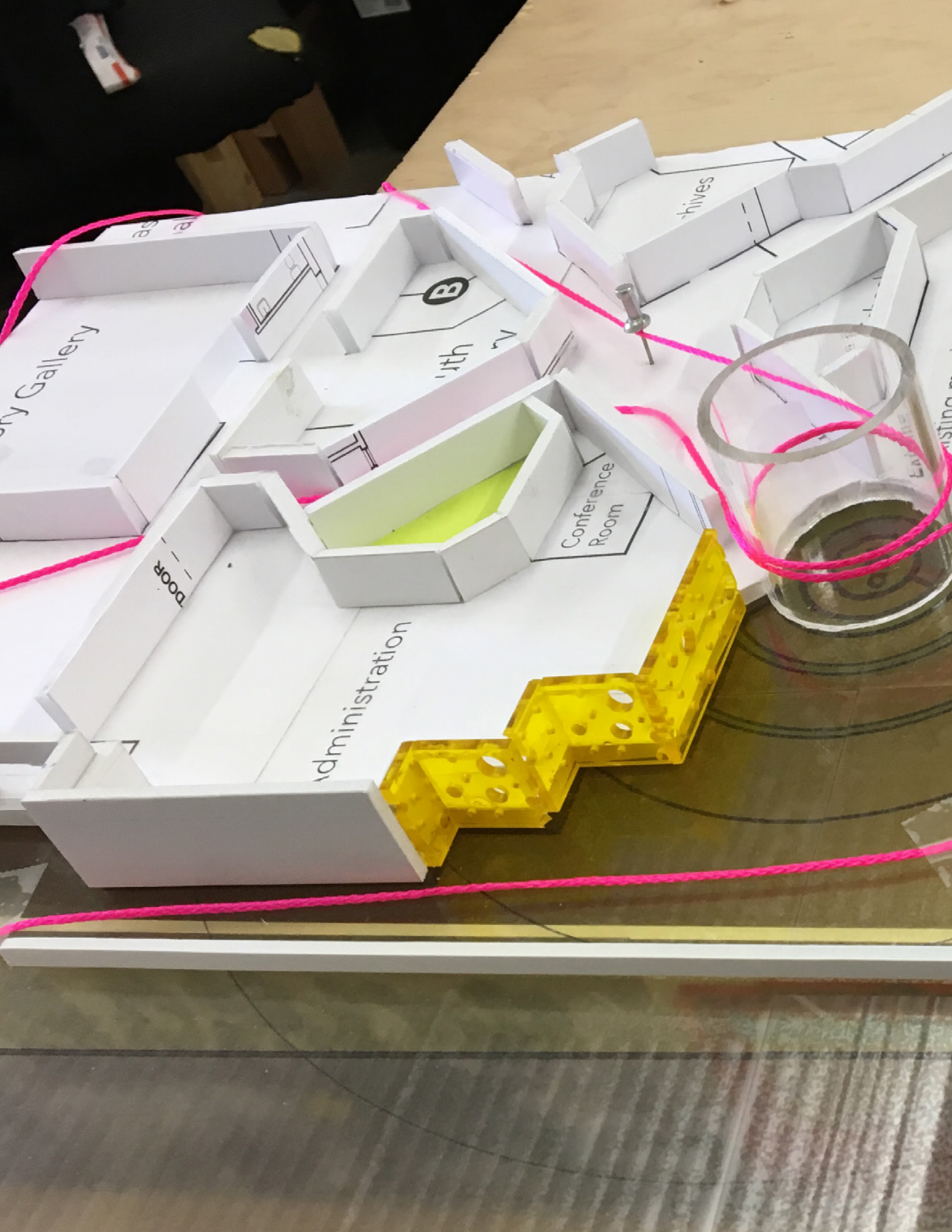
Applicable Codes (per CABQ Jan 1, 2018)	
	2018 City of Albuquerque Integrated Development Ordinance (IDO)
	2015 City of Albuquerque Uniform Administrative Code
	2009 New Mexico Commercial Building Code
	2012 New Mexico Plumbing Code
	2014 New Mexico Electrical Code
	2012 New Mexico Mechanical Code
	2015 International Building Code (IBC)
	2012 Uniform Mechanical Code
	2012 Uniform Plumbing Code
	2014 National Electrical Code
	2012 International Fire Code
	2009 New Mexico Energy Conservation Code
	ICC/ANSI A117.1-2003

JURISDICTION	
Code	City of Albuquerque - Public Institutional
Zoning	Mixed-Use Low-Density (MX-L)
Applicable Standards	N/A

OVERALL BUILDING ANALYSIS		ACTUAL
Occupancy	Assembly Group A-3 (A), IBC 2015, 303.4 Business Group B (B), IBC 2015 304.1	
<u>Most restrictive for non-separated use</u>	A	
Construction Type	II-B	
Allowable Floors	3	2
Allowable Area per Story - Sprinklered IBC 2015, Table 506.2	28,550 sf	
Allowable Area Total 3 Stories - Sprinklered IBC 2015, Table 506.2	85,500 sf	25,937 sf
Allowable Area as a Single Story - Sprinklered IBC 2015, Table 506.2	38,000 sf	
Fire Protection	Fully Sprinklered IBC 2015 903.1.1, NFPA 13	
Exit Access Travel Distance IBC 2015, Table 1017.2	250 feet	

OCCUPANCY LOAD IBC 2015 Table 1004.1.2				
Use	Area	Load Factor	Occupant Load	
Assembly (Gallery / Culture Lounge)	3,480	15	232 (per net sf)	
Business Areas (Offices, Classrooms, Shared Work Space)	11,260	100	113 (per gross sf)	
Total Occupant Load			345	

TOTAL PLUMBING LOAD COUNT (IBC 2015 Table 2902.1)					
	Total	Male	Female		
Occupant Load: Group A-3	232	116	116		
Occupant Load: Group B	115	57	57		
Plumbing Fixtures	W/C; Ur	W/C	Lav	Lav	Drinking Fountains
	Male	Female	Male	Female	
Group A-3 Ratio - (1 fixture per), IBC 2015 Table 2902.1	125	65	200	200	1 per 500
Required	1	2	1	1	1
Group B Ratio - (1) fixture per), IBC 2015 Table 2902.1	25	25	40	40	1 per 100
Required	3	3	3	3	2
Total Required	3	3	3	3	3
Provided	3	3	3	3	4
Required Family RR (W/C & Lav) IBC 2015 1109.2.1	1				
Provided Family RR	2				
Total Provided W/C	8				
Total Provided Lav	8				
Service Sink (1 required)	2				



Gallery

ad
al

B

with
TV

Hives

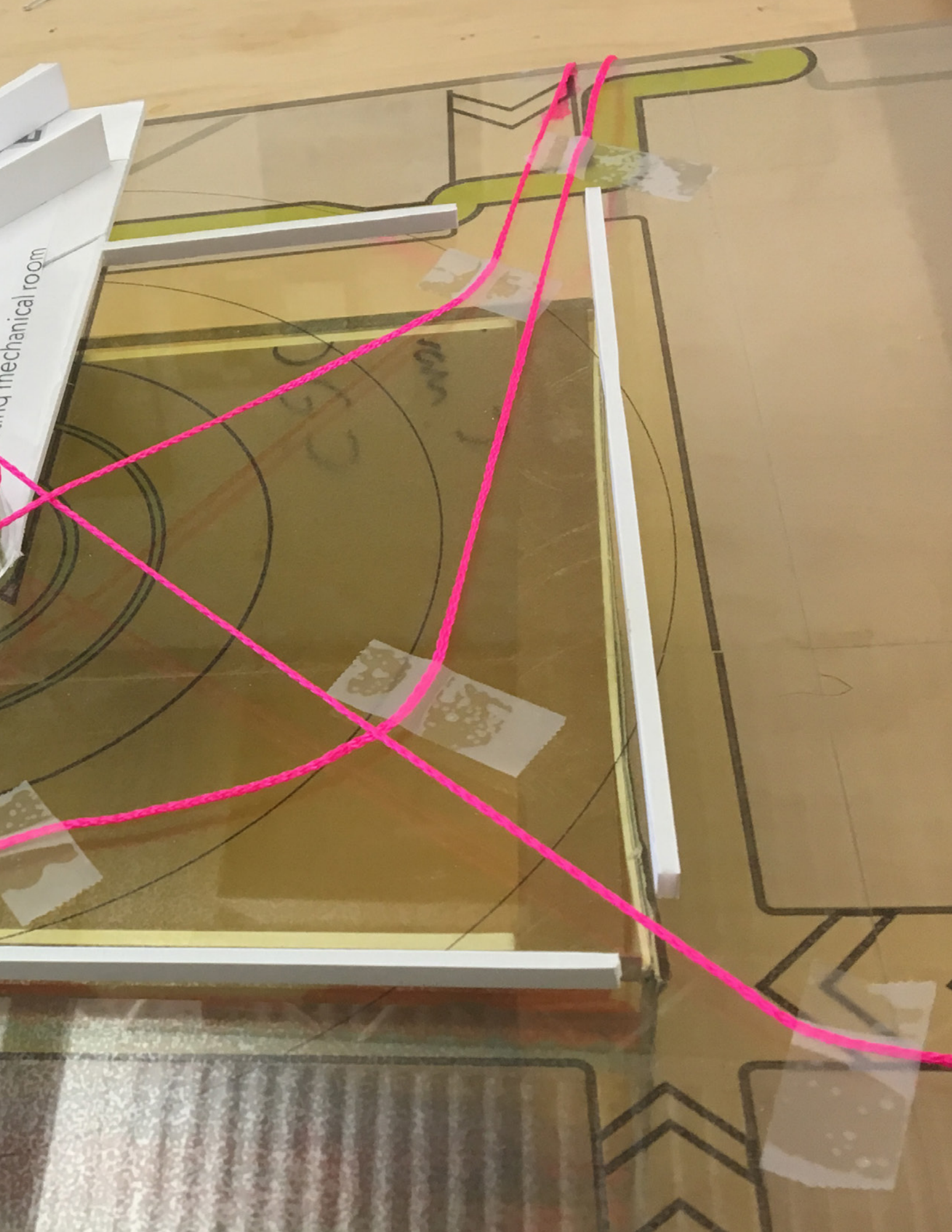
DOOR

Conference
Room

Administration

Existing

and mechanical room



6.0 HVAC Report

Vibrancy

Introduction

The Albuquerque Museum is in the programming phase for a new addition primarily for the use of classrooms and gathering space. As part of the conceptual design the existing Administration area will be moved to a new space. The ideal location for expansion is the South end of the building into the sculpture garden area. This area for expansion currently includes the original mechanical room which houses air handling equipment, ductwork, chilled/heating water pipes, pumps, water heater, and electrical distribution panels. This report includes an assessment of these existing MEP systems and a recommended strategy for replacement and modification.



Existing MEP Equipment in Mechanical Equipment Room

The existing mechanical room is at a lower elevation than the main floor of the museum and the sculpture garden. The space extends up to the same roof level as the museum, with ductwork and piping extending from the floor to the ceiling of the mechanical room.

Air Handlers

1. AHU-1 (West): This equipment is located on the floor in the corner of the West end.
 - a. Original to the building, approximate age of 40 years (past expected useful life).
 - b. Supply and return air ductwork extends from this unit to heat/cool the following areas:
 - i. Entry Gallery/Lobby (205)
 - ii. West Gallery/Hall (206)
 - iii. Vestibule (203)
 - iv. Administrative Area (226)
 - v. Conference Room (222)
 - vi. Offices (several)
 - vii. Current Education Classroom Area
 - c. This equipment still serves all areas that it was originally designed for. The areas listed above each have their own thermostat (7 thermostats).
 - d. This equipment utilizes the south facing solar energy collection panels visible from the sculpture garden. The panels pre-heat outside air during the winter that is being brought into the building and distributed by the air handler unit. This helps reduce energy consumption.
2. AHU-2 (East): This equipment is located on the floor in the corner of the East end.
 - a. Original to the building, approximate age of 40 years (past expected useful life).
 - b. Supply and return air ductwork extends from this unit to heat/cool the following areas:
 - i. Entry Gallery (205)
 - ii. Lecture Hall/Auditorium
 - iii. Photo Archive Office and Workroom
 - c. Areas that have been removed from this system include:
 - i. Photo Archives Storage
 - ii. History Gallery 204 (originally called Intro Exhibit Gallery 218)
 - iii. Restrooms 216 & 217
 - d. This equipment now only serves about 50% of the area that it was originally designed for.
 - e. This equipment utilizes the south facing solar energy collection panels visible from the sculpture garden. The panels pre-heat outside air during the winter that is being brought into the building and distributed by the air handler unit. This helps reduce energy consumption.

6.0 HVAC REPORT

Chilled Water and Heating Water Piping Distribution

The AHUs in the mechanical room are fed chilled water and heating water from the newer chillers and boilers (new central plant). The piping from the new central plant makes its way to this original mechanical room. The original piping in this room is backed from the newer system, and it is assumed that the piping in this area only serves this equipment and is not distributed to other areas from this mechanical room.

Pumps

1. Chilled Water Circulation Pumps: The original chilled water pumps in the mechanical room are still in use. These only serve the old equipment in this room (AHU-1&2), and not any other areas of the building.
2. Heating Water Pumps: The original heating water pumps in the mechanical room are still in use. These only serve the old equipment in this room (AHU-1&2), and not any other areas of the building.

Domestic Water Heater

There is a large water heater (about 100 gallons) in the mechanical room that serves several restrooms in the original part of the museum.

Electrical Panels

There is a large main electrical distribution panel on the North wall of the mechanical room. This panel originally powered all equipment in the mechanical room, as well as lights and receptacles (wall outlets). The large roof mounted chillers (air-cooled) that were installed to replace the abandoned chiller in the mechanical room is fed from this panel.

1. Items that are currently powered by this panel and may need to remain in service:
 - a. Rooftop air-cooled chillers (to be removed eventually as part of master plan)
 - b. Lighting (interior and exterior)
 - c. Receptacles (interior and exterior)
 - d. Sump Pumps
 - e. Exhaust Fans
2. Items that are currently powered by this panel and will be removed by this project:
 - a. Air Handlers
 - b. Pumps (chilled water and heating water)
3. Items that have been abandoned and no longer served by this panel:
 - a. Old chiller (in mechanical room)
 - b. Solar heating system pumps
 - c. Old boiler (in mechanical room)

Miscellaneous Abandoned Items

There are several systems and pieces of equipment originally installed in this mechanical room that have been abandoned. The equipment has not been removed likely because of difficulty to get it up the stairs and out a standard sized door. These items/systems include:

1. Original Chiller
2. Solar Heating System (pumps, heat exchangers, storage tanks, collector panels, etc.)
3. Original Boiler Makeup Air

Removal, Replacement, and Extension of MEP Systems for New Education Center

The new education center is proposed to extend through and above the existing mechanical room, as well as renovate the existing administration area. The proposed plan also includes a second level for new indoor and outdoor spaces. The proposed plan also includes an elevator, which will utilize some of the existing mechanical room below-grade space. The systems and equipment described above will be removed, replaced, and/or extended to serve the new and existing spaces.

New HVAC System Options (1a, 1b, 1c, 2)

Both air handlers will be removed as part of this project due to age and need to utilize the space. All of

6.0 HVAC REPORT

the existing spaces listed above, and the new spaces will need to be served by a new heating and cooling system.

1. The most efficient system options would utilize the central plant chilled/heating water. These recommended system types include:
 - a. 4-Pipe Fan Coil Units with Dedicated Outside Air:
 - i. Chilled/Heating water piping is routed to each existing, new, and renovated space. A ceiling mounted, or closet mounted, fan coil unit provides heating and cooling to each zone as required. Two or three rooftop outside air systems to supply the required ventilation air to each fan coil unit.
 - ii. Advantages: smaller ductwork; less/smaller equipment on roof; energy efficiency; flexibility for future changes.
 - iii. Disadvantages: equipment in ceiling space to be maintained; complexity of piping and possible additional pipes.
 - b. Variable Air Volume (VAV) System:
 - i. Large air handler units (two or three) would be installed on roofs (or new mechanical rooms) and distribute air through a ductwork system. Each zone/room would have a VAV box with hot water reheat coil for temperature control.
 - ii. Advantages: most equipment requiring maintenance located on roof or new mechanical rooms; lower complexity of piping.
 - iii. Disadvantages: very large equipment located on 2nd story roofs; large ductwork, not very flexible for future changes.
 - c. Chilled Beam with Perimeter Heating:
 - i. Chilled beams are similar to fan coil units but eliminate or reduce the size of the fan. Chilled water is supplied to equipment mounted in/on the ceiling, and air is circulated passively or with a very small fan. Heating water can also be supplied to the chilled beams, but supplemental heating like baseboard radiators would be required in some areas. Two or three rooftop outside air systems to supply the required ventilation air to each fan coil unit.
 - ii. Advantages: very energy efficient; silent or very quiet; high level of comfort; smaller ductwork; less/smaller equipment on roof; flexibility for future changes.
 - iii. Disadvantage: higher installation cost; complexity of piping; condensation control complexity; no filtration of recirculated air.
2. Instead of utilizing the central plant, packaged heating/cooling equipment could be installed to reduce complexity and possibly reduce cost. This option is not recommended, but presented for comparison and consideration.
 - a. Packaged rooftop units are common, but not energy efficient. Several RTUs would be installed depending on how many thermal comfort zones are required; estimated 6 to 12 units.
 - b. Advantages: low complexity; possibly low cost depending on existing electrical capacity.
 - c. Disadvantages: loud equipment on roof; maintenance requirements; large ductwork; high energy cost; future replacement challenges; low flexibility; fewer thermal control zones.

Central Plant Equipment "Master Plan"

The central plant consists of newer boilers in the North mechanical room, a newer water-cooled chiller in the North mechanical room with cooling tower on the roof, and two older air-cooled chillers located on the roof above the local history gallery. The design of the central plant includes space and connections for a second water-cooled chiller to be installed in the North mechanical room, which would eliminate the existing air-cooled chillers on the roof. It is recommended that this work be completed as part of this project due to the noise and age of the existing air-cooled rooftop chillers. The design for this replacement has already been completed as part of the "Phase II" construction documents dated November 2011. A cost was likely proposed for this work designated as "Bid Alternate 3".

6.0 HVAC REPORT

Chilled Water and Heating Water Piping Extension

For the recommended new system options described in #1 above, the chilled/heating water distribution piping would be extended to the new spaces. Since the proposed plan includes significant additional space, the pipe sizes would need to be evaluated for the appropriate connection point. If energy efficient building design practices are used to minimize the cooling and heating loads of the new additions, then the existing piping may be simply extended from near the existing mechanical room for distribution to the new spaces/equipment.

New Pumps

The pumps in the existing mechanical room will be removed. They are being used to supplement the pumping power from the newer central plant pumps since this area is located so far away from the new mechanical room. New "booster" pumps would likely be incorporated into the new design for any of the recommended systems and would require a new small mechanical room or penthouse to be included in the programming.

New Domestic Water Heater(s)

The existing and new restrooms require a new source of water heating, unless a small amount of space remains in the existing mechanical room/pit. Existing gas piping on the roof will allow for new water heaters to be incorporated into the new additions relatively easily.

Electrical Panel and New Distribution

It is recommended that some of the existing electrical distribution remain in place due to the cost and complexity of re-wiring all lighting and receptacles in the existing indoor and outdoor areas. This would require space on the North wall of the mechanical room to remain intact, and a chase/shaft extending above the panel. Most of the large loads on the panel will be eliminated, and if the existing rooftop air-cooled chillers are removed as recommended, the only existing loads will be lighting and receptacles. This panel could be replaced with a smaller one. It is recommended to be in the same location, but the panel could be relocated if necessary with unknown complexity and cost. New electrical distribution will be required for the new additions and renovations. This could be fed from the existing electrical panel, or new sub-panels located in the new areas. The new loads will include: lighting, receptacles, and new HVAC equipment.

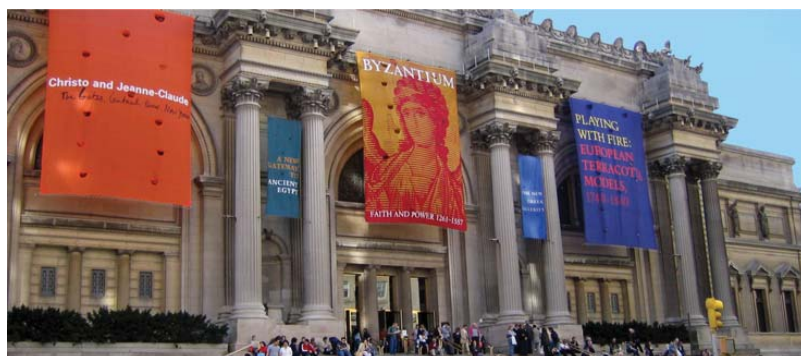
	Preliminary Cost Estimate	Minimum Cost	Maximum Cost	Target Cost
New HVAC System		\$ 200,000	\$ 400,000	\$ 250,000
Central Plant "Master Plan"		\$ 150,000	\$ 250,000	\$ 175,000
Chilled/Heating Piping Extension		\$ 20,000	\$ 30,000	\$ 20,000
and Pumps				
New Domestic Water Heater(s)		\$ 5,000	\$ 10,000	\$ 7,000
New Electrical Distribution		\$ 50,000	\$ 100,000	\$ 75,000
Plumbing for New Restrooms		\$ 50,000	\$ 70,000	\$ 60,000
Photovoltaic System (30-60 kW)		\$ 70,000	\$ 180,000	\$ 100,000
Fire Sprinklers		\$ 30,000	\$ 40,000	\$ 35,000
	Totals	\$ 575,000	\$ 1,080,000	\$ 722,000

7.0 SIGNAGE & WAYFINDING

7.0 Signage & Wayfinding Sussman Prejza & Co

Large Scale Exterior Graphics

Currently multiple wall mounted changeable graphics are mounted to the Museum exterior. These banner systems are very useful for promoting upcoming and current shows. We sense that this system could be expanded to include freestanding pole mounted banners that could help strengthen a connection to all corners of the site including Old Town. Banners of this type require a small footprint and can deliver a bold visual as well as engaging form.



7.0 SIGNAGE & WAYFINDING

Several exterior sign elements exist on-site currently. These include wall graphics, identity and entrance signs as well as cabinet displays. We suggest that this program should be expanded as part of the proposed expansion to include elements such as digital displays. These small pedestrian scale cabinets could be part of a larger Albuquerque museum district effort to promote current programming. Given their digital media, they would be easily shared and updated by multiple institutions.



7.0 SIGNAGE & WAYFINDING

Wall Murals

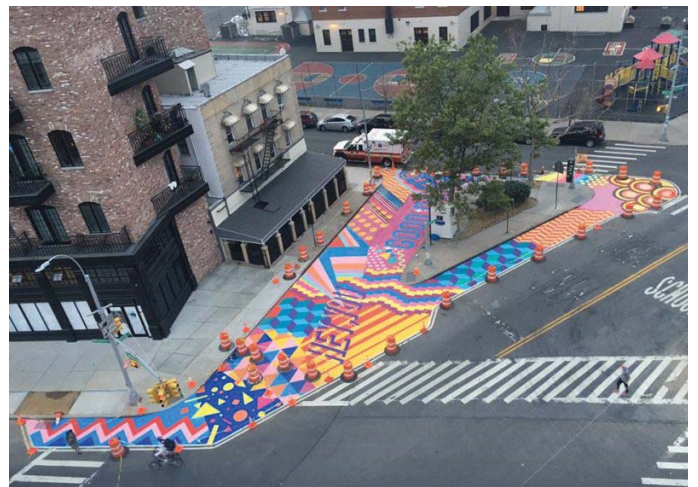
The current museum building and surrounding wall surfaces feature multiple blank wall surfaces that could be used for large outdoor murals. Besides adding color and engaging graphics to these walls, murals can hopefully help build connections to local artists and their stories. The blank courtyard walls and those facing Old Town would be particularly well suited to murals. These semi-permanent installations would help extend the vision and spirit of the museum beyond its “four walls”.



7.0 SIGNAGE & WAYFINDING

Exterior Paving Pattern

Beyond signs and traditional graphic elements several related techniques and materials may be used to communicate site specific content and to welcome visitors. Shown here are multiple paving patterns which serve to highlight specific areas within a site. These may include abstract elements and colors, as well as donor or museum identity messaging. Patterns may be formed with tiles, inlaid letter forms, colored concrete or selectively painted as shown below.



7.0 SIGNAGE & WAYFINDING

Digital Displays

The use of visitor activated digital display technology is a current and ongoing trend that we see increasingly used by museums and other cultural institutions. These displays provide viewers with greater access to a museum collection, the ability to customize a visit and enhanced information resources. Currently we note that scrolling monitors have been installed at the main museum entrance and at secondary spaces within the galleries. We suggest that the expansion project could provide new spaces and content that could be highlighted in even more engaging experiences.



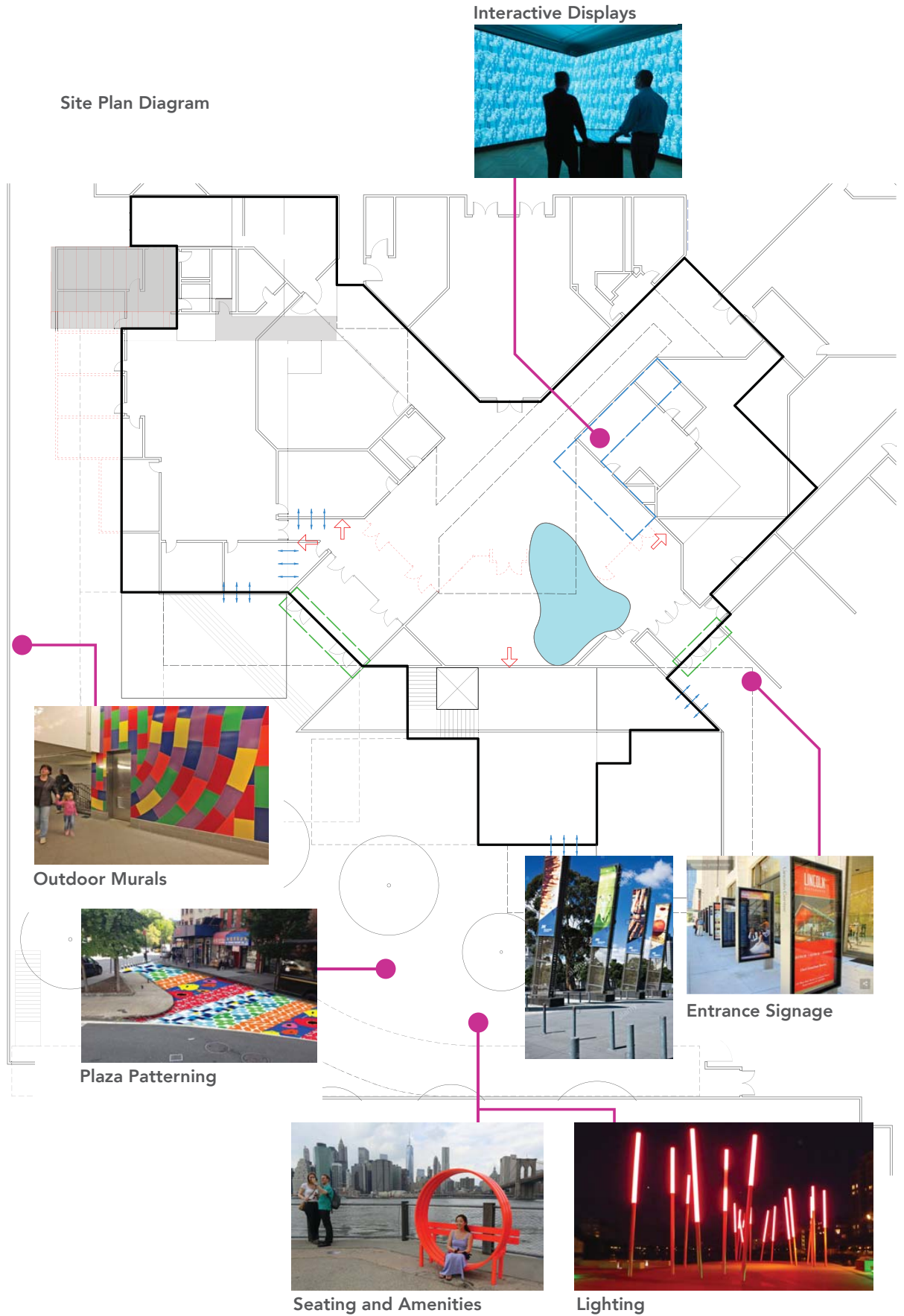
7.0 SIGNAGE & WAYFINDING

Expansion Plaza Identity and Amenities

The current expansion project is to be built adjacent to a large and valuable outdoor plaza that will provide support to classroom activities and may serve a multi-function role. The plaza will benefit from the addition of lighting, a canopy structure and related amenities such as landscape, seating and museum identity features. Through the addition of these features the space could become more appealing as a rental and outdoor event area for small gatherings.



7.0 SIGNAGE & WAYFINDING



8.0 PRELIMINARY COST ESTIMATE

Preliminary Cost Estimate

Balis & Company

The cost estimate for the aM Education Center is based on analysis of functional area (e.g. classroom, administration, etc.) costs for similar facilities separated between new construction or remodeling. Ancillary costs for outdoor decks & ramps and sitework are based on analysis of the key components including decking railings, structural supports, etc. Adjustments to the functional area costs have been made to account for the unique site conditions of construction within and above existing facilities. The requirements for foundations and primary structural systems within and through existing facilities in order to support upper level superimposed loads imparts significant additional costs. Similarly, modifications and additions to mechanical and electrical systems within the existing facilities to support remodels and additions is accounted for in the functional area costs.

Albuquerque Museum aM Education Center Summary of Estimated Construction Costs 2/28/2018				
Component	Area	SF	\$/SF	Amount
Ground Floor:				
Classroom 1 / Kid Gallery / RR	1,525 SF		\$230.00	\$350,750
Classroom 2	2,400 SF		\$160.00	\$384,000
Outdoor Classroom 1	1,140 SF		\$65.00	\$74,100
Outdoor Classroom 2	2,140 SF		\$65.00	\$139,100
Staff Offices	900 SF		\$160.00	\$144,000
Display / IT / Men's / Women's	1,214 SF		\$210.00	\$254,940
Vertical Circulation / Elevator	266 SF		\$657.89	\$175,000
South Lobby (existing)	3,388 SF		\$120.00	\$406,560
Art On-Ramp (Struct./Deck/Railings/Lighting)				\$250,000
Old Town Overlook / Ramp / Bleachers / South Courtyard Wall				\$300,000
Old Town Amphitheater				\$25,000
Second Floor:				
Administration / Women's / Men's	5,200 SF		\$380.00	\$1,976,000
Culture Lounge	3,149 SF		\$380.00	\$1,196,620
Culture Loung Deck (incl. struct./deck/railings)	1,591 SF		\$125.00	\$198,875
Conference Room / Cust. / Women's / Men's	1,489 SF		\$380.00	\$565,820
Green Roof / Sculpture Garden Deck	1,162 SF		\$250.00	\$290,500
Catwalk (over existing Ground Floor circulation)	791 SF		\$185.00	\$146,335
Conference Room Deck	286 SF		\$185.00	\$52,910
Connection to Existing Deck	435 SF		\$35.00	\$15,225
PV Trellis	2,646 SF		\$95.00	\$251,370
HVAC:				
See 6.0 HVAC Report for details				<u>\$722,000</u>
Sitework:				
Demolition	19,000 sf		\$3.00	\$57,000
Grading (assume 6,800 sf grade change or 2' avg.)	6,800 sf		\$1.45	\$9,860
Drainage Improvements (allow)	1 ls		\$5,000	\$5,000
Entry Ramp	2,650 sf		\$14.00	\$37,100
Landscaping & Irrigation	1 allow		\$100,000	\$100,000
Cisterns	1 allow		\$25,000.00	\$25,000
Vine Walls	1,000 sf		\$5.00	\$5,000
Site Signage, lighting bollards, Furnishings, etc.	1 allow		\$20,000.00	\$20,000
Total Estimated Cost				<u>\$8,178,064.99</u>
Contingency 20.0%				\$1,635,613.00
Escalation (5 yrs @ 2.75%/yr) 14.5%				<u>\$1,425,927.41</u>
				\$11,239,605.40
New Mexico Gross Receipts Tax 7.5%				<u>\$842,970.40</u>
Total Estimated Cost w/NMGRT				<u>\$12,082,575.80</u>

9.0 REFERENCES / CASE STUDIES

Case Studies

1. Dallas Museum of Art - Center for Creative Connections
Dallas, TX
12,000 sf of artistic exploration space



Connection to the outdoors

Toddler zone



Family-friendly activities



Engagement with curated art objects



Activity & display area

9.0 REFERENCES / CASE STUDIES

Case Studies

2. Frist Center for the Visual Arts - Martin ArtQuest
Nashville, TN
Currently under renovation

MARTIN ARTQUEST GALLERY



Multi-generational /
Family-friendly activities



Hands-on activities related
to current exhibits



Display areas for objects
created by the community

9.0 REFERENCES / CASE STUDIES

Case Studies

3. Peabody Essex Museum - Create Space
Salem, MA
2,600 sf of studio / workshop



Hands-on learning stations



Accessible drawers with additional exhibit materials



References

1. A Space for Learning: A New Handbook for Creating Inspirational Learning Spaces
Text compiled by Sam Cairns, with additional material by Gillian Wolfe CBE.
Edited by Sally Bacon & Hilary Lissenden.

Printed by Park Lane Press.

Space for Learning partners 2015

This report is available online at: www.spaceforlearning.org.uk,

aMF Education Center Program

Revised Schedule

SSA / 2.13.2018

	WEEK OF	TASK
2017	Dec 4 - 8	Tuesday, Dec 5: Program Kick-off meeting , 10:00 am at SSA
	Dec 11 - 15	Thursday, Dec 14: Facilities Tour , 3:00 - 5:00 pm Friday, Dec 15: , 1:00 - 4:00 pm Friday, Dec 15: Systems Tour , 10:00 - 12:00 pm
	Dec 18 - 22	Compile preliminary info / diagram / build site model (closed for Holidays Dec 25 - 29)
	Dec 25 - 29	
2018	Jan 1 - 5	
	Jan 8 - 12	Thursday, Jan 11: Workshop #1 (concepts / case studies / wayfinding), 2:00 - 5:00 pm (SSA office)
	Jan 15 - 19	Wednesday, Jan 17: Workshop #2 Day 1 , Open House / community charrette, 1:00 - 4:00 pm (aM Ventana Rm) Thursday, Jan 18: Workshop #2 Day 2 , Open House / community charrette, 9:00 am - 7:00 pm (aM Lobby)
	Jan 22 - 26	Compile draft program / prepare ROM cost
	Jan 29 - Feb 2	
	Feb 5 - Feb 9	
	Feb 12 - 16	Tuesday, Feb 13: Progress Meeting , 2:00 - 3:00 pm
	Feb 19 - 23	Friday, Feb 23: Draft Document to aM/aMF
	Feb 26 - Mar 2	Friday, Mar 9: aM/aMF Review comments to SSA
	Mar 5 - Mar 9	
	Mar 12 - Mar 16	Final Document Tune-Ups
	Mar 19 - 23	Friday, Mar 23: Final Document to aM/aMF
Exhibit!!!		

Workshop #1 (Thursday, Jan 11)

Workshop #1 will be the starting point for the sharing of ideas / concepts, perceived needs and desired functions of the new Education Center. We will also look at selected case studies of existing art and history education centers (Elizabeth Becker, aM), and a visual presentation of signage & wayfinding concepts by Miles Mazzie (SP&CO).

- Invitees: all aM/aMF staff, and selected local artists and APS art teachers.

Workshop #2 (Wednesday, Jan 17 - Thursday, Jan 18)

Workshop #2 will use physical models to encourage community participation in the programming / conceptual design of the new Education Center in an open house format.

- Invitees: all aM/aMF staff, aM docents, CABQ officials and community members.