

3-22-2013

DPAC 2013: Dixon Learning Center

William S. Perkins

Chris Wilson

Mark Childs

Follow this and additional works at: https://digitalrepository.unm.edu/dpac_projects



Part of the [Architecture Commons](#)

Recommended Citation

Perkins, William S.; Chris Wilson; and Mark Childs. "DPAC 2013: Dixon Learning Center." (2013).
https://digitalrepository.unm.edu/dpac_projects/13

This Book is brought to you for free and open access by the Architecture and Planning at UNM Digital Repository. It has been accepted for inclusion in Design and Planning Assistance Center - Projects by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.



Dixon Learning Center

Dixon, New Mexico

Embudo Valley Community Library

Design and Planning Assistance Center
School of Architecture and Planning
University of New Mexico

Spring 2003



Thanks to the Embudo Valley Community Library for funding this study.

Thanks to Mesa Reprographics for printing the document.

Dixon Learning Center

Dixon, New Mexico

Embudo Valley Community Library

Design and Planning Assistance Center
School of Architecture and Planning
University of New Mexico
2414 Central Ave. S.E.
Albuquerque, N.M. 87131

Spring 2003

Student teams:

*Thomas Tomlinson, Katya Crawford, and Malia Orell
R. Jarrod Cline, Peggy Wright and Krystyna Zelenay
Andrew Aulgur, Lisa Barva, Kim Deschampheleire,
and Robin Eddy
Calandra L. Cook, Myrna Marquez, Joel C. McHorse,
and Jay Rice
Mitzi Messick, Daren Pocus, and R. Sean Darnell*

*William S. Perkins, ASLA, Studio Instructor
Chris Wilson, Visiting Associate Professor, Advisor
Mark Childs, Director of DPAC*

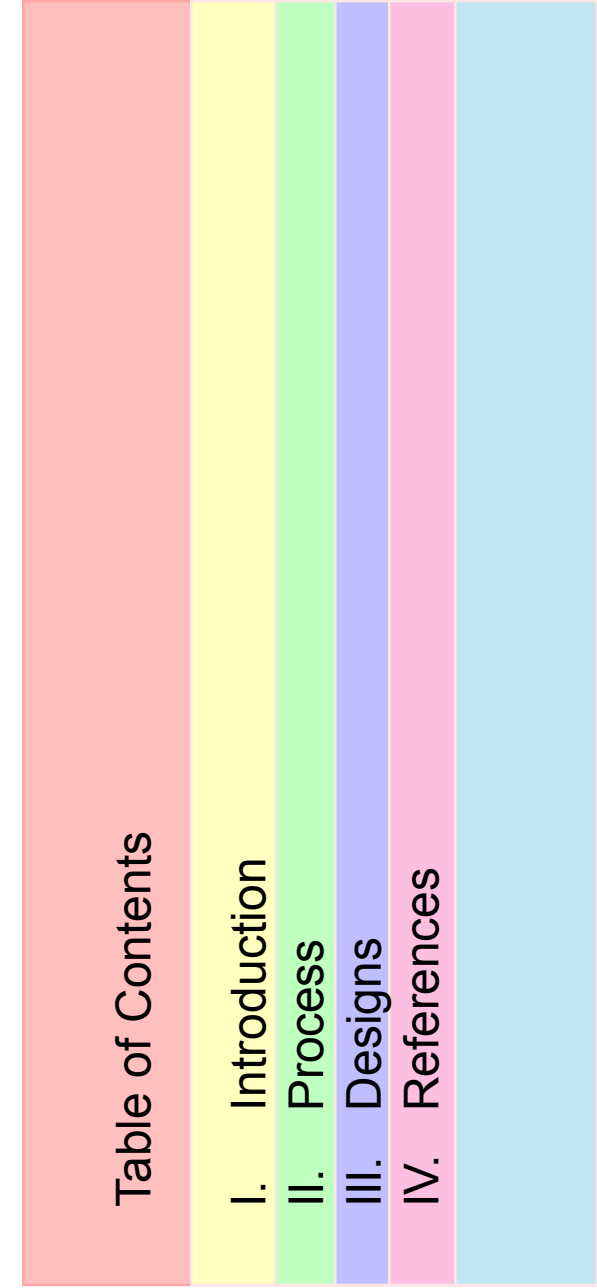
Design and Planning Assistance Center

(DPAC) is a community service of the School of Architecture and Planning at the University of New Mexico. We work with community groups and not-for-profit organizations throughout New Mexico on architectural, planning, and landscape projects. DPAC was established in 1969 and is staffed by students in architecture, planning, and landscape degree programs.

To obtain additional copies of this publication, contact:
School of Architecture and Planning
University of New Mexico
Mark Childs, Director of DPAC, UNM
email: mchilds@unm.edu

Table of Contents

I.	Introduction.....	1
II.	Process.....	3
III.	Designs.....	5
IV.	References.....	15

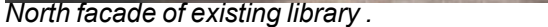




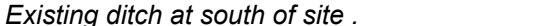
North aerial view of the site.



Landscape view of river .



North facade of existing library .



Existing ditch at south of site .



Introduction/Project Summary

In April 2002 the Embudo Valley Library Board, encouraged by the generous support of an anonymous area resident, raised the necessary matching funds and acquired a key Dixon property to serve as a new home for the community's library. The 1½ acre property includes three buildings; a charming bungalow style residence, a building that served for many years as a general store and a utilitarian garage. The open areas behind the buildings slope gently up to the remnant trees of an apple orchard and include a portion of the community's acequia system and the associated irrigation water. The hills and mesas that define the Embudo Valley are visually prominent around the site.

The Board moved the Library into the bungalow style residence and established a Steering Committee to explore how the remainder of the site might be utilized to best serve the Board's mission and the interests of the Dixon community. Visioning workshops were held and a master planning process undertaken to explore the needs of the community and to identify a program of uses for the buildings and the site.

The program as identified included not only the functions of a vital library, but also areas designated for community center activities and a multi-purpose meeting room/performance hall. In addition, the program called for a heritage apple orchard, a memorial garden to the late Eloy Duran and informal outdoor spaces for the community members to gather – to name just a few.

The University of New Mexico's Design and Planning Assistance Center (DPAC) was engaged to investigate the site and explore alternative designs for its development. In an eight-week planning and design effort the architecture and landscape architecture student teams embraced the challenge and devised five distinct possible visions for the site and its buildings.

In the spirit of exploring options, teams were encouraged to investigate site possibilities based on different sets of assumptions. For instance, two teams were to assume that the ¾ acre parcel to the west was to be acquired. This parcel includes a traditional adobe structure.

Similarly, and taking cues from the Master Plan, two teams were encouraged to investigate the possibilities for the site without the general store building. During the design investigation, a DPAC faculty representative made preliminary observations and a case for preserving and protecting the historic character of both the general store and the residence on the grounds that both structures exhibit qualities that suggest eligibility for inclusion on the State register of historic places. However, with an emphasis on exploring alternatives for the community, the student teams continued their investigations. A discussion of the approach to the design and the design concepts are represented on the following pages.

Images taken by student: Jay Rice



Chili pods found in Rosemary's house .

Orchard view to the east.

Existing site view to the north



Dixon Residence

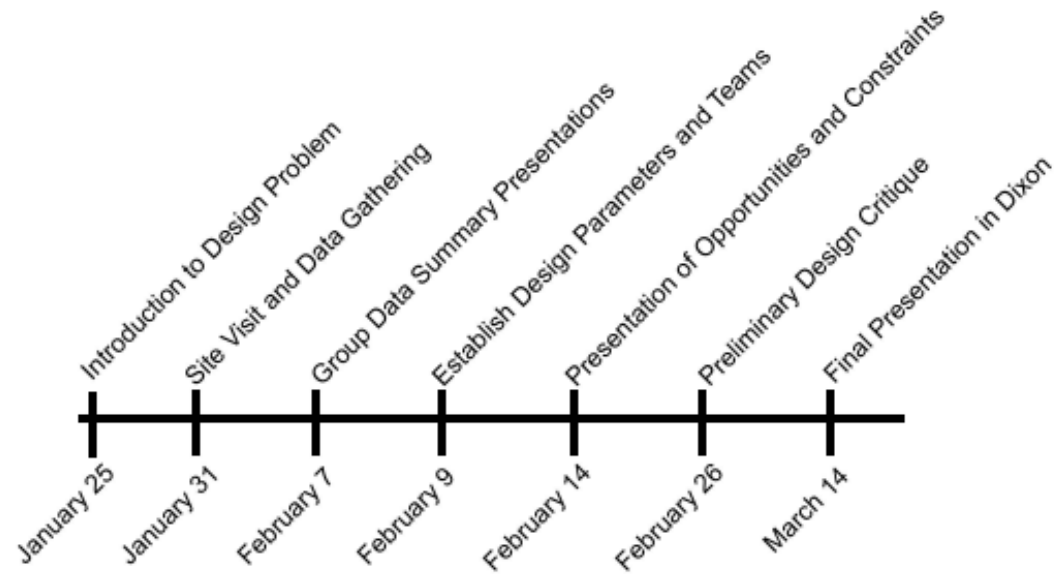


Cemetery view from south of the site.

Architecture of Historic Dixon Plaza



II. Process



Process Timeline

Process

The DPAC studio class approached the project first as *one* team – organized to gather and assemble information that would bear on the site and architectural design form. A brainstorming session to identify important questions and data needs was followed by the class’s re-organization into eight discrete teams to efficiently gather and assemble the information that would ultimately be used by all. Teams were organized around subject areas:

- History and Culture
- Natural Systems
- Program Summary
- Circulation and Infrastructure
- Demographics and Economics
- Codes and Regulations
- Architectural Issues
- The Adjacent Site

The students visited Dixon and the library site and met with members of the Steering Committee and the general community on January 31 / February 1. Meetings between the students and community members were followed by detailed site observations and measurements, photo documentation and sketching. Students were provided overnight accommodations in community homes so that investigations could continue on Saturday morning.

Sketch by Thomas Tomlinson



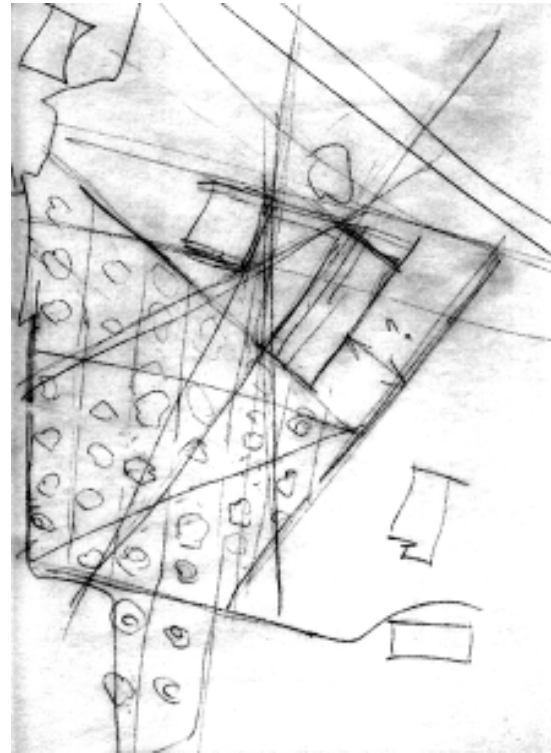
Site Sketch



Students on Walking Tour of Dixon

In the following days display boards and reports were prepared to summarize the findings and were presented to fellow classmates for use in the upcoming design effort.

In the second portion of the class, students organized themselves into 5 teams of 3 or 4 students each. Each team accepted a set of assumptions relative to the status of Zeller's general store building and the adjacent $\frac{3}{4}$ acre site. Each team began by analyzing the site in terms of opportunities and constraints for the various program components. Teams presented and received critical comment on their analysis from reviewers from Dixon as well as from professionals. Approximately two weeks later the design teams presented concept drawings including plans, sections and elevations to a larger review committee made up of several Steering Committee members as well as architects and landscape architects from the community. In the final two weeks of the project each team prepared a final schematic designs which they presented to community members on March 14th in Dixon. The graphics summarizing these submissions are included on the following pages.



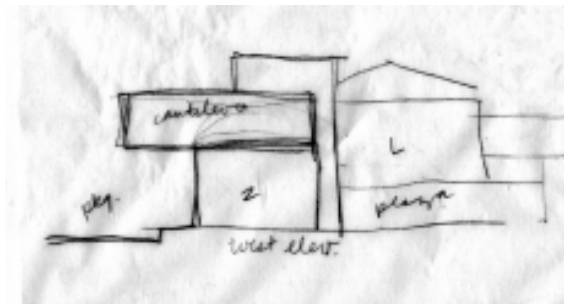
Concept Sketch



Sketch by Mitzi Messick



Students assembled at Zellers



Concept Sketch

III. Design

Design Team

Thomas Tomlinson
 Katya Crawford
 Malia Orell

The challenge that our group accepted was to keep Zellers' store and work within the existing property lines. By redesigning the Zellers' store and adding on to the existing library, we feel that the process would be in the true character of how change occurs in Dixon.

The goal of the overall design is to embrace the entire site as a learning center. This concept is formalized through sustainable design and the fusion of architecture and landscape.

The architecture of the library addition and building renovations integrate sustainable elements that include tromb walls, thermal massing and water walls. Other elements essential to energy conservation are a variety of operable and clerestory windows that provide daylighting and ventilation. Much of the original roof structure of Zellers' and the garage have been exposed to create an open and airy environment while also maintaining the character of the buildings.

The new addition to the library is connected to the original building by a transition space composed of glass. This corridor allows natural light into both structures while providing a graceful transition from the old to the new with minimal disturbance to the original



The walk from the street to the courtyard is a rich journey framed by colorful walls, a hanging herb and edible flower garden and cafe' tables and chairs along a path made of pebbles.



The courtyard at night



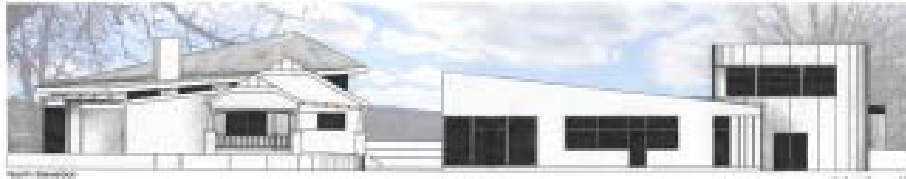
The solarium provides passive solar gain, may be used as a greenhouse in the spring and a reading room in the winter.



Children's outdoor living room.

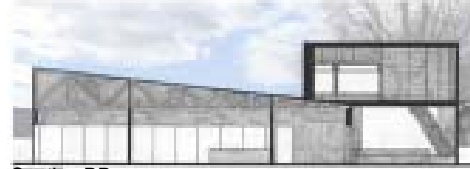


The landscape unfolds from the more formal setting of the courtyard to subtly terraced experimental gardens and an expansive heritage orchard. The design then dissolves into the hills south of the site.



North Elevation

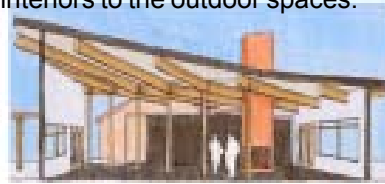
The landscape is invited into the buildings through plentiful windows that frame the exterior views. The design of vine covered trellises and open-air porches create smooth and comfortable transitions from the interiors to the outdoor spaces.



Section BB



PLAN



Section



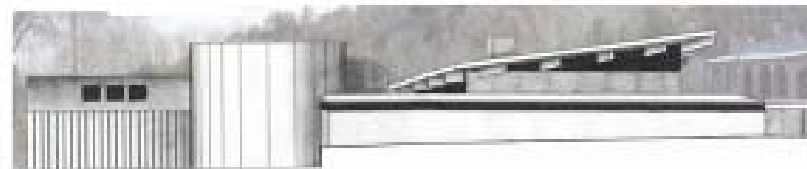
Section AA



South Elevation



East Elevation



West Elevation

building. The addition to the library features a free standing fireplace in its center that provides physical as well as visual warmth in the winter and articulates an intimate reading space in the large, open main room. Another feature of the library addition is the solarium/greenhouse on the south side of the main room.

The addition of the tower into the site acts as a connecting structure and helps mediate the varying floor elevations between the community center (Zellars') to the artist studios (the garage). The tower also adds a strong vertical element to the courtyard and houses the radio station on the second story and extends out to create the open-air stage.

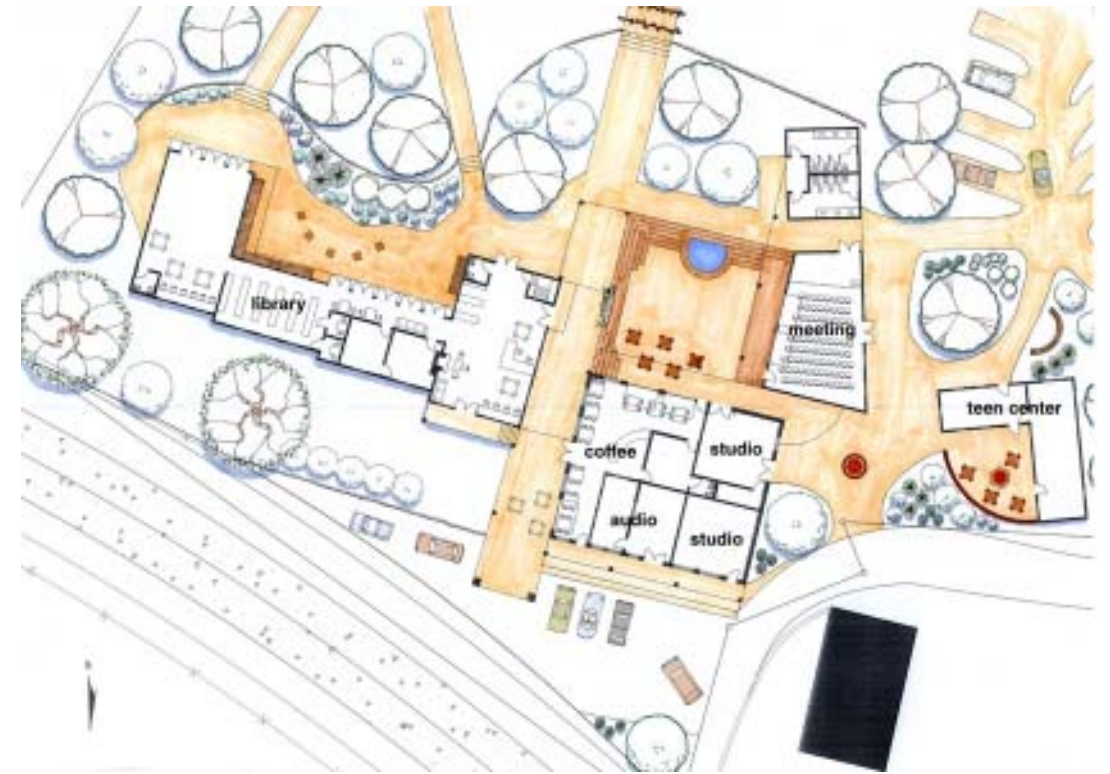
The space between and on the south side of the buildings have been carved out to form a terraced courtyard. Defined by the artist studios, the community center and the library on three sides, the courtyard is made complete by terraced seating, a canopy of ornamental shade trees and a children's outdoor living room made from vines and trees. The courtyard is home to la resolana, an outdoor stage, café seating and may serve as an outdoor reading room for the library and the transition space from one building to the next. Rain is collected from the rooftops and is poetically distributed throughout the courtyard to trees and plantings through the use of a cistern, water chains and a french drain.

III. Design

Dixon Placita

Design concepts

- To integrate the historic agricultural roots of Dixon with the community's present day interest in the arts by the creation of a primarily edible landscape and the use of recycled farming equipment as sculptural elements
- To form interior and exterior rooms that are adaptive to change over time in order to meet the communities present and future programmatic needs
- To follow sustainable building practices through the use of strategic sunshades, vegetation for climate control, the re-use of existing structures, and the southern orientation of the buildings
- To enhance the connection between the interiors of the buildings and the exterior spaces by allowing the buildings to form outdoor spaces for social gatherings, children's play, and quiet areas for reading
- To use the vernacular landscape of Dixon to inform the design through the use of stone work at the entrance, terraces, and color
- To create connections between the buildings through the use of flagstone paths, vegetation, integrated materiality, spatial orientation, and trellises



Floor plan

Design Team

R. Jarrod Cline
Peggy Wright
Krystyna Zelenay



Site plan



Long Section



Cross section



Diagram of existing buildings and proposed buildings



North Elevation



III. Design

Image rendered by Student Andrew Aulgur and Robin Eddy



Birds Eye Perspective to South
La Resolana Community Center

Dixon, New Mexico is a rural community with strong ties to its agricultural heritage. The lifeblood of that heritage has been the delivery of water to nurture the crops. This system, *las acequias*, serves as a potent metaphor for the community of Dixon: mutual responsibility yields mutual benefit.

Using the *acequia* map from the book *Mayordomo* by Stanley Crawford, curvilinear lines have been condensed and loosely laid down across the site in homage to the larger *acequia* system found throughout the Embudo Valley. The placement of these lines has been shifted slightly to coincide with the topographical changes at the site. A series of terraces will be formed by low, river rock retaining walls that follow these lines. River rock will be incorporated as a readily available, local material and as a vertical representation of the *acequia* system.

In addition, the terrace walls will form the boundaries between bands of altering vegetation. A strong, axial pathway will penetrate the vegetation banding and will lead the visitor from the courtyard, through a series of open and enclosed spaces, across the *acequia*, and blend into the county road. This design creates a desirable tension and offers the user the flexibility to vary activity nodes.

Design Team

Andrew Aulgur
Lisa Barva
Kim Deschamheleire
Robin Eddy



Image rendered by Student Lisa Barva & Kim Deschamheleire

Site Plan



Enlarged Building Plan



Site Sections

Image rendered by Student AA & RE



Birds Eye Perspective to North

An artistic overlay is also incorporated into this design in reference to a more contemporary community thread—the annual studio tour. Space has been suggested at the northeast corner of the site for an annual art installation. In addition, locally made ceramic tiles could line the small water trough along the pathway. An undulating display of grapevines will form a work of *agrisculpture*, combining the strong agricultural heritage of the area with a new, artistic form.

The courtyard will have strong definition, excellent views toward the mountains, and shade structures to provide a welcome respite from the strong summer sun. With two levels, the courtyard allows for greater flexibility in use and the use of paving will tie the main courtyard areas together with the adjacent café will establishing a subtle hierarchy of outdoor space.

Image rendered by Student AA & RE



View to Public Spaces

Image rendered by Student AA & RE



Street View

III. Design



The following design proposal began with two assumptions: the general store was to be removed and the property to the west was to be acquired. In addition, the removal of the garage was deemed appropriate given the parameters and the condition of the structure. The design proposes a learning center that combines formal site elements with the vernacular style of the predominantly agricultural Embudo Valley community. The fusion of vernacular and formal design elements creates an engaging consonance between seemingly disparate styles.



Two new pitched-roof, adobe structures are placed between remaining buildings to create an enclosed courtyard to the west of the library as well as a welcoming entrance to the site. The meeting hall becomes the focal point of the courtyard, as it is elevated eighteen inches above and framed by the library and café. Further, the meeting hall displays religious connotations by way of the large round windows in each gable and the elevated forecourt. These elements add to the strength of the centerpiece as well as pay homage to *La Morada* (monastery) that reportedly existed on the site. The library has been extended along its north-south axis in order to meet space requirements and maintain the historic façade of the building. Trellises and an acequia-fed water feature further formalize the courtyard space. The traditional adobe structure to the west retains its original footprint and is developed as a series of studio rental spaces and as a location for the community-proposed radio station.

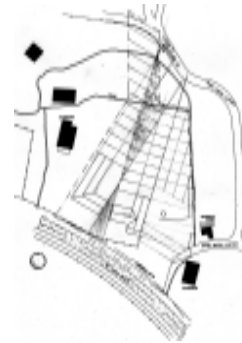




Open space surrounding the community center exhibits several formal features immersed in the traditional orchard style of Dixon. Terraces, a common landscape form in the Embudo Valley until the introduction of the tractor, give order to the orchard behind the meeting house. The acequia system is reverently displayed throughout the orchard. Lateral lines have been reconfigured to better serve the terraced orchard. Sculptural water elements are incorporated at the intersections of terrace walls and the lateral ditches and serve as permanent reminders of the importance of the lifeline of the community and become a playful attraction during irrigation. The water chutes pay homage to the Islamic gardens of Spain, the culture that introduced the acequia system to New Mexico. The Eloy Duran Memorial Garden is situated behind the meeting hall and includes an acequia-fed water feature based on the form of a grinding wheel. The garden is obscured by the hall and surrounding fruit trees to provide a quiet, contemplative outdoor space. A *ramada*-style shelter, located in the northeast corner of the property, faces the orchard and will serve as a bandstand and outdoor performance space.



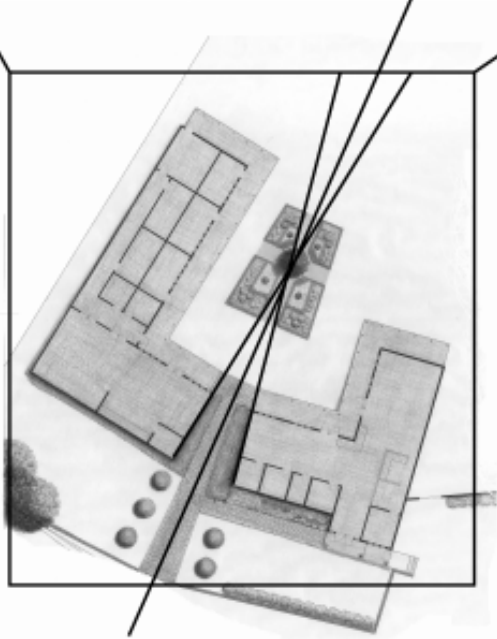
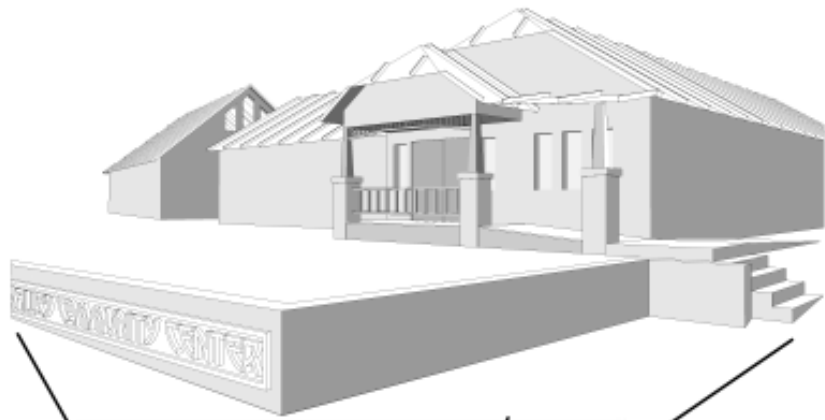
III. Design



Embudo Valley Community Center

This design was formulated under the assumption that Zeller's store and the garage are removed for the site and the adjacent property is not acquired. We sought to provide adequate space for the requirements of the program, while striving to maintain the historical character of the library building. In order to accomplish this we referenced the local vernacular building typology. These initial design concepts were used to inform the landscape, which in turn refined the built forms. Exploration of this process led to the axial design, which links the surrounding area, the site, and the built forms as a cohesive whole.





DPAC Studio - Dixon, New Mexico 14 March 2003



1. portales
2. weight room
3. radio station
4. craft studio
5. retail space (rental)
6. w.c.
7. meeting room
8. cafe
9. cyberport
10. mech. room
11. tutoring room
12. book stacks
13. reading areas
14. admin. office
15. processing area
16. circulation desk
17. childrens area



Mitzi Messick, Daren Pocus & Sean Darnell

IV. References

Precedents:

Alexander, C. A Pattern Language. New York: Oxford University Press, 1977.

Arellano, Estevan. "The Roots of Traditional Agriculture in Northern New Mexico." The Farm Connection Vol. 9 Num.2 (2001):1-5.

Crawford, Stan. Mayordomo. Albuquerque: UNM Press, 1988.

Dellicoe, Geoffrey and Susan. Islamic Gardens, the Landscape of Man. London: Thames and Hudson, 1975.

"Hispanic Villages of Northern New Mexico." Trevia Basin Study 1935. Ed. Marta Weigle. Lighting Tree, 1975.

International Council for Area Development Planning & NM State Planning Office. Embudo- a Pilot Planning Project for the Embudo Watershed of New Mexico. 1960

New Mexico Magazine. "Backtracks- Time travels through New Mexico." New Mexico Magazine 1994.

Selcraig, Bruce. "A Home-Grown Water War." High Country News 11 Oct. 1999: 6-9

Data Collection:

Aerial map and acequia system: <http://www.wrigns.gov>, <http://www.rgis.gov>

American National Standard: Accessible & Usable Buildings and Facilities (ICC/ANSI A117.1-1998)

Atencio, Joe. "Dixon...in the Valley of the Orchards." New Mexico (1967):30-31.

Davenport, Kristen. "Libraries." The New Mexican (Sunday, Nov. 17, 2002): E1, E3.

Embudo Valley Library Annual Report, 2000.

Matlock, Staci. "Living their faiths, Catholics, Presbyterians to hold reconciliation." Taos News (May, 1999): A1-A2.

NM Environmental Improvement Board: Liquid Waste Disposal Regulations: Oct. 1997 (20 NMAC 7.3)

Olmstead, Richard. "New Library Opens in Dixon with Help from Volunteers." Rio Grande Sun (Thursday, May 28, 1992): A10.

Padilla, Jerry A. "Anonymous donor makes new library possible." The Taos News

Rio Arriba County Design and Development Regulation System, 2000-2001.

Interviews:

Locals

Arellano, Estevan

- History of Dixon
- Orchard information
- Vision of site

Arellano, Elena. Library's needs, events

Crawford, Stan

- Acequias
- Climate information
- Grape growing

Crawford, Rosemary

Case, Clark. Social Aspects of Dixon, NM.

Rinker, Ron. Program, space needs

Academic

Wilson, Chris

- History of Dixon, NM

Design Reviewers:

Academic Interviews

Borbas, Steve

Borkovitz, Rick

Burns, Mimi

Calott, Chris

Childs, Mark

Johns, Bob

Wilson, Chris