



PROGRAMMING STUDY
CENTENNIAL COMMONS
ACADEMIC COMMONS AND SERVICES CENTER



Table of Contents



TAB ONE	Executive Summary <ul style="list-style-type: none">A. IntroductionB. Building Program ConceptC. Acknowledgements
TAB TWO	Institution History
TAB THREE	Masterplan Guidelines
TAB FOUR	Program Summary <ul style="list-style-type: none">A. Site PlanB. Preliminary Floor Plan LayoutsC. Space SummaryD. Detailed Typical SpacesD. Program Sheets
TAB FIVE	Site Development <ul style="list-style-type: none">A. Site AlternativesB. Site DescriptionC. Architectural Character
TAB SIX	Building Performance Systems <ul style="list-style-type: none">A. Mechanical/Plumbing SystemsB. Electrical Systems
TAB SEVEN	Schedule
TAB EIGHT	Cost Estimate
TAB NINE	Geotechnical Investigation
TAB TEN	Preliminary Building Code Analysis Topographic Survey

Executive Summary

Introduction



Students Congregating Around the Fountain

In the year 2011, the 100th class of freshman will begin their new journey at Dixie State College. As a tribute to the legacy of the students that have gone before and as a statement towards building an even brighter future, Dixie State College (DSC) is pressing forward to fund, program, plan, design and construct a most remarkable structure that will forever change the opportunities for the students and faculty that will live and learn in the Dixie community. The proposed new Centennial Commons will serve as a capstone on the first 100 years, the cornerstone on a changing time, and a keystone for the next century of teaching and learning.

The mission of Centennial Commons is twofold:

First and foremost, the building is meant to generate activity, collaboration, interaction and a superior learning environment for the students of Dixie State College.

Secondly, the building will provide a home to critical programs that are compatible with the educational intentions of the facility and are currently without an appropriate location on campus.

Through a series of open and collaborative workshops with DSC faculty, students and administrators, who will be occupying the building, a striking concept and functional building program for this significant new facility was developed.

This program is based on information gathered from the major stake holders at Dixie State College in the year 2007. Extensive study was done to determine the departments and relationships to be included in the Centennial Commons. An additional programming phase shall be scheduled during the pre-design phase of the final project for program verification and to further develop project specifics, such as finishes, millwork, acoustical requirements and equipment requirements (including audio-visual/communications).

Executive Summary

Building Program Concept



Collaboration

College in Transition

Dixie State College is an institution that is in the midst of a major transformation. Situated in Washington County, Utah, DSC is in the precarious position of having to keep pace with the fastest growing community in the nation. The burgeoning community will demand highly trained professionals to keep pace with the unprecedented growth; Dixie State College will be the supplier of most of these professionals. Strategic planning and foresight will be required to accommodate changes the institution will need to make over the next decades to equip the workforce.

In the short-term, several critical programs at Dixie State College are in transition, without a location to call home. The Science Building on campus is currently being renovated to include essential 'state of the art' laboratories. With the addition of these labs, they will now be deficient in classroom space and office area. Many departments are being displaced due to the college's growth. The Math department is being relocated from its current location in the North Instructional Building. The English and Humanities Departments are being shifted out of the McDonald Building, and the Computer Sciences transferred from the Udvar-Hazy Building. Not only are existing departments requiring relocation, new baccalaureate degrees are being offered necessitating more space conducive for learning.

Therein lies the importance of creating the Centennial Commons at Dixie State College. Although the proposed area of the facility is programmed for the present, it is likely that the educational makeup of the facility will be very different in twenty years. While it is impossible to design for all the eventualities, it is essential that the building be planned and programmed to be adaptable enough to accommodate future changes with little effort and no sacrifice. A building that is programmed to carry Dixie State College through these inevitable transitions will be the most strategic tool in the institution's planning arsenal.

Creating an Academic / Social Gathering Space

As a predominantly commuter college with nearly 80% of the students working outside of the campus, Dixie State College has suffered from a dearth of on campus interaction and activity in recent years.

In addition to fulfilling the previously mentioned academic needs, the Centennial Commons will carry out the mission of creating collaborative, interactive and congenial spaces in which students can exchange ideas, information, and goodwill while creating school memories important in a student's life experiences.

It is essential to create this kind of space for students by way of a large Student Commons area that is centrally located on each floor of the facility. It is envisioned as a place filled with natural light, a place of gathering, teaching, learning, and sharing. It will provide a safe place for cultivating the minds and lifting the spirits of all who enter. This Commons area will be a shared resource where technology is readily available in its most current and opportunistic learning forms. The Student Commons will be a convertible space accommodating small and large groups, formal and informal learning. The Student Commons will be enhanced by the introduction of food and technology which invites students to linger for extended hours to gain a depth of knowledge and a breadth of associations with their fellow learners.

Executive Summary Acknowledgements



The process is a team effort

Dixie State College

Lee Caldwell	President
Stan Plewe	Vice President of College Services
Ned Carnahan	Executive Director of Campus Services
Sherry J. Ruesch	Director of Facilities Planning
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Pamela Montrallo	Executive Director of Human Resources
Addison Everett	Foreign Languages Department Chair
Darryl Biniaz	English Department Chair
Curtis Larsen	Computer Science Department Chair
Martha Talman	Library (President of Faculty Senate)
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Scott Talbot	Executive Director of Business Services
Karen Bauer	Biological Sciences Department Chair
Scott Mortensen	Math Department Chair
David Roos	Executive Director of Registration and Records
Mary Stubbs	Director of ITS Services (Pres. of Exempt Staff Association)
Donald Hinton	Dean of Education, Humanities, Arts and Social Sciences
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Jonathan Morrell	Director of Trio/Student Support Services
Steve Bringham	Dean Adult Studies and Community Service
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Frank Lojko	Director of Institutional Research and Government Affairs
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Gail Bunker	Coordinator of Cultural Affairs (Washington Co. Commissioner)
George Whitehead	Associate VP of Institutional Advancement & Cultural Affairs
Jennifer Shakespeare	ASDSC Student Body President 2007-2008
Rich VanAusdal	President of DXATC
Barbara Jones	Member, Dixie College Foundation
Dale Larkin	Vice President, Dixie College Foundation
Dr. Shandon Gubler	Chair of DSC Board of Trustees
Jeannine Holt	Member of Board of Trustees (Retired 7/01/07)
Mark Gubler	President, DSC Alumni Association (Member, Board of Trustees)

Heritage Choir

Susan Taysom	Member, Heritage Choir (Secretary of Cultural Affairs)
Leslie Jennings	Member, Heritage Choir

Community

Alan Gardner	Washington County Commissioner
Scott Hirschi	Director of Wash Co Econ Development Council
Daren Barney	Mayor, Ivins City

Design Team

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Tim Saunders	VCBO Architecture
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Dave Weseman	Spectrum Engineers
Steve Wadsworth	WHW Engineers
Chris Larson	Construction Control Corp
Randy Crosby	Vice President of InfoWest Global Internet Services

Institution History



Dixie Academy Gymnasium



Founding Fathers

As Dixie State College of Utah approaches its' centennial year it is on the threshold of a new era. The Centennial Commons Building will mark this momentous occasion by honoring a rich past and facilitating a promising future.

Dixie State College saw its beginnings on September 19, 1911 as St. George Stake Academy. The Academy emerged from a community of Mormon pioneers living in this remote area of Utah. Tested by the harsh environment and isolated location they persevered and emerged as a self sustaining community. Education was an important principle to the early pioneers and they rallied together to support higher education.

This precedent set by the residents of St. George has been upheld during Dixie State College's development over the past 100 years. In the early 1930's, as the U.S. felt the effects of the Great Depression, the LDS Church decided to close a number of their academies. At the time the St. George Stake Academy was privately owned by the LDS Church. This was a critical time in Dixie State College's history and the community rallied legislative support to keep the college open. In 1933 House Bill 58 passed and the State of Utah took ownership of Dixie Junior College. Despite the new status, the Depression prevented the State from providing Dixie Junior College with any funds for two years. Again, the selfless donations of the community, faculty and students were the lifeline for the school during this difficult time.

Over the next thirty years Dixie Junior College continued to grow and prosper along with St. George City. The main educational building was joined by five other structures as the campus expanded. Up to this point the institution provided two years of high school and two years of college taught by the same faculty. Eventually, the college's students and stakeholders desired an identity distinct from the high school, necessitating separation. The case for independence was hindered by the limited space for growth on the existing campus. Dixie Junior College was at the crossroads of a new era and began searching for land to purchase.

In 1957 the first building establishing the new campus on the east side of town was completed. Thus began the new identity of Dixie State College. Over the next fifty years the College would continue to grow both in acreage and academics

In 2007, Dixie State College of Utah again finds itself at the crossroads of a new era. DSC is in the process of adding and expanding four year baccalaureate programs; these programs will require new and updated facilities. Also, population growth in Washington County is the highest in the nation and Dixie State College is feeling the effects of growing pains. The Centennial Commons building will play a vital role in the successful transition into the college's future. As Dixie State College's rich history dictates, the strength and support of the faculty, students and community will continue to be an essential factor in the development of the Centennial Commons. The strong support provided by the community has been, and always will be, the key to making Dixie State College an exceptional place of learning.

Master Plan Guidelines



Current Campus

In 2006 a master plan was undertaken to study the effects of the inevitable growth of Dixie State College. The master plan estimates that the college's full-time equivalent enrollment will double in size in ten years and quadruple in size in twenty years. This growth coupled with the emergence of new baccalaureate programs only increases the already desperate need for additional modern facilities. The Centennial Commons Building will be the crucial first step in preparing Dixie State College (DSC) for its future.

As was indicated in the master plan, Dixie State College will need to make the most of the campus acreage available. It was determined that the ideal plan is to build new facilities taller (up to five stories) and closer together to accommodate additional growth on their relatively small footprint while still maintaining smaller intimate open and green areas. The Centennial Commons building will be the first proposal to come forward under the new master plan recommendations. Therefore, the building is recommended to be five stories tall and located between the Eccles Fine Arts Center and the Browning Library. This location will assist DSC in enlivening and strengthening the academic core.



Masterplan 10-year

The master plan also addressed locations of future buildings and demolition of old, dilapidated facilities. A previous study was conducted to analyze the Whitehead building for improvement. In this study it was determined that a structural upgrade and remodel were not economically feasible. It was therefore recommended that a new student services building be constructed. All student service center functions will be replaced in their entirety in the new Centennial Commons building.

The rapid growth the college is experiencing and will continue to experience has instigated the need for additional classroom space for a number of departments. This spatial deficiency has been compounded by the emerging baccalaureate programs. The Centennial Commons building is proposed to both replace the student service functions of the Whitehead building and provide much needed classroom space.



Masterplan 20-year

Over the next twenty years the masterplan predicts that Dixie State College will need to add over three million square feet of facilities to keep up with projected growth. The Centennial Commons building will be a vital asset to the campus during this process. Flexible classroom spaces will provide emerging and expanding programs transitional space while new facilities are being built. Centennial Commons will supply the immediately needed space as well as provide flexible spaces to facilitate future campus programs.

Program Summary



Students gathering outdoors in the temperate Dixie weather



Whitehead Building



Students study at the library

This program study for the Centennial Commons building is the product of a number of workshops with college administrators, Student Services personnel, and representatives of various academic departments currently experiencing spatial deficiencies. The vision for Centennial Commons is to create a multi-functional building. The academic programs selected for this building were determined based on a synergistic relationship. These functions were chosen based on the concept of the building as an activity center on campus. Through these workshops it was determined that the following departments are to be located in the Centennial Commons building:

Student Service Functions

A previous facility study determined that the Whitehead building, which houses Student Services, is in serious disrepair and needs immediate attention. A building upgrade and remodel are not economically feasible. The Whitehead building is roughly 61,000 square feet and the student service and business service functions housed there will be relocated in their entirety, with some additional growth, into Centennial Commons.

Other student service functions such as the Library and Computer Labs are currently at capacity. The impact of adding baccalaureate degrees will heavily tax these already undersized facilities. The proposed location for the Centennial Commons building will allow for a physical connection to the existing Library at the lower level providing a synergistic relationship. This connection will provide the library with considerable space for expansion. Also, by including student study spaces and computer lab functions in the Student Commons portion of Centennial Commons, it will relieve pressure from the already inadequately sized study spaces in the library and provide open space for the expansion of stacks within the Library.

The lower two levels of the building are to house the public functions of student services, library and student commons spaces. The sloped site provides an on grade entrance at both the south fountain quad entrance and the north pedestrian plaza, enlivening both the main and second levels. The commons spaces are to be flexible, open and inviting. In the Commons, students will have access to all of the services they require: registration, cashiers, computers, study space, technology and food. This area will become a hive of activity.

Academic Departments

Currently there is a severe lack of classroom space on the campus and many academic departments are extremely limited in space. Most notably Humanities classes are taught in almost every building on campus. As this department adds new baccalaureates (English is already offered and Integrated Studies will be the next degree addition) they desperately need more space. Additional classrooms and faculty offices are to be located in the Centennial Commons.

The Science department is another program that is experiencing a severe lack of space. Their current building is undergoing a process to upgrade labs and convert classrooms into much needed additional lab spaces. This department has an immediate need for additional classrooms and faculty offices.



Students make use of all available study space

Other academic programs that are experiencing similar spatial deficiencies are Math and Computer Science. Currently the Math department is housed in the North Instructional building. Math, being a prerequisite for most areas of studies, draws a number of students across 100 South. A central location for this department would be preferred and would free up the North Instructional building for a more suitable department. Computer Science is temporarily housed in the Udvar-Hazy Business building. The business department will need to expand into that space in the next few years leaving Computer Science without a home. Both departments are well suited for the Centennial Commons.

Academics are to be located on the upper levels of the Centennial Commons building as these are less public functions. Classroom design should be both functional and flexible, with integrated technology. Learning and teaching methods are becoming more and more reliant on technology. The “smart classrooms” included in this facility, will provide faculty with the technological tools to utilize all types of media, encouraging and facilitating learning.

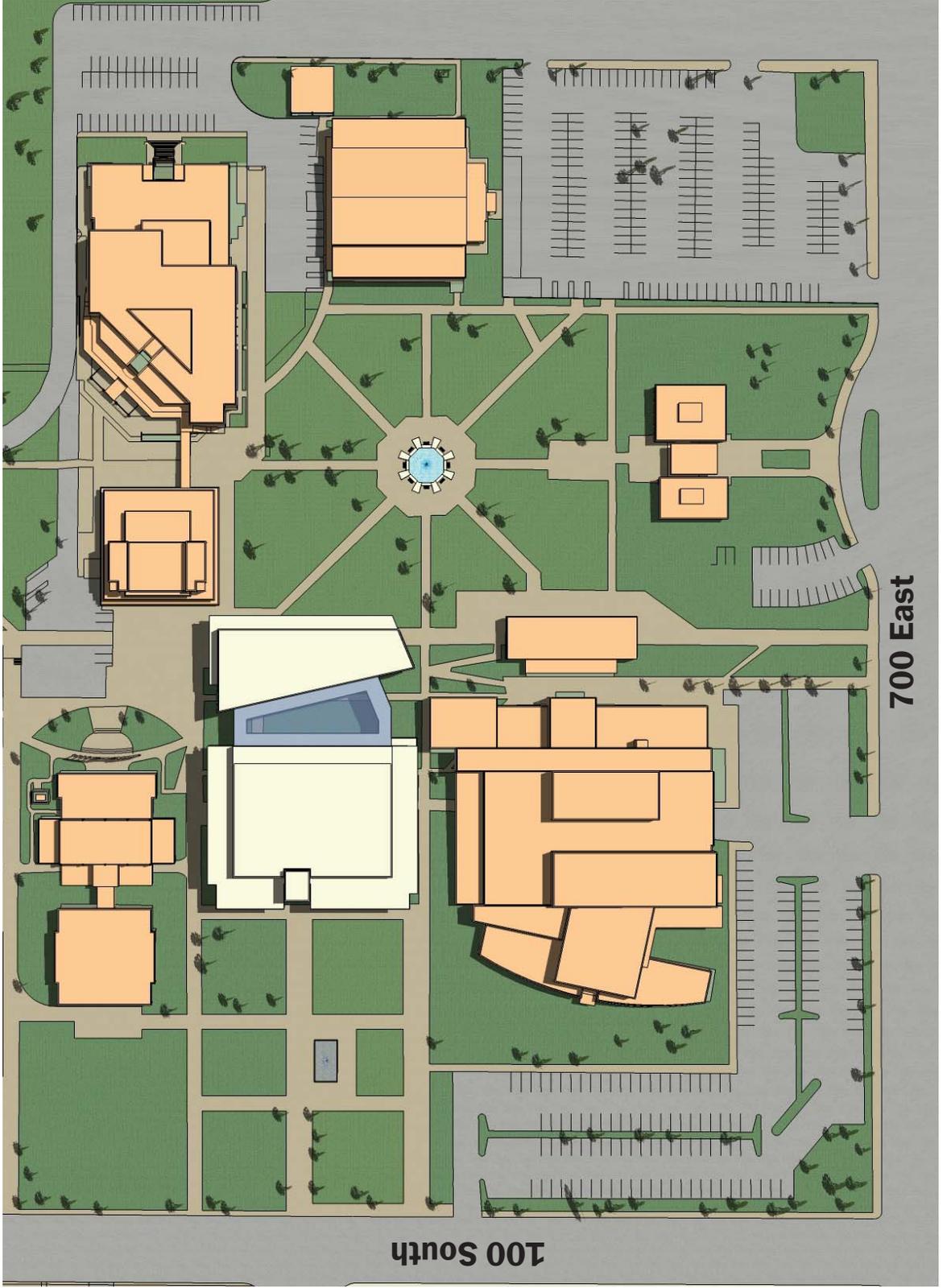
Heritage Choir

The Heritage Choir is a privately funded musical group that has a close relationship with the DSC’s music department. It has been determined that the Heritage Choir, also in need of new facilities, will be located in the Centennial Commons building. The close proximity to the Eccles Performing Arts Center and access from 100 South makes it a prime location for Heritage Choir. Music department functions that coexist with the Heritage Choir will also be included in the program for the Centennial Commons. The Heritage Choir functions will, however, be privately funded, and are therefore listed separately in the square footage totals.

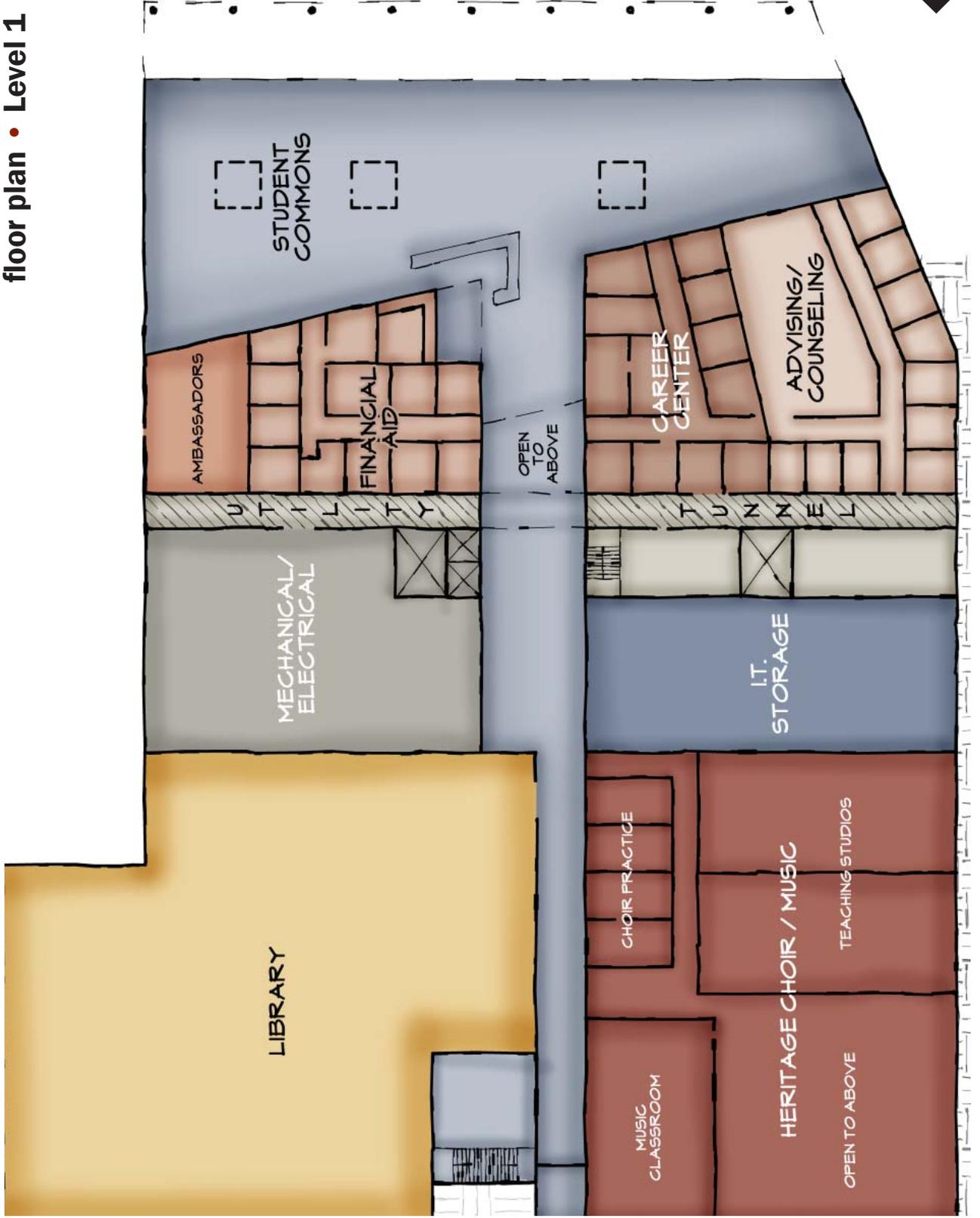
Program Design Concept

The mixed-use, multi-function concept for the Centennial Commons building will create a true student center on campus. Student Service functions will always be necessary and draw students to the building. By providing additional services such as the Commons, the new building will encourage students to stay on campus rather than perpetuate the current commuter attitude at the College. The flexible classroom design concept for the Centennial Commons building will alleviate the immediate need felt by many departments and will also provide transitional spaces for future departments as Dixie State College continues to grow. The unique combination of these functions will create an activity center of interaction and learning for Dixie State College.

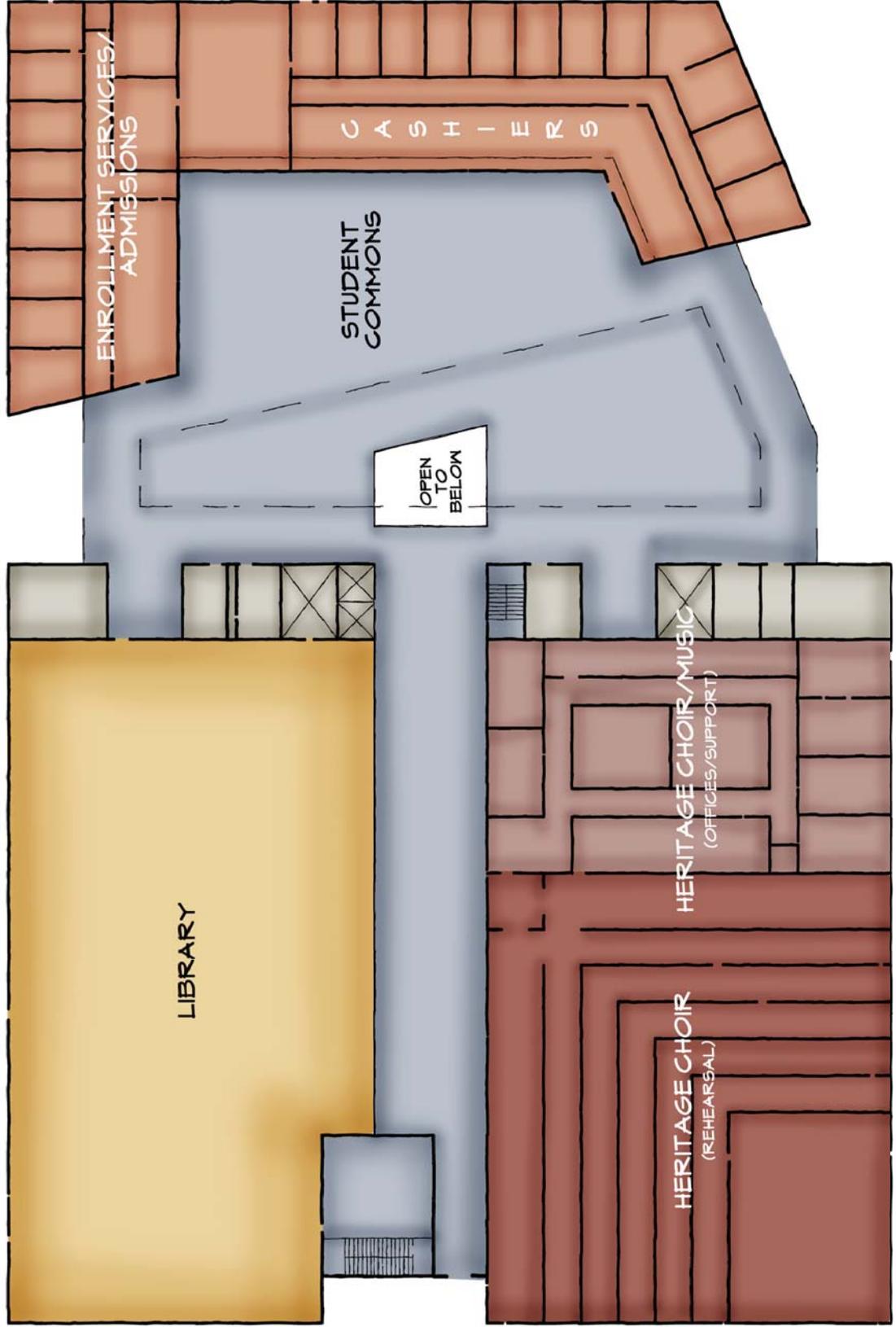
Site Plan
Centennial Commons



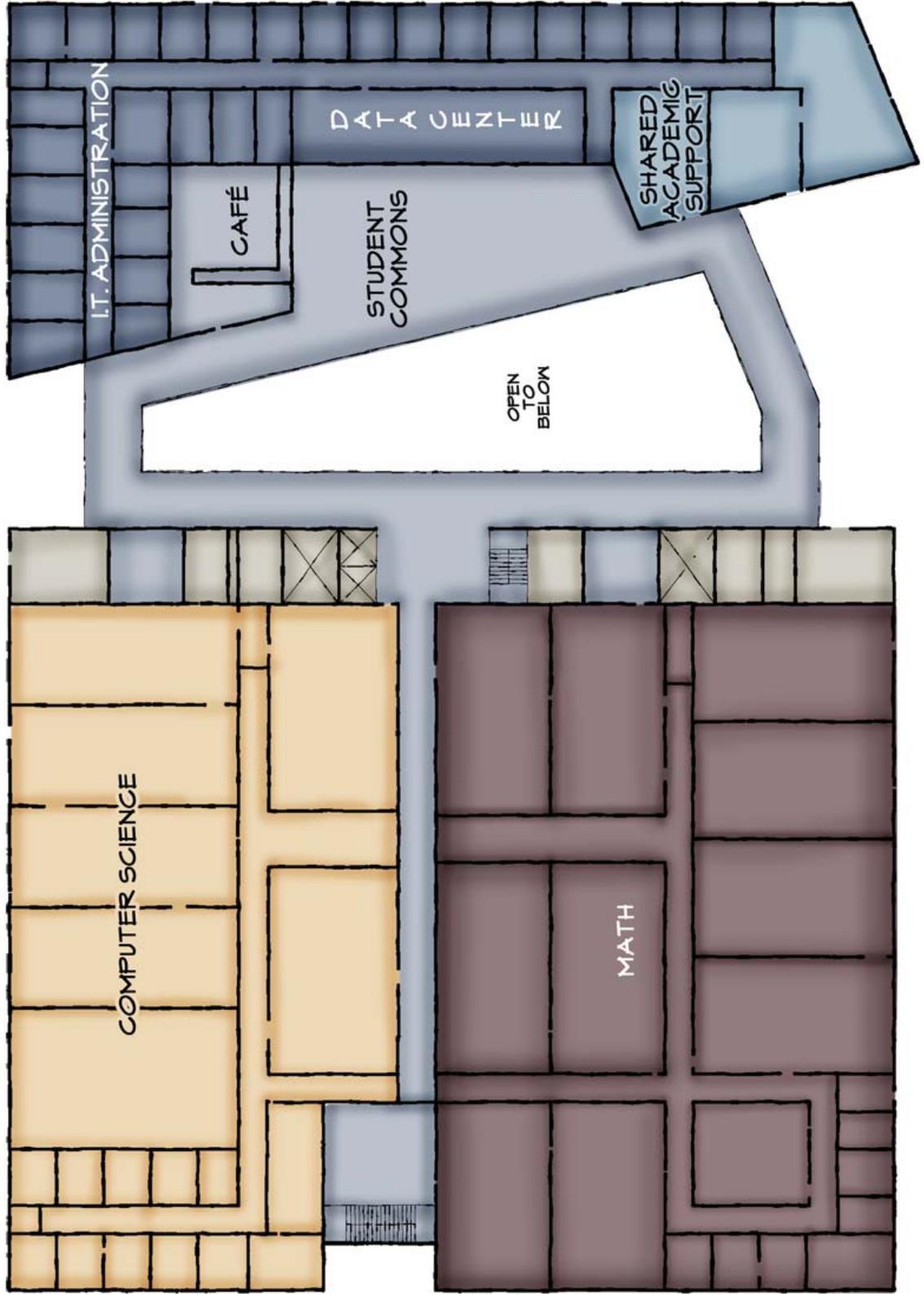
floor plan • Level 1



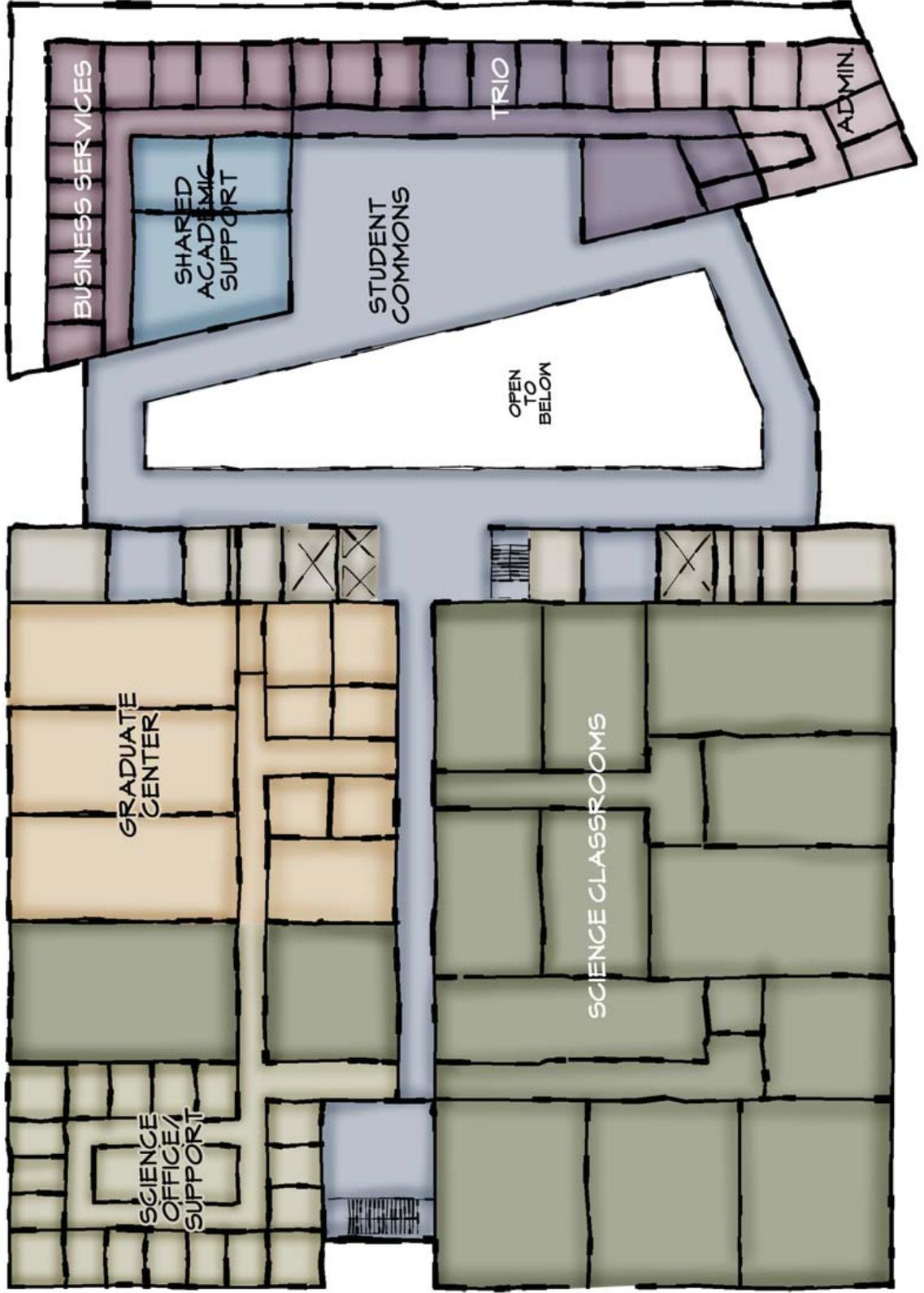
floor plan • Level 2



floor plan • Level 3



floor plan • Level 4



floor plan • Level 5



AREA	QTY	SF / SPACE	TOTAL SF
A. Student Services			16,320
Advising / Counseling			
A.1a Offices	2	150	300
A.1b Offices	8	120	960
A.2a Reception / Waiting / Computers	1	300	300
A.2b Testing Rooms	4	80	320
A.3a Storage	1	150	150
A.3b Conference	1	300	300
Career Center			
A.4a Offices	4	120	480
A.4b Offices	2	150	300
A.5a Offices (Coop Ed)	3	120	360
A.5b Library	1	120	120
A.6a Computer Lab (4 Computers)	1	150	150
A.6b CNA Testing Room (3 Computers)	1	120	120
A.7 Interview Rooms	2	100	200
Enrollment Services / Admissions			
A.8a Offices (Private)	8	120	960
A.8b Offices (Private)	2	150	300
A.9a Counter Space (20FT) 400 in front 200 in back	1	700	700
A.9b Offices (Open Work Areas)	10	120	1,200
A.10a Meeting / Training Room	1	300	300
A.10b Recruitment Greeting / Presentation Room / Ambassador Call Center / Meeting Room	1	600	600
Financial Aid / Scholarships			
A.11a Counter Space (20FT)	1	700	700
A.11b Offices (Private)	6	120	720
A.12a Offices (Private)	2	150	300
A.12b Administrative Assistant (Work Area)	1	120	120
A.13a Technical Specialist (Work Area)	2	120	240
A.13b Accounting (Work Area)	1	120	120
A.14 Cashier	1	6,000	6,000
B. Business Services			2,700
B.1a Offices (Closed)	10	150	1,500
B.1b Offices (Open)	8	100	800
B.2 Secure Record Storage	1	400	400
C. Administration			1,440
C.1a HR Offices	3	150	450
C.1b HR Security Office	1	120	120
C.2a Small Conf. Room	1	300	300
C.2b IR Office	1	150	150
C.3a VP Student Services Offices	2	150	300
C.3b Reception Area	1	120	120
D.1 Student Commons			10,000

AREA	QTY	SF / SPACE	TOTAL SF
E.1 Library			17,500
F. I.T. / Admin. Computing			8,200
F.1a Offices	5	150	750
F.1b Offices	20	120	2,400
F.2a Storage / IT	1	4,000	4,000
F.2b Data Center	1	850	850
F.3 Storage	1	200	200
G. Computer Science / Visual Technology			11,150
G.1a Offices	2	150	300
G.1b Offices	9	120	1,080
G.2a Storage / Servers	2	180	360
G.2b Lecture Rooms	2	1,000	2,000
G.3a Computer Classrooms	3	1,000	3,000
G.3b Computer Labs	2	1,800	3,600
G.4a Computer Server Room	1	570	570
G.4b Lab Assistant Office	1	120	120
G.5 Advisor Office	1	120	120
H. Continuing Education			625
H.1a Offices	4	125	500
H.1b Sec.Office	1	125	125
I. Graduate Center			7,050
I.1a Offices	7	150	1,050
I.1b Facilitator Offices (Suite) Open	1	200	200
I.2a IP Seminar Rooms	6	200	1,200
I.2b IP Classrooms (seat 25)	4	900	3,600
I.3a Storage	1	200	200
I.3b Control Room	2	200	400
I.4 Reception Area	1	400	400
J. Science			16,460
J.1a Faculty Offices	2	150	300
J.1b Faculty Offices	8	120	960
J.2a Adjunct Faculty (Suite)	1	600	600
J.2b Classrooms (seat 35)	6	1,000	6,000
J.3a Classrooms (seat 65)	6	1,400	8,400
J.3b Storage	1	200	200

AREA	QTY	SF / SPACE	TOTAL SF
K. Math			11,980
K.1a Faculty Offices	2	150	300
K.1b Faculty Offices	8	120	960
K.2a Adjunct Faculty (Suite)	1	600	600
K.2b Classrooms	10	1,000	10,000
K.3 Reception	1	120	120
L. English / Humanities			14,085
L.1a Faculty Offices	2	150	300
L.1b Faculty Offices	13	120	1,560
L.2a Secretary Offices	1	125	125
L.2b Classrooms (seat 35)	5	1,000	5,000
L.3a Classrooms (seat 65)	4	1,400	5,600
L.3b Psychology Lab / Data Collection	3	200	600
L.4 Seminar Rooms	3	300	900
M. Shared Academic Support			2,800
M.1a Copy / Work Rooms	3	200	600
M.1b Conference Rooms	4	200	800
M.2a Conference Rooms	1	600	600
M.2b Faculty Break Room	2	400	800
N. Trio			1,830
N.1a Offices (Student Support Services)	4	120	480
N.1b Computer Lab / Meeting Room (SSS)	1	400	400
N.2a Upward Bound Offices	3	150	450
N.2b ETS (Educational Talent Search) Offices	2	150	300
N.3 Storage	1	200	200
O. Future Programs - Flexible Academic Spaces			4,960
O.1a Classrooms	4	1,000	4,000
O.1b Offices	8	120	960
P. Food Services			600
P.1a Small Kiosk	1	150	150
P.1b Medium Kiosk	1	250	250
P.2 Vending Stations	8	25	200

AREA	QTY	SF / SPACE	TOTAL SF
Q. Music			5,970
Q.1a Offices	4	225	900
Q.1b Choral Practice Rooms	4	80	320
Q.2a Choir Storage	1	350	350
Q.2b Music Library	2	400	800
Q.3a Teaching Studio	2	1,200	2,400
Q.3b Music Classroom	1	1,200	1,200
R. Heritage Choir			10,900
R.1a Offices	1	200	200
R.1b Choral Rehearsal	1	9,500	9,500
R.2a Choir Storage	1	250	250
R.2b Music Library	1	600	600
R.3a Recording Equipment / Support	1	250	250
R.3b Recording Storage	1	100	100
Total Square Feet (excluding Heritage Choir)			
Subtotal			133,670
40.5%* Efficiency Factor			54,086
Total			187,756
Heritage Choir			
Subtotal			10,900
33%** Efficiency Program			3,597
Total			14,497
Total Building			202,253

Notes:

*: 40.5% Efficiency Factor includes Mechanical, Electrical, Telecommunication, Building Storage, Restrooms, Custodial, Elevator Equipment Room, Circulation, and Exterior Walls.

** : 33% Efficiency Factor for Heritage Choir includes Circulation and Exterior Walls only.

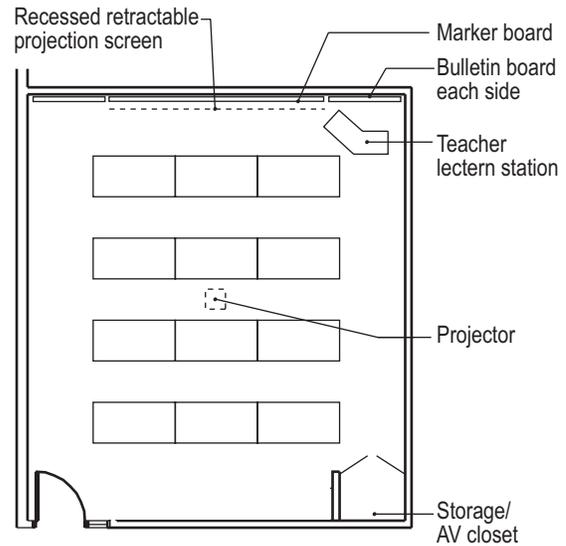
SPACE DETAILED TYPICAL CLASSROOM

SPACE

Area	Varies
Minimum Dimensions	28'
Minimum Ceiling	10'
Occupants	Varies

FUNCTION

- Flexible classroom space



REQUIREMENTS

Ceilings	Lay-in acoustical tile
Walls	Painted
Floors	Carpet tile over low profile raised access floor system
Base	4" rubber
Windows	Desirable
Doors	3'x7' solid core wood with side lite
HVAC	Heating, ventilating and air conditioning. Average temperature 72° F
Plumbing	None
Lighting	Indirect, 50 f.c., dimmable
Audio / Visual	Integrated building public address system. Ceiling mounted projector, floor boxes
Telephone	None
Data	Overall wireless coverage; outlets to ceiling mounted projector connected to lectern, floor boxes, counter top
Power	Convenience outlets all walls and above counter top, flush floor box at table rows and in front of room; power to ceiling mounted projector, wall mounted TV
Security	Lockable doors and cabinets
Other Considerations	Provide 2'x2' space for recycling container

EQUIPMENT

- Base and wall cabinets, lockable
- Storage closet, lockable
- Retractable projection screen
- Marker boards (dry erase)
- Bulletin boards
- Support for ceiling mounted projector
- Window blinds / shades
- Wall clock (battery operated)

EQUIPMENT BY OTHERS

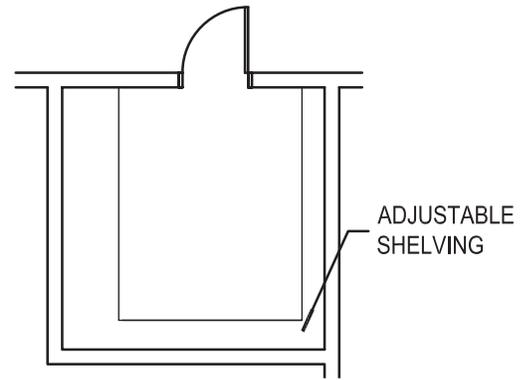
- Tables and cable management (for flexible layouts)
- Chairs
- Lectern
- AV system equipment rack with controller, DVD/VCR, data, etc.
- Computer system
- Waste receptacles

SPACE

DETAILED TYPICAL GENERAL STORAGE

SPACE

Area	Varies
Minimum Dimensions	10'
Minimum Ceiling	12'
Occupants	NA



FUNCTION

- General storage for administration and academic departments

REQUIREMENTS

Ceilings	Exposed structure, painted
Walls	Painted
Floors	VCT
Base	4" rubber
Windows	None
Doors	Pair or single 3'x7' hollow metal door
HVAC	Ventilation
Plumbing	None
Lighting	Ceiling mounted pendant utility fluorescent, 30 f.c.
Audio / Visual	None
Telephone	None
Data	None
Power	Convenience outlets on each wall
Security	Lockable doors with security strike plate
Other Considerations	Wall should be reinforced where appropriate to accept shelving fasteners

EQUIPMENT

- Adjustable shelving

EQUIPMENT BY OTHERS

- Tables
- Chairs
- Portable lectern

SPACE

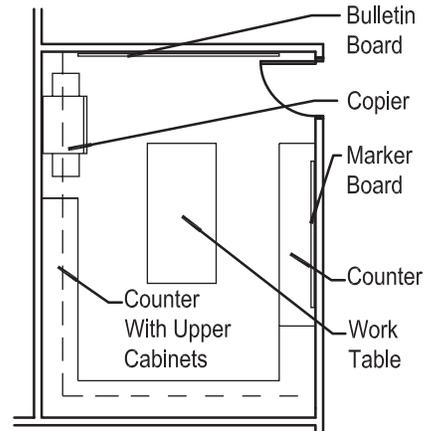
DETAILED TYPICAL WORKROOM

SPACE

Area	Varies
Minimum Dimensions	10'
Minimum Ceiling	9'
Occupants	NA

FUNCTION

- Administrative personnel use



REQUIREMENTS

Ceilings	2x2 Lay-in acoustical ceiling tile
Walls	Painted
Floors	VCT
Base	4" rubber
Windows	Optional
Doors	3'x7' solid core wood
Access	
HVAC	Heating - ventilating - air conditioning
Plumbing	None
Lighting	50 f.c., under counter task lighting
Audio / Visual	Integrated public address system
Telephone	Outlet for (1) wall mounted multiline IP set (2) Data connections
Data	(3) Electrical outlets per wall - locate above splash of counter top at base cabinet locations; outlet for copier; surge protection at copier & computer
Power	
Security	Lockable doors
Other Considerations	Space could connect directly to administration space without doors. Allow 2'x2' area for recycling container.

EQUIPMENT

- Built-in counter top with base and upper cabinets
- Bulletin board
- Marker board, white (dry erase)
- Wall clock (battery-operated)

EQUIPMENT BY OTHERS

- Chairs / stools
- (1) Wall mounted multi-line standard telephone
- Multi roll butcher paper rack
- Work table
- Computer system
- Printer
- Paper shredder
- Copier
- Fax
- Trash receptacle

SPACE

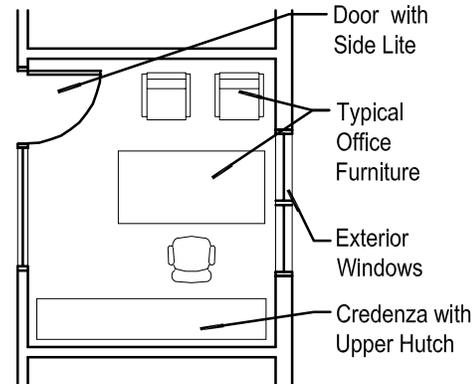
DETAILED TYPICAL OFFICE

SPACE

Area	120 - 150 sf
Minimum Dimensions	10'
Minimum Ceiling	9'
Occupants	1 with varied visitors

FUNCTION

- Administrative workspace



REQUIREMENTS

Ceilings	2x2 Lay-in acoustical ceiling tile
Walls	Painted
Floors	Carpet tile over low profile raised access floor system
Base	4" rubber
Windows	Exterior and interior windows desirable
Doors	3'-7' Solid core wood with side lite
HVAC	Heating - Ventilating - Air Conditioning
Plumbing	None
Lighting	50 f.c.; include task lighting and day lighting in the design
Audio / Visual	None
Telephone	Outlet for (1) Multi-line IP set
Data	(4) Data connections
Power	(3) Duplex outlets on each wall; surge protection for computers
Security	Lockable

EQUIPMENT

- Vertical Window Blinds

EQUIPMENT BY OTHERS

- Desk / Credenza
- Desk chair
- Guest chairs
- Task lighting
- Multi-line IP telephone
- Bookcase
- File cabinet
- Computer system
- Printer
- Trash receptacles

SPACE

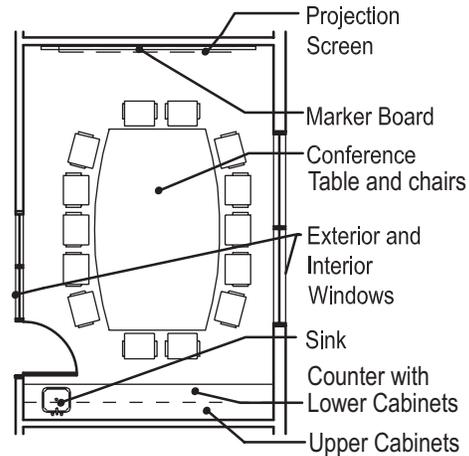
DETAILED TYPICAL CONFERENCE ROOM

SPACE

Area	Varies
Minimum Dimensions	12'
Minimum Ceiling	9'
Occupants	Varies

FUNCTION

- Group meeting space



REQUIREMENTS

Ceilings	2x2 Lay-in acoustical ceiling tile
Walls	Painted
Floors	Carpet tile over low profile raised access floor system
Base	4" - match carpet
Windows	Exterior and interior windows desirable
Doors	3'x7' Solid core wood with sidelite
HVAC	Heating, ventilating & air conditioning with switched exhaust fan
Plumbing	Small stainless steel bar sink
Lighting	70 f.c. with Dimmer system
Audio / Visual	Conduit and wiring for closed circuit and cable TV
Telephone	Outlet for (1) multiline IP set
Data	Data connections at conference table, above counter at back wall and/or equipment rack in wall cabinet, and to ceiling-mounted projector.
Power	Convenience outlets all walls and above counter top; flush floor mounted power receptacles to be provided under table; ceiling-mounted projector, equip. rack at rear wall cabinetry & to under counter refrigerator; GFI at counter top by sink; surge protection for computers, AV equip. and projector.
Security	Lockable doors and cabinets

EQUIPMENT

- Marker board, white (dry erase)
- Built in pull down projection screen
- Wall clock (battery-operated)
- Sink
- Countertop over base cabinets with wall cabinets above; provide space for under counter refrigerator; vent for AV equipment
- Vertical window blinds
- Bracket for ceiling-hung projector

EQUIPMENT BY OTHERS

- Ceiling-mounted projector
- Projection screen
- Conference table (comprised of multiple smaller for flexibility of layout)
- Chairs
- (1) multiline IP telephone
- (1) multiline conference telephone
- Trash receptacle
- Under counter refrigerator
- AV system equip. rack w/ amplifier, controller, VCR/DVD, etc.
- Recycling bin
- Soap and paper towel dispenser

A.1a

DEPARTMENT

**STUDENT SERVICES
ADVISING / COUNSELING
Offices**

SPACE

SPACE

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Advising / Counseling Directors

RELATIONSHIP

- Located on Level 1
 - Near Career Center
 - Near Advising / Counseling Reception
-

A.1b

DEPARTMENT

**STUDENT SERVICES
ADVISING / COUNSELING
Offices**

SPACE

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	8
Total Area	960

NOTES

- Typical office finishes and services (See Detailed Typical Office)
- Offices to have privacy

FUNCTION

- Workspace for Advising / Counseling Administration

RELATIONSHIP

- Located on Level 1
- Near Career Center
- Near Advising / Counseling Reception
- Near Advising / Counseling Director

A.2a

DEPARTMENT

STUDENT SERVICES**ADVISING / COUNSELING**

SPACE

Reception / Waiting / Computers

SPACE

Area	300 nsf
Minimum Dimensions	15'
Occupants	15
Quantity	1
Total Area	300

NOTES

- Computer stations for student assisted registration
- Reception desk visible from entrance

FUNCTION

- Waiting / Reception area for Advising / Counseling

RELATIONSHIP

- Located on Level 1
- Near Student Commons and Main Entry

A.2b

DEPARTMENT

STUDENT SERVICES**ADVISING / COUNSELING**

SPACE

Testing Rooms

SPACE

Area	80
Minimum Dimensions	8'
Occupants	1
Quantity	4
Total Area	320

NOTES

- Must have acoustical separation from waiting area
- Computer station required
- Private, but with ample lighting

FUNCTION

- One person private testing rooms

RELATIONSHIP

- Located on Level 1
- Adjacent to Advising / Counseling Reception

A.3a

DEPARTMENT

**STUDENT SERVICES
ADVISING / COUNSELING
Storage**

SPACE

SPACE

Area	150 nsf
Minimum Dimensions	10'
Occupants	NA
Quantity	1
Total Area	150

NOTES

- Typical storage finishes and services (See Detailed Typical General Storage)
- Full height adjustable shelves

FUNCTION

- Storage area for Advising / Counseling

RELATIONSHIP

- Located on Level 1
- Near Advising / Counseling Reception

A.3b

DEPARTMENT

**STUDENT SERVICES
ADVISING / COUNSELING
Conference**

SPACE

SPACE

Area	300 nsf
Minimum Dimensions	15'
Occupants	15
Quantity	1
Total Area	300

NOTES

- Visibility from Advising / Counseling Reception
- Counter with lower cabinets and sink
- Acoustical separation from Reception
- Typical conference room finishes and services (See Detailed Typical Conference Room)

FUNCTION

- Meeting space for 12-15 people

RELATIONSHIP

- Located on Level 1
- Adjacent to Advising / Counseling Reception

A.4a

DEPARTMENT

STUDENT SERVICES

SPACE

**CAREER CENTER
Offices****SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	4
Total Area	480

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Career Center Advisors

RELATIONSHIP

- Located on Level 1
 - Adjacent to Advising / Counseling
 - Adjacent to Student Commons
-

A.4b

DEPARTMENT

STUDENT SERVICES

SPACE

**CAREER CENTER
Offices****SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Career Center Advisors

RELATIONSHIP

- Located on Level 1
- Adjacent to Career Center Advisor Offices

A.5a

DEPARTMENT

STUDENT SERVICES

SPACE

**CAREER CENTER
Offices (Coop Ed)****SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	3
Total Area	360

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Coop Ed Advisors

RELATIONSHIP

- Located on Level 1
- Adjacent to Career Center Advisor Offices

A.5b

DEPARTMENT

STUDENT SERVICES

SPACE

**CAREER CENTER
Library****SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	1
Total Area	120

NOTES

- Adjustable shelves around perimeter
- Small work table
- Visible from Student Commons

FUNCTION

- Career Center Library to house occupational media and study space

RELATIONSHIP

- Located on Level 1
- Adjacent to Career Center Advisor Offices

A.6a

DEPARTMENT

STUDENT SERVICES**CAREER CENTER**

SPACE

Computer Lab (4 Computers)**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	6
Quantity	1
Total Area	150

NOTES

- Visible from Student Commons

FUNCTION

- Small computer lab for research

RELATIONSHIP

- Located on Level 1
 - Near Career Center Library
-

A.6b

DEPARTMENT

STUDENT SERVICES**CAREER CENTER**

SPACE

CNA Testing Room (3 Computers)**SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	1
Total Area	120

NOTES

- Acoustical separation
- Private, but with option of supervision

FUNCTION

- Small computer lab testing space

RELATIONSHIP

- Located on Level 1
- Near Career Center Advisor Offices

A.7**DEPARTMENT****STUDENT SERVICES****SPACE****CAREER CENTER****Interview Rooms****SPACE**

Area	100 nsf
Minimum Dimensions	10'
Occupants	5
Quantity	2
Total Area	200

NOTES

- Private rooms with acoustical separation

FUNCTION

- Small meeting room for interviews between students and advisors

RELATIONSHIP

- Located on Level 1
- Adjacent to Career Center Advisors

A.8a

DEPARTMENT

STUDENT SERVICES

SPACE

**ENROLLMENT SERVICES / ADMISSIONS
Offices (Private)****SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	8
Total Area	960

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Enrollment Services / Admissions employee

RELATIONSHIP

- Located on Level 2

A.8b

DEPARTMENT

STUDENT SERVICES

SPACE

**ENROLLMENT SERVICES / ADMISSIONS
Offices (Private)****SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Enrollment Services / Admissions Director

RELATIONSHIP

- Located on Level 2

A.9a

DEPARTMENT

STUDENT SERVICES

SPACE

ENROLLMENT SERVICES / ADMISSIONS**Counter Space (20FT)****400 in front, 200 in back**

SPACE

NOTES

Area 700 nsf

Minimum Dimensions

Occupants NA

Quantity 1

Total Area 700

FUNCTION

- Surface space for office function and work

RELATIONSHIP

- Located on Level 2
- Adjacent to Student Commons

A.9b

DEPARTMENT

STUDENT SERVICES

SPACE

ENROLLMENT SERVICES / ADMISSIONS**Offices (Open Work Areas)**

SPACE

NOTES

Area 120 nsf

Minimum Dimensions 10'

Occupants 4

Quantity 10

Total Area 1,200

FUNCTION

- Open work areas for public projects

RELATIONSHIP

- Located on Level 2

A.10a

DEPARTMENT

STUDENT SERVICES

SPACE

**ENROLLMENT SERVICES / ADMISSIONS
Meeting / Training Room**

SPACE

Area	300 nsf
Minimum Dimensions	
Occupants	
Quantity	1
Total Area	300

NOTES

- Typical conference room finishes and services (See Detailed Typical Conference Room)

FUNCTION

- Flexible small space for informal conferences and meetings

RELATIONSHIP

- Located on Level 2
- Adjacent to Student Commons

A.10b

DEPARTMENT

STUDENT SERVICES

SPACE

**ENROLLMENT SERVICES / ADMISSIONS
Recruitment Greeting / Presentation Room
/ Ambassador Call Center / Meeting Room**

SPACE

Area	600 nsf
Minimum Dimensions	20'
Occupants	30
Quantity	1
Total Area	600

NOTES

- Visible from Student Commons
- Typical conference room finishes and services (See Detailed Typical Conference Room)

FUNCTION

- Flexible space to be used for formal presentations, meetings and gatherings
- Provides computer stations for Ambassadors

RELATIONSHIP

- Located on Level 2
- Adjacent to Student Commons

A.11a

DEPARTMENT

STUDENT SERVICES

SPACE

**FINANCIAL AID / SCHOLARSHIPS
Counter Space (20 FT)**

SPACE

Area	700 nsf
Minimum Dimensions	
Occupants	NA
Quantity	1
Total Area	700

NOTES

- Access to counter from Student Commons

FUNCTION

- Surface space for office function and work

RELATIONSHIP

- Located on Level 1
- Adjacent to Student Commons

A.11b

DEPARTMENT

STUDENT SERVICES

SPACE

**FINANCIAL AID / SCHOLARSHIPS
Offices (Private)**

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	6
Total Area	720

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Office space

RELATIONSHIP

- Located on Level 1
- Near Financial Aid / Scholarship Administrative Assistant

A.12a

DEPARTMENT

STUDENT SERVICES

SPACE

**FINANCIAL AID / SCHOLARSHIPS
Offices (Private)**

SPACE

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finished and services (See Detailed Typical Office)

FUNCTION

- Workspace for Financial Aid / Scholarship Directors

RELATIONSHIP

- Located on Level 1
 - Near Financial Aid / Scholarship Administrative Assistant
-

A.12b

DEPARTMENT

STUDENT SERVICES

SPACE

**FINANCIAL AID / SCHOLARSHIPS
Administrative Assistant (Work Area)**

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	1
Total Area	120

NOTES

- Open work area

FUNCTION

- Open workspace for Administrative Assistant to Financial Aid / Scholarship

RELATIONSHIP

- Located on Level 1
- Located behind Financial Aid / Scholarship counter
- Access from Student Commons

A.13a

DEPARTMENT

STUDENT SERVICES

SPACE

FINANCIAL AID / SCHOLARSHIPS
Technical Specialist (Work Area)

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	6
Quantity	2
Total Area	240

NOTES

- Open work area for Technical Specialists

FUNCTION

- Workspace for Financial Aid / Scholarship Technical Specialist

RELATIONSHIP

- Located on Level 1
 - Adjacent to Financial Aid / Scholarship Administrative Offices
-

A.13b

DEPARTMENT

STUDENT SERVICES

SPACE

FINANCIAL AID / SCHOLARSHIPS
Accounting (Work Area)

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	6
Quantity	1
Total Area	120

NOTES

- Open work area for Accountants

FUNCTION

- Workspace for Financial Aid / Scholarship Accountants

RELATIONSHIP

- Located on Level 1
- Adjacent to Financial Aid / Scholarship Administrative Offices

A.14

DEPARTMENT

STUDENT SERVICES

SPACE

Cashier**SPACE**

Area	6,000 nsf
Minimum Dimensions	
Occupants	NA
Quantity	1
Total Area	6,000

NOTES

- Multi-point access cashier counter
- Visible signage
- Flexible signage and function so that cashier windows and registration windows can be used interchangeably depending on business flow
- Ability to set up registration kiosks in Student Commons during peak usage

FUNCTION

- Work counter at which students can register for classes and pay fees

RELATIONSHIP

- Located on Level 2
- Direct access from Student Commons
- Work stations / offices behind counter

B.1a

DEPARTMENT

BUSINESS SERVICES

SPACE

Offices (Closed)**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	6
Quantity	10
Total Area	1,500

NOTES

- Typical office finishes and services (See Detailed Typical Office)
- Non-public / -student access

FUNCTION

- Workspace for Business Service Administrators

RELATIONSHIP

- Located on Level 4
 - Adjacent to open offices
-

B.1b

DEPARTMENT

BUSINESS SERVICES

SPACE

Offices (Open)**SPACE**

Area	100 nsf
Minimum Dimensions	
Occupants	
Quantity	8
Total Area	800

NOTES

- Open, flexible work space
- Typical office finishes and services (See Detailed Typical Office)
- Non-public / -student access; private suite

FUNCTION

- Workspace for Business Services staff

RELATIONSHIP

- Located on Level 4

B.2

DEPARTMENT

BUSINESS SERVICES

SPACE

Secure Record Storage**SPACE**

Area	400 nsf
Minimum Dimensions	
Occupants	
Quantity	1
Total Area	400

NOTES

- Flexible shelving
- Secure, locked space with limited access
- Typical storage finishes and services (See Detailed Typical General Storage)

FUNCTION

- Secure storage for Business Services

RELATIONSHIP

- Located on Level 4
- Adjacent to open offices

C.1a

DEPARTMENT

ADMINISTRATION

SPACE

HR Offices

SPACE

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	3
Total Area	450

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Human Resources

RELATIONSHIP

- Located on Level 4
- Near Reception Area

C.1b

DEPARTMENT

ADMINISTRATION

SPACE

HR Security Office

SPACE

Area	120 nsf
Minimum Dimensions	6'
Occupants	4
Quantity	1
Total Area	120

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Human Resources Security

RELATIONSHIP

- Located on Level 4
- Adjacent to Human Resources offices
- Near Reception Area

C.2a

DEPARTMENT

ADMINISTRATION

SPACE

Small Conference Room**SPACE**

Area	300 nsf
Minimum Dimensions	15'
Occupants	15
Quantity	1
Total Area	300

NOTES

- Counter with lower cabinets and sink
- Acoustical separation from Reception
- Visual connection to Reception
- Typical conference room finishes and services (See Detailed Typical Conference Room)

FUNCTION

- Small meeting space for 12-15 people

RELATIONSHIP

- Located on Level 4
- Adjacent to Reception

C.2b

DEPARTMENT

ADMINISTRATION

SPACE

IR Office**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	1
Total Area	150

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for IR Administrator

RELATIONSHIP

- Located on Level 4
- Near Reception Area

C.3a

DEPARTMENT

ADMINISTRATION

SPACE

VP Student Services Offices**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for VP Student Services

RELATIONSHIP

- Located on Level 4
- Adjacent to Reception

C.3b

DEPARTMENT

ADMINISTRATION

SPACE

Reception Area**SPACE**

Area	120 nsf
Minimum Dimensions	
Occupants	
Quantity	1
Total Area	120

NOTES

- Visual connection to Student Commons
- Waiting area amenities

FUNCTION

- Waiting and Reception for Administrative Offices

RELATIONSHIP

- Located on Level 4
- Access directly from Student Commons

D.1**DEPARTMENT****SPACE****Student Commons****SPACE**

Area	10,000 nsf
Minimum Dimensions	
Occupants	NA
Quantity	1
Total Area	10,000

NOTES

- Open, flexible space to encourage student congregation and interaction
- Daylighting
- Serves as a central circulation point; all departments have access
- Divided into functional areas: student study, computer access (or kiosks), social spaces, food service, and lounge

FUNCTION

- Open area for students to congregate and interact

RELATIONSHIP

- Located on All Levels
- Central location; each department has physical and visual access to Student Commons

E.1**DEPARTMENT****SPACE****Library****SPACE**

Area	25,000 nsf
Minimum Dimensions	
Occupants	NA
Quantity	1
Total Area	25,000

NOTES

- Program functions to be reviewed with Library
- Administration at time of PreDesign services and program verification
- Limited access for security and surveillance purposes
- Functions to fit with the philosophy of Centennial Commons; flexible, interactive space

FUNCTION

- Expansion space for existing library

RELATIONSHIP

- Located on Level 1 and Level 2
- Direct connection to existing Browning Library at lower level
- Accessible from Student Commons

F.1a

DEPARTMENT

I.T. / ADMIN. COMPUTING

SPACE

Offices**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	5
Total Area	750

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for I.T. / Admin. Computing Directors

RELATIONSHIP

- Located on Level 3
- Adjacent to I.T. / Admin. Computing Offices
- Near Student Computer Labs and Computer Science Dept.

F.1b

DEPARTMENT

I.T. / ADMIN. COMPUTING

SPACE

Offices**SPACE**

Area	120 nsf
Minimum Dimensions	
Occupants	
Quantity	20
Total Area	2,400

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for I.T. / Admin. Computing Administrators

RELATIONSHIP

- Located on Level 3
- Adjacent to Data Center
- Near Student Computer Labs and Computer Science Department

F.2a

DEPARTMENT

I.T. / ADMIN. COMPUTING

SPACE

Storage / I.T.**SPACE**

Area	4,000 nsf
Minimum Dimensions	30'
Occupants	NA
Quantity	1
Total Area	4,000

NOTES

- Secure storage
- Server racks
- Direct chilled air / ventilated space / separate cooling system
- Raised access floor system
- Typical storage room finishes and services (See Detailed Typical General Storage)

FUNCTION

- Provide general storage space and server room for campus I.T.

RELATIONSHIP

- Located on Level 1

F.2b

DEPARTMENT

I.T. / ADMIN. COMPUTING

SPACE

Data Center**SPACE**

Area	850 nsf
Minimum Dimensions	20'
Occupants	NA
Quantity	1
Total Area	850

NOTES

- Secure area
- Direct chilled air / ventilated space / separate cooling system
- Raised access floor system

FUNCTION

- Data center computer / server lab for Administrative Computing

RELATIONSHIP

- Located on Level 3
- Near Administrative Computing offices

F.3

DEPARTMENT

I.T. / ADMIN. COMPUTING

SPACE

Storage**SPACE**

Area	200 nsf
Minimum Dimensions	10'
Occupants	NA
Quantity	1
Total Area	200

NOTES

- Secure storage
- Flexible shelving
- Typical storage room finishes and services (See Detailed Typical General Storage)

FUNCTION

- Provide general storage for I.T. / Administrative Computing

RELATIONSHIP

- Located on Level 3
- Near I.T. and Data Center

G.1a

DEPARTMENT

**COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Offices**

SPACE

SPACE

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Computer Science / Visual Technology Director

RELATIONSHIP

- Located on Level 3
 - Adjacent to Computer Science / Visual Technology offices
-

G.1b

DEPARTMENT

**COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Offices**

SPACE

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	9
Total Area	1,080

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Computer Science / Visual Technology faculty

RELATIONSHIP

- Located on Level 3
- Near Computer Science / Visual Technology classrooms and labs

G.2a**DEPARTMENT****COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Storage / Servers****SPACE****SPACE**

Area	180 nsf
Minimum Dimensions	10'
Occupants	NA
Quantity	2
Total Area	360

NOTES

- Secure storage
- Server racks
- Direct chilled air / ventilated space
- Adjustable shelving
- Typical storage room finishes and services (See Detailed Typical General Storage)

FUNCTION

- Storage space for Computer Science / Visual Technology equipment

RELATIONSHIP

- Located on Level 3
- Near computer classrooms

G.2b**DEPARTMENT****COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Lecture Rooms****SPACE****SPACE**

Area	1,000 nsf
Minimum Dimensions	28'
Occupants	50
Quantity	2
Total Area	2,000

NOTES

- Typical classroom finishes and services (See Detailed Typical Classroom)
- Integrated technology

FUNCTION

- Lecture classrooms for Computer Science / Visual Technology

RELATIONSHIP

- Located on Level 3
- Accessible from Student Commons

G.3a

DEPARTMENT

**COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Computer Classrooms**

SPACE

SPACE

Area	1,000 nsf
Minimum Dimensions	28'
Occupants	24
Quantity	3
Total Area	3,000

NOTES

- Lecture-style computer classroom with integrated technology

FUNCTION

- Flexible classroom space for computer-related training

RELATIONSHIP

- Located on Level 3
 - Accessible from Student Commons
-

G.3b

DEPARTMENT

**COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Computer Labs**

SPACE

SPACE

Area	1,800 nsf
Minimum Dimensions	30'
Occupants	36
Quantity	2
Total Area	3,600

NOTES

- Flexible computer lab space with integrated technology

FUNCTION

- Open computer lab for instruction and individual use

RELATIONSHIP

- Located on Level 3
- Near computer classrooms

G.4a

DEPARTMENT

**COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Computer Server Room**

SPACE

SPACE

Area	570 nsf
Minimum Dimensions	15'
Occupants	NA
Quantity	1
Total Area	570

NOTES

- Secure area, limited access
- Server racks
- Direct chilled air / ventilated space

FUNCTION

- Computer server room for lab and classroom technology

RELATIONSHIP

- Located on Level 3
 - Adjacent to computer labs
 - Near Lab Assistant office
-

G.4b

DEPARTMENT

**COMPUTER SCIENCE /
VISUAL TECHNOLOGY
Lab Assistant Office**

SPACE

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	1
Total Area	120

NOTES

- Visual connection to Computer Lab
- Direct access to Computer Labs
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Computer Science Lab Assistant

RELATIONSHIP

- Located on Level 3
- Adjacent to computer labs

G.5**DEPARTMENT****COMPUTER SCIENCE /
VISUAL TECHNOLOGY****SPACE****Advisor Office****SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	1
Total Area	120

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Computer Science / Visual Technology Student Advisor

RELATIONSHIP

- Located on Level 3
- Adjacent to Computer Science / Visual Technology faculty offices

H.1a

DEPARTMENT

CONTINUING EDUCATION

SPACE

Offices**SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	4
Total Area	500

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Continuing Education Administration

RELATIONSHIP

- Located on Level 3
- Near shared academic conference room

H.1b

DEPARTMENT

CONTINUING EDUCATION

SPACE

Sec. Office**SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	1
Total Area	125

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Continuing Education Secretary

RELATIONSHIP

- Located on Level 3
- Adjacent to Continuing Education offices

I.1a

DEPARTMENT

GRADUATE CENTER

SPACE

Offices**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	7
Total Area	1,050

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Graduate Center Administrator and faculty

RELATIONSHIP

- Located on Level 4

I.1b

DEPARTMENT

GRADUATE CENTER

SPACE

Facilitator Offices (Suite) Open**SPACE**

Area	200 nsf
Minimum Dimensions	
Occupants	15
Quantity	1
Total Area	200

NOTES

- Open suite-style office
- Typical office finishes and services (See Detailed Typical Office)
- Shared workspace, reflecting amount of time Facilitators spend in classrooms

FUNCTION

- Flexible, open workspace for Facilitators

RELATIONSHIP

- Located on Level 3
- Adjacent to Graduate Center faculty offices

I.2a

DEPARTMENT

GRADUATE CENTER

SPACE

IP Seminar Rooms**SPACE**

Area	200 nsf
Minimum Dimensions	10'
Occupants	10
Quantity	6
Total Area	1,200

NOTES

- Seminar rooms to have receiving capabilities. Only one needed to be origination room
- Technology enriched, including: Document camera, DVD player, cameras, microphones and projection screen

FUNCTION

- Small group instructional space capable of distance learning

RELATIONSHIP

- Located on Level 4
- Near IP classrooms

I.2b

DEPARTMENT

GRADUATE CENTER

SPACE

IP Classrooms (seat 25)**SPACE**

Area	900 nsf
Minimum Dimensions	23'
Occupants	25
Quantity	4
Total Area	3,600

NOTES

- IP classrooms to have both receiving and originating capabilities
- All classrooms to have receiving capability through UEN (Utah Education Network)
- Technology enriched, including: Document camera, DVD player, cameras, microphones and projection screen.

FUNCTION

- Instructional classroom capable of distance learning for graduate programs offered throughout U of U and USU

RELATIONSHIP

- Located on Level 4
- Near seminar rooms
- Vertical connection to Student Commons and vertical circulation. Many students unfamiliar with campus use this space

I.3a

DEPARTMENT

GRADUATE CENTER

SPACE

Storage**SPACE**

Area	200 nsf
Minimum Dimensions	10'
Occupants	NA
Quantity	1
Total Area	200

NOTES

- Adjustable shelves
- Typical storage room finishes and services (See Detailed Typical General Storage)

FUNCTION

- General storage room for the Graduate Center

RELATIONSHIP

- Located on Level 4
 - Adjacent to IP Classrooms
-

I.3b

DEPARTMENT

GRADUATE CENTER

SPACE

Control Room**SPACE**

Area	200 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	2
Total Area	400

NOTES

- Control Rooms to be between IP Classrooms. One Control Room per two classrooms
- Window to classrooms
- AV / IT control over broadcast to and from classrooms

FUNCTION

- Observation space for classroom facilitators to operate the necessary equipment

RELATIONSHIP

- Located on Level 4
- Adjacent to IP classrooms

I.4

DEPARTMENT

GRADUATE CENTER

SPACE

Reception Area**SPACE**

Area	400 nsf
Minimum Dimensions	15'
Occupants	20
Quantity	1
Total Area	400

NOTES

- Visual connection to Student Commons
- Waiting area amenities

FUNCTION

- Waiting and Reception for Graduate Center

RELATIONSHIP

- Located on Level 4
- Access directly from Student Commons
- Adjacent to Facilitator Offices

J.1a

DEPARTMENT

SCIENCE

SPACE

Faculty Offices

SPACE

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Science Department Chair

RELATIONSHIP

- Located on Level 4
- Adjacent to Science faculty

J.1b

DEPARTMENT

SCIENCE

SPACE

Faculty Offices

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	8
Total Area	960

NOTES

- Open suite-style office
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Science faculty

RELATIONSHIP

- Located on Level 4

J.2a

DEPARTMENT

SCIENCE

SPACE

Adjunct Faculty (Suite)

SPACE

Area	600 nsf
Minimum Dimensions	20'
Occupants	15
Quantity	1
Total Area	600

NOTES

- Shared adjunct faculty office
- Open suite-style office
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Open workspace for adjunct Science faculty

RELATIONSHIP

Located on Level 4

J.2b

DEPARTMENT

SCIENCE

SPACE

Classrooms (seat 35)

SPACE

Area	1,000 nsf
Minimum Dimensions	30'
Occupants	40
Quantity	6
Total Area	6,000

NOTES

Centennial Commons will only house Science classrooms; Labs are to remain located in the Science Building

- Instructional counter with sink, no gas
- Higher quantity of white boards
- Locking cabinets under instructor's table
- Flexible space
- Integrated technology

FUNCTION

- Flexible classroom space for Science instruction

RELATIONSHIP

- Located on Level 4
- Potential adjacency to Math and Computer Science
- Accessible from Student Commons

J.3a

DEPARTMENT

SCIENCE

SPACE

Classrooms (seat 65)

SPACE

Area	1,400 nsf
Minimum Dimensions	30'
Occupants	65
Quantity	6
Total Area	8,400

NOTES

- One (1) classroom to have epoxy top at instructional counter
- Instructional counter with sink, no gas, located at front of classroom
- Locking cabinets under instructor's table
- Flexible space
- Integrated technology

FUNCTION

- Large, flexible classroom for lecture-format instruction

RELATIONSHIP

- Located on Level 4
- Accessible from Student Commons

J.3b

DEPARTMENT

SCIENCE

SPACE

Storage

SPACE

Area	200 nsf
Minimum Dimensions	10'
Occupants	NA
Quantity	1
Total Area	200

NOTES

- Adjustable shelving
- Work counter
- Secure storage

FUNCTION

- Storage space for Science equipment and demonstration materials

RELATIONSHIP

- Located on Level 4
- Adjacent to Science classrooms

K.1a

DEPARTMENT

MATH

SPACE

Faculty Offices

SPACE

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Math Department Chair

RELATIONSHIP

- Located on Level 3
 - Adjacent to Math faculty offices
 - Adjacent to Math reception
-

K.1b

DEPARTMENT

MATH

SPACE

Faculty Offices

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	8
Total Area	960

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Math Department faculty

RELATIONSHIP

- Located on Level 3
- Near Math classrooms
- Adjacent to Math reception

K.2a

DEPARTMENT

MATH

SPACE

Adjunct Faculty (Suite)

SPACE

Area	600 nsf
Minimum Dimensions	20'
Occupants	15
Quantity	1
Total Area	600

NOTES

- Open suite-style office
- Typical office finishes and services (See Detailed Typical Office)
- Shared adjunct faculty office
- Locking storage required

FUNCTION

- Open workspace for adjunct Math faculty

RELATIONSHIP

- Located on Level 3
- Adjacent to Math faculty offices

K.2b

DEPARTMENT

MATH

SPACE

Classrooms

SPACE

Area	1,000 nsf
Minimum Dimensions	30'
Occupants	40
Quantity	10
Total Area	10,000

NOTES

- Two (2) classrooms require locking cabinets
- Classroom geometry shall be deep rather than wide
- Flexible space
- Integrated technology

FUNCTION

- Flexible classroom space for Math instruction

RELATIONSHIP

- Located on Level 3
- Accessible from Student Commons

K.3

DEPARTMENT

MATH

SPACE

Reception**SPACE**

Area	120 nsf
Minimum Dimensions	
Occupants	
Quantity	1
Total Area	120

NOTES

- Visual connection to Student Commons
- Waiting area amenities

FUNCTION

- Waiting and Reception for Math Department

RELATIONSHIP

- Located on Level 3
- Accessible from Student Commons
- Adjacent to Math faculty offices

L.1a

DEPARTMENT

ENGLISH / HUMANITIES

SPACE

Faculty Offices**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Humanities Department Head

RELATIONSHIP

- Located on Level 5
 - Adjacent to Humanities faculty
 - Adjacent to English / Humanities secretary
-

L.1b

DEPARTMENT

ENGLISH / HUMANITIES

SPACE

Faculty Offices**SPACE**

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	13
Total Area	1,560

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Humanities faculty

RELATIONSHIP

- Located on Level 5
- Adjacent to English / Humanities secretary
- Adjacent to English / Humanities classrooms
- Adjacent to English / Humanities seminar rooms

L.2a

DEPARTMENT

ENGLISH / HUMANITIES

SPACE

Secretary Office**SPACE**

Area	125 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	1
Total Area	125

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Humanities department secretary / receptionist

RELATIONSHIP

- Located on Level 5
 - Direct access from Student Commons
 - Adjacent to Humanities faculty offices
-

L.2b

DEPARTMENT

ENGLISH / HUMANITIES

SPACE

Classrooms (seat 35)**SPACE**

Area	1,000 nsf
Minimum Dimensions	25'
Occupants	35
Quantity	5
Total Area	5,000

NOTES

- Flexible classroom space
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Flexible classroom space for English / Humanities instruction

RELATIONSHIP

- Located on Level 5

L.3a

DEPARTMENT

ENGLISH / HUMANITIES

SPACE

Classrooms (seat 65)**SPACE**

Area	1,400 nsf
Minimum Dimensions	32'
Occupants	65
Quantity	4
Total Area	5,600

NOTES

- Lecture-style classroom with tiered-seating
- Typical classroom finishes and services (See Detailed Typical Classroom)

FUNCTION

- Large lecture-style classroom for Humanities instruction

RELATIONSHIP

- Located on Level 5
 - Adjacent to Student Commons
 - Near Humanities classrooms
-

L.3b

DEPARTMENT

ENGLISH / HUMANITIES

SPACE

Psychology Lab / Data Collection**SPACE**

Area	200 nsf
Minimum Dimensions	12'
Occupants	10
Quantity	3
Total Area	600

NOTES

- Flexible classroom space
- Typical classroom finishes and services (See Detailed Typical Classroom)

FUNCTION

- Small meeting space for 2-4 people

RELATIONSHIP

- Located on Level 5
- Near Humanities seminar rooms

L.4

DEPARTMENT

ENGLISH / HUMANITIES

SPACE

Seminar Rooms**SPACE**

Area	300 nsf
Minimum Dimensions	15'
Occupants	12
Quantity	3
Total Area	900

NOTES

- Flexible meeting space
- Typical conference room finishes and services (See Detailed Conference Room)

FUNCTION

- Small meeting rooms for group study

RELATIONSHIP

- Located on Level 5
- Near Humanities classrooms

M.1a

DEPARTMENT

SHARED ACADEMIC SUPPORT

SPACE

Copy / Work Rooms**SPACE**

Area	200 nsf
Minimum Dimensions	12'
Occupants	NA
Quantity	3
Total Area	600

NOTES

- Countertops with base cabinets and upper cabinets for storage
- Photocopy machine
- Typical workroom finishes and services (See Detailed Typical Workroom)

FUNCTION

- Workroom for administrative / faculty use

RELATIONSHIP

- Located on Levels 3, 4, & 5
- Near faculty offices

M.1b

DEPARTMENT

SHARED ACADEMIC SUPPORT

SPACE

Conference Rooms**SPACE**

Area	200 nsf
Minimum Dimensions	12'
Occupants	10
Quantity	4
Total Area	800

NOTES

- Typical conference room finishes and services (See Detailed Conference Room)

FUNCTION

- Small meeting space for group discussion between 8-10 people

RELATIONSHIP

- Located on Levels 3, 4, & 5
- Near faculty offices
- Near administrative reception

M.2a

DEPARTMENT

SHARED ACADEMIC SUPPORT

SPACE

Conference Rooms**SPACE**

Area	600 nsf
Minimum Dimensions	20'
Occupants	30
Quantity	1
Total Area	600

NOTES

- Typical conference room finishes and services (See Detailed Conference Room)

FUNCTION

- Large meeting space for group discussion with up to 30 people

RELATIONSHIP

- Located on Levels 3, 4, & 5
 - Near faculty offices
 - Near administrative reception
-

M.2b

DEPARTMENT

SHARED ACADEMIC SUPPORT

SPACE

Faculty Break Rooms**SPACE**

Area	400 nsf
Minimum Dimensions	15'
Occupants	20
Quantity	2
Total Area	8000

NOTES

- Countertops with base cabinets and upper cabinets for storage
- Electrical for refrigerators and microwaves
- Electrical and data for vending machines
- Flexible space
- View is preferred

FUNCTION

- Multipurpose break / snack room for administrators and faculty

RELATIONSHIP

- Located on Levels 4 & 5
- Near faculty offices

N.1a

DEPARTMENT

TRIO

SPACE

Offices (Student Support Services)

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	4
Total Area	480

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Trio advisors

RELATIONSHIP

- Located on Level 4
 - Accessible from Student Commons
-

N.1b

DEPARTMENT

TRIO

SPACE

Computer Lab / Meeting Room (SSS)

SPACE

Area	400 nsf
Minimum Dimensions	15'
Occupants	20
Quantity	1
Total Area	400

NOTES

- Four countertop computers located along one side of meeting room

FUNCTION

- Meeting space for group discussion with computer access for four (4) computers

RELATIONSHIP

- Located on Level 4
- Near Trio advisor offices

N.2a**DEPARTMENT** **TRIO****SPACE** **Upward Bound Offices****SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	3
Total Area	450

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Upward Bound administrator

RELATIONSHIP

- Located on Level 4

N.2b**DEPARTMENT** **TRIO****SPACE** **ETS (Educational Talent Search) Offices****SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	8
Quantity	2
Total Area	300

NOTES

- 150 nsf offices are reserved for Directors. If staffing does not require the second office at 150 nsf, it could be reduced to 120 nsf.
- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for ETS administrator

RELATIONSHIP

- Located on Level 4

N.3

DEPARTMENT

TRIO

SPACE

Storage**SPACE**

Area	200 nsf
Minimum Dimensions	12'
Occupants	NA
Quantity	1
Total Area	200

NOTES

- Adjustable shelves
- Typical storage room finishes and services (See Detailed General Storage)

FUNCTION

- General storage for Trio program

RELATIONSHIP

- Located on Level 4
- Near Trio program offices

0.1a

DEPARTMENT

**FUTURE PROGRAMS
FLEXIBLE ACADEMIC SPACES
Classrooms**

SPACE

SPACE

Area	1,000 nsf
Minimum Dimensions	28'
Occupants	48
Quantity	4
Total Area	4,000

NOTES

- Typical classroom finishes and services (See Detailed Typical Classroom)

FUNCTION

- Flexible classroom space for academic instruction

RELATIONSHIP

- Located on Level 5
 - Adjacent to Student Commons
-

0.1b

DEPARTMENT

**FUTURE PROGRAMS
FLEXIBLE ACADEMIC SPACES
Offices**

SPACE

SPACE

Area	120 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	8
Total Area	960

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for future program's faculty

RELATIONSHIP

- Located on Level 5

P.1a

DEPARTMENT

FOOD SERVICES

SPACE

Small Kiosk**SPACE**

Area	150 nsf
Minimum Dimensions	10'
Occupants	2
Quantity	1
Total Area	150

NOTES

- No cooking equipment necessary
- Kiosk to serve as food or drink stand that sells prepared food such as sandwiches or salads

FUNCTION

- To provide nominal food service to the Student Commons

RELATIONSHIP

- Located in Student Commons space on Level 1
 - Near seating area
-

P.1b

DEPARTMENT

FOOD SERVICES

SPACE

Medium Kiosk**SPACE**

Area	250 nsf
Minimum Dimensions	10'
Occupants	4
Quantity	1
Total Area	250

NOTES

- No cooking equipment necessary
- Facilities for warming kitchen, including: sink, refrigerator, freezer, microwave oven
- Cafe tables and chairs in Student Commons near food kiosk

FUNCTION

- To provide nominal food service to the Student Commons

RELATIONSHIP

- Located in Student Commons space on Level 2
- Near seating area

P.2

DEPARTMENT

FOOD SERVICES

SPACE

Vending Stations

SPACE

Area	25 nsf
Minimum Dimensions	4'
Occupants	NA
Quantity	10
Total Area	200

NOTES

- Power and data required for vending

FUNCTION

- Area for vending machines

RELATIONSHIP

- Located in Student Commons space
- 2 per floor

Q.1aDEPARTMENT **MUSIC**SPACE **Offices****SPACE**

Area	225 nsf
Minimum Dimensions	12'
Occupants	10
Quantity	4
Total Area	900

NOTES

- Typical office finishes and services (See Detailed Typical Office)
- Space for a piano
- Acoustical separation from adjacent spaces

FUNCTION

- Workspace and instructional space for Music faculty

RELATIONSHIP

- Located on Level 2
 - Near Music faculty offices
 - Near Student Commons
-

Q.1bDEPARTMENT **MUSIC**SPACE **Choral Practice Rooms****SPACE**

Area	80 nsf
Minimum Dimensions	8'
Occupants	4
Quantity	4
Total Area	320

NOTES

- Acoustical separation from adjacent spaces

FUNCTION

- Small music practice rooms for 1-4 people

RELATIONSHIP

- Located on Level 1
- Near teaching studios

Q.2aDEPARTMENT **MUSIC**SPACE **Storage****SPACE**

Area	350 nsf
Minimum Dimensions	15'
Occupants	NA
Quantity	1
Total Area	350

NOTES

- Adjustable shelves on one wall
- Typical storage room finishes and services (See Detailed General Storage)

FUNCTION

- General storage for Music Department

RELATIONSHIP

- Located on Level 1
 - Near teaching studios
-

Q.2bDEPARTMENT **MUSIC**SPACE **Music Library****SPACE**

Area	400 nsf
Minimum Dimensions	15'
Occupants	NA
Quantity	2
Total Area	800

NOTES

- Sliding music storage

FUNCTION

- Library for choral sheet music

RELATIONSHIP

- Located on Level 1
- Adjacent to teaching studios

Q.3a**DEPARTMENT MUSIC****SPACE Teaching Studio****SPACE**

Area	1,200 nsf
Minimum Dimensions	30'
Occupants	24
Quantity	2
Total Area	2,400

NOTES

- Must accomodate 20 keyboard pianos
- Acoustical treatments and separation from adjacent spaces
- Whiteboards to have musical staff

FUNCTION

- Classroom for keyboarding instruction

RELATIONSHIP

- Located on Level 1
 - Near Music classrooms
-

Q.3b**DEPARTMENT MUSIC****SPACE Music Classroom****SPACE**

Area	1,200 nsf
Minimum Dimensions	30'
Occupants	48
Quantity	1
Total Area	1,200

NOTES

- Typical classroom finishes and services (See Detailed Typical Classroom)
- Acoustical treatments and separation from adjacent spaces
- Whiteboards to have musical staff

FUNCTION

- Classroom for musical instruction

RELATIONSHIP

- Located on Level 1
- Near teaching studios

R.1a

DEPARTMENT

HERITAGE CHOIR

SPACE

Offices**SPACE**

Area	200 nsf
Minimum Dimensions	12'
Occupants	10
Quantity	1
Total Area	200

NOTES

- Typical office finishes and services (See Detailed Typical Office)

FUNCTION

- Workspace for Heritage Choir staff

RELATIONSHIP

- Located on Level 2
 - Near Heritage Choir offices
 - Near Student Commons
-

R.1b

DEPARTMENT

HERITAGE CHOIR

SPACE

Choir Rehearsal**SPACE**

Area	9,500 nsf
Minimum Dimensions	80'
Occupants	500
Quantity	1
Total Area	9,500

NOTES

- Rehearsal Hall to house large choir & orchestra
- Acoustically designed to be sound sensitive for recording
- Flexible space; College can use the space when not occupied by the choir
- Service entry required for organ & grand piano removal
- Risers for choir
- Two-story space

FUNCTION

- Rehearsal and recording space for a 200+ person choir

RELATIONSHIP

- Located on Level 1 & 2
- Adjacent to recording equipment room
- Direct access from Main Entrance at Level 2

R.2a

DEPARTMENT

HERITAGE CHOIR

SPACE

Choir Storage

SPACE

Area	250 nsf
Minimum Dimensions	12'
Occupants	NA
Quantity	1
Total Area	250

NOTES

- Storage for music stands and chairs
- Typical storage room finishes and services (See Detailed General Storage)

FUNCTION

- General storage for Heritage Choir

RELATIONSHIP

- Located on Level 1
 - Adjacent to Rehearsal Hall
-

R.2b

DEPARTMENT

HERITAGE CHOIR

SPACE

Music Library

SPACE

Area	600 nsf
Minimum Dimensions	20'
Occupants	NA
Quantity	1
Total Area	600

NOTES

- Sliding music storage

FUNCTION

- Library for choral sheet music

RELATIONSHIP

- Located on Level 1
- Adjacent to Rehearsal Hall main entrance

R.3a

DEPARTMENT

HERITAGE CHOIR

SPACE

Recording Equipment / Support

SPACE

Area	250 nsf
Minimum Dimensions	12'
Occupants	5
Quantity	1
Total Area	250

NOTES

- Visual connection to the Rehearsal Hall
- Electrical equipment for audio recording
- Acoustical separation from adjacent spaces

FUNCTION

- Control room for recording in Rehearsal Hall

RELATIONSHIP

- Located on Level 2
 - Adjacent to Rehearsal Hall
-

R.3b

DEPARTMENT

HERITAGE CHOIR

SPACE

Recording Storage

SPACE

Area	100 nsf
Minimum Dimensions	10'
Occupants	NA
Quantity	1
Total Area	100

NOTES

- Adjustable shelves
- Typical storage room finishes and services (See Detailed General Storage)

FUNCTION

- General storage for Heritage Choir

RELATIONSHIP

- Located on Level 2
- Adjacent to Recording Equipment / Support

Site Alternatives

Several site alternatives were studied for the location of the new Centennial Commons building. The configuration ultimately chosen for the facility contains unique qualities that made it preferable the other site layouts for the building.

Option A



Option A

This site alternative stretched the building along the east-west axis allowing for the optimum solar alignment for obtaining daylight for the facility. This plan also allows the Commons building to front on both the Fountain Quad and the Encampment Mall. Providing a strong terminus building to the Encampment Mall was perhaps one of the most compelling reasons for locating the building in this location.

This alignment, however, did not allow for a phased transition. The Whitehead building, which houses all of Student Services, would need to be demolished before the construction of the new Centennial Commons building commenced. In this circumstance, Student Services would not have a home on campus for the duration of the construction (2 years). In addition, this option did not allow for a future facility that could expand the offerings of the Student Union facility. For these reasons, it was not the preferred scheme.

Option B



Option B

This L-shaped site alternative was a response to the problematic phasing of the Student Services facility as noted in Option A. This configuration provided for the building of Centennial Commons in two portions (each part of the L). The construction would proceed as follows: first, the westernmost portion of Centennial Commons would be built; second, Student Services would be relocated from the Whitehead building into Centennial Commons; third, the Whitehead building would be demolished, and; fourth the other portion of the facility would be built. This resolves the problem of providing a temporary home for the Student Services; however, the schedule for the entire building is compromised and drawn out.

This site scheme does have the desired effect of enclosing the Fountain Quad mall and enlivening it by designing a building with a large portion of its face fronting the mall. This scheme also provides the opportunity to expand the Student Union facility with a building at the head of the Encampment Mall.

Due to the prolonged schedule consequences inherent in the scheme, this site alternative was not a preferred option.

Option C



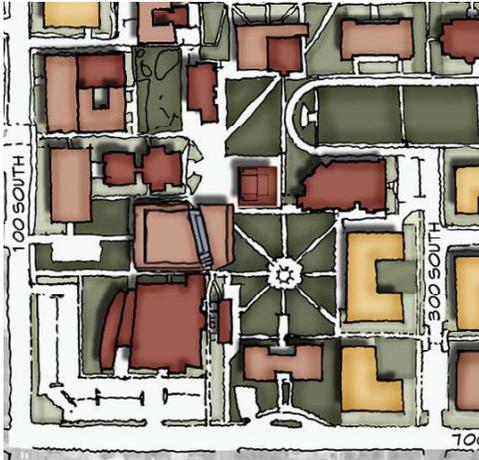
Option C

This site alternative was the last of the three options to be studied. It was not initially considered because of the following two site issues: first, the 200,000 square foot footprint would not fit on the site in four stories, and; second, the existing utility tunnel from the Browning Library to the Eccles Fine Arts Center runs right through the middle of the proposed facility. It was recommended that the Centennial Commons building be built five stories high to compress the facility's footprint. It was also determined that the first level of the facility could run below the bottom of the utility tunnel.

Option C allows for a seamless transition for Student Services. Student Services can remain in the Whitehead building until the new Centennial Commons facility is completed. Upon completion the Whitehead building can be demolished and a new Student Union expansion component can be added in its place.

This alternative also provides an opportunity to engage the Fountain Quad most effectively. A large southern front to the building will provide complete visual access into the building from the Quad. With the removal of the Family Sciences building to the north, a new student entry courtyard can be created for those entering from parking lots to the north. This site option situates the new Centennial Commons facility literally at a crossroads of campus with entries from four directions, thus making it the new gateway building to the campus.

Site Description



Site Plan

The configuration for the Centennial Commons building must possess several critical qualities to ensure its success as an active student collaboration space and a crossroads of the campus.

Building Entry

The facility must be easily accessible from all directions of campus. It should connect to the Browning Library to the east, the Eccles Fine Arts Center to the west, the Fountain Quad and Student Union to the south and from the parking areas to the north. The entries from each of these directions should be visually porous, that is, the building should be transparent so that visitors entering the building will have a sense of the activities within the facility and desire entry. Of most importance is the creation of an active building façade fronting on the Fountain Quad. Accessible outdoor areas off the Centennial Commons building will tend to bring activity and student life into the Fountain Quad. Visual informational signage from the Commons into this quad would also reinforce the importance of the Fountain Quad as an active student gathering space.



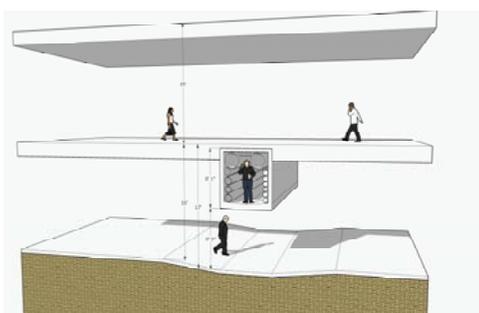
Site Plan

The new north entry courtyard will provide a shady outdoor gathering space and act as a collector for all the students and faculty that are parking in the lots to the north. This courtyard will be a less formal entryway to campus, and will funnel students through the building on their way to other locales on campus.

The building should acknowledge the students coming from the Eccles Fine Arts Center to the west and the students that will be coming from the Browning Library and Student Union building to the east. These entries should be sized to accommodate a large number of students.

Connections

The programming team is recommending the underground library portion of the Centennial Commons facility be extended so that it touches and flows into the Browning Library on that lower level. This connection will allow a single control point for the lower level library addition in the Centennial Commons facility. The upper level library addition can open into the lower level library addition and utilize the same control point into the existing Browning Library. This underground connection will require more complex construction due to required shoring and additional excavation costs, however, the link to the existing Browning Library is a critical component for the library facility.



Utility Tunnel

The utility tunnel that runs through the proposed Centennial Commons building site will deliver the needed utilities (hot and chilled water, data and high voltage power) directly to the mechanical and electrical spaces on the lower level of the building. This aspect of the construction will need to be studied more in depth to make sure that the tunnel elevations correspond to the proposed floor levels in the new building.



Graff Fine Arts Center



Encampment Mall

Another important connection that needs to be recognized is the traffic generation that comes from the fine arts complex to the west to the Browning Library and other buildings to the east. An open and unencumbered passageway through the building will make this a favored shortcut for students on their way across campus. Any pedestrian activity that is routed through the building should be encouraged no matter the duration. Even this pass through traffic generates the possibility for student interaction and chance meetings.

Landscaping

Circulation pathways to and from the Centennial Commons facility should be flanked by shade trees, not only to shade the paths, but also make the spaces more of a human scale and provide comfortable rest spots along the path. The same strategy could be employed for the south, east and west sides of the building. Deciduous trees would shade the structure in the summer and allow sunlight to penetrate the building in the winter when the leaves have fallen.

A mix of soft plantings and hardscape should be considered for the outdoor gathering spaces that are created. Low water plantings should be considered as a first option, with bluegrass used only for student rest areas or physical activity areas where grass and shade trees are desired.

Parking

Currently, parking on the Dixie State College campus is not in short supply. According to recent studies, the supply and demand of parking is at a balanced point. The tide could be turning with the construction of the Commons building including new baccalaureate degrees in the facility, expanded Library, extended Student Services and more Student Common space. Students will begin to experience minor shortages as this new building comes on line. An additional, moderately sized surface parking lot may suffice for the short-term. However, in the very near future, a structured parking deck will be needed to help the College utilize their scarce land resources wisely. With the land values in St. George continuing to press upward, the cost of structured parking may prove to be a valuable investment in increasing the buildable footprint of the campus.

Architectural Character

Exterior Qualities



Entry from Fountain Quad



Entry from Library



North Entry Court

The overriding attribute of the new Centennial Commons facility is that it is student-friendly from any direction of approach. Ideally, there would be no backside to the building; the facility would have a transparent quality allowing visitors into the building visually before they ever enter physically.

This visual transparency is especially important to the south side of the facility, which fronts the Fountain Quad. The ability to see into the very active student space from the Fountain Quad will draw more students in, thus activating the quad itself. Ideally, students will spill out onto the quad where activities are programmed to occur continuously throughout the day. A covered indoor / outdoor space (colonnade) shaded from the sun could help facilitate these activities.

The blurring of the barriers between indoor and outdoor space will be critical in making the new Centennial Commons building successful. Another device that should be employed is the inclusion of outdoor deck space accessible from some of the public spaces on the interior. Outdoor spaces can be utilized for a good portion of the school year in the temperate weather (fall, winter and spring) of St. George. These outdoor decks on the levels of the building allow for a greater chance of unplanned meeting and gathering among students. Having both an indoor and an outdoor component to the Student Commons function of the building will enhance its attractiveness to students on the campus.

The building's exterior should respect the existing campus character that has been established with a palette of buff colored masonry, glass and architectural concrete. The inherent building mass of the masonry and concrete should be used for passive cooling and heating strategies.

Currently, there is not an identifiable built icon for the Dixie State College campus. The Fountain Quad with the backdrop of the Western history mural is the closest the campus has to an icon of that nature. The adjacent Centennial Commons facility will create a building that can develop the Fountain Quad into the identifiable campus icon that is being sought. With constant student activity and a high degree of visual transparency the facility will become like no other building on campus. For this reason, consideration should be given to upgrading the masonry material used for the building. A buff colored stone veneer could be used in place of, or in addition to, the buff colored brick currently used throughout campus.

The large amount of glass generates the responsibility to shade this glass from the intense summer sun. Large overhangs in combination with deep recesses at glazed areas will keep direct daylight (and unwanted accompanying solar heat gain) out of the building. Deep recesses with shade and shadow, punched window openings and shaded circulation paths with colonnades are trademarks of architecture in the American Southwest. These functional building attributes will establish the look and feel of the building, and set the standards for future Dixie State College campus buildings.

The new Commons building will have a large section of exposed roof area. Consideration should be given to devoting a portion of that roof to sustainable principles. The employment of a photovoltaic roof panel system could capture



North Entry

energy from the sun that would help offset the energy demand of the building. Grants through local energy suppliers or national sources could be sought to offset the initial costs for these panels.

A roof garden system should also be discussed. A garden on the top of the facility would provide another gathering spot for students as well as reduce the heat island effect created by the building. A roof garden could also be used to distribute and use incident rain water that falls on the building, thus reducing the requirements on the campus stormwater system.

Interior Qualities

The three areas of the proposed facility each have their own unique qualities. The facility can be conceptually separated into three distinct areas: The Academics section houses the classroom space, laboratories, faculty offices and support space for the various educational departments in the building. The Student Commons area provides space for students to gather and study in either groups or singly. The Student Support Services area provides office and support space for the various departments that are housed in the building.

Academics

The Academics portion of the building should have daylight access, easily modifiable and flexible spaces, and accommodations for a variety of learning styles. Breakout areas outside of classroom spaces provide opportunities for students to gather and collaborate before and after classes. Faculty office suites located near departmental classroom areas should have accessible, informal spaces for instructors to meet and talk with students. Classroom spaces should be a flat floor model with furniture that can be arranged to accommodate numerous classroom configurations. Projection capabilities should be included in all classrooms. The floor system for this area of the building should be a low profile raised access floor so that power and data can be easily routed to any location in the area.

Student Commons

Creating a comfortable, vibrant and collaborative environment in the Student Commons space is the most important task for the proposed facility. The programmed Student Commons space should occur on every level and in every nook and cranny of the facility. Easy access to wireless networks, electrical power, and display / brainstorming space is important for group study activities. Creating a variety of areas for individual study, group study (two or more) and class size gatherings will be critical to the Student Commons' success.

In addition to incorporating dynamic space sizes, the Student Commons space must also be multi-functional; the space must be able to adapt to numerous activities and fluidly change from one season to the next. For example, in the first few weeks of any new school year there is a crush of students waiting in line to register for classes. To program queuing space for that short timeframe would be a waste of resources. The Student Commons space can be configured to accommodate the registration lines in the early semesters, foregoing some



View of Student Commons

student gathering space in the short term. After the registration crunch is over the student space can be reconfigured.

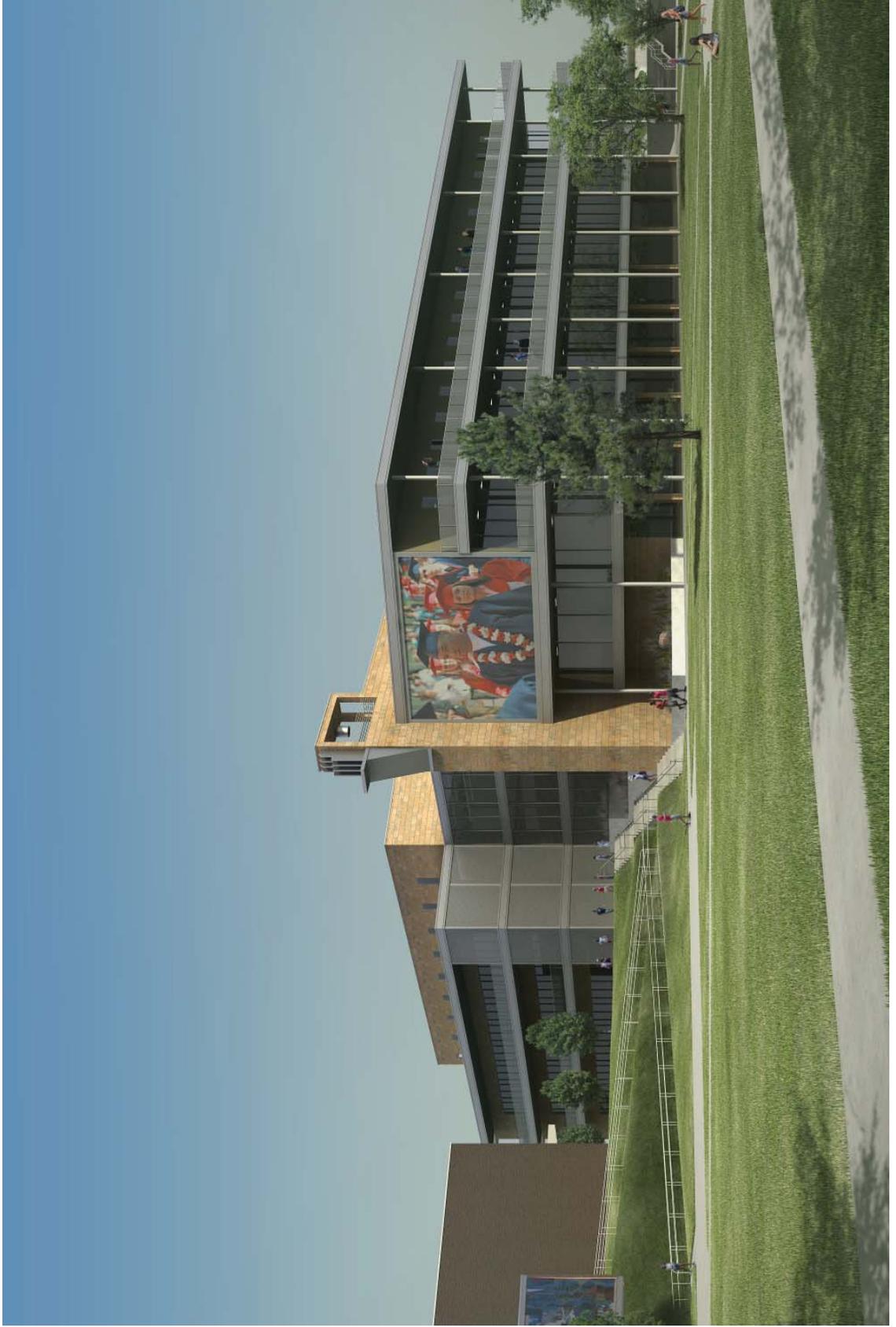
All Student Services functions should be distributed throughout the Student Commons space at easily accessible locations. These areas can be conceptualized as an indoor shopping mall layout, all services are visually accessible and readily available in the open mall interior.

Priority should be given to arranging the Student Commons area as an atrium. An open, daylit area with communicating floor levels will create a vital and vibrant locale that students will visit often.

Office Space / Student Support Services

The Student Support Services component of the building should be as flexible and modifiable as the Academic areas. A low profile, raised access floor is appropriate for the routing of power and data. In the Computer Data Center a higher profile access floor should be contemplated in order to route mechanical ducting under the floor. Student support offices should have walls that are potentially moveable and easily altered.

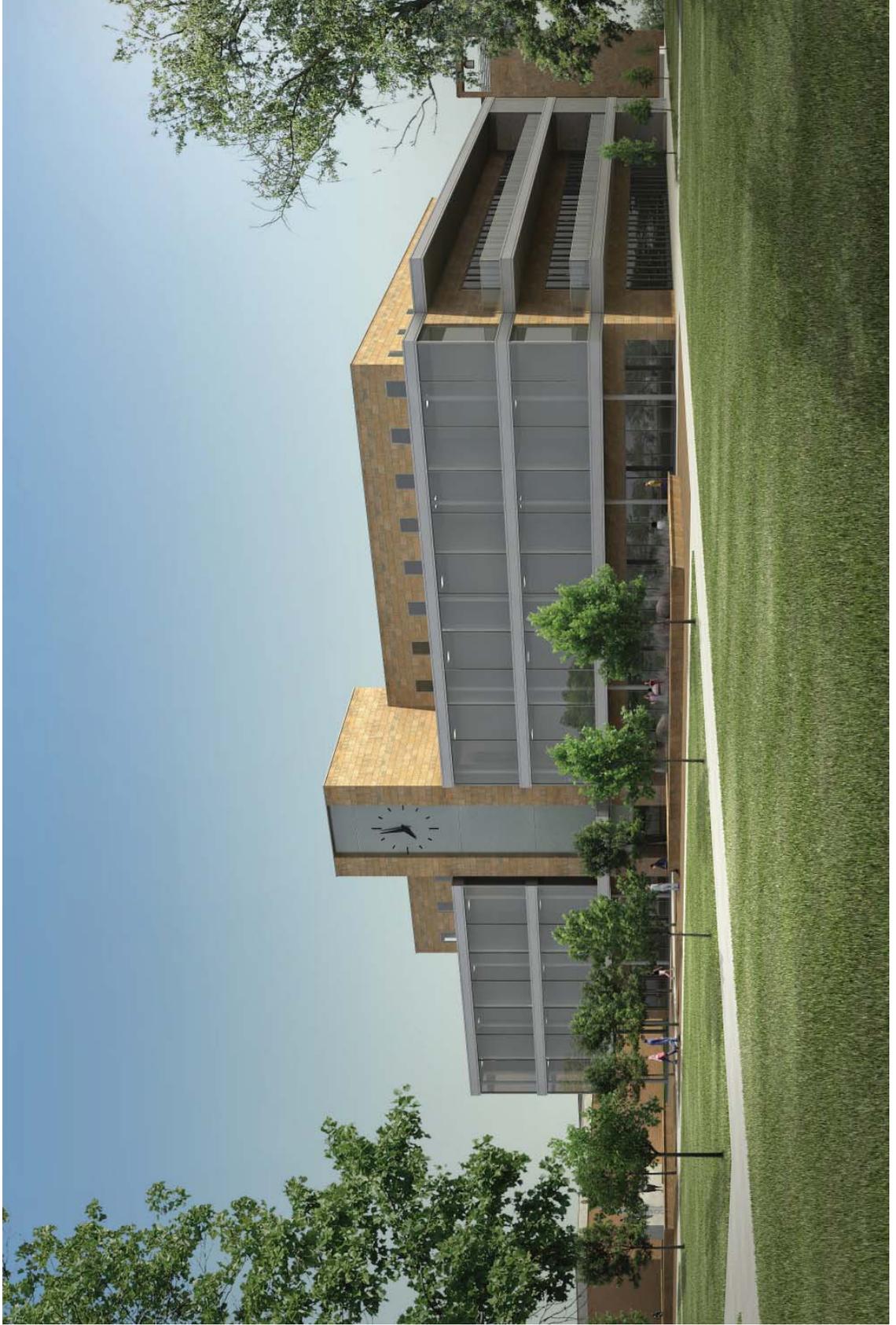
View from Administration



View from East



North Entry Court



North Entry



View of Student Commons



Mechanical/Plumbing Systems



General Mechanical

Design and construction of the new Centennial Commons at Dixie State College shall comply with the current Utah State Division of Facilities and Construction Management’s updated Design Criteria as well as the Dixie State College Mechanical and Plumbing Design Standards and Requirements.

The mechanical and plumbing systems for the new Centennial Commons (CC) shall be energy conserving as defined by ASHRAE’s 90.1 2004 and DFCM’s energy standards. Systems and equipment shall have a proven history of providing efficiency and optimal energy conservation.

The control system shall be an electronic DDC system; this system meets the current building controls on campus. CC’s DDC system shall be linked to the campus management system (EMS) Honeywell Central System or system approved by Dixie State College (DSC).

All equipment shall be clearly labeled. Equipment, piping and ductwork shall be painted and labeled as required by Dixie State College design guidelines. Colors shall match DSC standards. Design engineers shall provide DSC color chart in specifications listing pipe usage, color and type (manufacturer) of paint.

Design Conditions

The mechanical system shall be designed to maintain comfort condition in accordance with the Utah State Energy Code, DFCM A/E Design Guide, DSC Design and Construction Standards, and ASHRAE 90.1 2004.

Elevation	2760 Ft.
Ambient (ASHRAE 2-1/2%, 97%)	
Summer	107 ° F DB 71 ° F WB
Winter	19 ° F DB
Indoor Conditions	
Summer	72 ° F
Winter	74 ° F
Envelope U-values	
Roof:	0.05
Wall	0.05 - 0.07
Fenestration:	U= 0.5± SC≤0.50
Hollow Metal Doors:	U=0.6
Ventilation Rates	ASHRAE 62-1 - 2004
Internal Heat Gain	
People	ASHRAE Estimates for Level Activity
Equipment	ASHRAE Estimates for the Following
	<ul style="list-style-type: none"> • Computers/Servers • Copy Machines • TV Monitors, equipment, and electronics • Special Lighting • Any other heat producing equipment
Lights	Assume 2.5 Watts / Sq. Ft. general. Adjust for special occupancy or task requirements.

Applicable Codes

The mechanical system for the CC building shall be designed and installed in accordance with the most recently adopted codes and standards:

- Dixie State College Design Standards
- Life Safety Code
- International Building Code (IBC) including all appendices
- International Mechanical Code (IMC)
- International Plumbing Code (IPC)
- International Energy Conservation Code (IECC)
- National Electrical Code (NEC)
- National Fire Protection Association (NFPA)
- ASHRAE 90.1 - 2004
- ASHRAE Standard for Ventilation 62-1 2004
- ASHRAE Guides and Standards (ASHRAE)
- State of Utah Boiler and Pressure Vessel Rules and Regulations
- American Society of Mechanical Engineers (ASME)
- American Standards Association (ASA)
- American Society of Testing Materials (ASTM)
- Sheet Metal and Air conditioning Contractors National Association (SMACNA)
- Occupational Safety and Health Administration (OSHA)
- DFCM Indoor Air Quality Criteria
- Utah State Division of Facilities and Construction Management (DFCM)
Architect / Engineer Design Guide
- International Fuel Gas Code (IFGC) and Questar Regulations

Heating, Ventilating and Air Conditioning

The new Centennial Commons building shall be heated, cooled and ventilated with systems noted in other paragraphs of this program suitable for the building function and occupancy in accordance with Dixie State College, ASHRAE and DFCM standards. HVAC systems must compare with current mechanical systems designed for classrooms, administration offices, teaching, observation rooms, food service, music rooms, computer sciences, and counseling. The primary HVAC system for the new Centennial Commons building shall be an all air system utilizing variable air volume (VAV) boxes with hot water reheat coils. Constant volume air handling units or fan coil units with chilled and hot water coils may be utilized for certain specialized occupancies.

Flexible Space Conditioning

HVAC systems shall be designed in such a way as to be adaptable to changes in space usage. There is the potential for departments to shift within and into / out of the building. The HVAC system must be able to be changed and adapted to the new usage with the least amount of disturbance to the renovated space as well as the rest of the building.

The new DDC controls shall be designed to be easily changed and adapted to departments moving into vacated spaces.

The VAV design is a system that is easily adaptable. By simply relocating or adding new VAV boxes to the existing system, new area layouts can be satisfied.

The specified fan coil units are also easily adaptable. Units can be relocated or added to accommodate new layouts.

Heating System

The heating source for the new CC building shall be provided from medium temperature hot water provided from the central boiler plant. Medium temperature hot water (320°F) is located in the distribution underground tunnel located under this proposed building. 320°F hot water shall be distributed to a water-to-water heat exchanger located in the lower floor west side mechanical room. 180°F heating water shall be distributed throughout the building using a two pipe, direct return system to preheat hot water coils located in the air handling units, reheat coils located at the inlet of the VAV boxes, hot water coils located in the constant volume air handling units and fan coil units.

The heating hot water pumps shall be designed with 100% redundancy. The heating hot water system shall consist of base mounted end suction hot water distribution pumps, standby pumps, variable frequency drives, (option of designer), pre-heat coil inline circulating pumps, air eliminator, and expansion tank complete with automatic make-up water system through a drum system with pump. This is in lieu of a backflow preventer. The entire hot water system shall be controlled by DDC controls and completely integrated into the existing campus central control system. Coordinate with Dixie State College.

Hot water piping shall be sized for no more than 7 fps velocity and 5 HD/100' Loss. Piping shall be carbon steel schedule 80 for high temperature water and schedule 40 for hot water 180° F and below.

Flanges shall be 300# for high temperature hot water and 150# for 180°F and below. Exchanger shall be rated for 300#.

Cooling System

Cooling source for the new CC building shall be chilled water provided from the central chilled water plant. 45° F chilled water is located in the distribution underground tunnel located under this proposed building.

Building chilled water system DDC controls shall be integrated with the campus DDC central control system. Chilled water supply piping shall supply 45° F chilled water to cooling coils located within the building VAV and constant volume air handling units, and fan coil units. Coils shall be designed for a 10° F water temperature rise.

Coil circulating inline pumps shall be provided for each coil.

Chilled water piping shall be sized for no more than 7 fps velocity and 5 HD/100' Loss. Piping shall be carbon steel schedule 40. Flanges shall be 125 psi.

Air systems

Air system for the new CC building shall be provided from variable volume air handling units, with VAV boxes for individual spaces, constant volume air handling units or fan coil units depending on occupancy and usage. Individual VAV box and adjustable sensor shall be provided in each room or space. The number of air handling units and their locations shall be determined by space availability, location, usage, requirements and economics. Air handling units shall be provided with hot water coils and chilled water coils. Each air handling unit shall have 100% economizer capability. The use of return / relief fans shall be determined during design. Return fans are encouraged where there are large pressure drops or long runs through return air systems, or if additional control of building static pressure is required.

Roof and ceiling mounted exhaust fans, depending on usage, shall be provided for the copy rooms, conference rooms, (if located in an interior space or as determined by designer), toilet rooms, science labs, elevator machine rooms, food handling, and custodial closets. The exact number and location of the fans shall be determined during design. Exhaust ducts shall be routed to roof. Exhaust systems for any hazardous material shall be exhausted from roof mounted exhaust fans. Pressurized hazardous duct systems within the building will not be allowed.

Outside air ventilation shall comply with ASHRAE Standard 62-1 2004. Outside air shall be controlled by carbon dioxide sensors to provide adequate ventilation and improve energy efficiency. The systems shall be capable of 100% outside air and 100% relief air during the economizer cycle. The number and location of fresh air inlets and relief air outlets shall be determined during design. Fresh air inlets shall not be located in any location where contamination of the air can take place, ie. Carbon Monoxide, lawn fertilizer, vents, etc.

A fan room for each floor with some type of decorative fresh air louver is recommended. Louvers should run continuous to each other or in mixed locations. Louvers shall be built into a pattern with the type of exterior finish used by the Architect. Pattern and color of louvers shall be dictated by the Architect.

The air handling system shall be controlled by a DDC control system that is 100% integrated into the campus central control system. Building air handling system controls shall include constant volume air handling units, fan coil units, and air handler VFD control with duct static pressure re-set, air handler discharge temperature control, VAV box space temperature and discharge temperature control, building static pressure control, outside air damper control, etc. Additional specifics of the control system shall be coordinated with Dixie State College during design.

All ductwork shall be insulated metal duct with volume dampers for each branch diffuser or register. Air distribution systems for interview rooms, offices, classrooms and conference rooms shall be designed to provide a quiet, comfortable learning and working environment.

Use flex duct, maximum of 6'-0", for connection between diffuser and duct.

Provide access to the ceiling mounted VAV boxes.

Duct distribution in music area shall be designed per ASHRAE standards for music rooms. Diffusers or registers shall be low velocity and located to prevent drafts. Ductwork shall be sized using .04 friction loss per 100 feet of duct.

Library duct system shall be designed per ASHRAE standards for libraries. Use low velocity diffusers and linear diffusers. Ductwork shall be sized using .05 friction loss per 100 feet of duct.

Plumbing Systems

Plumbing systems shall be designed to meet the International Plumbing Code 2006 as adopted by the State of Utah, DFCM Guidelines and Dixie State College Design Standards.

The Centennial Commons building shall be equipped with culinary hot water gas fired or electric water heaters. This decision should be value based. Water heaters shall be 85 to 90 percent efficient with PVC combustion air and flue piping. Provide

recirculating pumps, mixing valves, under lavatories, etc.

Plumbing fixtures shall be of the same manufacturer. Provide ADA compliant fixtures as required by code.

Provide mixing valves under each lavatory using auto faucets.

Lavatories shall be cabinet or wall mounted, porcelain and oval. Lavatories shall be self rimming type. Metal rings are not allowed. See DSC approved manufacturers list and coordinate with campus plumbing personnel.

Water closets shall be floor mounted flush valve and ADA approved with elongated bowl and open front seat. See DSC approved manufacturers list.

Urinals shall be wall mounted, flush valves, and ADA approved. Flush valves shall be auto type. See DSC approved manufacturers list.

Floor drains shall be provided in all bathrooms, custodial closets, mechanical equipment rooms, close to water heaters, and any other location where drains are needed or required.

Water treatment for the heating hot water systems shall be provided and system shall match existing campus system. Existing campus system is Powers.

Gas supply to building shall be carbon steel piping above ground and in the buildings and plastic piping meeting Questar requirement for underground. Provide gas meter at building. Connect to campus natural gas distribution system.

Exterior hydrants shall be provided for landscape and hose connections. Hydrants shall be wall mounted, box cover, key operator, freeze proof with 3/4" ball valve on water supply line to hydrant.

Roof drainage shall consist of a primary and secondary drainage system. Secondary piping shall exit the wall 1'-0" above the finished grade into a wall type spout.

Access to all valves, etc. that requires maintenance shall be provided.

Refrigerated handicapped drinking fountains shall be provided.

Hot water shall be provided to all lavatories, service sinks, cabinet mounted sinks and any fixture requiring hot water. Provide one hot water heater per floor to prevent long routing of piping.

Fire Protection System

Fire sprinkler protection system shall be suitable for the building type and occupancy. Appropriateness will be determined at the start of design. The entire building shall be sprinkled. System shall comply with NFPA, DSC Campus Fire Marshal and State of Utah Fire Marshal requirements.

A wet pipe fire sprinkling system, shall be provided complete with fire riser, alarms, panel, piping, sprinkler heads, etc.

Fire alarm main panels shall be installed near the main front entrance used by the fire department. The exact placement of the fire alarm main panels shall be decided

during design in conjunction with the DSC Campus Fire Marshal, Architect and Dixie State College.

The fire sprinkler inspector's test shall be piped into a drain or sewer to prevent water damage.

The fire sprinkler inspector test shall be of the simulated sprinkler head type, not the glass bulb type.

The fire alarm contractor shall provide a "dry" set of contacts to tie into the central campus annunciator panel.

All fire rated doors shall be supplied with a magnetic door hold open that is tied into the fire alarm system. Upon activation of a fire alarm or power failure, the magnets shall release.

The contractor shall provide documentation of the acceptability of all fire safety materials used.

All piping used for fire protection shall be per NFPA and DSC standards. Thin wall piping for fire protection is not allowed.

Utility Tunnel

Dixie State College has an existing underground walkable utility tunnel. This tunnel exits to the south of the campus central heating and cooling plant and divides into a tunnel running east and the other running west. Both tunnels also run north and south. Tunnel utilities include high temperature water supply and return, chilled water supply and return, electrical, controls and communication. The Centennial Commons building will be built directly over the existing tunnel where it is actually located above the lower level. We therefore want the wet side mechanical room i.e. converter, pumps, air eliminator, expansion tank, water treatment, make-up and piping, within the area where the tunnel enters the new building.

A new access door from the north side of the tunnel into the west side mechanical room shall be provided. This mechanical room should be two levels; the top level should be even with the bottom of the tunnel. This arrangement will allow the piping to exit the tunnel into the mechanical room. Existing tunnel hot and chilled water piping are located on the south side of the tunnel. New piping shall connect and be routed at the top of the tunnel to access the mechanical room from above the door. Tunnel access must remain the same. See attached details.

Tunnel Pipe Sizing

The 10" chilled water piping supply and return from the central plant to the library branch could remain; however, the 8" piping from the library branch to the new connections for the Centennial Commons building must be upsized from an 8" to a 10". This would also affect the take off at the tunnel branch running south to the gymnasium. The 6" routed to the Eccles Fine Arts Center must be left as it exists. See existing tunnel distribution drawings.

Utilities

Water

Provide a new 4" cold water line from the Centennial Commons building to the closest campus potable water source. Design team shall work with DSC for best location.

Underground water service piping shall be type K wrapped copper and shall enter the building into a pressure reducing station and main building shut-off valve. All interior above grade water piping shall be type L copper. All culinary hot and cold water piping shall be insulated.

Water PRV station shall reduce upstream water pressure to 60 PSIG down stream pressure.

Provide 8" fire line to new fire risers within the building. Connect to the closest campus exterior fire line for source. Coordinate with DSC Campus Fire Marshal and State Fire Marshal in this area.

Sewer

The Centennial Commons building sewer line shall be a new 6" or 8" waste line extended from new building to the nearest main located in this area. Design team shall determine the best location for new tie-in. Sewer piping shall be cast iron. Provide cleanouts as required by code. No-hub is not allowed underground. The existing sewer line is routed north to south and is located east of the existing Whitehead Student Service Center.

Storm Drainage

Building roof drain piping shall surface drain. Roof drain piping inside the building shall be insulated. Primary and secondary roof drain system shall be provided. Civil shall provide drain water monitoring from site to street.

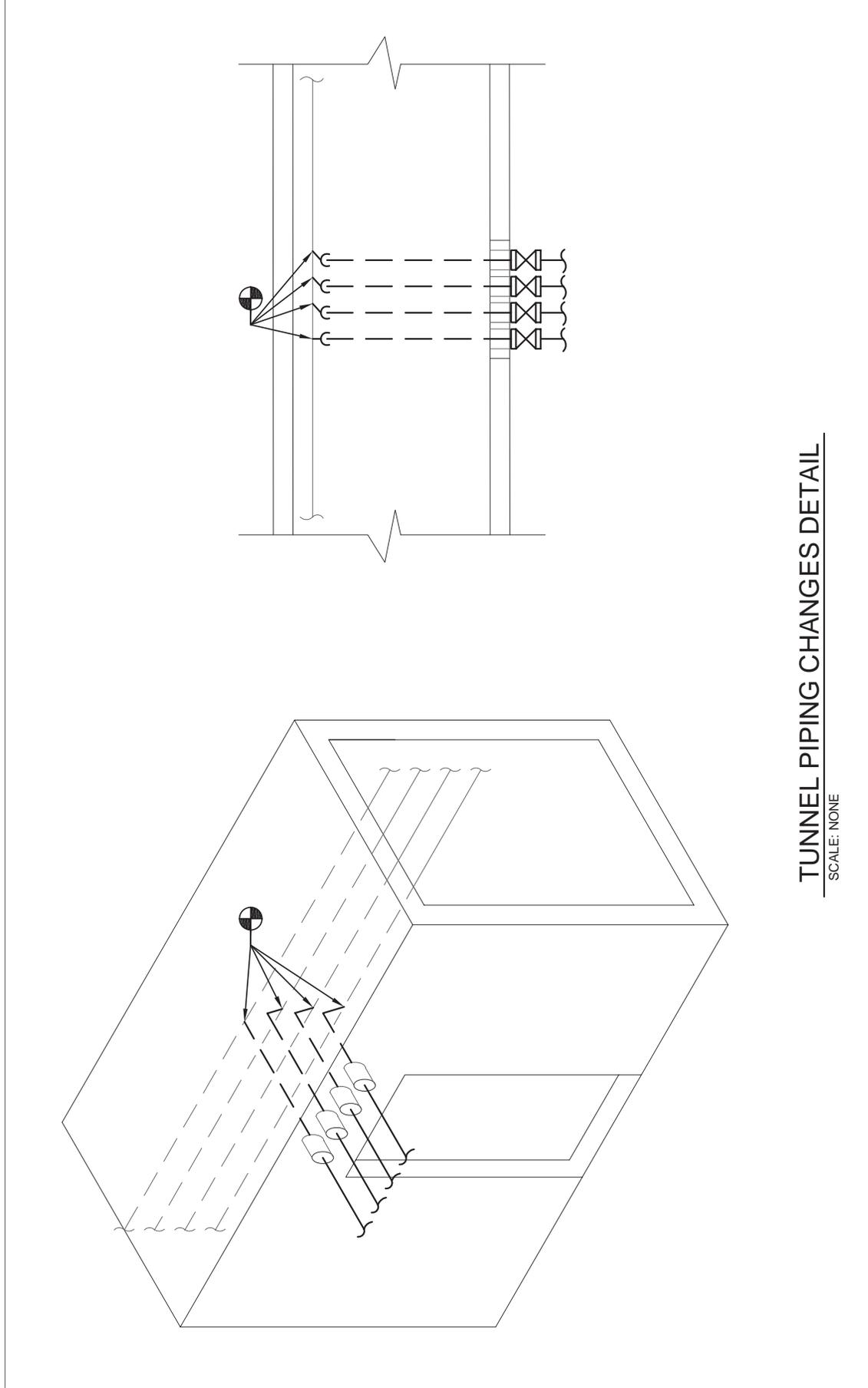
Natural Gas

Natural gas shall be supplied from the campus gas distribution system or from the street to the site. Piping to meter shall be by Questar Gas. Questar shall provide and set meter at building at Contractor's expense. Underground gas piping shall be plastic in accordance with and approved by Questar Gas.

Ground Water

Ground water flows from north to south and can cause serious problems with footings and foundations. An 8" PVC drain piping with perforations must be installed along the whole north side of the building at footing depth. The PVC piping will collect the ground water and direct it to a sump pump inside the building located in the lower level and pumped to the south end or in the roof drain piping system.

Tunnel Piping Changes



TUNNEL PIPING CHANGES DETAIL
SCALE: NONE

Electrical Systems



Codes and Standards

Codes which are applicable to the design of the electrical systems are listed below. Comply with each of the latest adopted publications:

- ADA, Americans with Disabilities Act
- ASHRAE 90.1 Energy Code
- DFCM Design Requirements
- Dixie State College Standards
- EIA, Electronics Industries Association
- TIA, Telecommunications Industry Association
- IBC 2003, International Building Code
- IESNA, Illuminating Engineering Society of North America
- NFPA, National Fire Protection Association (applicable sections including but not limited to):
 - NFPA 70, National Electrical Code
 - NFPA 72, National Fire Alarm Code
- UL, Underwriter's Laboratories
- Utah State Fire Marshal Laws, Rules and Regulations

Site Utilities

Existing Utilities Relocation

Relocation of existing power and telecommunications will be required for the new building site. Site investigation for the relocation of all utilities will be required.

Medium Voltage Service

Relocate the main campus 15 kV loop between the Browning Library and Eccles Fine Arts Center to accommodate the new building construction. Relocate the radial feeds serving individual buildings in the surrounding area where the feeds will be disturbed by excavation activities; this includes but is not limited to underground lines to the Gardner Student Center and Life Science building. Other buildings may be affected depending on the final site configuration. During the rework of the 15 kV system, the campus must remain fully operational; temporary power services must be provided to the effected buildings.

For service to the new building, connect to existing 15 kV distribution system. Verify capacity of existing loop serving this area. Upgrade cables and add new switches as required to maintain the loop system. Fully involve DSC facilities department in the design and decisions related to the 15 kV system modifications.

A new outdoor pad-mounted switch and transformer for the building shall be located outside the facility.

Telecommunications

Four 4" conduits shall be provided into the building for telecommunications service. Connect to existing campus telecommunications distribution system.

Building Service and Distribution

Main Service

The main electrical switchboard shall be in a dedicated electrical room, close to the pad-mounted transformer. The building secondary voltage shall be 277/480V, 3-phase, 4-wire. The main switchboard shall be provided with digital metering. Different types of loads shall be separated onto separate feeders and panelboards, such as motors, lighting, convenience power and “clean” computer power. In general, large motors and equipment shall be served at 208V, 3 phase; lighting, outlets and small equipment at 120V.

Motor Control Centers

A motor control center shall be provided in all mechanical equipment rooms. All 3-phase motors shall be provided with phase-loss protection. Variable frequency drives shall be provided where required for mechanical equipment in compliance with DSC requirements.

Panelboards

New panelboards shall be provided in vertically stacked electrical rooms. Electrical rooms shall be centrally located and circuit lengths shall not exceed 150'. Electrical rooms shall be dedicated to electrical distribution and shall not be used for storage or any other purpose. An area of each room shall be dedicated for current and future riser conduits so that wall-mounted equipment will not impede vertical distribution. Panelboards serving normal lighting and appliance circuits shall be located on the same floor as the circuits they serve.

Spare Capacity

Switchboards, panelboards, transformers and other distribution equipment shall be provided with 25% spare capacity and spaces / spares for future growth and flexibility. Electrical equipment rooms shall have 25% additional space for future equipment.

Branch Circuits

Branch circuits shall be loaded to no more than 80% of what is allowed by NFPA 70. Where outlets are intended for a specific piece of equipment, the load of the outlet shall be based on the equipment nameplate. Otherwise, allow no more than 6 convenience outlets per circuit or 4 outlets per circuit serving workstation computer terminals. Outlets with dedicated branch circuits (one outlet per circuit) are required for vending machines, copy machines, break room counters, A/V cabinets and other locations likely to have equipment requiring dedicated circuits. Each branch circuit homerun shall have no more than 3 circuits per raceway. Oversized neutral conductors are required on circuits with high-harmonic content such as those serving multiple computer stations.

Conductors

All conductors shall be copper. Conductors for branch circuits shall be sized to prevent voltage drop exceeding 3% at the farthest load. The total voltage drop on both feeders and branch circuits shall not exceed 5%. When calculating the voltage drop, the load shall be assumed to be 80% of the ampacity of the branch

circuit and feeder conductors.

Raceways

Raceways shall be minimum ¾" C. Type MC or AC cable is prohibited. Cable tray system shall be designed so that station cable raceways do not extend more than 50' max to cable tray. Conduits shall stub to the cable tray. Include pull strings in all empty conduits. Include raceway for all audio / visual and technology systems whether furnished as part of the construction contract or furnished by the Owner.

Equipment and Furniture

All equipment and furniture identified in the program documents, whether it is furnished in this contract or a separate contract, shall be provided with power and raceway rough-in for complete operation. Coordinate furniture connections with furniture systems suppliers. Refer to mechanical drawings, specifications and basis of design for mechanical equipment connections.

Fault Current and Coordination Study

A fault current and coordination study shall be performed by a licensed electrical engineer to indicate available fault current at all points in building distribution systems. New equipment shall be adequately rated for the amount of available fault current. System coordination shall be studied; fuses or breakers selected should ensure minimum system outage due to overloads or fault currents. Breakers with adjustable long time, short time, instantaneous and / or ground fault settings shall be set at levels for optimum system coordination.

Transient Voltage Surge Suppression

Provide transient voltage surge suppression (TVSS) and "noise" protection at service equipment (each main) and on branch panelboards in the facility that serve computer terminals.

Outlets

Refer to program and space plan sheets for typical area basic requirements. Where requirements cannot be identified, the following shall be used as a general guideline. Each outlet location shall be coordinated with the design team and end user during the design.

Classrooms, Lecture Halls and other Instructional Spaces: Provide outlets for instructor's station, audio / visual equipment and each student. Ensure that there is at least one outlet for each 10' of wall space. Provide floor outlets where stations or equipment cannot be served directly from the wall without crossing aisle space. Where tables are fixed in place, coordinate power outlets mounted directly into the millwork for each student.

Student Commons Areas, Lounges and Study Areas: Provide power outlets for laptop computers, at least one duplex for each group of 4 seats, but no less than one outlet per each 12' of wall space. Provide floor outlets where stations or equipment cannot be served directly from the wall without crossing aisle space.

Offices: For each workstation, provide two duplex outlets dedicated to computer terminals and one additional normal outlet for every 10' of wall space.

Conference and Board Rooms: Provide one outlet for every 10' of wall space plus one outlet dedicated to computer terminals on two walls. Provide floor outlets underneath conference room tables.

Kitchen Areas: As required by kitchen equipment plus additional convenience outlets at no greater than 12' spacing on available walls.

Lounges / Breakrooms / Kitchenettes: GFI Outlets on dedicated circuits every 4' on counter top plus dedicated outlets for refrigerator, microwave, and disposal (switched at counter top), plus one outlet for every 10' of other wall space in room.

Counter tops (in general): One outlet every 4'; GFI where within 8' of a sink.

Main Computer / Server / MDF: Several outlets on emergency / UPS power under raised floor and around perimeter of room with circuit density to allow for at least 100 watts per square foot. Coordinate exact quantity required with the user groups and the anticipated equipment. Include future provisions as well.

Telephone / Data Closets (IDF): At least 6 quad outlets on emergency and UPS power with circuit density to allow for at least 50 watts per square foot. Provide a minimum 6-outlet surge / power strip in every equipment rack. Whether local rack-mounted UPS units are used or a central UPS system is used to power these closets shall be evaluated and coordinated with the user groups during the design.

Electrical Rooms: At least one outlet on emergency power.

Restrooms: One GFI outlet near each lavatory counter top.

Corridors / Lobbies: Provide at least one outlet every 25', on alternating sides of the corridor or lobby.

Stairs: One outlet at the landing of each level.

Storage Rooms (small) / Janitors Closets: One outlet.

Building Exterior: One WP / GFI outlet near each entrance.

Other Areas: In areas that are not defined coordinate requirements with user during design. For budget purposes allow one (1) outlet per 40 square feet of area.

Grounding

All feeder and branch circuit raceways shall include an insulated equipment grounding conductor. Provide an additional insulated / isolated grounding system throughout all 120/208V panelboards and associated feeders in compliance with DSC standards. Provide a grounding riser system throughout the telecommunications closets with grounding bus bars mounted accessible in each closet. All grounding systems shall be bonded together per NEC requirements.

Lightning Protection

Provide a separate line item in the budget for a lightning protection system. Engage an LPI-certified installer, designer and inspector for the system. Provide a UL Master Label and comply with NFPA 780.

Emergency Service and Distribution

Provide an emergency diesel generator for the building. The generator shall be located outdoors on grade. Fuel supply shall be minimum 24 hours at full load. Two transfer switches shall be provided: one for emergency and one for non-emergency ("standby-by") loads. Annunciate alarms adjacent to fire alarm panel. The following shall be provided with emergency power:

Emergency egress and exit lighting

Fire Alarm

Smoke control – if provided

Communications Rooms (including main data center) – lights, outlets and air conditioning

Electrical rooms – lights and outlets

Uninterruptible Power Supply (UPS)

Design a UPS system for the main server / computer room and MDF, sized to provide 100 watts per square foot, minimum. Other critical computers and equipment, as determined during the design, may be provided with UPS power. UPS shall be static, double conversion, on-line type and have an external maintenance bypass. Size batteries for approximately 15 minutes at full load. Evaluate fully-redundant modules and battery strings on a cost vs. benefit basis and present results to the owner/user groups for a decision during the design.

Lighting***General***

Comply with illuminance levels and uniformity criteria of IESNA and IESNA Recommended Practices. Comply with RP1-93 "Office Lighting", RP3-00 "Lighting for Educational Facilities" and RP-33-99 "Lighting for Exterior Environments". Except for specialized applications lighting shall be designed with a minimum efficacy of 64 lumens per watt. Specify maximum 10% THD electronic ballasts. Lighting shall be designed with a CRI exceeding 82 except in storage, mechanical, electrical and similar non-public applications. Different lamp types shall be minimized when appropriate. Use 4' T-8 lamps with CRI of 88 or greater when possible. Specify lamps complying with EPA TCLP requirements.

Comply with ASHRAE 90.1 requirements, except that overall energy target requirements should be exceeded by 10%. Design lighting control to harvest daylighting where practical, to control based upon occupancy, and according to programmable scheduling as applicable to the application.

Parking, Pedestrian, and Street Lighting

Use campus standard lighting fixtures compatible with campus surroundings for all walkways, parking and roadways. Control exterior lighting with combination photocell and time schedule control through the lighting relay control system.

Interior Lighting

In general, utilize low-glare fluorescent lighting with electronic ballasts. Recessed direct / indirect fixtures shall be used in offices and break-out rooms. Pendant direct / indirect lighting is proposed for classrooms, but must be carefully coordinated

with projectors so that the fixtures do not interfere with the projected image. Rooms with audio / visual shall have variable or switched lighting levels with a separate controlled zone to reduce glare and illuminance on the audio visual display. In addition to the previous specifications, origination rooms shall include television studio lighting fixtures to focus and highlight instructor. In rooms with projectors, a separate bank or station of lighting control switches near the instructor's position shall be provided for ease of controlling lighting during presentations. Provide vandal resistant fixtures for locker rooms.

Classroom Lighting Control: All classrooms, lecture halls, conference rooms and similar instructional or meeting spaces shall be provided with an integrated modular preset lighting control / dimming system with control stations at each entry and at the lecture podium. These systems shall interface with audio / visual control system for each room.

Corridor, Common Areas and Exterior Lighting Control: Control lighting in these areas through a networked lighting relay control system that operates based on time of day, photocell inputs and manual override wall stations. Integrate the relay system with the building management system.

Daylighting Areas: In areas that are provided with natural daylighting, provide automatic daylighting control with photocells that control fixtures through dimming and stepped switching.

Provide exit lighting to comply with IBC. Design emergency lighting for means of egress to 1 fc minimum to comply with IBC. Include emergency lighting in restrooms, electrical rooms, vaults and communication rooms.

Fire Alarm

Comply with Utah State Fire Marshall's Rules and Regulations and DSC Design Standards. Design an addressable system capable of networking with the campus system and reporting back to central campus fire alarm system. Design strobes visible from all locations except private offices. Design horns or speakers to comply with NFPA including higher ambient noise requirements. Requirements for a voice evacuation system is dependent on final occupant load and shall be verified as the design progresses. Where smoke control systems are required, coordinate the integration of the fire alarm with the smoke control systems. Provide duct detectors and fan shutdown where required by NFPA and the IMC, including detection of smoke at all return air shafts serving multiple floors. Coordinate location of the building annunciator with the DSC Campus Fire Marshal. All other detectors and functions shall comply with the referenced codes and standards.

Telecommunications Raceways

Riser Distribution

Provide stacked telecommunications closets to serve each floor of the building. Locate closets to ensure cabling routed through the raceway system does not exceed a distance of 250 feet (as measured along the length of the cable) to the furthest outlet. Provide a minimum of four 4" sleeves between floors.

Horizontal Distribution

Provide a cable tray distribution network throughout each floor and into the IDF closets. Extend the cable tray around the inside of the IDF closet above the racks to allow cables to be routed within the room. Run the cable tray down one wall to allow riser cables to be supported from floor to floor. Tray system should be designed to ease access to it when the building is in full operation. Limit cable tray routing to locations above corridors, common and similar areas. Where ceilings are exposed or inaccessible, provide a bridge of equivalent conduit connecting the cable trays in the accessible ceiling areas.

Voice / Data Drops

Each voice / data outlet location shall consist of a 4" square box with mud ring and one 1" conduit stubbed to the nearest cable tray. Refer to program space plans for quantities and coordinate exact locations with the users during design. At a minimum, provide one voice / data drop for each workstation, fax machine, copy machine, desk, computer terminal and teaching station. Where wireless networks are being considered for student access, allow sufficient empty raceways for future hardwired connections should the wireless system have insufficient bandwidth for evolving applications.

Structured Cabling

Provide a complete structured cabling system (voice and data) that includes: copper and fiber riser cables, and; horizontal cabling consisting of three category 6 cables to each drop (more or less cables per drop may be required based on specific requirements). Include all terminations, racks and wire management per DSC standards.

Security Systems

Provide rough-in conduit, cabling and equipment for a complete security system consisting of door access control card readers, intrusion detection and CCTV video surveillance. The exact locations and quantities shall be determined as the design progresses. For initial planning, all exterior doors should be provided with card access and CCTV monitoring.

Clock System

Provide battery operated clocks throughout the building with a GPS receiver/transmitter at a central location. Specify clocks to be correctable by the GPS receiver / transmitter via a wireless connection directly to each clock.

Audio Visual Systems

Audio visual systems are to be determined. Coordinate requirements with the users during the design.

Schedule

A proposed design and construction schedule has been projected for the Centennial Commons building. This schedule anticipates opening the facility in the Fall of 2011, the year of the Centennial for Dixie State College. This forecast leaves adequate time for a two (2) year construction timeline and appropriate time for each of the design phases for the project. Additional time should be allotted in the predesign phase of the project for the chosen Design Team to collect more comprehensive building data for the program of the facility. The schedule includes additional programming time to adequately complete a more detailed program that verifies finishes and other specifics for each room in the facility.

Cost Estimate

An estimate of probable construction costs has been compiled based on the programmed square footage, finish materials anticipated for the building, and mechanical and electrical systems projected for the facility. These costs have been forecasted in today's construction dollars. **This proposed construction budget will not be adequate for an anticipated construction start in summer 2009. An escalation factor will need to be projected and added to this budget to adequately reflect updated accurate costs of constructing the facility in the year 2009.**

The portion of the construction budget directly attributable to the Heritage Choir program that is anticipated for the facility is to be privately funded. The approximately 15,000 square feet of Heritage Choir program will cost close to \$4 million. A summary of the projected project costs are as follows:

Building Cost Summary	Unit Quantity	Unit Cost	Subtotal
Construction Subtotal	202,253 SF	\$201.31	\$40,716,017
General Conditions	10%	\$20.13	\$4,071,602
Overhead & Profit	5%	\$10.17	\$2,035,801
Design Contingency	15%	\$30.20	\$6,107,403
Construction Total	202,253 SF	\$261.71	\$52,930,822
Heritage Choir Costs	14,497 SF	\$261.71	\$3,794,010
Electronic Information Signage			\$250,000
Construction Total (minus Heritage Choir Costs)			\$49,386,812

PROJECT NAME.....DIXIE STATE COLLEGE CENTENNIAL COMMONS
 LOCATION.....ST. GEORGE, UT
 ARCHITECT.....VCBO SF 202,253
 STAGE OF DESIGN.....PROGRAMMING

UNI #	DESCRIPTION	UNIT QTY	UNIT COST	
A	<u>SUBSTRUCTURES</u>			
	Demo Building 2 Story	202,500 CF	\$ 0.32	\$ 64,598
	Demo Building 1 Story	378,400 CF	\$ 0.32	\$ 120,710
	Perimeter Footings	350 CY	\$ 385.00	\$ 134,750
	Spot Footings	250 CY	\$ 352.00	\$ 88,000
	Below Grade Foundation Wall	6,500 SF	\$ 21.59	\$ 140,355
	Slab on Grade	56,640 SF	\$ 4.02	\$ 227,410
	Foundation Drainage System	550 LF	\$ 43.62	\$ 23,988
	Foundation Waterproofing	6,500 SF	\$ 5.12	\$ 33,248
	Building Area Site Clearing	63,600 SF	\$ 0.98	\$ 62,264
	Building Excavation	9,790 CY	\$ 6.60	\$ 64,612
	Backfill & Compaction	1,000 CY	\$ 21.62	\$ 21,615
	Remove Excess	8,790 CY	\$ 6.60	\$ 58,012
	Building Grading	63,600 SF	\$ 0.28	\$ 17,490
	Gravel Under Slab	1,244 TN	\$ 20.90	\$ 25,994
	TOTAL SUBSTRUCTURES			\$ 1,083,045
B	<u>SHELL</u>			
B10	Superstructure			
	Floor Structure	2,038,610 LB	\$ 1.93	\$ 3,924,324
	Roof Structure	396,480 LB	\$ 1.93	\$ 763,224
	Floor Deck	145,615 SF	\$ 2.09	\$ 304,335
	Roof Deck	56,640 SF	\$ 2.15	\$ 121,493
	Topping Slab	145,613 SF	\$ 3.91	\$ 568,619
B20	Exterior Enclosure			
	Exterior Wall Framing	73,600 SF	\$ 4.35	\$ 319,792

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	7/9/2007
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PROJECT NAME.....DIXIE STATE COLLEGE CENTENNIAL COMMONS
 LOCATION.....ST. GEORGE, UT
 ARCHITECT.....VCBO SF 202,253
 STAGE OF DESIGN.....PROGRAMMING

UNI #	DESCRIPTION	UNIT QTY	UNIT COST	
	Rigid Roof Insulation	56,640 SF	\$ 2.70	\$ 152,645
	Single Ply Roof Membrane	56,640 SF	\$ 2.48	\$ 140,184
	Skylight	4,576 SF	\$ 71.50	\$ 327,184
	Exterior Wall Sheathing w/ vapor barrier	73,600 SF	\$ 2.05	\$ 150,586
	Exterior Wall Finish	73,600 SF	\$ 37.40	\$ 2,752,640
	Building Fireproofing	202,253 SF	\$ 1.60	\$ 322,594
	Exterior Glazing & Curtainwalls	40,480 SF	\$ 71.50	\$ 2,894,320
	Fire Stopping/ Caulking	202,253 SF	\$ 0.28	\$ 55,620
	Exterior Doors	14 EA	\$ 4,015.00	\$ 56,210
	Patio / Light Shelf	6,520 SF	\$ 71.50	\$ 466,180
	Metal Wall Cap	1,550 LF	\$ 10.62	\$ 16,453
	Metal Flashings	3,100 SF	\$ 7.15	\$ 22,165
	Caulking & Sealants	1 LS	\$ 16,500.00	\$ 16,500
	TOTAL SHELL			\$ 13,375,067
C	<u>INTERIORS</u>			
	Stud Frame Partitions	86,256 SF	\$ 6.05	\$ 521,849
	Demountable Partitions	62,640 SF	\$ 16.12	\$ 1,009,444
	Interior Corridors	62,640 SF	\$ 7.15	\$ 447,876
	Interior Doors	202,253 SF	\$ 4.24	\$ 856,541
	Interior Glazing	202,253 SF	\$ 0.84	\$ 169,084
	Identifying Devices	1 LS	\$ 55,000.00	\$ 55,000
	Free Standing Handrails	1,208 LF	\$ 137.50	\$ 166,100
	Stair Pans	14 EA	\$ 14,025.00	\$ 196,350
	Millwork	202,253 SF	\$ 5.50	\$ 1,112,392



Applied Geotechnical Engineering Consultants, Inc.

PRELIMINARY GEOTECHNICAL INVESTIGATION

DIXIE CENTENNIAL

ST. GEORGE, UTAH

PREPARED FOR:

**VCBO ARCHITECTURE
524 SOUTH 600 EAST
SALT LAKE CITY, UTAH 84102**

ATTENTION: DEREK PAYNE, AIA

PROJECT NO. 2071559

AUGUST 3, 2007

TABLE OF CONTENTS

SUMMARY	Page 1
SCOPE OF WORK	Page 3
SITE CONDITIONS	Page 3
PROPOSED CONSTRUCTION	Page 4
SUBSURFACE CONDITIONS	Page 4
SUBSURFACE WATER	Page 6
PRELIMINARY RECOMMENDATIONS	Page 6
A. Site Grading	Page 6
B. Foundations	Page 12
C. Concrete Slab-on-Grade	Page 12
D. Seismicity and Liquefaction	Page 12
E. Soil Corrosion	Page 13
LIMITATIONS	Page 14
FIGURES AND TABLE	
VICINITY MAP	Figure 1
SITE PLAN	Figure 2
LOGS, LEGEND AND NOTES OF EXPLORATORY BORINGS	Figure 3
CONSOLIDATION TEST RESULTS	Figures 4-6
TYPICAL SUBGRADE STABILIZATION DETAIL	Figure 7
SUMMARY OF LABORATORY TEST RESULTS	Table 1

SUMMARY

1. The subsurface profile observed in the borings drilled at the site generally consists of topsoil overlying lean to fat clay underlain by shale bedrock to the maximum depth investigated, approximately 25 feet.
2. Groundwater was encountered in the borings at depths ranging from approximately 3 ½ to 4 feet below the existing grade.
3. The proposed structure may be supported on conventional spread footings bearing on properly compacted structural fill. Bearing capacities and structural fill thicknesses will depend on proposed grades, loads, and depth to groundwater. We anticipate allowable bearing pressures will range from 1,500 to 3,500 psf.
4. The structures at the site should be designed and constructed in accordance with seismic soil profile "Site Class C" based on the 2006 International Building Code.
5. Due to the presence of shallow groundwater, a perimeter drain will likely be required. The drain should consist of a perforated drain pipe placed in a gravel filled trench. The drain pipe should be sloped to drain by gravity or to a sump. Typically, the drain pipe should be placed approximately 2 feet below the finished slab elevation and should extend around the perimeter of the building approximately 5 feet beyond the exterior walls.
6. Due to the soft soil and shallow groundwater conditions observed at the site, excavation with heavy rubber-tired equipment should be minimized. Track-mounted equipment should be utilized whenever possible. Excessive use of heavy rubber tired equipment may cause the exposed subgrade to become soft and pump, subsequently raising the groundwater level, resulting in an unstable condition. To achieve compaction, cuts should be made with track-mounted equipment and should be wheel-rolled only during the compaction process to achieve compaction as recommended in the compaction section of the report. Compaction of the subgrade may be reduced to "proof-rolling" at the geotechnical engineers discretion if soft soil conditions exist following grubbing.

SUMMARY

7. If the exposed subgrade is soft, becomes soft and/or pumps during site grading due to high moisture conditions, biaxial geogrid (TENSAR BX1200 or equivalent) should be placed on the exposed subgrade below building pads, foundations, and/or roadways following removal of disturbed soil. We recommend placing 18 to 24 inches of road base over the geogrid in these areas to assist in stabilizing the subgrade. Placement of 12 inch minus crushed/angular rock may be required prior to placing the geogrid if the ground surface is saturated or excessively soft. Use of crushed/angular rock below the geogrid may reduce the amount of road base required to stabilize the subgrade. A typical subgrade stabilization detail is shown on Figure 7. As an alternative to the use of road base and geogrid an increased thickness of crushed/angular rock may be used to stabilize soft areas. An engineer from AGECE should be notified to provide on-site recommendations and observations during the stabilization process.
8. Utility trenches that extend below the water level will require dewatering and the use of a trench box during excavation. Sloping of utility trench sidewalls may also be required. Angular free-draining gravel will be required to backfill utility trenches to at least 1 foot above the highest anticipated water level. Following placement of the free draining gravel, filter fabric (Mirafi 140 or equivalent) should be placed over the gravel to separate the gravel from backfill.
9. Preliminary geotechnical information related to foundations, subgrade preparation, and materials are included in the report. A more detailed geotechnical investigation should be performed for the site when construction details, a grading plan and building loads are known.
10. The information provided in this summary should not be used independent the information presented in the body of this report.

SCOPE OF WORK

This report presents the results of a preliminary geotechnical investigation for the proposed Dixie Centennial building to be located on the Dixie College Campus in St. George, Utah as shown on Figure 1.

A field investigation was conducted to determine the subsurface conditions and to obtain samples for laboratory testing. Information obtained from the field investigation and laboratory testing was used to define conditions at the site for our engineering analysis and to develop preliminary recommendations for the proposed construction. We have also reviewed the geotechnical investigation for the adjacent Eccles and Graff Fine and Performing Arts Center prepared by AGECEC under project number 2011085 and dated February 26, 2002.

Our preliminary recommendations and conclusions are based on the information obtained from the referenced report, the subsurface investigation, the results of laboratory testing, engineering analysis, and our experience in the area. This report presents the subsurface conditions encountered and recommendations for the geotechnical aspects of the project.

SITE CONDITIONS

At the time of our field investigation, the site of the proposed building was landscaped with lawn and some trees. Numerous concrete sidewalks have been constructed across the site. The site generally slopes down gently to the south. The southern end of the site slopes down steeply to the south for a distance of approximately 10 to 12 feet. A playground is located to the north, a landscaped common area is to the south, the Eccles and Graff Fine and Performing Arts building is to the west, and the Dixie College library is to the east.

PROPOSED CONSTRUCTION

We understand it is proposed to construct a three-story building at the site. We also understand the building is proposed to be approximately 200,000 square feet in size. Construction details, proposed grading, and building loads are not known at this time.

SUBSURFACE CONDITIONS

On July 26, 2007, an engineer from AGECE visited the site and observed the drilling of two borings at the approximate locations shown on Figure 2. The borings were drilled with a truck mounted drill rig equipped with 7-inch hollow-stem augers. The subsurface profile observed within the borings was logged and soil and bedrock samples were obtained for laboratory testing.

The subsurface profile observed in the borings drilled at the site generally consists of topsoil overlying lean to fat clay. The clay is underlain by shale bedrock to the maximum depth investigated, approximately 25 feet. Detailed descriptions for each soil and bedrock type observed follow.

Topsoil - The topsoil consists of sandy lean clay with roots and organics. It is soft, moist, low plastic, and brown in color.

Fat clay with sand - The fat clay with sand is very stiff, wet, high plastic, and red in color.

Laboratory tests conducted on a sample of the fat clay with sand indicate an in-place moisture content of 21 percent, an in-place dry density of 102 pcf, and a fines content (percent passing the No. 200 sieve) of 85 percent. An Atterberg Limits test indicates a liquid limit of 50 percent and a plasticity index of 30 percent.

A one-dimensional consolidation test conducted on a sample of the fat clay with sand indicates the material is non-moisture sensitive when wetted under a constant pressure of approximately 1,000 psf and moderately compressible under additional loading.

Lean clay - The lean clay contains occasional sand lenses. It is medium stiff, moist to wet, high plastic, and red to brown in color.

Laboratory tests conducted on samples of the lean clay with sand indicate in-place moisture contents ranging from 14 to 28 percent, in-place dry densities ranging from 93 to 111 pcf, and fines contents (percent passing the No. 200 sieve) ranging from 31 to 86 percent. Atterberg Limits tests indicate liquid limits ranging from 22 to 46 percent and plasticity indexes ranging from 7 to 24 percent. A water soluble sulfates test indicates a sulfate concentration of 300 ppm.

One-dimensional consolidation tests conducted on sample of the lean clay with sand indicates the material is non-moisture sensitive when wetted under a constant pressure of approximately 1,000 psf and slightly to moderately compressible under additional loading.

Shale bedrock - The shale bedrock is soft to moderately hard, moist, low plastic, and red in color.

Laboratory tests conducted on samples of the shale indicate in-place moisture contents ranging from 11 to 22 percent, in-place dry densities ranging from 104 to 113 pcf, and fines contents (percent passing the No. 200 sieve) ranging from 75 to 84 percent. Atterberg Limits tests indicate liquid limits ranging from 27 to 29 percent and plasticity indexes ranging from 8 to 9 percent.

One-dimensional consolidation tests conducted on samples of the shale indicate the material is non-moisture sensitive when wetted under a constant pressure of approximately 1,000 psf.

The Logs, Legend and Notes of Exploratory Borings are shown on Figure 3. Laboratory test results are shown on Figure 3 and in the Summary of Laboratory Test Results, Table 1. The one-dimensional consolidation test results are shown graphically on Figures 4-6.

SUBSURFACE WATER

Groundwater was encountered in the borings at depths ranging from approximately 3½ to 4 feet below the existing grade. Fluctuations in the groundwater level may occur over time. An evaluation of such fluctuations is beyond the scope of this report.

PRELIMINARY RECOMMENDATIONS

Based on the subsurface conditions observed, laboratory test results, and our experience in the area, the following preliminary recommendations are provided for the proposed construction.

A. Site Grading

A grading plan was not available at the time this report was prepared. When the grading plan is complete, AGECE should be notified so that we may ensure our preliminary recommendations are consistent with the proposed grading.

1. Subgrade Preparation

Prior to placing fill in building pad or pavement areas, soil containing significant amounts of roots and organics should be removed. We anticipate this will require the removal of approximately 1 foot of soil. Subsequent to grubbing and removal of topsoil, the exposed subgrade should be scarified, properly moisture conditioned, and compacted to meet the recommendations included in the compaction section of this report prior to placing fill or concrete. If the exposed subgrade is soft following grubbing, compaction of the subgrade may be reduced to "proof rolling" at the engineers discretion.

If the exposed subgrade is soft, becomes soft and/or pumps during site grading due to high moisture conditions, biaxial geogrid (TENSAR BX1200) may be placed on the exposed subgrade below building pads, foundations, and/or pavement areas following removal of disturbed soil. We recommend placing 12 to 24 inches of roadbase material over the geogrid in these areas to assist in stabilizing the subgrade. Placement of 12 inches of 12 inch minus crushed angular rock may be required prior to placing the geogrid if the ground surface is saturated or excessively soft. Use of crushed rock below the geogrid may reduce the amount of road base required. A typical subgrade stabilization detail is shown on Figure 7. If soft soil conditions are encountered, a representative of AGECE should be notified to provide recommendations for the stabilization process.

The following recommendations should be followed during placement of the stabilization materials.

- The crushed rock should be placed in 1 foot loose lifts. Prior to placing additional rock or geogrid, the material should be densified by proof-rolling the material to provide a stable subgrade. We recommend a large steel drum roller, without vibration, be used to densify the rock.

- The Tensar geogrid should be placed over the crushed rock. Where required, the geogrid should be overlapped a minimum of 2 feet and stretched tight.
- The base course should be placed in 1 foot lifts by pushing the material onto the geogrid from a stable surface onto the soft area with track mounted equipment until a stable condition is achieved. The base course may be compacted with rubber tired equipment or a smooth drum roller. The base course should be moisture conditioned prior to placement to minimize the compactive effort required.
- AGECE should observe placement of the crushed rock, geogrid, and base course.

As an alternative to the use of road base and geogrid an increased thickness of crushed/angular rock may be used to stabilize soft areas. We anticipate this will require on the order of 2 feet of 12 inch minus crushed/angular rock capped with 6 to 8 inches of 6 inch minus crushed rock. An engineer from AGECE should be notified to provide on-site recommendations and observations during the stabilization process.

2. Excavation/Earthwork

We anticipate that excavation of the on-site soil can be accomplished with typical excavation equipment. Excavations which extend into the bedrock will require heavy duty excavation equipment.

Due to the soft soil and shallow groundwater conditions observed at the site, excavation with heavy rubber-tired equipment should be minimized. Track-mounted equipment should be utilized whenever possible. Excessive use of heavy rubber tired equipment may cause the exposed subgrade to become soft

and pump, subsequently raising the groundwater level, resulting in an unstable condition. To achieve compaction, cuts should be made with track-mounted equipment and should be wheel-rolled only during the compaction process to achieve compaction as recommended in the compaction section of the report.

Due to shallow groundwater conditions, excavations which extend below the groundwater level will require dewatering and the use of a trench box during excavation. The dewatering method may be chosen by the contractor. Sloping of trench sidewalls may also be required. We further recommend free draining gravel be placed to backfill utility trenches to an elevation of at least 1 foot above the highest anticipated groundwater level. Prior to backfilling the excavations with compacted fill, filter fabric (Mirafi 140N or equivalent) should be placed above the gravel to provide separation between the gravel and the backfill.

3. Materials

The on-site soils, free of organics, debris and material larger than 6 inches are suitable for use as site grading fill, wall backfill, and utility trench backfill. The on-site soils are not suitable for use as structural fill.

Import materials should be granular, non-gypsiferous, non-expansive, granular soil, and should meet the following recommendations. AGEC should approve imported fill materials prior to delivery to the site.

Area	Fill Type	Recommendations
Footings/Pads	Structural fill	-200 < 35%, LL < 30% Maximum size: 4 inches Solubility < 1%
Underslab/Subgrade Stabilization	Base course	-200 < 12% Maximum size: 1 inch Solubility < 1%
Utility trench (below groundwater table)	Crushed gravel	-200 < 5% Maximum size: 1 inch
Utility trench (above groundwater table)	Granular fill	-200 < 50%, LL < 30% Maximum Size: 4 inches Solubility < 1%
Subgrade Stabilization	Crushed rock	-200 < 5% Maximum size: 18 inches

-200 = Percent Passing the No. 200 Sieve
LL = Liquid Limit

4. Compaction

Compaction of fill placed at the site should equal or exceed the following percentages of the maximum dry densities as determined by ASTM D-1557:

Area to Support	Percent Compaction
Subgrade	90
Site grading fill	95
Structural fill	95
Utility trench backfill	95
Wall backfill	95
Base course	95

Fill should be compacted to the percentages provided above when compared to the maximum dry density as determined by ASTM D-1557.

Soil at the site was generally above the optimum moisture content and will likely require drying prior to placement to facilitate appropriate compaction. Fill placed at the site should be tested frequently to verify proper compaction.

Fill should be placed in lift thicknesses which do not exceed the compaction capability of the equipment used. Typically, 6 to 8-inch loose lifts are adequate for heavy equipment. Lift thicknesses should be reduced to 4 inches for hand compaction equipment.

5. Site Drainage

Site drainage should be maintained during the course of construction and throughout the life of the structures. After construction has been completed, positive drainage of the surface water away from the buildings should be maintained. To reduce infiltration adjacent to foundations we recommend the following:

- a. A minimum slope of 6 inches in the first 10 feet away from the perimeters of buildings should be provided.
- b. Roof gutter systems should be installed around the perimeters of the buildings. Roof downspouts should discharge away from the buildings so as to prevent ponding adjacent to foundations.
- c. Placement of a 3 to 4 foot wide concrete apron or pavement around the perimeters of buildings.

6. Perimeter Drain

Due to the presence of shallow groundwater, a perimeter drain will likely be required. The drain should consist of a perforated drain pipe placed in a gravel filled trench. The drain pipe should be sloped to drain by gravity or to a sump.

Typically, the drain pipe should be placed approximately 2 feet below the finished slab elevation and should extend around the perimeter of the building approximately 5 feet beyond the exterior walls.

B. Foundations

The proposed structure may be supported on conventional spread footings bearing on properly compacted structural fill. Bearing capacities and structural fill thicknesses will depend on proposed grades, loads, and depth to groundwater. We anticipate allowable bearing pressures will range from 1,500 to 3,500 psf.

A more detailed geotechnical investigation should be performed for the site when construction details, grading plans and building loads are known.

C. Concrete Slab-on-Grade

Slab-on-grade floor systems may be used in conjunction with spread footing foundation systems. Slabs should be supported on properly compacted structural fill. Four inches of base course should be placed below slabs to provide a consistent subgrade and to promote curing of concrete.

Due to the presence of shallow groundwater, vapor barriers should be used below slabs. We recommend the barrier be a minimum of 15 mil to minimize potential for puncturing during construction.

D. Seismicity and Liquefaction

Buildings should be designed and constructed in accordance with "Site Class C" requirements according to the 2006 International Building Code.

Liquefaction potential is dependant on the presence of groundwater and loose "clean" sand. Based on the subsurface soil/bedrock conditions, we anticipate the liquefaction potential at the site is "low". A liquefaction hazard analysis can be performed when additional subsurface investigation and laboratory testing are complete.

E. Soil Corrosion

Based on laboratory test results and our experience in the area, there is a relatively high concentration of water soluble sulfates in the native soil and bedrock. Therefore, we recommend that concrete that will be in contact with the on-site soil and bedrock contain Type V sulphate-resistant cement and be designed in accordance with the provisions provided in the American Concrete Institute Manual of Concrete Practice (ACI) 318 Section 4.3 and the 2006 International Building Code. Table 4.3.1 of ACI 318 should be referenced utilizing a sulfate exposure category of "severe". Consideration should be given to cathodic protection of buried metal pipes or the use of PVC pipe when permitted by local building codes.

Consideration should also be given to cathodic protection of buried metal pipes. We recommend utilizing PVC pipe where local building codes allow.

LIMITATIONS

This report has been prepared in accordance with generally accepted soil and foundation engineering practices in the area for design purposes. The conclusions and preliminary recommendations included in the report are based on the information obtained from the referenced report, the borings drilled at the approximate locations indicated on the site plan, the results of laboratory testing, engineering analysis, and our experience in the area. Variations in the subsurface conditions may not become evident until additional exploration or excavation is conducted. If the subsurface soil or groundwater conditions are found to be different from what is described in this report, we should be notified to reevaluate the recommendations given.

If you have any questions or if we can be of further service please call.

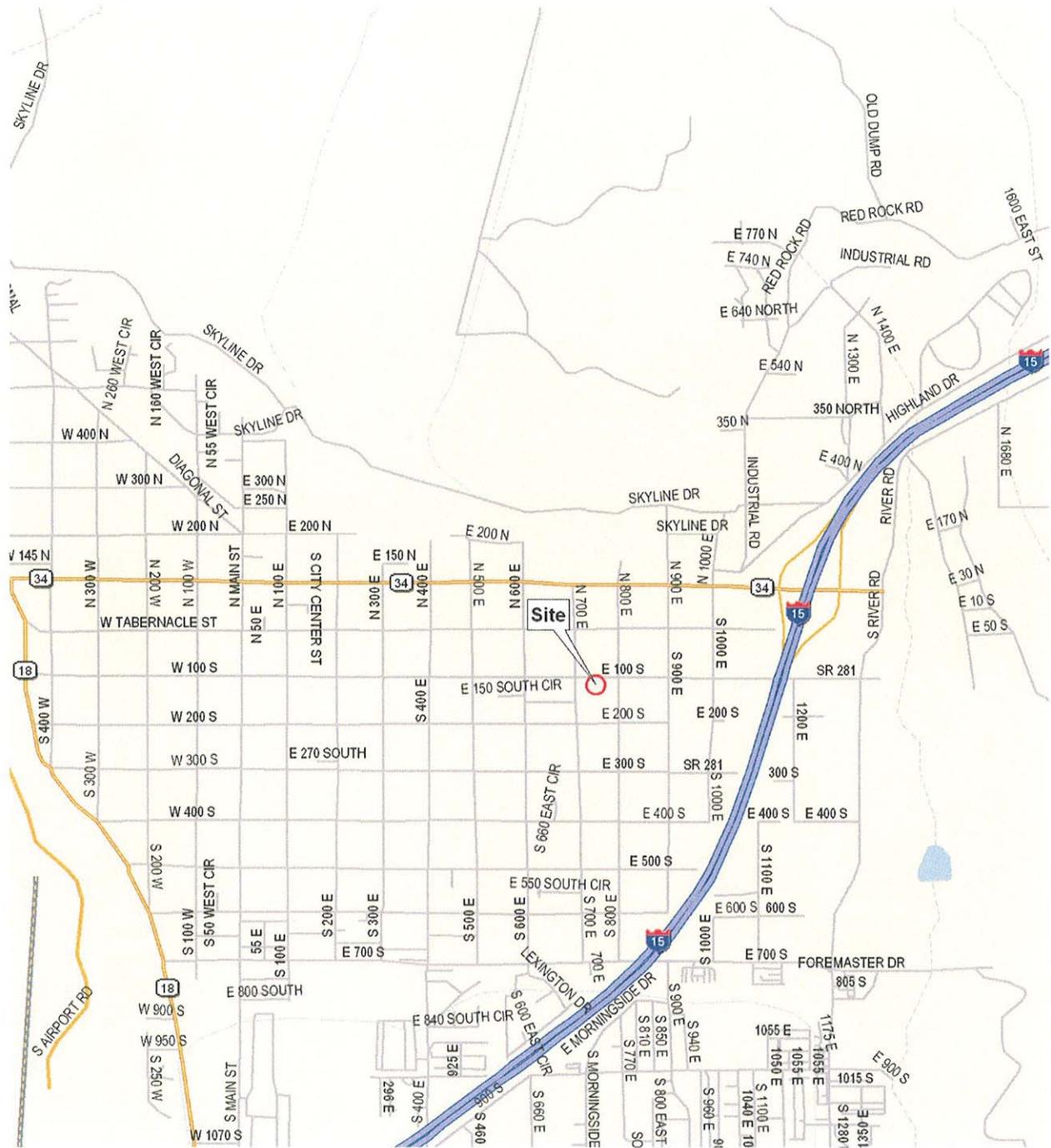
APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.

Shawn Turpin, P.E.



Reviewed by: Arnold DeCastro, P.E.

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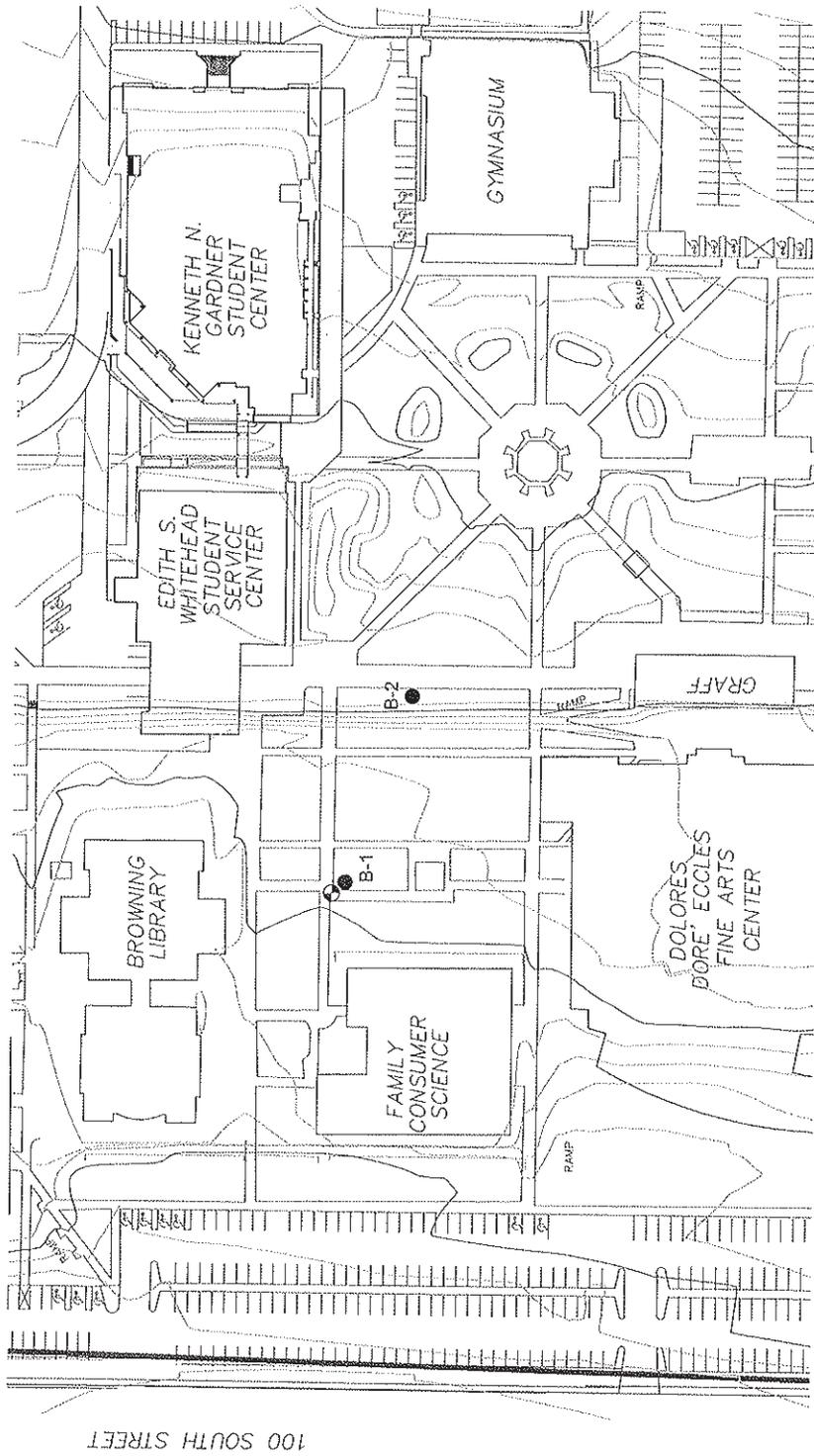
DeLorme Street Atlas, 2004

DIXIE CENTENNIAL
ST. GEORGE, UTAH



Scale 1:25,000

DIXIE CENTENNIAL
ST. GEORGE, UTAH



- Approximate boring location
- ⊕ Benchmark; edge of sidewalk, assumed elevation of 100 feet.

2071559

Site Plan



Figure 2

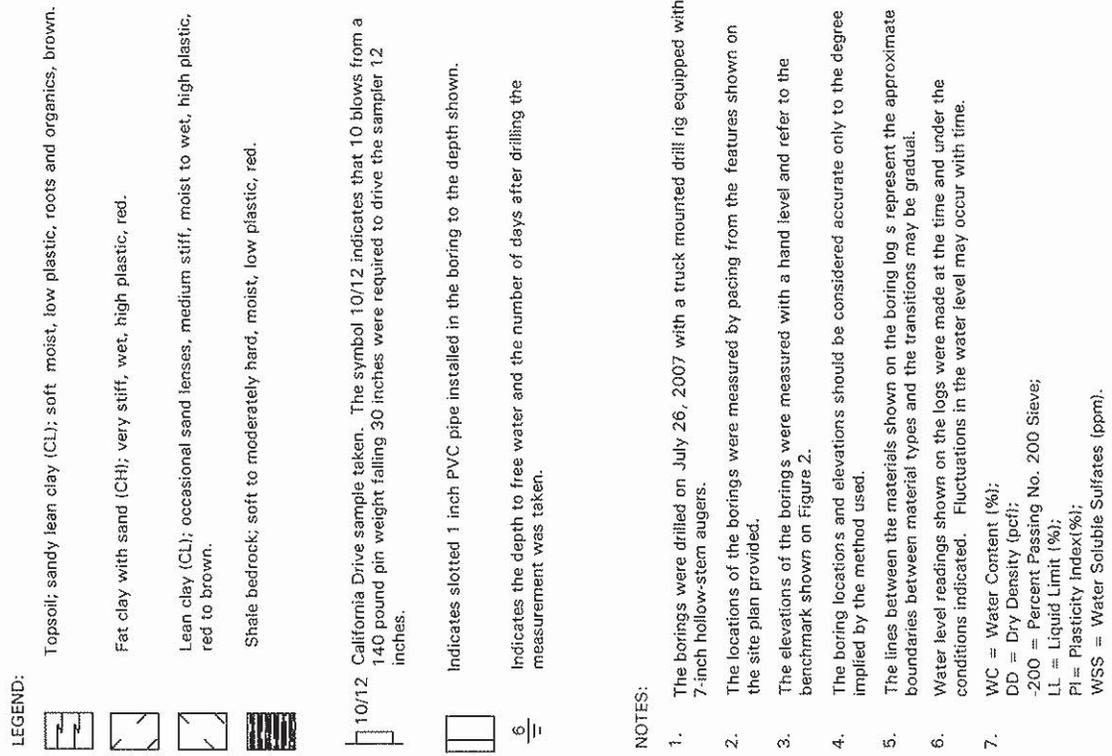
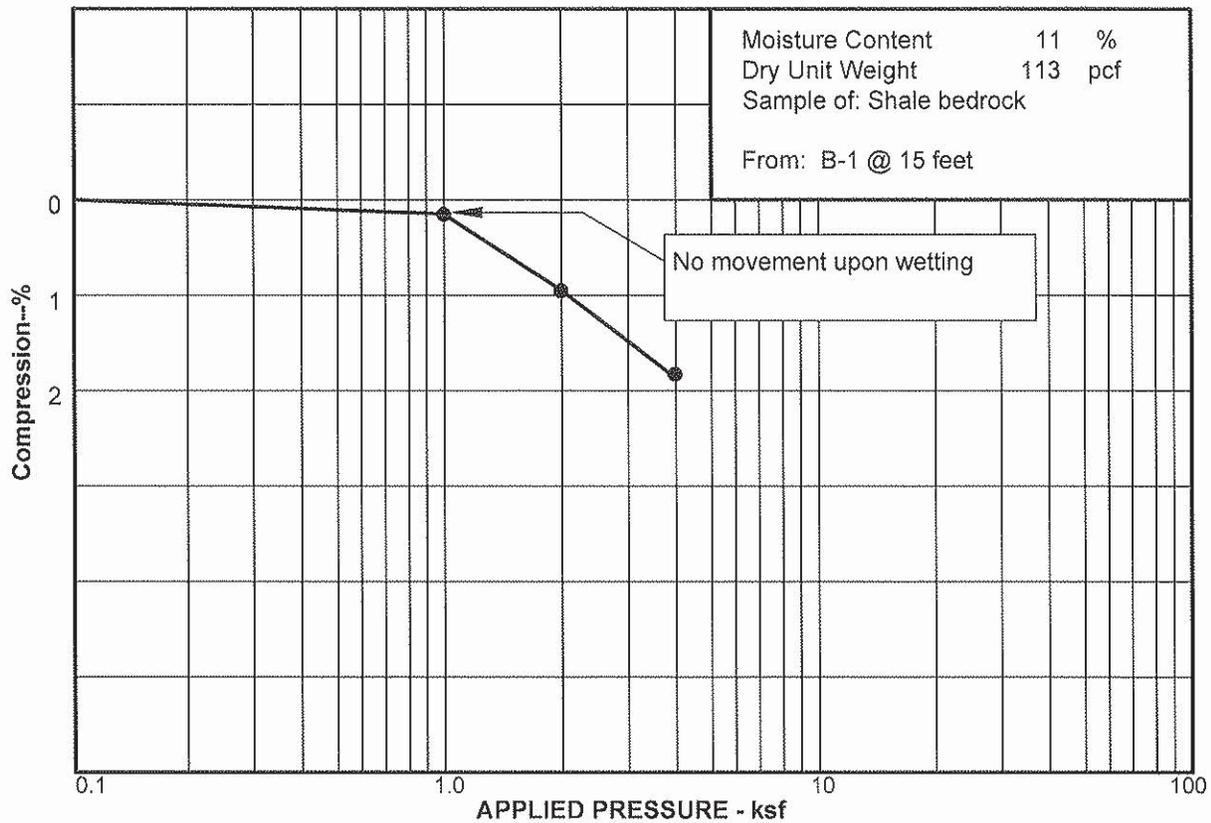
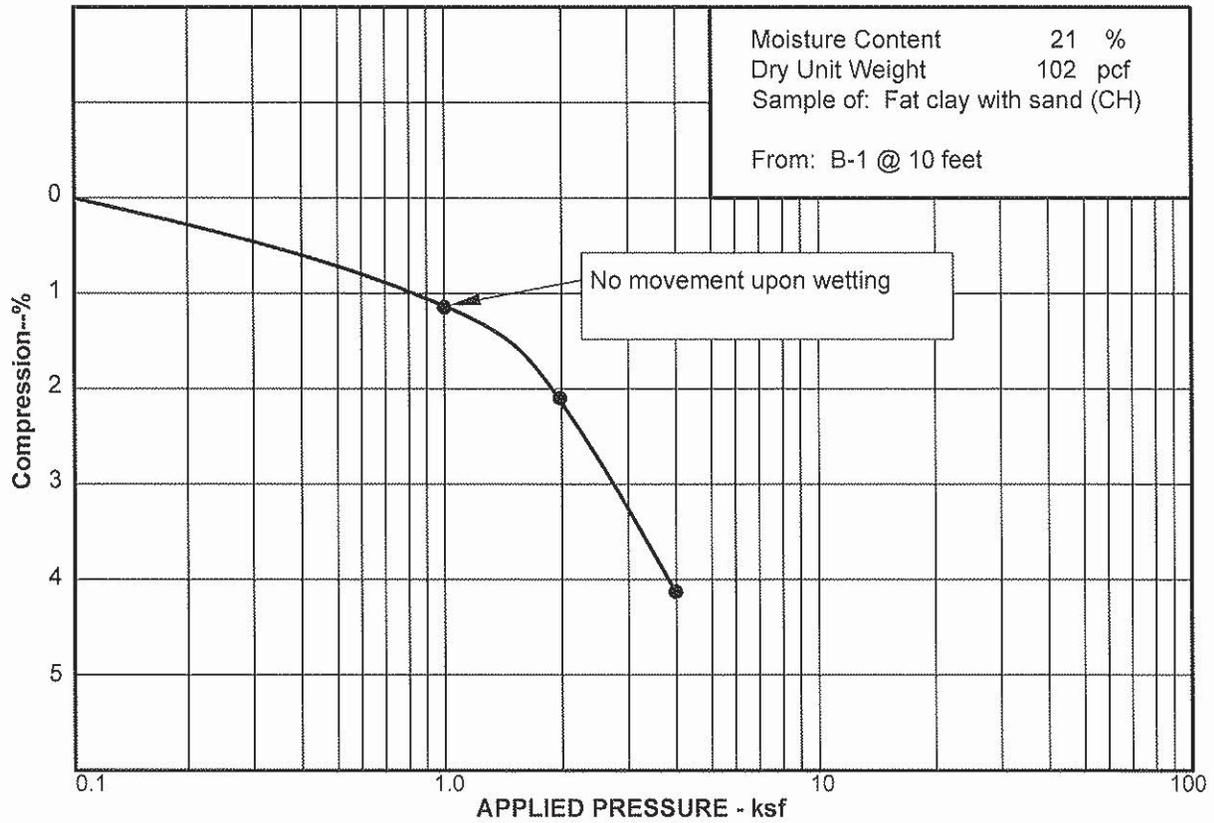
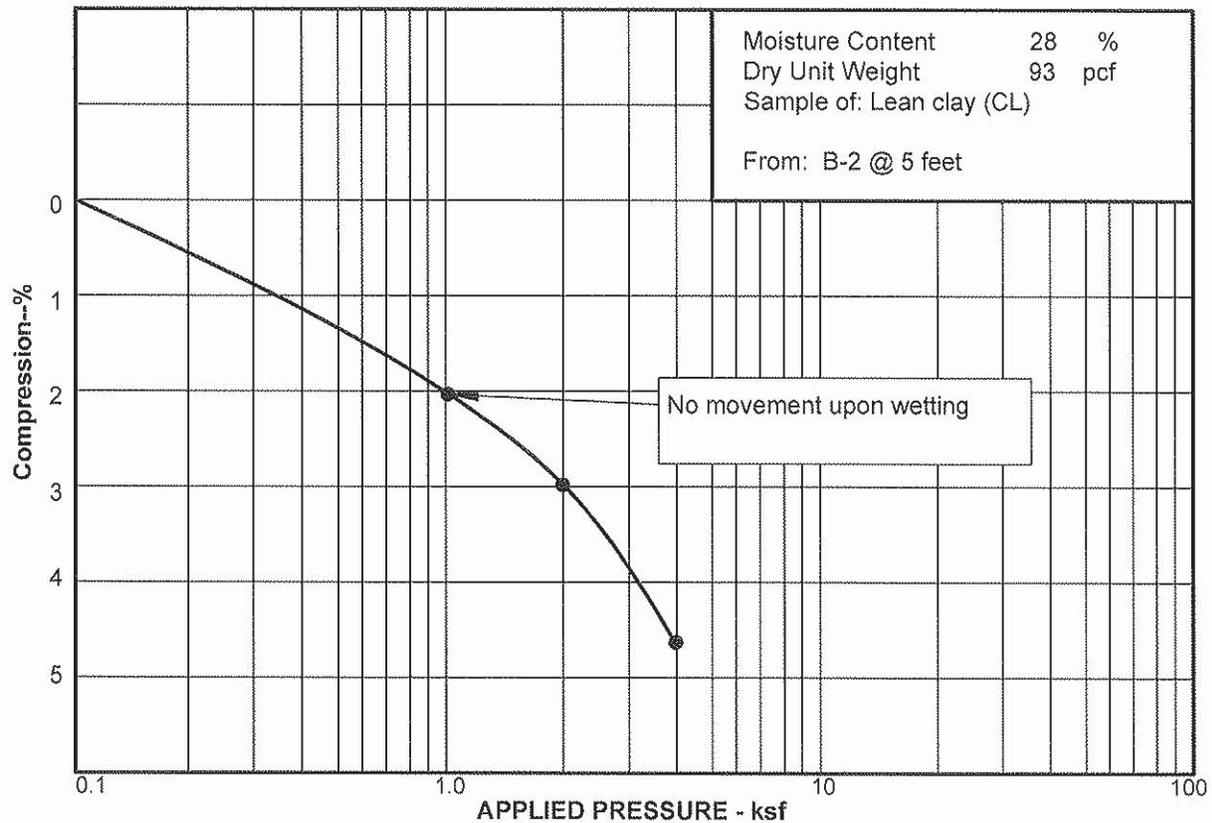
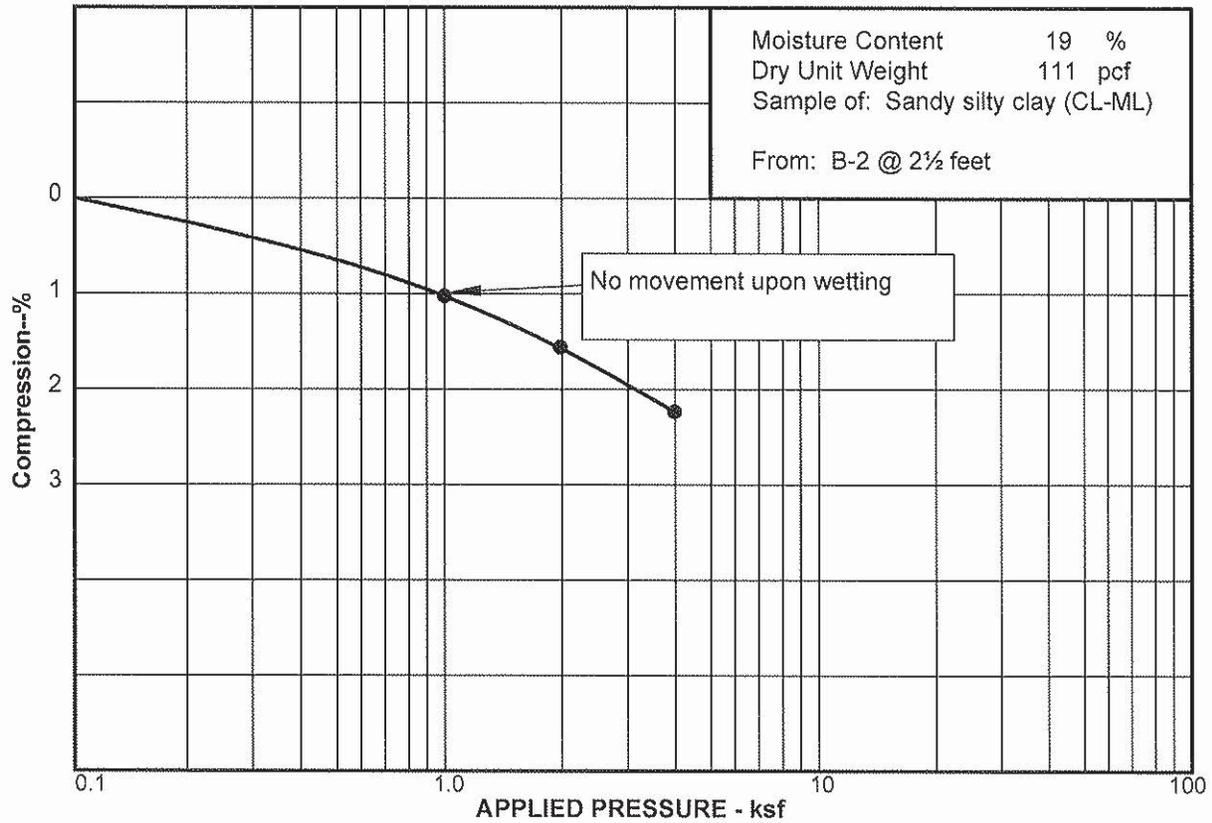


Figure 3

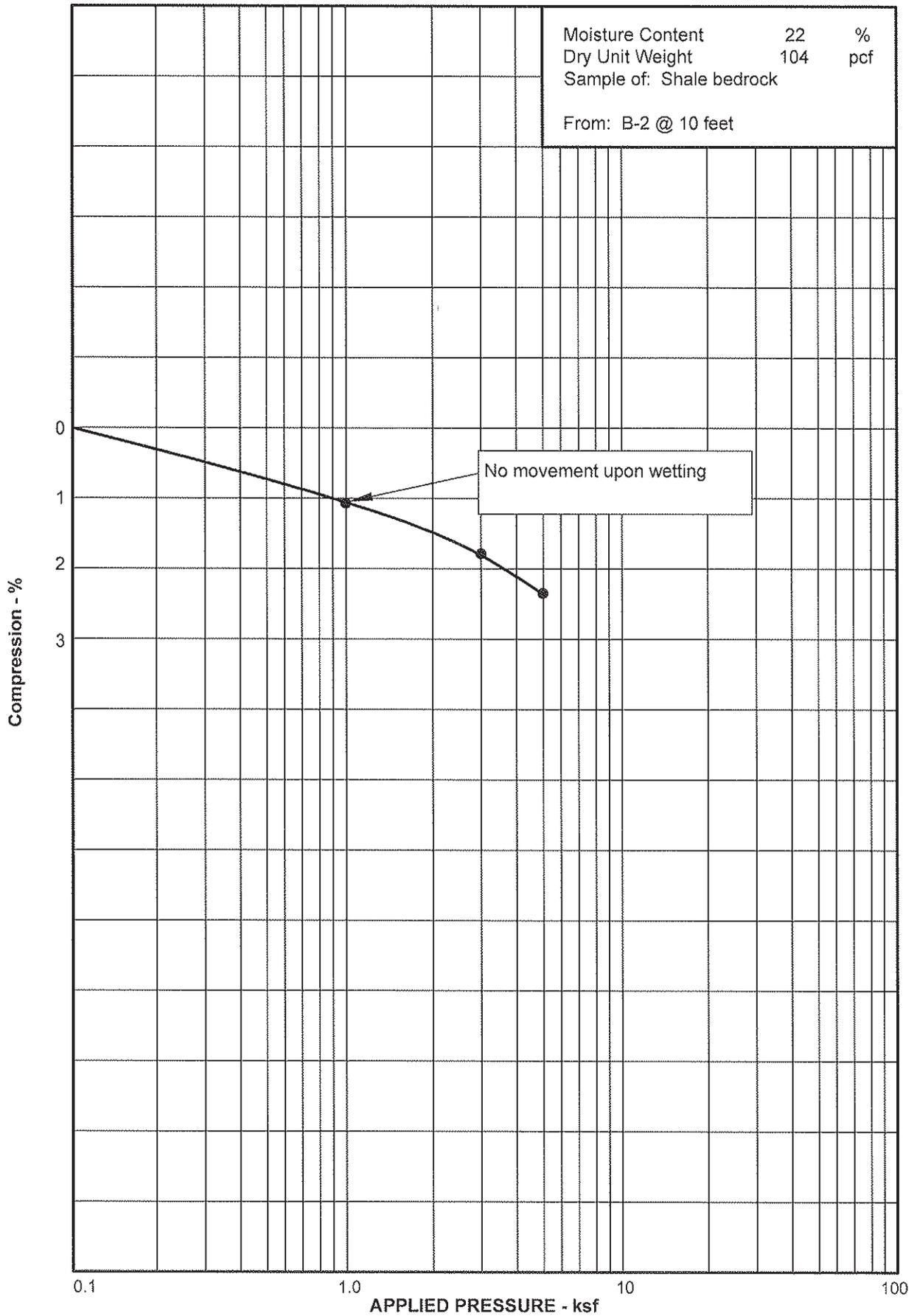
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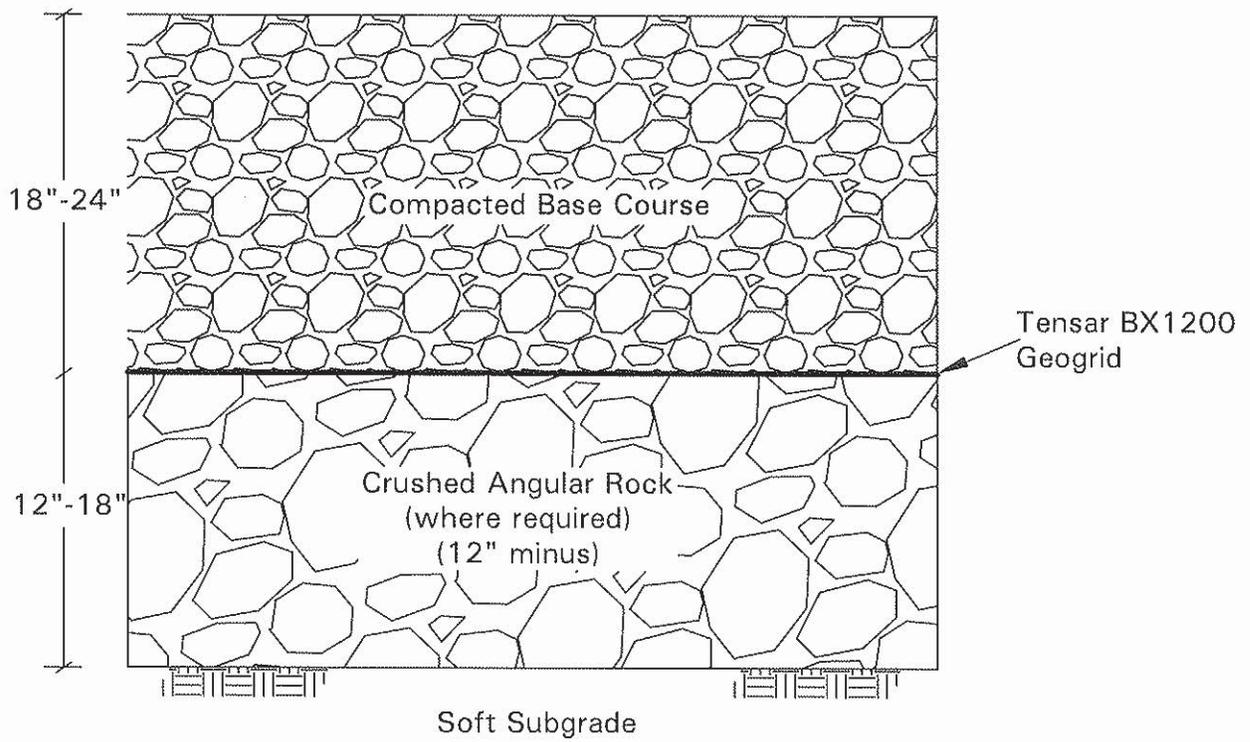


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Applied Geotechnical Engineering Consultants, Inc.





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TABLE I
SUMMARY OF LABORATORY TEST RESULTS

SAMPLE LOCATION		TEST PIT NO.	DEPTH (FEET)	NATURAL MOISTURE CONTENT (%)	NATURAL DRY DENSITY (PCF)	GRADATION			ATTERBERG LIMITS		WATER SOLUBLE SULFATE (PPM)	SAMPLE CLASSIFICATION
						GRAVEL (%)	SAND (%)	SILT/CLAY (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)		
B-1	2½			14				31			300	Clayey sand (SC)
B-1	10			21				85	50	30		Fat clay with sand (CH)
B-1	15			11				75	27	9		Shale bedrock
B-2	2½			19				57	22	7		Sandy silty clay (CL-ML)
B-2	5			28				86	46	24		Lean clay (CL)
B-2	10			22				84	29	8		Shale bedrock

DIXIE CENTENNIAL

PROJECT NUMBER 2071559

Preliminary Building Code Analysis

Code and Standards

Codes that are directly applicable to design of the building system are listed below. This project shall comply with each of the latest adopted publications of the following codes and standards. In case of conflicts between these standards, or between standards and other information contained in program criteria, obtain written clarification from the Owner's representative prior to submitting proposal.

- IBC 2006, International Building Code
- ANSI 2003
- ADAAG 2004
- Life Safety Code 2006
- IFC 2006, International Fire Code
- IMC 2006, International Mechanical Code
- Electrical Code 2006
- IECC 2006, International Electrical Conservation Code

Project Description

Five story building with mechanical space, classrooms, library space, choir rooms, student commons, administration spaces and offices with the following occupancy types:

- A3 Choir rooms, Student Commons, Library
- B Offices, Services and Education (beyond the 12th grade)

Required Fire Separations

There will be a 3 hour fire wall (vertical separation, Table 705.4) separating the building into two areas, and for the purpose of this analysis shall be considered two distinct structures, Building A and Building B.

A fire separation between the A3 and B occupancies is typically required (1 hour) (Table 508.3.3).

Levels 1 and 2 for Building A will be analyzed as a non-separated use structure, and therefore no separations on those levels are needed. Overall, building A will be analyzed as a separated use structure, with a 1 hour horizontal separation assembly between Level 2 and Level 3, to be consistent with section 711.

Building B will be analyzed as a non-separated use structure, and therefore no separations are needed.

Incidental use areas (Table 508.2) will be required at the following locations:

- Boiler Room - 1 hour separation
- Storage Room - 1 hour separation

Actual Square Footages

Actual Square Footages (Total Building A)		
A3	Level 1	32,950 sf
A3	Level 2	30,187 sf
B	Level 3	30,234 sf
B	Level 4	30,241 sf
B	Level 5	20,813 sf
Total levels 1 and 2		63,137 sf
Total levels 3 through 5		81,288 sf
Total levels 1 through 5		144,452 sf

Actual Square Footages (Total Building B)		
A3	Level 1	18,739 sf
A3	Level 2	14,230 sf
A3	Level 3	15,100 sf
A3	Level 4	13,081 sf
Total levels 1 through 4		61,150 sf

Actual Square Footages (First Level)		
A3	Commons, Library, Lecture Halls, Choral Rehearsal	
	Building A	21,173 sf
	Building B	7,545 sf
B	Offices	
	Building A	14,211 sf
	Building B	11,191 sf
Total this level	Building A	32,950 sf
	Building B	18,739 sf

Actual Square Footages (Second Level)		
A3	Commons, Library, Lecture Halls, Choral Rehearsal	
	Building A	19,172 sf
	Building B	10,715 sf
B	Offices, Education (greater than 12th grade)	
	Building A	11,015 sf
	Building B	3,515 sf
Total this level	Building A	30,187 sf
	Building B	14,230 sf

Actual Square Footages (Third Level)		
B	Offices, Education (greater than 12th grade)	
	Building A	30,234 sf
	Building B	15,100 sf
Total this level	Building A	30,234 sf
	Building B	15,100 sf

Actual Square Footages (Fourth Level)		
B	Offices, Education (greater than 12th grade)	
	Building A	30,241 sf
	Building B	13,081 sf
Total this level	Building A	30,241 sf
	Building B	13,081 sf

Actual Square Footages (Fifth Level)		
B	Offices, Education (greater than 12th grade)	
	Building A	30,234 sf
Total this level	Building A	30,234 sf

Project Assumptions

Assume a Type IIA Construction Type for Building B

Assume a Type IIB Construction Type for Building A

Building is to be equipped with an automatic fire sprinkling system.

Note

There will be a 3 hour fire rated fire wall (vertical separation) between the Building A and Building B. These areas will be considered as separate building areas.

Basic Allowable Areas and Height (From Table 503)

A3- Construction Type IIA (Building B)

Allowable Area: 15,500 square feet
Height: 3 stories

A3- Construction Type IIB (Building A)

Allowable Area: 9,500 square feet
Height: 2 stories

B - Construction Type IIB (Building A)

Allowable Area: 23,000 square feet
Height: 4 stories

Allowable Area Increases

Frontage Increase (If)
 $If = 100(F/P - .25) \times W/30 =$
 $If = 100(1040/1040 - .25) \times 30/30 = 75\%$
 Fire Sprinkler Increase 200%
 Multi-Story Increase (For total building)
 (3 stories maximum) Area x 3

Allowable Area (after increases) per floor

A3 – Building A
 $Aa (A3) = 9,500 \text{ sf} + (9,500 \times 75/100) + (9,500 \times 200/100)$
 A3 allowable = 35,625 square feet

B – Building A
 $Aa (B) = 23,000\text{sf} + (23,000 \times 75/100) + (23,000 \times 200/100)$
 B allowable = 86,250 square feet

A3 – Building B
 $Aa (A3) = 15,500 \text{ sf} + (15,500 \times 75/100) + (15,500 \times 200/100)$
 A3 allowable = 58,125 square feet

Note

Since the required fire separation occurs horizontally and no single floor shares an occupancy area, shared occupancy allowable area ratios (as per Section 508.3.3.2) are not required.

The total square footage on the largest A3 occupancy level of building A is approximately 32,950 square feet. The square footage on this level does not exceed the allowable area per floor of the allowable A3 area of 35,625 square feet. **OK**

The total square footage on the largest B occupancy level of building B is approximately 30,241 square feet. The facility square footage on this level does not exceed the allowable area per floor of the allowable B area of 86,205 square feet. **OK**

The total square footage on the largest A3 occupancy level of building B is approximately 18,739 square feet. The square footage on this level does not exceed the allowable area per floor of the allowable A3 area of 58,125 square feet. **OK**

Allowable Areas (after multi-story increase) – entire building

Building A	A3	32,625 sf x 3 stories = 97,875 sf
Building A	B	86,250 sf x 3 stories = 258,750 sf
Building A Total		356,625 sf

Building B	A3	58,125 sf x 3 stories = 174,375 square feet
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The total square footage of building A is approximately 144,452 square. The facility square footage does not exceed the allowable combined areas for A3 and B areas of 356,625 square feet.

The total square footage of building B is approximately 61,150 square. The facility square footage does not exceed the allowable area of an A3 area of 174,375 square feet.

Entire building may be classified as noted and is within the allowable building area for those occupancies. **OK**

Construction Types

Type II A Construction – Levels 1, 2, 3, and 4 – Building B

Fire Resistance Ratings for Building Elements	Table 601
Structural Frame	1 hour
Bearing walls (Int./Ext.)	1 hour
Non-Bearing Walls (Int./Ext.)	1 hour <30 ft. (Table 602)
Floor construction	1 hour
Roof construction	1 hour (where applicable, see Table 601)
Shaft enclosures (elevator/stairway)	2 hour (Section 707.4)

Type II B Construction – Levels 1, 2, 3, 4, and 5 – Building A

Fire Resistance Ratings for Building Elements	Table 601
Structural Frame	0 hour
Bearing walls (Int./Ext.)	0 hour
Non-Bearing Walls (Int./Ext.)	1 hour <30 ft. (Table 602)
Floor construction	0 hour
Roof construction	0 hour (where applicable, see Table 601)
Shaft enclosures (elevator/stairway)	2 hour (Section 707.4)

Note

1. Corridor walls will not need to be fire-resistive rated since the building is protected by a automatic sprinkler system. (Table 1004.3.2.1)
2. Fire protection of structural members shall not be required.
3. Walls of Atrium will need to be 1-hour fire rated or constructed as per section 404.5 (Exception 1)

Allowable Heights

Building A

A3 occupancy is allowed to be 2 stories high (55 feet) (Table 503) with a height increase of one story and 20 feet for inclusion of an approved automatic sprinkler system. (Section 504.2).

B occupancy is allowed to be 4 stories high (55 feet) (Table 503) with a height increase of one story and 20 feet for inclusion of an approved automatic sprinkler system. (Section 504.2).

Building A: 5 stories allowed (75 feet high)

Building B

A3 occupancy is allowed to be 3 stories high (65 feet) (Table 503) with a height increase of one story and 20 feet for inclusion of an approved automatic sprinkler system. (Section 504.2).

Building B: 4 stories allowed (85 feet high)

Actual Heights

Actual Height – Building A: 5 stories

The facility will be a maximum of five stories, with a height of approximately 70 feet.

Actual Height – Building B: 4 stories

The facility will be a maximum of four stories, with a height of approximately 70 feet.

Dead End Corridors

Dead end corridors shall be a maximum of 20 feet long throughout the entire building (1017.3). Building A, Levels 3-5 may have a maximum dead end corridor of 50 feet long (1017.3 Exception 2).

Exit Widths (Table 1005.1)

Egress widths for the occupancies served:

Stairs: .2 inches/occupant

Other: .15 inches/occupant

First Level		
230 Occupants	x .15	34.5" required (2 exits)
6 doors	@ 32" clear	96" provided
Second Level		
102 occupants	x .20	20.4" required (2 exits)
102 occupants	x .15	15.3" required
1 stair	@ 4'-2" clear	50" provided
2 door	@ 32" clear	64" provided
Third Level		
230 occupants	x .20	46.0" required (2 exits)
2 stairs	@ 4'-2" clear	100" provided
Fourth Level		
239 occupants	x .20	47.8" required (2 exits)
2 stairs	@ 4'-2" clear	100" provided



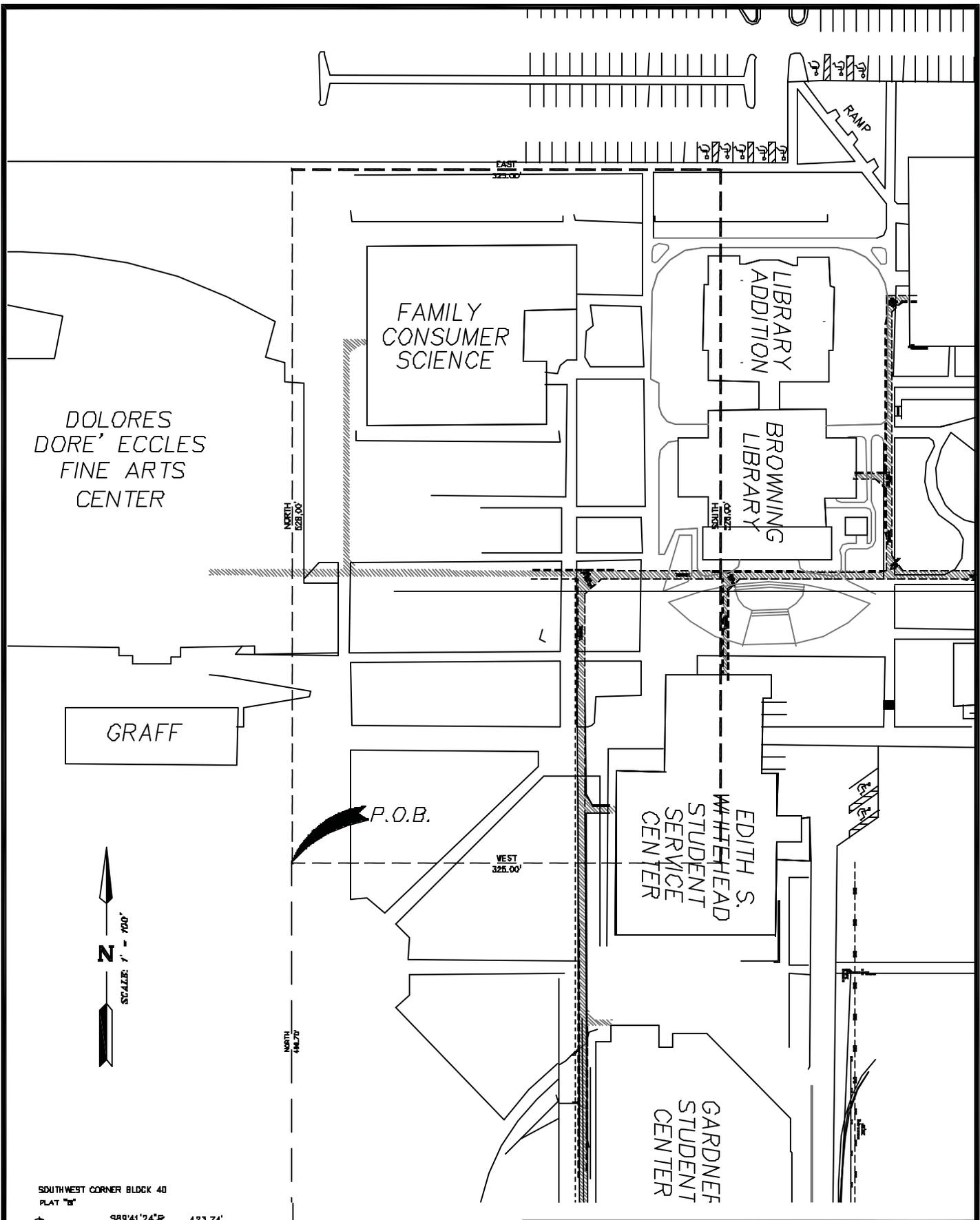
ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

**LEGAL DESCRIPTION FOR
FAMILY SCIENCE BUILDING ALTA SURVEY
(August 6, 2007)**

A portion of Block 39, Plat "B" St. George City Survey, more particularly described as follows:

Commencing at the Southwest Corner of Block 40, Plat "B" St. George City Survey;
Thence South $89^{\circ}41'24''$ East along the south line of said Block 40, and Block 39, a distance of 423.74 feet;
Thence North, a distance of 496.70 feet to the Point of Beginning;
Thence North, a distance of 528.00 feet;
Thence East, a distance of 325.00 feet;
Thence South, a distance of 528.00 feet;
Thence West, a distance of 325.00 feet, to the Point of Beginning.



DOLORES
DORE' ECCLES
FINE ARTS
CENTER

FAMILY
CONSUMER
SCIENCE

LIBRARY
ADDITION

BROWNING
LIBRARY

GRAFF

P.O.B.

EDITH S.
WHITEHEAD
STUDENT
SERVICE
CENTER

GARDNER
STUDENT
CENTER



SOUTHWEST CORNER BLDGK 40
PLAT "B"

989'41"24" P 423.74'

FAMILY SCIENCE CENTER ALTA SURVEY BOUNDARY
AUGUST 6, 2007

ALPHA
ENGINEERING COMPANY

148 EAST TABERNAACLE, ST. GEORGE, UT. 84-770
TELEPHONE (435) 828-6500