

Facilities Master Plan Truckee Meadows Community College















Illustrative Master Plan -TMCC Dandini Campus and the Desert Research Institute in Reno

TMCC's Dandini Campus creates a focus of education and training, sharing a common hilltop site with the Desert Research Institute.

APPROVED BY THE UNIVERSITY AND
COMMUNITY COLLEGE SYSTEM OF NEVADA
BOARD OF REGENTS
DECEMBER 2004



The TMCC Facilities Master Plan is an integral part of our overall planning effort that supports our strategic plan and integrates academic and physical space requirements.

Facilities master planning represents a "blueprint" for the continued development of the College. The plan establishes a framework for development that will accommodate student enrollment growth while maintaining a sense of community that captures the openness and beauty of the site and builds upon the unique landscape of the campus.

When the original Red Mountain Building was constructed and first occupied, one could not imagine the rapid growth of the Truckee Meadows and the demand for community college education. As the area has grown, so has the college. With three existing centers and a fourth center proposed, TMCC is responding to the needs of Northern Nevada through all of its programs and services. The college sees itself as a partner with the community to diversify the economy of Northern Nevada, meet the health care crisis, provide access to growing populations of students who have been underrepresented in higher education, and to provide the first two years of virtually any baccalaureate program.

The Facilities Master Plan creates a physical and visual presence which will continue to encourage accessibility to the site for the next decade and beyond. The plan lays out a comprehensive vision for campus buildings, open space, and our further relationship with the Desert Research Institute.

Your encouragement of the College through hard work, dedication, fiscal support, and appreciation of TMCC's distinctive beauty and contributions to the region is highly valued. We look forward to working with you to bring the Master Plan to fruition.

Sincerely.

Philip M. Ringle, Ph.D.

President



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Purpose

MASTER PLAN OVERVIEW HISTORY OF TMCC MISSION

STRATEGIC GOALS LOCATIONS

MASTER PLAN OVERVIEW

Welcome to the Facilities Master Plan of Truckee Meadows Community College (TMCC). The facilities master plan establishes a physical framework in support of TMCC's educational mission as it addresses a growing student population. Taking into account growth at all TMCC locations, the master plan accommodates growth for the Dandini Campus from a student headcount of 10,044 (Fall 2003) to over 16,000. To address this growth, the Dandini Campus will need to expand its facilities from 398,000 to 1,084,000 gross square feet, along with the requisite parking.

In addition, the master plan enters into a cooperative development of several facilities to be shared with its neighbor, the Desert Research Institute.

HISTORY OF TMCC

In 1969, the community college system was established by the Nevada State Legislature. In 1971, Governor Mike O'Callaghan dedicated Western Nevada Community College as one of three community colleges in the Community College Division of the University and Community College System of Nevada.

In 1979, the Board of Regents split Western Nevada Community College and established Truckee Meadows Community College (TMCC). TMCC became the fourth community college within the University and Community College System of Nevada.

In its infancy, TMCC operated under the name of Western Nevada Community College. The parent campus was located in Carson City. Stead Air Base housed a secondary campus serving predominantly the greater

Reno-Sparks area. Both campuses had their own student organizations, faculty senates, and administrative organizations.

In addition to Stead Air Base, space for registration and classrooms was provided by the Washoe County Schools. The first of the multi-phases of construction for a campus on Dandini Boulevard in Reno was completed in 1976. The Dandini Campus became the central hub for the staff, programs and students.

Starting in the 1980s, the student demand for courses and programs created a need for more facilities. In addition to expanding the Dandini Campus, TMCC established the TMCC IGT Applied Technology Center in 2000 and the Meadowood Center in 2003.







1-1 TMCC's Locations

The Dandini Campus (left); the Meadowood Center (center); and the TMCC IGT Applied Technology Center (right).

MISSION

Truckee Meadows Community College provides access for lifelong learning opportunities to improve the quality of life for our diverse community.

TMCC creates a supportive, intellectually and culturally dynamic environment by offering the following:

- General education programs
- Transfer degree programs
- Developmental education programs
- Occupational/technical degrees and programs
- · Customized job training
- Continuing education and recreational programs
- Student and academic support services

The college anticipates and responds to educational needs of individuals to achieve their goals, aspirations, and dreams.

STRATEGIC GOALS

Achieving Academic Excellence

To foster an institutional culture that values, demands, and supports excellence in teaching and learning.

Diversity

To foster an academic community that welcomes the opportunity to experience, examine and learn from diverse physical, cultural and ideological backgrounds while nurturing mutual respect.

Facilities

To provide effective and efficient development and use of facilities that are aesthetically pleasing, safe, environmentally friendly and enhance the learning experience.

Finance and Institutional Effectiveness

To achieve college goals through responsible human and fiscal resource development and management.

Strategic Partnerships

To expand and to forge new, mutually beneficial partnerships, ensuring the vitality and relevance of our curriculum and programs, distinguishing TMCC as an integral and influential member of the community.

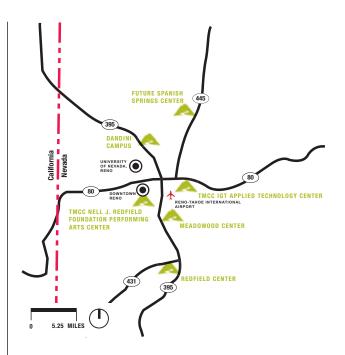
Technology

To develop a technology infrastructure to provide faculty, staff and students with the best practices of the industry.

Welcoming and Supportive Environment

To enhance and foster a welcoming intellectual, cultural and physical environment that is open, supportive and sensitive.

1-2 TMCC's Multiple Locations



1-3 The Dandini Campus



LOCATIONS

Dandini Campus

TMCC's main campus houses a wide variety of academic and occupational programs, as well as the administrative functions of the college--everything from student financial aid, admissions and records, to accounting and human resources.

Meadowood Center

TMCC's Meadowood Center is a full-service education center. It offers a variety of academic and personal enrichment classes as well as student support services. Both the Institute for Business & Industry and Community Services are housed at the Meadowood Center which opened in 2003.

TMCC IGT Applied Technology Center

TMCC's IGT Applied Technology Center at Edison provides education and training opportunities in industrial technologies, including automotive, construction, diesel, electronic, environmental control technology, recreation vehicle and welding technology. The Institute's mission is to provide world-class training for a technically skilled workforce and to guarantee results through student successes.

The TMCC Nell J. Redfield Foundation Performing Arts Center

Opened in 2003 in a building leased through September 2012, the TMCC Nell J. Redfield Foundation Performing Arts Center houses the college's dance, music and theater programs. The center is located in the Keystone Shopping Square.

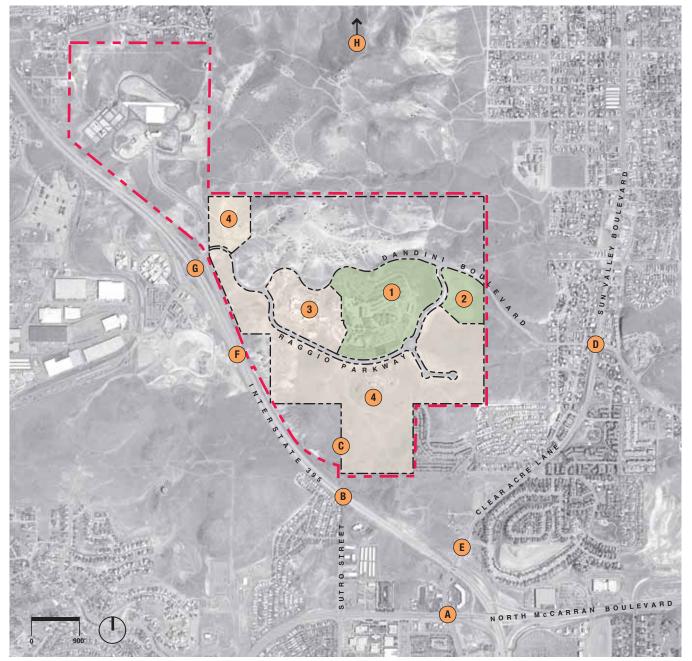
Future locations include:

The Redfield Center

Located on Wedge Parkway, the Redfield Center shares a campus with the University of Nevada, Reno. The 40,000 square foot facility is scheduled to open in 2005.

The Spanish Springs Higher Education Center

The Spanish Springs Higher Education Center was targeted by the college for expansion and the gift of four acres facilitated the site selection. The 60,000 square foot facility will serve the fastest growing portion of Washoe County.



Transportation improvements taken from the 2030 Regional Transportation Plan prepared by the Regional Transportation Commission (RTC)

1-4 Planning Context

TMCC's 76.1-acre Dandini Campus includes the 61.6-acre core campus (1) and a 14.5-acre area (2) land banked for future needs. TMCC is part of the Dandini Regional Center that includes the 32.2-acre Desert Research Institute (3) and the 177-acre Desert Research Park (4). The Dandini Regional Center is one of nine such centers planned for the region. Proposed transportation improvements in the area include:

- A Constructing a grade-separated intersection at North McCarran Boulevard and Clear Acre Lane.
- **B** Widening Sutro Street from two to four lanes. Constructing a new interchange at US 395 and Sutro Street.
- **C** Extending Sutro Street to Sun Valley Boulevard.
- D Widening Clear Acre Lane/ Sun Valley Boulevard from four to six lanes. Improving the intersection at Dandini Boulevard.
- *E* Improving US 395/Clear Acre Lane interchange.
- Widening US 395 from four to six lanes and providing a north-bound truck-climbing lane.
- *G* Improving Parr Boulevard interchange.
- Constructing a six-lane ring road expressway.

LEGEND

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Potential Regional Center Boundary

Property Line

TMCC



Desert Research Institute





Program and Goals

TMCC
DANDINI CAMPUS
MASTER PLAN PRINCIPLES

SITE CONSIDERATIONS

TMCC

The Truckee Meadows Community
College program reflects the aggregate space needs for the Dandini Campus, the TMCC IGT Applied Technology
Center, and the Meadowood Center (South Building). The Fall 2003
headcount of 11,797 is projected to be 15,459 in "Horizon 1".

The addition of the Redfield Center, the Spanish Springs Higher Education Center, and Dandini's recently opened Student Center will help address a portion of the deficit.

The analysis of programs and the projected growth (found in the Appendix - separate from this document) was based on detailed analysis of course, staffing, and facility inventory files as well as the results of the space utilization analysis and the space needs analysis.

This Facilities Master Plan addresses the needs and goals for the Dandini Campus.

DANDINI CAMPUS

The Dandini Campus program reflects its role as part of Truckee Meadows Community College, targeting student growth at two levels of enrollment beyond the Fall 2003 headcount of 10,044 students. The enrollment targets, referred to as "Horizon 1" and "Horizon 2," identify space needs for 12,322 and 16,058 students respectively. While Horizon 1 is also commonly referred to as the year 2013, the master plan emphasizes the direct relationship of program to student enrollment, independent of specific targeted dates.

For the Fall 2003 enrollment, the Dandini Campus had 57 assignable square feet (ASF) per full time equivalent (FTE) student. Applying the University and Community College

System of Nevada (UCCSN) guidelines, the projected space to support the Fall 2003 enrollment would have been 87 ASF/FTE. When bench-marked with comparable community colleges, TMCC also has less assignable square feet per full time equivalent student (57 versus 88 AST/FTE). This data highlights the need to increase the amount of facilities.

The Facilities Master Plan addresses the need to increase Academic and Student Life Space on the Dandini Campus from 398,000 GSF to 1,084,000 GSF (Horizon 2 Build-out). This need for increased space is driven by the growth in enrollment and the existing space deficits relative to UCCSN guidelines.

			Pr	Projections of Space Needs			
MCC		Fall 2003 5	Current			Horizon 1	
			(To	meet UCCSN Guideline)	(To n	neet UCCSN Guideline)	
Studen		5,559		5,559		8,166	
Studer		11,797		11,797		15,459	
Non-Student FTE ¹ Non-Student HC ASF/FTE (Academic and Student Life, Athletic,PE,Rec,and Other)		620		620		827	
		N/A		N/A		N/A	
		56	92			86	
			Delta		Delta		
cademic and Student Life Space							
Classroom and Service		57,189		69,490		102,078	
Teaching Laboratories and Service		93,575		103,420		151,920	
Offices and Service		84,718		90,900		121,650	
Library		22,922		53,489		74,814	
Assembly and Exhibit		8,061		22,236		32,664	
Physical Plant		11,446		28,571		39,671	
Lounge		2,155		11,118		16,332	
Merchandising		2,509		5,559		8,166	
Food Services		2,222		48,354		63,996	
Meeting Rooms ⁴		15,176		5,559		8,166	
All Other		6,763 ³		6,763 ³		7,564	
	ASF	306,736	138,723	445,459	181,562	627,021	
AS	SF/FTE ²	55		80		77	
thletic, PE, Recreation - Facilities							
Physical Education		2,737		52,236		62,664	
Recreation		0		11,118		16,332	
	ASF	2,737	60,617	63,354	15,642	78,996	
AS	SF/FTE ²	0		11		10	
verali Totals Total	ASF	309,473		508,813		706,017	
Inactive		14,408					
Outside Organizations		37,646					

SOURCE: Paulien & Associates, May 2004 NOTES: Base data taken from Fall Semester, 2003

- 1 Includes faculty and staff
- 2 Includes support space for this use category
- Includes primarily child care space and conference rooms (a conference room is defined as a room used for a specific organizational unit of office area)
- 4 Meeting rooms are defined as rooms used for general purposes such as community or campus group meetings, not associated with a particular department
- 5 Does not include Student Center at Dandini campus opened in 2004

2-1 Program Projections - TMCC

This table identifies TMCC's aggregate space needs for the Dandini Campus, the TMCC IGT Applied Technology Center, and the Meadowood Center (South Building).

Definitions

FTE Full Time Equivalent

A formula-derived number that results from converting student credit hours (SCH) into equivalent full-time "students" in terms of credit load. In most cases, 15 student credit hours equals one FTE.

HC Headcount

The number of unduplicated students enrolled in credit courses in a given semester or academic year.

ASF Assignable Square Feet

ASF is defined as the area measured within the interior walls of a room that can be assigned to a program. It does not include circulation, mechanical or building service spaces. Converting assignable space to gross square foot usually adds about 50% to the assignable space.

GSF Gross Square Feet

Includes ASF and supporting spaces such as for storage, rest rooms, circulation, and mechanical equipment.



2-2 Program Projections - Dandini Campus

The table identifies the Dandini Campus space needs for academic and student life space, PE and recreational facilities, and parking to address the two student headcount horizons of 12,322 and 16,058.

ASF figures for the Dandini Campus have been converted into GSF to determine the framework for facilities.

SOURCE: Paulien & Associates (May 2004), Sasaki Associates, Fehr & Peers (June 2004)

NOTES: Base data taken from Fall Semester, 2003

- 1 Includes faculty and staff
- 2 Includes support space for this use category
- Includes primarily child care space and conference rooms (a conference room is defined as a room used for a specific organizational unit of office area)
- 4 Campus Headcount = Student Headcount plus Non-Student Headcount
- 5 10% efficiency factor to eliminate unnecessary circulation to search for parking spaces
- 6 Based on data collected by the TMCC Police Department during the first four weeks of the Spring 2004 semester (includes unpaved and nonstriped areas)
- 7 Meeting rooms are defined as rooms used for general purposes such as community or campus group meetings, not associated with a particular department
- 8 Includes the Student Center completed in 2004

		Fall 2004 ⁸		Horizon 1		Horizon 2	
DANDINI CAMPUS	NI CAMPUS		Guideline			Guideline	
Non-	Student FTE Student HC Student FTE ¹ -Student HC	4,733 10,044 576 655		6,509 12,322 708 805		9,635 16,058 881 1,002	
ASF/FTE (Academic and Student Life, Athletic, PE, R	ec,and Other)	57	Delta	90	Delta	84	
Andrewin and Chadrattifa Corner			Dona		Dona		
Classroom and Service Classroom and Service Teaching Laboratories and Service Offices and Service Library Assembly and Exhibit Physical Plant Lounge Merchandising Food Services Meeting Rooms All Other	ASF ASF/FTE ²	45,922 62,032 79,232 20,652 4,964 11,400 14,192 4,346 5,257 9,795 7,564 ³ 265,356	253,161	81,365 121,093 106,900 62,678 26,036 32,791 13,018 6,509 54,054 6,509 7,564 518,517	204,317	120,441 179,249 132,150 87,795 38,540 45,745 19,270 9,635 72,810 9,635 7,564 722,834	
	GSF/ASF GSF GSF/FTE	1.50 398,000 84	380,000	1.50 778,000 120	306,000	1.50 1,084,000 113	
PE and Recreation Facilities		F 000		EC 000		68,540	
Physical Education Recreation		5,262 0		56,036 13,018		19,270	
	ASF ASF/FTE ²	5,262 1	63,792	69,054 11	18,756	87,810 9	
	GSF/ASF GSF GSF/FTE	1.75 9,000 2	112,000	1.75 121,000 19	24,000	1.65 145,000 15	
Parking							
PARK Total Parking Spaces. Total Parking Spaces (100% 10% Parking Spa Recommended Par Existing Permanent (striped) Pa Existing Permanent (striped) Parking Spa	6 Occupancy) ace increase ⁵ king Spaces rking Spaces	0.16 1,725 ⁶ 170 1,895 1,596 299	375 415	0.16 2,100 210 2,310	630 690	0.16 2,730 270 3,000	



2-3 Place Names Existing

Bounded by Dandini Boulevard to the north, Raggio Parkway to the east and south, and the Desert Research Institute to the west, TMCC's core campus is comprised of six buildings (1-6) and the Facilities Services buildings (7&8). Major open space elements include an outdoor amphitheater (9) and the adjacent Angela Dandini Garden (10).

LEGEND

- 1. Red Mountain Building
- 2. V. James Eardley Student Center
- 3. Library
- 4. Sierra Building
- 5. Vista Building
- 6. E.L. Cord Foundation Child Care Center
- 7. Facilities Services Building
- 8. Grounds Shop
- 9. Amphitheater
- 10. Angela Dandini Garden
- A. Parking Lots A-C
- B. Parking Lots D-I
- C. Parking Lots AA-GG



2-4 Master Planning Work Sessions

Multiple TMCC community work sessions provided insight and direction in forming the master plan.







MASTER PLAN PRINCIPLES

The master plan builds upon recurring themes and expressed principles developed by the TMCC community. These goals express the ultimate aims and desires for TMCC's Dandini Campus.

Community

Foster a cultural and physical environment for learning, teaching, and social interaction between students, faculty, staff, and the greater community.

Access

Promote an open and accessible community college that uses TMCC's image, physical locations, design, and technical resources to encourage learning and training by users of all ages, races, cultures, and academic levels.

Leadership

Promote stewardship of the campus land incorporating sustainable techniques in design, building development and maintenance, campus life, and academic programs. Incorporate sustainable principles and advances in technology into building systems and the campus environment.

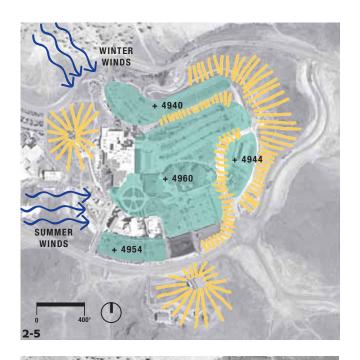
Sensitivity

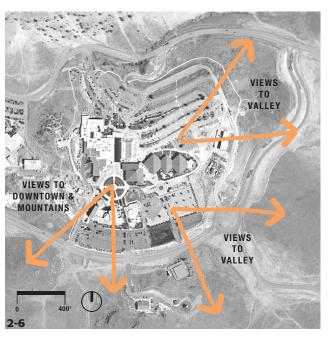
Respect the character of the high desert landscape and maintain the integrated setting of the campus on the hill. Respond to the dramatic vistas of the valleys and mountains and the internal campus views of prominent buildings.

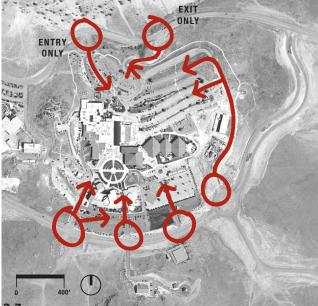
SITE CONSIDERATIONS

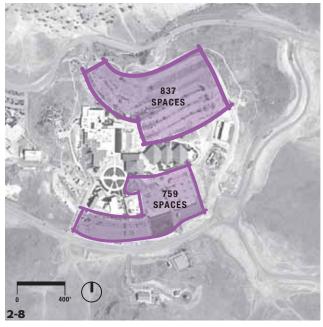
Currently, the campus consists of buildings that are either lineal in their relationship to other facilities or stand alone. As such they do not form outdoor space and, with the exception of the new student center, they do not create a hierarchy to afford better orientation to the TMCC community. Outdoor spaces are not hospitable to the users and surface parking dominates the surrounding landscape

TMCC currently addresses its performing arts needs through the lease of a facility in the Keystone Shopping Square.









2-5 Topography and Wind

Changes in elevation and steep terracing characterize the areas beyond the area of existing facilities. Numbers on the figure indicate general topographic elevations of areas. Seasonal winds vary in direction and often build up strength in the afternoons.

2-6 Distant Views

The plateau affords distant views to the surrounding built and natural landscape.

2-7 Access

Numerous access points are undifferentiated and potentially confusing.

2-8 Surface Parking

Surface parking dominates the areas adjacent to the existing campus core.





Plan and Framework

CONCEPT PLAN

CONCEPT PLAN

The master plan creates a series of buildings interspersed with large and small spaces, emphasizing vistas beyond, and incorporating protected courtyards within the structures. Building courtyards link interior circulation corridors to allow for ease of access around campus and protection from undesirable weather.

The building locations and orientation balance the program needs with solar sustainability issues as the treatment of individual building facades will respond to orientation – north, south, east, or west. Buildings would be three and four stories, using the existing topography when possible to maximize building use and minimize verticality of the building form.

Building locations and sequencing of construction address the needs of TMCC's Dandini Campus for both program horizons. (See Section 4 for further discussion.)

Horizon 1

778,000 GSF / 2,310 parking spaces

The Horizon 1 plan accomplishes the program needs for Academic and Student Life space with minimal impact to the existing campus infrastructure. One parking structure is necessary to meet the parking demand of this initial phase.

Horizon 2

1,084,000 GSF / 3000 parking spaces

The potential build-out of the Dandini Campus accomplishes the program by completing the build-out on the "hilltop" within the Raggio Parkway loop. Four parking structures and two surface lots would be necessary to handle the parking demand.



3-1 Birds-Eye View of Campus Build-out (Horizon 2)

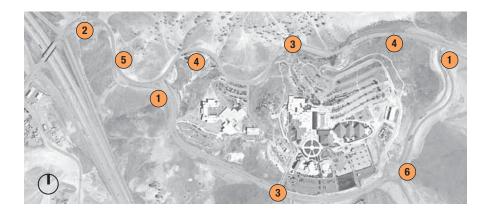
Viewed from a vantage point southeast of the campus, the figure illustrates the potential build-out condition of the Dandini Campus to support over a 16,000 student headcount. As seen in Section 4 of this document, the master plan identifies implementation steps to achieve this Horizon as well as the Horizon 1 projected target of a student headcount of over 12,300. Careful monitoring by TMCC of the student growth in relation to facilities needs will assure efficient and effective use of its resources.

3-2 Illustrative of Campus Build-out (Horizon 2)

The concept for the facilities master plan incorporates:

- Buildings located to shelter outdoor spaces from northerly and westerly winds and to frame significant views
- Defined campus entries off of Dandini Boulevard and Raggio Parkway
- Direct access from perimeter roads into parking structures to reduce vehicular travel on campus
- Clearly defined separate circulation systems for vehicles and pedestrians to minimize conflicts
- Buildings connected by pedestrian paths, courtyards, quads, and sheltered arcade spaces
- Protected interior courtyards with open ground level connections into buildings
- A series of outdoor gathering spaces, connected by a hierarchy of pedestrian pathways, located to take advantage of distant vistas





Vehicular Circulation

The master plan focuses internal campus circulation to a single northern entry/exit and southern entry/exit, both terminating in a circular drop-off near the core of campus. The campus collector drive will serve the two northern parking structures, which also have a secondary access off of Dandini Boulevard and Raggio Parkway. CitiFare bus circulation into campus will remain off of Dandini with a new transit stop incorporated at the north side drop-off. Service will be limited within the core of campus - Red Mountain for food service and Student Center for the bookstore – with primary shipping and receiving relocating to the new parking structure located off of Raggio Parkway.

Pedestrian Circulation

The master plan links primary and secondary pedestrian routes around and on campus in a series of outdoor and indoor gathering areas. The primary walks will serve as the collector routes to navigate easily around campus. They also serve as emergency access routes. Secondary walks will serve most building entries and link internal passages between courtyards to provide sheltered circulation during inclement weather. A fitness trail will encircle the campus to provide pedestrians a mile-plus route throughout the native desert landscape.

Bicycle parking will be accommodated in the parking structures and near the north and south campus drop-offs. The core of the campus will be for pedestrians only.

Grading Plan

The master plan maximizes the accessible circulation routes on campus (less than 5% slopes) and creates comfortable relationships between finish floor elevations of existing and proposed buildings. The proposed building layouts utilize the existing slopes at the perimeter of the hilltop to maximize building sizes while minimizing building footprints.

3-3 Recommended Transportation Improvements

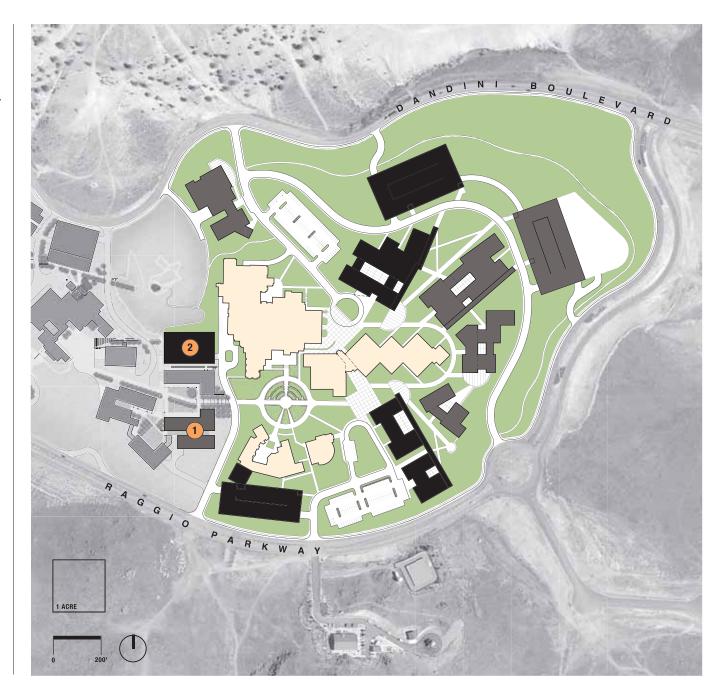
- Realign intersections to promote Raggio Parkway as the main vehicular route
- 2 Reconstruct intersection
- *Install potential traffic signal*
- 4 Provide bicycle and pedestrian facilities on Dandini Boulevard
- 5 Widen Dandini from two to four lanes between US 395 and the west intersection with Raggio Parkway
- 6 Improve roundabout safety

NOTE: List is not prioritized. Funding sources for the improvements shown have not been identified. The Regional Transportation Commission (RTC) will use this master plan to help guide the development of future updates to the 2030 Regional Transportation Plan. The implementation of the local and regional transportation improvements (shown in figures 3-3 and 1-4 respectively) are necessary for TMCC to meet the projected horizons set forth in this master plan.



3-4 Buildings and Open Space -Horizons 1 and 2

The siting of new facilities frame strategic views to the valley and to downtown Reno, while creating additional focal points for the TMCC community.



L E G E N D

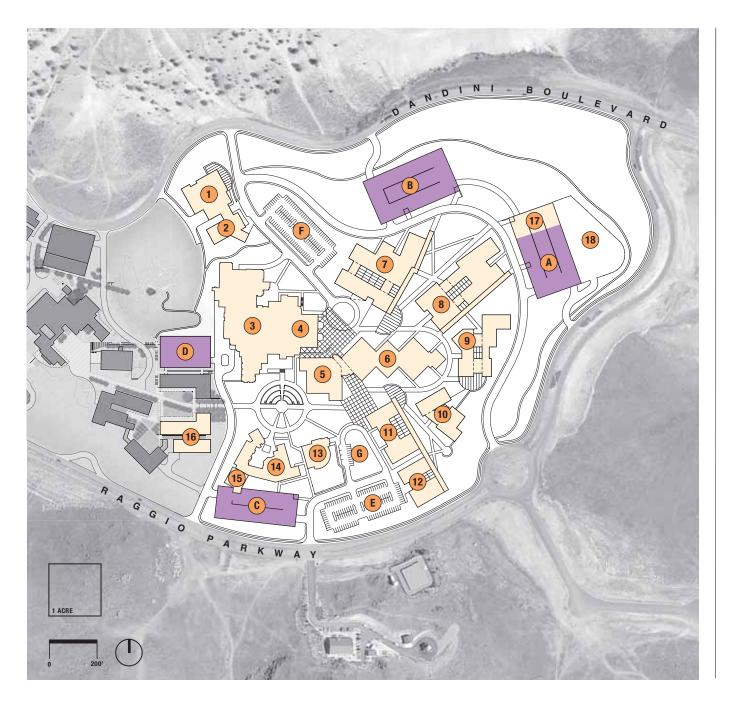


Proposed Horizon 1 Buildings

Proposed Horizon 2 Buildings

Open Space

1 and 2 Shared with Desert Research Institute



3-5 Building Functions - Horizon 2

The master plan creates a variety of new buildings the majority of which will serve academic and student life space.

LEGEND

- 1. New Performing Arts Center
- 2. New Academic and Student Life Space
- 3. Academic and Student Life Space
- 4. V. James Eardley Student Center
- 5. Library
- 6. Academic and Student Life Space
- 7. New Academic and Student Life Space
- 8. New Academic and Student Life Space
- 9. New Academic and Student Life Space
- 10. New Academic and Student Life Space $\,$
- 11. New Academic and Student Life Space
- 12. New Academic and Student Life Space
- 13. Child Care Center
- 14. Academic and Student Life Space
- 15. New Academic and Student Life Space
- 16. New Academic and Student Life Space (Shared with DRI)
- 17. New Facilities Services and Grounds (Level 1)
- 18. New Facilities Services and Grounds Yard
- A C New Parking Structures
- D New Parking Structure (Shared with DRI)
- E G Reconfigured Parking Lots



3-6 Open Space Functions - Horizon 2

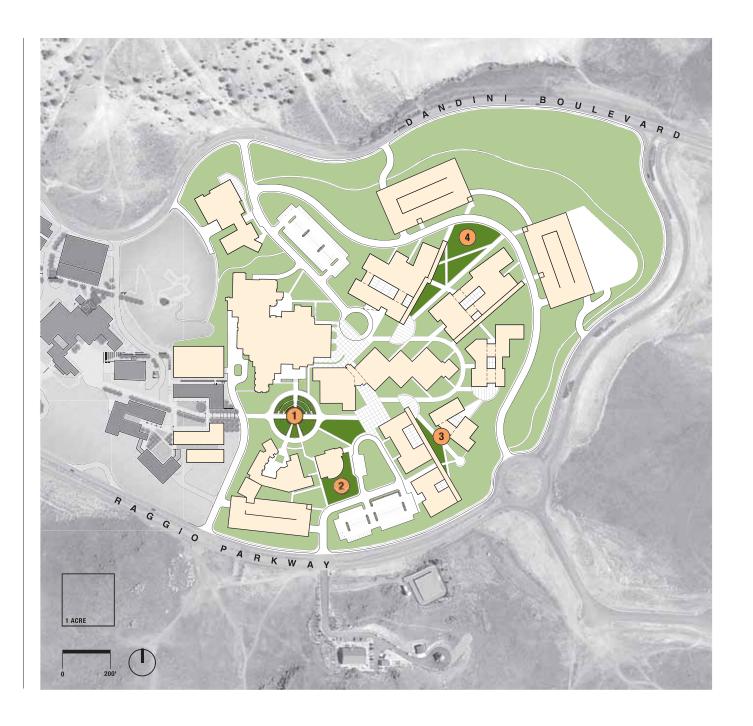
The facilities master plan proposes a hierarchy of open space that includes both programmed and unprogrammed uses. Programmed outdoor spaces incorporate turf to allow for multiple uses. Landscape emulating the surrounding native conditions will dominate the unprogrammed open spaces.

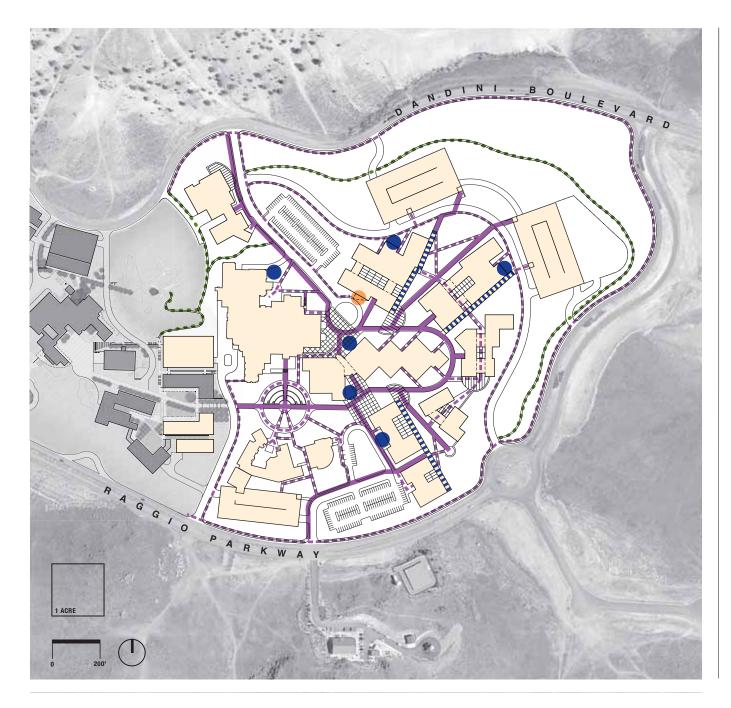
LEGEND

Unprogrammed Open Space

Programmed Open Space

- 1. Amphitheater
- 2. Child Care Outdoor Area
- 3. Southeast Quad
- 4. Northeast Quad





3-7 Pedestrian Circulation -Horizon 2

Intensified uses and the concentration of parking close to the campus facilities will promote a pedestrian environment for the TMCC community. Primary pedestrian circulation alongside the eastern edges of the new facilities will help shelter users from prevailing winds. The relocation of the main entry into the Child Care facility to the east facade will accommodate the revised drop-off and short-term parking without compromising pedestrian circulation routes.

LEGEND

Primary Pedestrian Circulation

Secondary Pedestrian Circulation

Sheltered Access along Buildings

..... • • • •

Fitness Trail



CitiFare Transit Stop



CitiLift Stop

3-8 Vehicular Circulation - Horizon 2

The master plan improves access to the campus by clearly identifying primary gateways for visitors and public transit and secondary access points to parking structures that minimizes the intrusion of vehicles adjacent to the campus.

The capacity of each parking facility is:

A 1,095 spaces

B 1,095 spaces

C 438 spaces

D 105 TMCC spaces

E 127 spaces

F 127 spaces

G 15 spaces

NOTES:

"D" identifies TMCC's required parking program included in the parking structure shared with the Desert Research Institute. Parking facilities "E, F, and G" will accommodate short-term parking demands for the campus.

LEGEND

Primary Entries

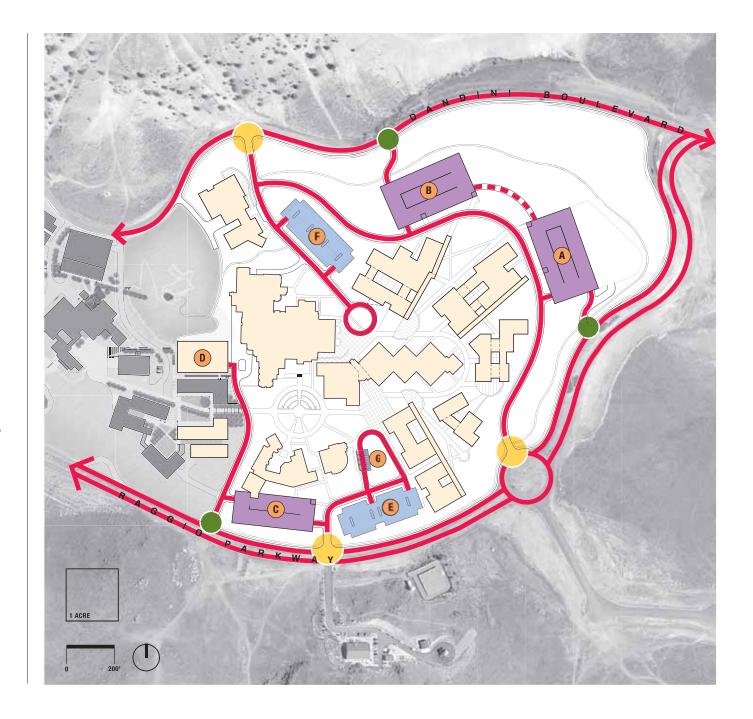
Secondary Entries

Primary Vehicular Circulation

Secondary Vehicular Circulation

Parking Structure

Surface Parking





3-9 Emergency Circulation - Horizon 2

The master plan provides needed emergency access on roadways as well as pedestrian walks.

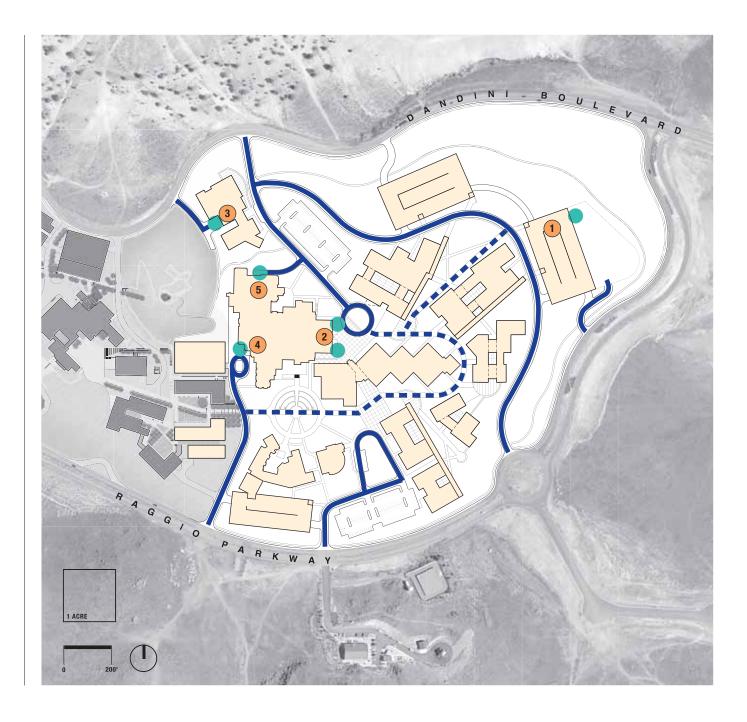
L E G E N D



Emergency Vehicle Access

3-10 Service Circulation - Horizon 2

Primary deliveries to the campus will occur at the facilities and grounds (1) and at the student services center (2). Additional access serves the performing arts center (3) and the Red Mountain building (4) and (5).



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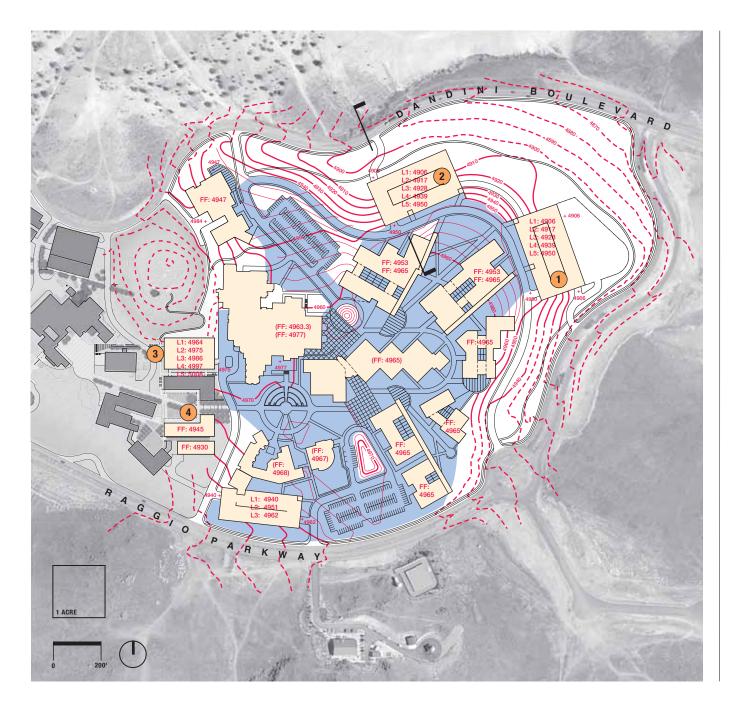
Loading Docks/Areas



Full Size Vehicles



Carts



3-11 Conceptual Grading -Horizon 2

The master plan expands the existing plateau of the campus to create a zone with slopes less than five percent, promoting equitable access for all users. The top level of the parking structures (1) and (2) are at the same level of the campus core for ease of access and to maintain distant views. Critical finished floor elevations are noted where building connections are made to pedestrian paths and exterior spaces. Accessible connections are made from the shared facilities (3) and (4) of the Desert Research *Institute to the core of the TMCC* campus.

LEGEND

Proposed 10 Foot Contours

Proposed 2 Foot Contours

+ 4902 Spot Elevation

(FF: 4965.0) Existing Finished Floor Elevation

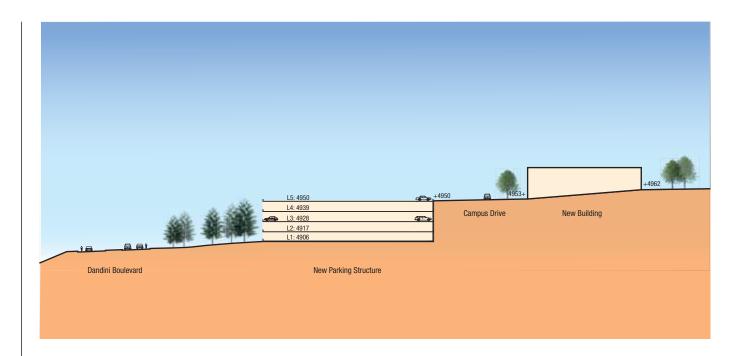
FF: 4947.0 Proposed Finished Floor Elevation

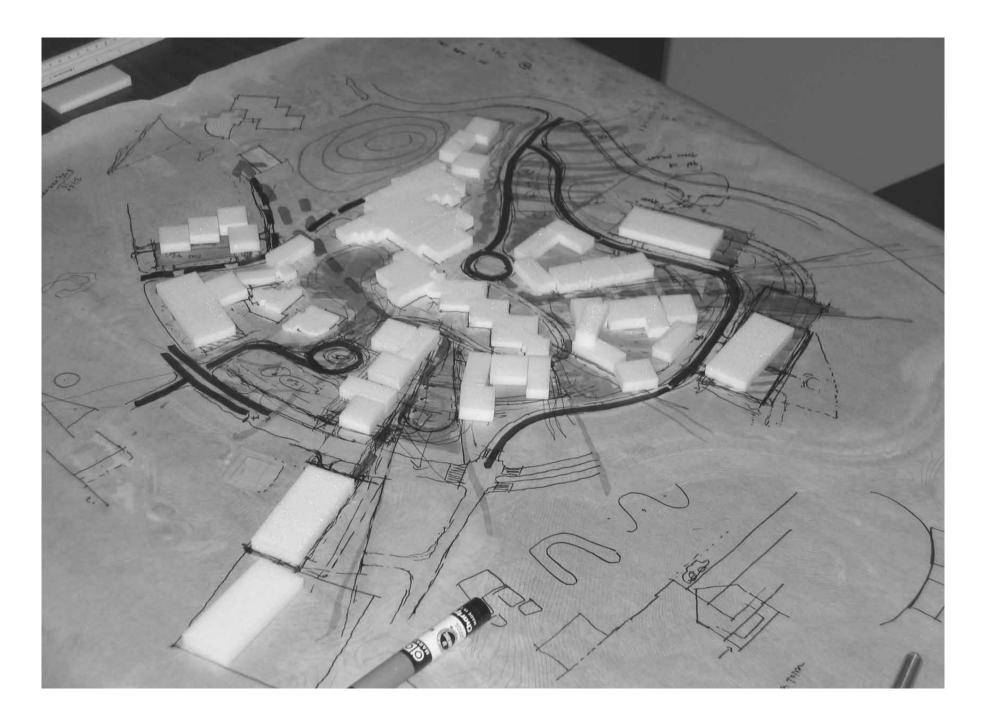
Areas of 5% Grade or Less

Section

3-12 Illustrative Section

The plateau of the campus allows the placement of parking structures to be "tucked" into the adjacent hillside, minimizing its visual intrusion from and into the campus.







Guidelines and Implementation

GUIDELINES
IMPLEMENTATION STEPS
FURTHER PLANNING AND DESIGN

GUIDELINES

Based on fundamental principles of compact design to encourage human interaction and efficient and sustainable use of resources, the master plan sets forth the following guidelines:

Campus on the Hill

- Limit development to the plateau to preserve the college's "hill town" character with unobstructed views that extend into the surrounding landscape
- Site buildings to shelter outdoor spaces from westerly and northerly winds and to frame significant views
- Interconnect buildings by pedestrian paths, courtyards, quads and sheltered arcade spaces
- Create a variety of exterior and interior spaces for use in different weather conditions and for different purposes: interior open courtyards; protected campus guads; less

protected open spaces framed by radiating building forms; and sheltered pedestrian connections

Framed Views

- Site new facilities to frame distant views to the mountains, valley, and downtown Reno
- Design new buildings to maximize near and distant views from buildings

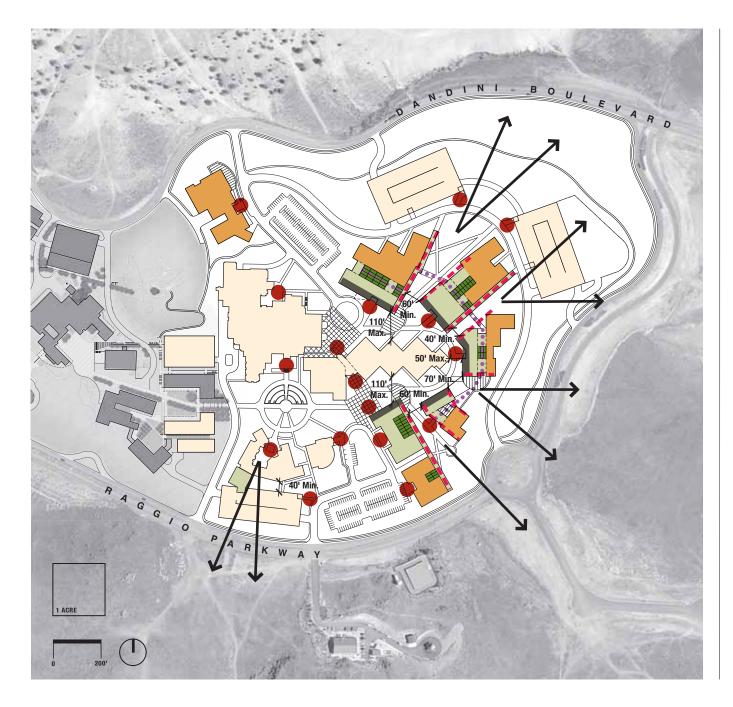
Architectural Character

- Use transparent connections to link small building masses
- Promote a horizontal character to the building massing by using low roof lines and by limiting buildings to three stories, allowing four stories on the descending slopes at the edges of the plateau
- Punctuate low roof lines at important public functions or significant building entries with vertical elements

- Integrate protected interior courtyards with open ground level connections into buildings
- Use natural materials (brick, stone, concrete, wood, steel) to blend with the landscape
- Use bold colors at public areas and entry ways to promote clear orientation and interest

Climate Sensitive Design

- Minimize solar gain and maximize energy efficiency by employing different building systems in recognition of each building's varying orientations
- Minimize north facing entries to minimize climatic issues; if not possible, recognize climatic constraints by proper design and the use of appropriate materials
- Site buildings to maximize protection from harsh winds and sun angles



4-1 Urban Design Guidelines

The urban design guidelines established for the campus include:

- A build-to line for new facilities to establish the relationship with existing buildings and the pedestrian spine
- Building setbacks to maintain edges for critical view corridors
- Through-building connections to link interior corridors and courtyards
- Building heights kept to 3 stories, allowing 4 stories on the descending slopes at the edges of the plateau
- Primary pedestrian entrances to new facilities are off the pedestrian spine that links the north and south campus

LEGEND

Build-to-Line

Setback

• • • •

Through-Building Connector

3-Story Buildings

4-Story Buildings

Courtyards

View Corridors

Primary Pedestrian Entrance

4-2 Campus on a Hill

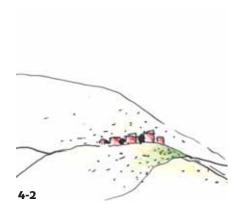
Limit new facilities to the plateau to preserve the "hill town" character of the campus.

4-3 Framed Views

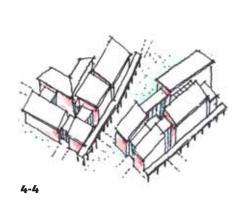
Site and mass buildings to frame important distant views.

4-4 Architectural Character

Scale, form, and layer new buildings to be complementary to the landscape and users.







Pedestrian Level Treatment

- Create a continuous protected network of pedestrian pathways
- Integrate a system of public art for both interior and exterior spaces
- Use the strategic placement of building entrances, signage, and well demarcated pathways to create an active and accessible ground level

Landscape Character

- In unprogrammed open space, use native and drought tolerant plant material to visually extend the campus into the neighboring landscape
- Limit planting that requires substantial irrigation (i.e. lawn) to opens spaces programmed to accommodate intensive public use
- Promote garden areas as teaching tools to educate the public about high desert environments

Campus Infrastructure

- Study alternative methods to utilize renewable energy sources for the campus
- Study the integration of a grey water collection and storage system for campus irrigation and isolated building uses
- Promote a campus-wide recycling program and recycled product integration into campus operations
- Establish educational outreach programs to promote the sustainable campus and buildings as integrated teaching tools

IMPLEMENTATION STEPS

The master plan suggest a series of steps to achieve both Horizon 1 and Horizon 2 development of the campus. These implementation steps reflect grouping projects that are interdependent. Other projects may be implemented independent of one another. TMCC will identify detailed project sequencing as it undertakes the implementation process.



4-5 Implementation Steps - Horizon 1

Student HC 12,322

GSF (existing) 398,000

GSF (Horizon 1) 380,000

GSF (total) 778,000

- 1 Construct parking structure (1,095 spaces)
- **2a** Relocate Facilities and Grounds to new location
- **2b** Realign fitness trail around parking structure
- Performing arts center and academic program -46,000 gsf
- 4 Realign existing entry drive
- **5a** Reconfigure existing parking lot
- 5b Academic program 54,000 gsf
- **5c** Academic program 108,000 gsf
- 6 Demolish existing Facilities and Grounds buildings
- 7 Academic program 98,000 gsf
- **8a** Reconfigure existing parking lot
- **8b** Academic program 59,000 gsf
- 9 Shared facility with DRI– 35,000 gsf

4-6 Implementation Steps - Horizon 2

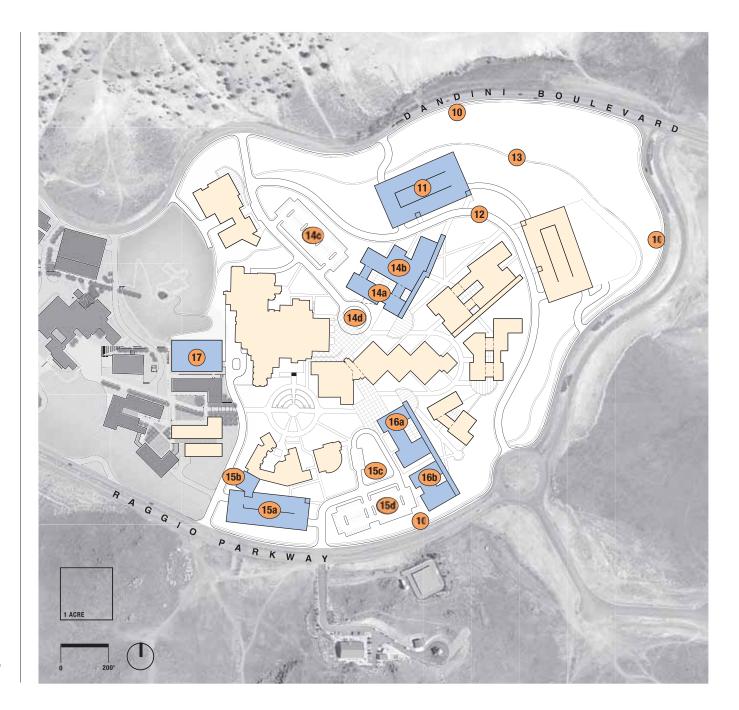
Student HC 16,058

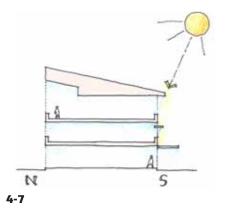
GSF (incl. Hor. 1) 778,000

GSF (Horizon 2) 306,000

GSF (total) 1,084,000

- 10 Construct pedestrian improvements along Dandini Boulevard and Raggio Parkway
- 11 Construct parking structure (1,095 spaces) and connection to Horizon 1 parking structure
- 12 Construct realigned collector road
- 13 Realign fitness trail around parking structure
- **14a** Academic program 46,000 gsf
- 14b Academic program 115,000 gsf
- 14c Construct new parking lot (127 spaces)
- **14d** Construct new entry drive and drop-off
- **15a** Construct parking structure (438 spaces)
- 15b Academic program and connection from Vista Building to new parking structure – 14,000 gsf
- 15c Create new entry drive and drop-off with parking for Child Care (15 spaces)
- 15d Construct new parking lot (127 spaces)
- **16a** Academic program 60,000 gsf
- **16b** Academic program 66,000 gsf
- 17 Shared parking structure with DRI (105 TMCC spaces)









4-7 Climate Sensitive

Design to maximize energy efficiency and to protect programmed outdoor spaces from harsh climatic conditions.

4-8 Pedestrian Scale

Create a continuous network of indoor and outdoor public spaces.

4-9 Landscape CharacterUse native plant materials to visually extend the campus into the surrounding landscape.

FURTHER PLANNING AND DESIGN

As the TMCC undertakes implementation of the master plan, it will need to formalize a review process that recognizes both campus-wide needs as well as the needs of specific improvements. In addition, while the master plan sets forth the basic framework of the campus, TMCC will need to undertake further studies to inform their decisions. Several considerations in this regard are:

Monitoring and Review

TMCC will undertake regular monitoring of program needs and the resources available. Additionally, TMCC will determine a schedule to update the master plan due to significant changes in programs, student FTE demands, or significant periods of time.

On-going Campus-wide Design Review

Future TMCC projects will be reviewed to assure that they address and contribute to the overall benefit of the campus, starting with the strategic goals, master plan principles, and guidelines contained in the facilities master plan.

Project Level Review

User group participation in new projects will guide a project's development to meet programmatic and budgetary requirements.

Additional Campus-wide Planning and Design

The facilities master plan will serve as a guide for development of further studies. As the planning for facilities development progresses, the college will engage in detailed design for infrastructure, signage, lighting, and land-scaping.

Project Feasibility Studies

Each project will require feasibility studies to determine detailed program needs, budget, and preliminary design. Such studies will focus a collective attention to those factors that will be significant to the users and decision-makers as each project moves forward into detailed design and construction documentation.



Contributors

PRESIDENT'S CABINET
MASTER PLAN ADVISORY COMMITTEE
RESOURCE GROUPS

OPEN MEETINGS CONSULTANT TEAM

The TMCC community actively engaged the master planning process through committees, open forums and a dedicated web site. Additionally, TMCC coordinated the master plan with the Desert Research Institute and the City of Reno.

Contributors from the Master Plan Advisory Committee and the Resource Groups represent the list of members when the master planning process began.

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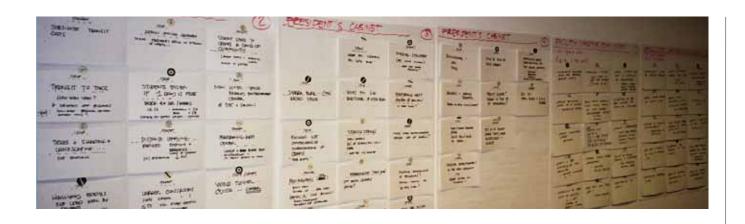
Jimm Groshong Bruce Lucia

Non-Traditional Teaching Methods

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5-1 Public Process

Over 110 members of the TMCC community participated in multiple work sessions.

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