Rooflines and Materials

Recommended:

-Provide consistent eaves and roof lines and use materials that are consistent with existing eaves and roof systems
-Follow existing pre-cast pattern on eaves
-Maintain consistent colors and textures
-Maintain campus building scale

Not Recommended:

-Sloped roofs
-Clay or slate roof finishes
-Metallic finishes on eaves or roofs
-Flat facades without articulation
-Alternative eaves design and mechanical equipment screening

Recommended

Existing Technology Building pre-cast panel design at the eaves

Not Recommended

ACCESS Center exterior west facade

Communications Building exterior east facade with stucco mechanical screen

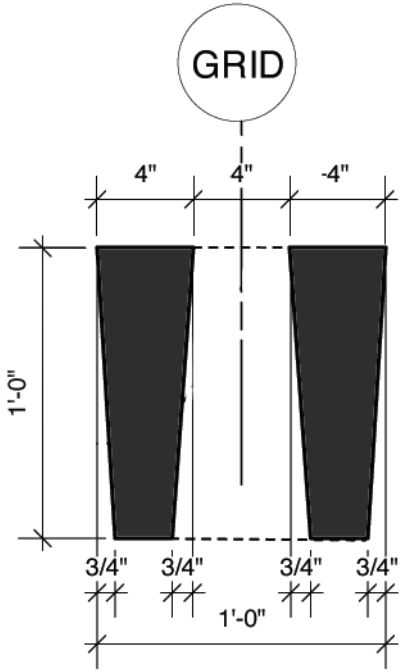
Building Details

The campus has adopted the use of fins/columns throughout the perimeter of buildings on the first or second floor. This design element should be considered where appropriate, according to the scale and the use of the building to reflect the existing conditions. The fins are primarily decorative elements, although they do serve as structural support in some cases. The fins have specific dimensions and taper in depth. The drawing below shows the fin measurements with an overall 1'-0"x1'-0" perimeter and 3/4" tapering at each end of the fin section.

Design Criteria

-Provide fin columns where appropriate
-Colors, materials and textures should be approved by the College at the design phase of the project
-The integration of new columns on buildings shall respond to the scale and articulation of existing buildings

Recommended



Recommended

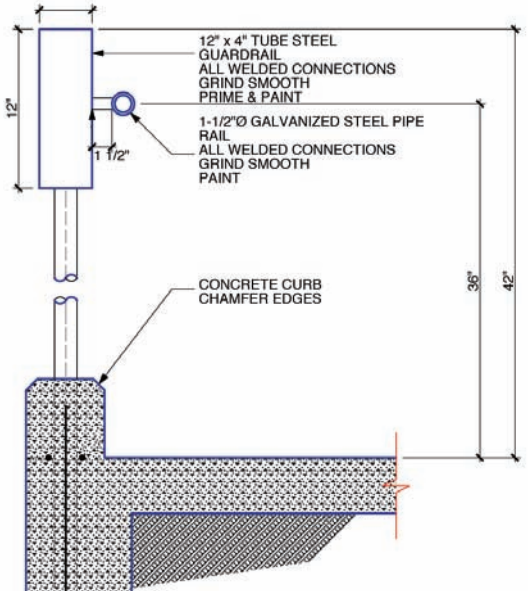
Top Left: LMC Building second floor railing and pre-cast concrete fin. Top Right: Student Center south exterior colonnade. Bottom: LMC south facade with colonnade

Guardrail and Handrail Details

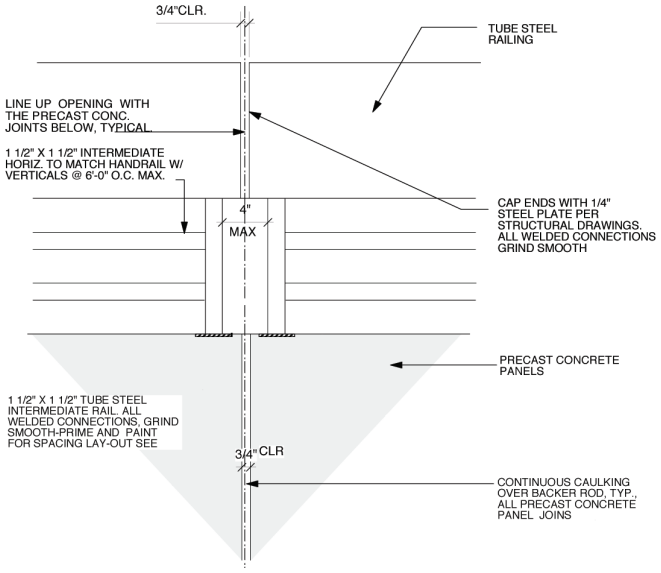
The railings should remain consistent throughout the campus. The original railing was constructed of laminated wood. However, this detail no longer meets code; therefore, a new railing detail has been adopted. The new railing was designed to match the 12" top section, but in tube steel. Two horizontal steel sections have been added to meet the code compliance of 4" or less for openings. In addition, a 1-1/2" pipe piece was included at all the railings to meet the code. New construction projects should continue to use the established standards and colors.

Original wood guardrail and pre-cast detail at the first floor Administration building

Original wood handrail



New approved tube steel site guardrail and handrail



New approved tube steel second floor railing

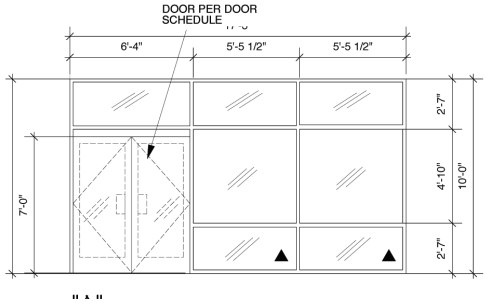
Tube steel guardrail and pre-cast detail at the second floor

Campus Doors and Windows

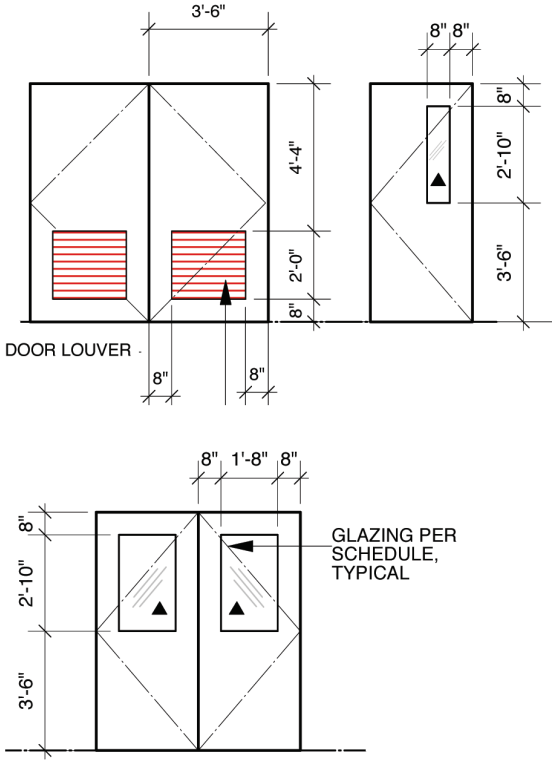
Future building designs will require more glazing for additional natural light into entries lobbies and classrooms. The design and location of large windows and doors shall be studied to consider the best energy use. The integration of storefront window systems and glass doors will soften the building facades and provide a visual connection of the interior with the exterior.

One example is the LMC Building. The design of the north facade integrates continuous windows at the second floor faculty offices and provides floor to ceiling windows throughout the first floor to provide natural light without any direct sunlight.

LMC Building north facade



Example of glazing at entry with storefront window system and glass doors



Example of doors with integrated glazing and door louvers.

Classroom Natural Lighting and Finishes

Most existing classrooms open directly to the outside and have clerestory windows, side door window panels or no windows at all. Limiting the amount of windows creates darker classrooms dependent on artificial lighting. The picture at the bottom right shows an existing classroom with no windows and artificial lighting only.

Clerestory windows are successful when used in combination with light shelves to reflect the light onto the ceiling. The current classrooms with clerestory windows are not as successful due to the 10-foot overhangs at the perimeter of the buildings. The design of future classrooms should integrate and evaluate the use of the overhangs and provide larger openings where possible and where it is energy efficient.

Design Criteria

-The design should take advantage of sunlight through window openings at the perimeter or through the use of skylights

-Classroom window openings shall integrate passive light control features to regulate and take advantage of the available sunlight

-Interior paint finishes, colors, flooring, ceiling and lighting shall be consistent with existing standards, and shall provide durable products approved by the Maintenance and Operation Department

-All classroom equipment and furniture shall be durable and consistent throughout. Lab furniture shall meet the necessary requirements and safety regulations

Recommended

Computer Science Laboratory at Antelope Valley College, is a good example of controlled lighting using glass block and vertical windows and sun walls adjacent to the windows to provide diffused light.

Not Recommended

Existing classroom with no windows to provide natural light

Classroom Network and Acoustics

As the college develops larger classrooms they should include improved network for instruction. In addition, larger lecture halls need to be adequately designed for acoustics and adequate lighting for the different disciplines.

The picture on the bottom left is an example of a lecture hall designed at Glendale Community College. The lecture hall seats about 120 students and is designed in a radial stepped seating arrangement, with vaulted ceiling and controlled lighting to allow for projections and note taking. The lecture hall has also integrated direct network access to each student station and for the instructor. The shape of the ceiling provides better sound quality

A sink can be integrated into the instructor's station for science classes to use. The lecture hall could be used by almost every discipline on campus and provides a flexible well-used and efficient space.

Design Criteria

-Provide state-of-the-art network, light and sound control at the instructor's station
-Provide college approved seating
-Provide projecting system
-Provide raised floor system where applicable

Recommended

Glendale Community College science lecture hall with integrated network connections for web-cast lectures, adequate equipment for digital instruction, stepped sitting with internet access for laptop computers, sloped ceiling for better acoustics and controllable lights.

Not Recommended

Existing lecture classroom with TV and VCR cart and overhead projector.

Mechanical Screens

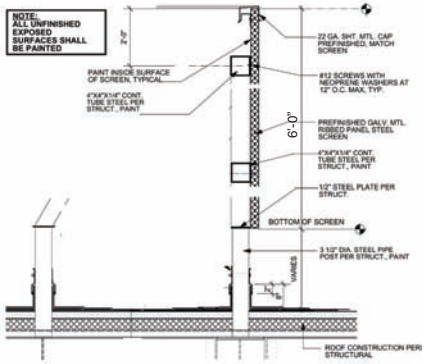
Moorpark College requires all buildings to be designed with individual roof mechanical equipment. When roof-mounted cooling and heating systems are installed, the College requires every building to provide a six foot high galvanized metal frame, Kynar panel finish and ribbed panel screen.

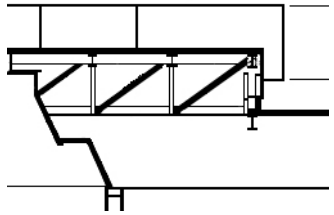
The design of the mechanical screen has been implemented on every building on campus since 1965. It is a common feature that was most recently used on the design of the new Library/Learning Resources building.

Design Criteria

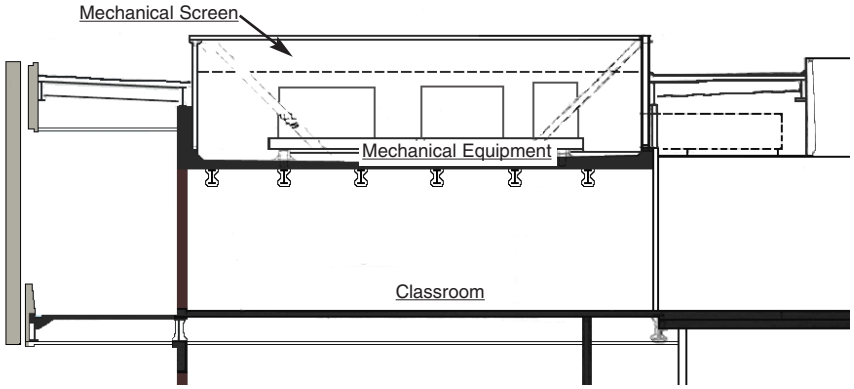
-Provide 6-foot tall galvanized metal frame, Kynar panel finish and ribbed panel screen

-Paint all exposed finished surfaces with approved color

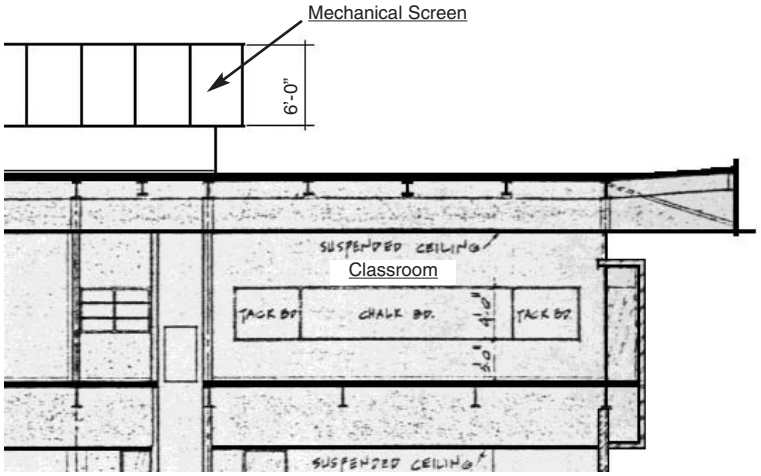




Left: LLRC mechanical screen detail
Right: Library section detail



Humanities building section with mechanical equipment screen



Library section with mechanical equipment screen

Building Integrated Details

Current buildings have integrated water fountains, public telephones, vents and fire extinguishers along the perimeter of the building. Most existing buildings have their primary circulation at the perimeter and, therefore, have integrated many student amenities into the building design. The benefit of this is access to telephone and drinking water lines already integrated into the building rather than running new lines underground to adjacent open areas or pedestrian walkways. It should be noted that changes in technology have reduced the number of pay phones needed on campus. New pay telephone installs will take place only in high demand areas.

Most of the original buildings have separate mechanical rooms at the perimeter, which require vents along the facade. The vents were designed into the overall composition of the façade and are consistent throughout most of the buildings. Most buildings since 1967 have roof mounted HVAC systems that require appropriate screening.

Design Criteria

-Provide water fountains, and fire extinguishers along exterior corridors or at main pedestrian walkways

-Maintain consistent colors, finishes and details with the remainder of the campus buildings

Built-in water fountain and recessed water hose connection and fire extinguisher onto the side of the building at exterior corridors

Administration building mechanical room exterior vents at north facade

Former Library building mechanical room exterior vents at north facade

Exterior Furniture

Moorpark College has a mix of landscape furniture throughout the campus. Most recently, the College integrated blue metal benches and tables throughout the campus. In addition, many landscape areas throughout the campus use pre-cast concrete benches to relate to the many concrete retaining walls.

Benches and Tables:

Tables:

-Provide ADA accessible tables
-Should be durable and weather resistant and easily maintained
-Should be powdercoated and painted to match existing furniture
-Provide table tops with durable materials and easily cleaned surfaces

Benches:

-Provide ADA accessible benches
-Should be durable, weather-resistant and easily maintained
-Should be powder-coated and painted to match existing furniture

Concrete benches:

-Shall be 15-18" in height and meet ADA requirements
-Should match concrete finish of existing benches

Recommended

Top Left: Pre-cast concrete bench
Top Right: Single metal bench floor mounted
Bottom: Metal Bench and Table

Recommended

Combination metal and concrete panel trash receptacle

Existing recycling receptacles

Exterior Furniture

Patio Umbrellas:
-Should be durable weather-resistant, capable of withstanding high winds and easily maintained

Trash Receptacles:
-Provide college approved weather-resistant,and easily maintained concrete and metal trash receptacles
-Should accommodate location, use and sizes
-Provide recycling receptacles according to College's standards.

Bicycle Racks:
-Should be durable, weather-resistant, and easily maintained
-Use embedded and surface mounted to match existing

Exterior lighting

Exterior lights should be designed to provide lighting levels required by national standards. All new fixtures should follow the existing standard and should be located on all walkways and road access to improve safety and accessibility. The College will be reviewing alternative fixtures that would provide better lighting levels and are more energy efficient.

Design Criteria

-Provide pedestrian light, pole, height and clear globe head to match existing fixtures
-Provide street and parking light, pole, height with cobra head type to match the existing fixture
-All exterior, pedestrian, parking and street lighting shall be high intensity discharge (HID) lamps and electronic ballasts

Not Recommended

Metal Trash Receptacle on a concrete pad

Floor mounted wood bench and table.

Recommended

Existing campus walkway pole light fixture, information case, campus wayfinding map and newspaper stand.

Campus Landmarks

Future campus projects and landscape improvement projects will provide opportunities for additional landmarks. The integration of landmarks adds to the character of the campus, provides points of orientation and defines individual open spaces. Some existing landmarks, like the Earth Shell, could be incorporated into the Arts Complex and parking lot reconfiguration to provide better access and programming.

The College has numerous possibilities for future landmarks throughout the campus. Some may include:

-At each end of Raider Walk, in front of the theater and the College Center.
-In front of the new Library/ Learning Resources building
-At the new lawn area south of the new Health Sciences building.
-At new or remodeled entrances:
  -East of the new Health Sciences building
  -East of the new Child Development Center
  -At the new entrance to the Zoo and EATM Center
  -At the northeast corner of the new Arts Center
  -At the new F parking lot entrance to the campus

The College shall approve any landmarks, involving students, staff and faculty in the development and design.

Campus sculpture located opposite of the central quad

Dedication plaque in the garden east of the Administration building

Photovoltaic installation at north campus entrance

Earth Shell amphitheater

Campus Signage

The following section will address the condition of the existing signage program at Moorpark College. The College Campus Sign System could be divided into three categories. The first involves the vehicular wayfinding signs primarily located along Collins Road and Campus Park Drive. These include traffic signs, accessibility symbols and parking. The second are pedestrian wayfinding, which include locator directory and map, pedestrian directional and international symbol for access. The last, building signs, includes all exterior and interior signage on a building. The overall sign system should allow new visitors to reach the edge of the campus and find their destination without having to circle the campus more than once and further aggravating the traffic flow.

The campus has a variety of sign styles that have been implemented throughout the different eras of development. On February 20, 1997 the campus published a Campus Sign System Master Plan Report documenting the state of the signs and providing conceptual design ideas for implementing an architectural sign system master plan. The document established some guidelines for signage that are reflected on some of the most recent building projects and campus improvements, but has not been implemented throughout the remainder of the campus. This is due in part to the lack of planning and implementation information provided by the report along with serious budget constraints. The published report was the first part of the overall master plan process. A second report that was to include the budget forecasting and implementation planning was never completed by the design team. In order to fully implement a consistent signage program throughout the campus, the signage master plan should be completed and then implemented to upgrade or replace signs throughout the campus. This task should become part of the work plan for the Campus Environment Committee.

Campus entry sign

The consistency of the signs throughout campus will graphically organize the campus and will achieve better results in orienting visitors and providing better accessibility. Many buildings were constructed with less stringent codes for signage and accessibility and need to comply with current accessibility laws. As the college continues to expand, it will be critical to provide adequate and well-planned signage for the convenience and well being of users.

Vehicular Wayfinding

Some of the problems related to vehicular wayfinding at Moorpark College are related to the lack of paved parking and need to use athletic fields or adjacent dirt fields for overflow parking. It is difficult to provide adequate and consistent signs and graphics for spaces continually changing. In addition, many codes, rules and regulations have changed over the past 39 years, which take time to implement and there are often layers of signs which need to be removed or updated. The college has done an outstanding job in implementing the major signs t the perimeter of the campus. These large white and blue signs, not only provide concise and important information, but their size and location makes them impossible to miss.

Design Criteria

-Provide large white and blue signs at the perimeter of campus where new entrances are developed or where existing entrances do not have any. Update the existing signs where new buildings are added/renovated
-All traffic signage should be located in a visible area, not blocked by any landscape or additional signs
-Avoid redundancy by adding additional signs that provide the same information
-Maintain the College standards for signage and follow the existing pattern of signs as best suites every situation or project
-The College must approve all new signage

Standard signs at perimeter road for campus building locations and parking accessibility.

Banner sign for overflow parking through the first weeks of each semester

Examples of Vehicular Wayfinding Signs

Parking Lot S entrance signs

Perimeter road traffic signage

Parking Lot CC signage

Parking Lot CC signage

Parking Lot S signage

Parking signage.

Parking Lot D & E signage

Pedestrian Wayfinding

Since a comprehensive signage master plan was not completed, the majority of the campus pedestrian signs are located at the original campus core. There are no additional maps throughout new parking areas and where portable classrooms are located on the southern end of campus or near the PE facilities. The campus will continue to develop additional pedestrian directories and maps based on the Master Plan to provide better orientation for new students and visitors.

The current pedestrian maps are either mounted on the campus newspaper stands, on steel poles or light poles. Throughout the campus core, the newspaper stands are fabricated out of metal and are painted blue to match the College's colors. The original maps were mounted on steel poles and are still located throughout the campus. There are banners mounted on the light poles throughout campus entrances. These should be implemented at new entrances and corridors where exterior light poles are used.

Existing maps should all be upgraded to reflect any additional buildings. New maps should be located near a site light and should match one of the existing types.

Design Criteria

-Provide large white and blue signs at every pedestrian campus entrance
-Provide updated campus maps at every campus entrance
-Designate space for students to display announcements and not deface building facades, campus features or landscape
-Provide additional newspaper stands throughout new areas of development with updated campus maps
-Coordinate locations maps and signs with exterior light implementation to provide adequate lighting for signage
-All signs should meet code compliance and should be approved by the College.

Building Administration west entrance with banners

Pedestrian entrance orientation sign

Campus maps and College Newspaper stand.

Campus maps and on steel pipe column.

Building Signage

Building signage is relatively consistent throughout the campus, with few exceptions. The main problems are the location and color of the signs. Examples not recommended in the future include the following: 1) Silver color building name signs that do not contrast well against the light-colored walls, 2) Building signs that are located out of eye level and with graphics too small to read.

During the first days of school or during conferences, paper signs with bold colorful letters are hung near the entrances of buildings to help identify them.

Design Criteria

-Building name sign must have 10” letters
-Signs must be cast aluminum, 3/4” thick with medium bronze anodized finish

LLR Building

Not Recommended

Small sign with building name and information located on the second floor railing of the Humanities and Social Sciences building.

Grey metallic building sign and additional blue sign placed on the northern stair and elevator tower of the Humanities and Social Sciences building.

Landscape Design Guidelines

Introduction

The purpose of the following section of the Landscape Design Guidelines is to establish a uniform criteria for the landscape phased implementation of the Moorpark College 2004 Master Plan and avoid the common problems associated with phased campus construction. Common problems are typically related to new construction and the interface with existing facilities and may include interim irrigation water management required during construction, impacts on existing mature trees/shrubs due to proposed grading design, the relationship of future and current planting. The infrastructure section of the 2004 Moorpark Master Plan contains a section dedicated to the technical aspects related to landscape, irrigation and grading. These may include the creation and/or exacerbation of storm water drainage problems, location of construction staging area(s) and the associated impacts.

These guidelines will provide design professionals with the foundation required to create a consistent and integrated approach to the planning and development of all future phased landscape projects on the Moorpark College campus.

As the college has experienced some difficulty in growing and/or maintaining certain plant species, the guidelines include both a matrix of acceptable plant material and a prohibited plant material list. Design professionals shall review both documents prior to initiation of the planting design.

Sloped lawn area south of the Humanities and Social Sciences building

Central east west promenade facing east at the Student Center (future Student Union)

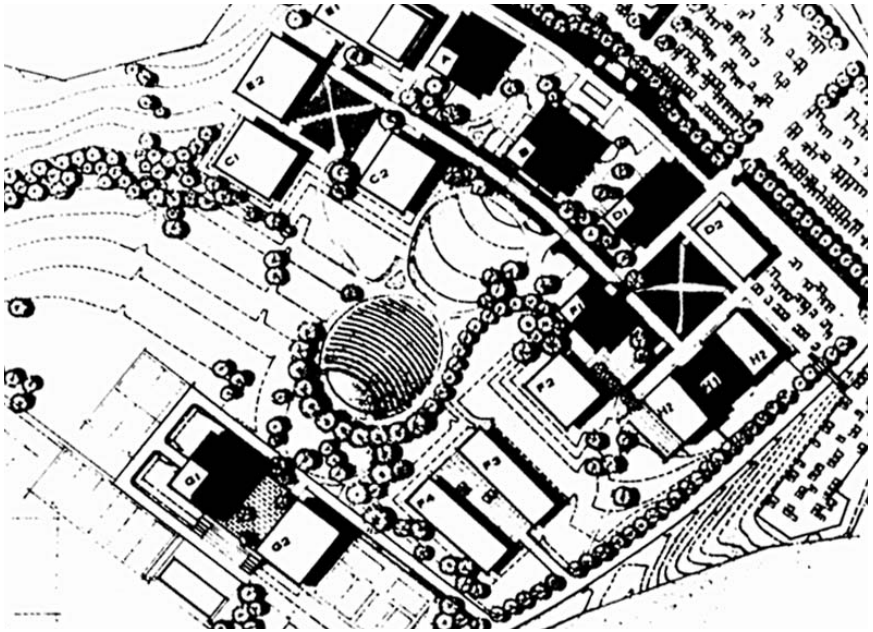
Landscape

Background

From the conception of the campus plan in 1963, the central sloping lawn area was to remain open for activities and aesthetic values. The plan indicated the use of additional planting along the eastern edge of the open space, where there is high pedestrian traffic. The slope lawn area was to be terraced for planning activities and even instructional spaces.

The Moorpark College's 2005-2015 Facilities Master Plan includes a proposal for converting the central open space into a space for activities by partially terracing the topography and using a system of ramps and walkways. The plan would include additional planting and landscape improvements.

Open sloped lawn area.



Original Master Plan Central Landscape Plan

Proposal for Central Landscape Area, 2004 Master Plan Landscape Section

Landscape

Landscape and Hardscape Organization

The landscape at Moorpark College has been designed to emphasize the organization grid of the campus plan. The orthogonal system of circulation paths and promenades and the location of the buildings is re-enforced by rows of trees, linear planters, long strips of lawn area and paving. The image on the right shows the landscape arrangement west of the central quad. The pedestrian promenade is emphasized by the use of brick inlay stripes and defined by the use of brick planters with large shade trees. The large trees provide a transition space between the main pedestrian walkway and the perimeter colonnade of the Physical Science building. East of the promenade is a lawn area with four trees and roses shrubs planted on a grid system. This space also provides a transition between the pedestrian walkway and the main quad.

The use of brick on walkways is an important feature throughout the campus. It is not only used to emphasize walkways, but it is used throughout important places of gathering and primary building entrances. In the image at the bottom right, brick was used to emphasize the importance of this space at the northern entrance to the former Library. It provided a strong connection between the front fountain plaza and the existing former Library.

Proposal for Central Landscape Area, 2004 Master Plan Landscape Section

Proposal for Central Landscape Area, 2004 Master Plan Landscape Section

Planting Areas and Site Walls

The College has been successful in integrating a variety of planting throughout the campus. The planting palette helps define articulate and comfortable spaces within sometimes difficult sloped areas. The topography has provided opportunities to integrate and design site walls and grand steps.

The campus is not only defined by its regular system of promenades and landscape features. There is also a consistency in the planting throughout the perimeter of the buildings and used to conceal mechanical equipment or to accent “leftover” spaces in awkward intersections or areas not accessible to pedestrians. To maintain the consistency and the tradition of the campus landscape definition, the following pages 80-84 will offer plant palettes selected by the grounds department at Moorpark College. It is imperative that the selected landscape architect work in close relationship with the grounds staff and follow the protocol as described on page 87 to achieve the best results.

The design of the site walls, although not consistent throughout the entire campus, provides an excellent precedent for the type of detail that is expected at the Moorpark College. Pour-in place concrete walls are tapered at the top and the finish alternates to fit the site specific condition. Along the bridge, lights were formed directly at the base of the walls. The walls are an excellent example of function and space articulation using simple unfinished materials. New walls should also incorporate design features to deter vandalism, such as skateboard grinding and others.

Proposal for Central Landscape Area, 2004 Master Plan Landscape Section

Proposal for Central Landscape Area, 2004 Master Plan Landscape Section

Landscape Upgrade Zones Plan

The plan on the opposite page (page 81) provides various landscape improvements to be implemented throughoutout the different phases of development.

A: Improve signage and planting at all major entries and intersections. Upgrade parking lot landscape and provide more evergreen trees for parking lot shade.

B: Provide for student breakout areas with tables and possible exterior wireless lap top connections. Create private small open spaces for outdoor music practices and larger open spaces for student interaction.

Vary areas for sun exposure throughout different times of the year. Provide viewing areas with adequate flowering accent trees, benches, and exterior lighting. Design exterior space for possible future outdoor concerts.

C: Provide landscape backdrop planting for transition into the zoo. The new EATM Building shall be landscaped with larger trees to mark an important entrance point to the Zoo and EATM facilities.

D: Enhance the campus loop road and create a Boulevard-like appearance by improving the signage, lighting, and landscape to provide a consistent standard. Accent trees should be added at major intersections and campus entrances.

E: Provide more deciduous trees at the entry for winter sun and summer shade. Provide continuous planting along sidewalks and more small seating areas in between buildings.

F: Maintain the open campus feel upon the completion of the Library Remodel. Reinstall adjacent turf and planting areas, restore pedestrian walkways, provide additional planting at the base of the building. The goal of this area is to maintain the visual connection when entering from the northern/upper parking lots into the campus. Update the campus key plans and provide additional ones at new campus entry points.

G: Maintain the open plaza turf space for major student events. Provide seating areas with tables and benches. Create small private student study spaces between the existing buildings.

Provide landscape at the perimeter of the Health Science Building and create an accessible entry with planting.

H: Provide seating areas under building overhead and additional outside student study areas. Provide handicap access to all seating and gathering areas and maintain the open vista to the lower campus.

I: The CDC building project shall include the adjacent access road as well as the nearby slope south of the Student Center damaged during the course of construction. Provide outdoor tables and seating spaces for students, instructors and parents.

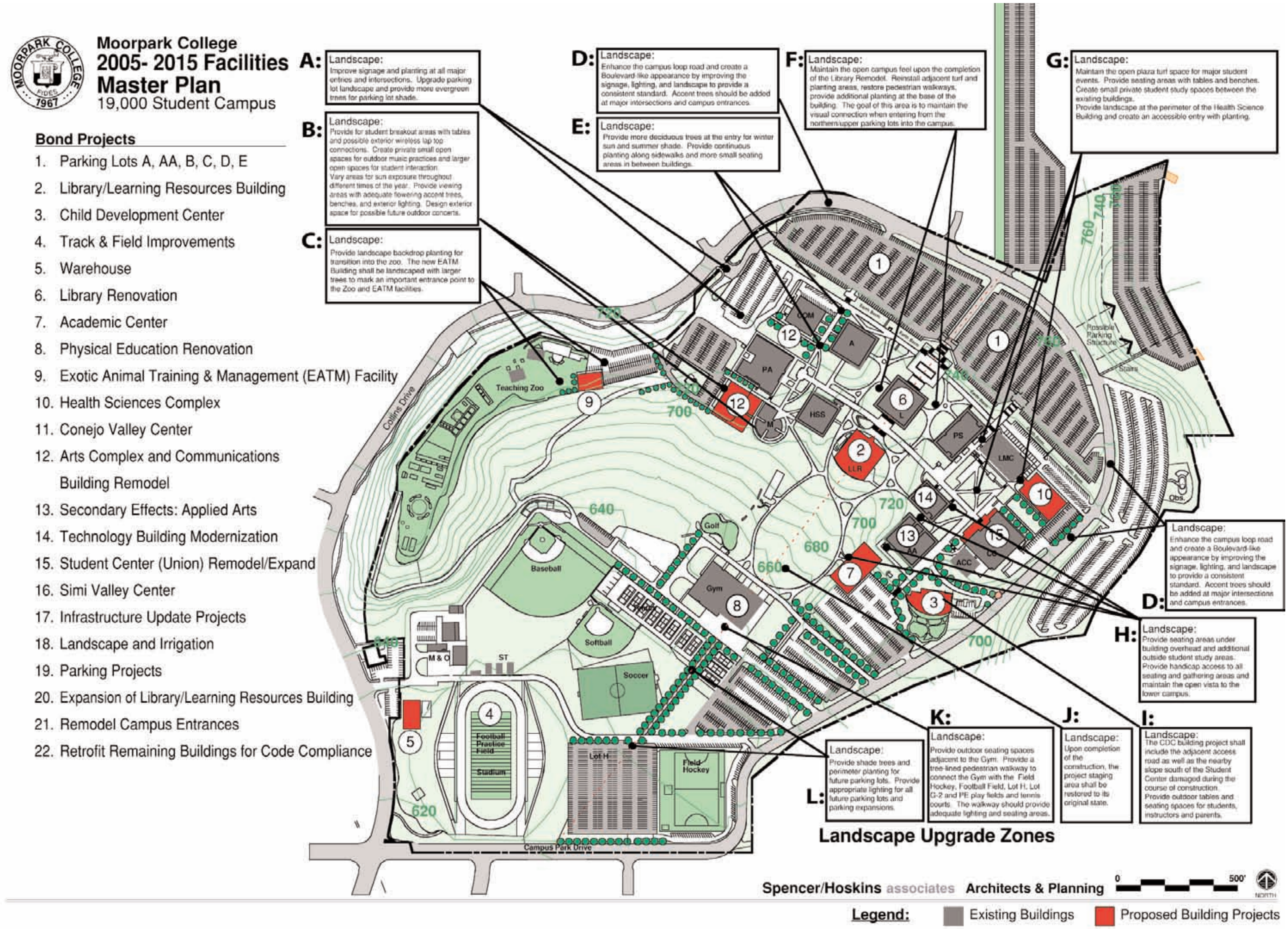
J: Upon completion of the construction, the project staging area shall be restored to its original state.

K: Provide outdoor seating spaces adjacent to the Gym. Provide a tree-lined pedestrian walkway to connect the Gym with the Field Hockey, Football Field, Lot H, Lot G-2 and PE play fields and tennis courts. The walkway should provide adequate lighting and seating areas

L: Provide shade trees and perimeter planting for future parking lots. Provide appropriate lighting for all future parking lots and parking expansions.

Graduation setup at the central campus quad

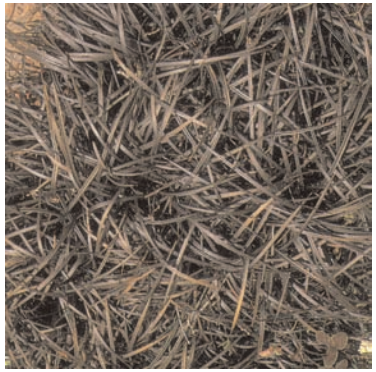
Lawn area with trees east of the existing Library


Moorpark College
2005- 2015 Facilities Master Plan
19,000 Student Campus
Bond Projects
1. Parking Lots A, AA, B, C, D, E
2. Library/Learning Resources Building
3. Child Development Center
4. Track & Field Improvements
5. Warehouse
6. Library Renovation
7. Academic Center
8. Physical Education Renovation
9. Exotic Animal Training & Management (EATM) Facility
10. Health Sciences Complex
11. Conejo Valley Center
12. Arts Complex and Communications Building Remodel
13. Secondary Effects: Applied Arts
14. Technology Building Modernization
15. Student Center (Union) Remodel/Expand
16. Simi Valley Center
17. Infrastructure Update Projects
18. Landscape and Irrigation
19. Parking Projects
20. Expansion of Library/Learning Resources Building
21. Remodel Campus Entrances
22. Retrofit Remaining Buildings for Code Compliance
A: Landscape: Improve signage and planting at all major entries and intersections. Upgrade parking lot landscape and provide more evergreen trees for parking lot shade.
B: Landscape: Provide for student breakout areas with tables and possible exterior wireless lap top connections. Create private small open spaces for outdoor music practices and larger open spaces for student interaction. Vary areas for sun exposure throughout different times of the year. Provide viewing areas with adequate flowering accent trees, benches, and exterior lighting. Design exterior space for possible future outdoor concerts.
C: Landscape: Provide landscape backdrop planting for transition into the zoo. The new EATM Building shall be landscaped with larger trees to mark an important entrance point to the Zoo and EATM facilities.
D: Landscape: Enhance the campus loop road and create a Boulevard-like appearance by improving the signage, lighting, and landscape to provide a consistent standard. Accent trees should be added at major intersections and campus entrances.
E: Landscape: Provide more deciduous trees at the entry for winter sun and summer shade. Provide continuous planting along sidewalks and more small seating areas in between buildings.
F: Landscape: Maintain the open campus feel upon the completion of the Library Remodel. Reinstall adjacent turf and planting areas, restore pedestrian walkways, provide additional planting at the base of the building. The goal of this area is to maintain the visual connection when entering from the northern/upper parking lots into the campus.
G: Landscape: Maintain the open plaza turf space for major student events. Provide seating areas with tables and benches. Create small private student study spaces between the existing buildings. Provide landscape at the perimeter of the Health Science Building and create an accessible entry with planting.
Teaching Zoo
Collins Drive
Baseball
Softball
Soccer
Gym
M & O
ST
Golf
Football Practice Field
Stadium
Lot H
Field Hockey
Campus Park Drive
COM
A
PA
HSS
L
PS
LMC
LLR
AA
ACC
CC
Obs.
Possible Parking Structure
Stairs
D: Landscape: Enhance the campus loop road and create a Boulevard-like appearance by improving the signage, lighting, and landscape to provide a consistent standard. Accent trees should be added at major intersections and campus entrances.
H: Landscape: Provide seating areas under building overhead and additional outside student study areas. Provide handicap access to all seating and gathering areas and maintain the open vista to the lower campus.
L: Landscape: Provide shade trees and perimeter planting for future parking lots. Provide appropriate lighting for all future parking lots and parking expansions.
K: Landscape: Provide outdoor seating spaces adjacent to the Gym. Provide a tree-lined pedestrian walkway to connect the Gym with the Field Hockey, Football Field, Lot H, Lot G-2 and PE play fields and tennis courts. The walkway should provide adequate lighting and seating areas.
J: Landscape: Upon completion of the construction, the project staging area shall be restored to its original state.
I: Landscape: The CDC building project shall include the adjacent access road as well as the nearby slope south of the Student Center damaged during the course of construction. Provide outdoor tables and seating spaces for students, instructors and parents.
Landscape Upgrade Zones
Spencer/Hoskins associates Architects & Planning
0 500'
NORTH
Legend: Existing Buildings Proposed Building Projects

LANDSCAPE

DO NOT PLANT LIST

TYPE	BOTANICAL NAME	COMMON NAME	REASON FOR FAILURE
GROUNDCOVERS			
	Ajuga reptans	Carpet Bugle	Unsuccessful
	Baccharis pilularis	Coyote Bush	Unsuccessful
	Festuca rubra	Creeping Red Fescue	Hard to maintain
	Festuca species	All fescues	Hard to maintain
	Gazania species	Gazania	Old fashioned and overplanted
	Herdera species	All ivy species	Poisonous and obtrusive
	Opiopogon japonicus	Mondo Grass	Hard to maintain
	Sollya heterophylla	Austrialian Bluebell Creeper	Unsuccessful
SHRUBS			
	Agave species	Agave species	To hard to maintain, obtrusive
	Bamboo / Sasa species	All bamboo species	To hard to maintain, obtrusive
	Callistemon species	Bottlebrushes	Overplanted on campus
	Camellia species	Camellias	Aphids, mold, thrips
	Centranthus rubrum	Jupiter's Beard	Unsuccessful
	Dondonaea viscosa	Hopseed Bush	Scale, aphids
	Euryops species	Euryops Daisies	Unsuccessful
	Hibiscus species	Hibiscus	Aphids, mold, thrips
	Juniperus species	Juniper species	Old fashioned and overplanted
	Nerium species	Oleander	Oleander scorch
	Photinia species	Photinia	Aphids, mold, thrips
	Pittosporum species	Mock Oranges	Overplanted on campus
	Raphiolepsis species	Indian Hawthorn	Overplanted on campus
	Rhododendron species	Azaleas	Aphids, mold, thrips
	Rose	Roses	Keep to established beds
	Xylosma species	Xylosma	Overplanted on campus
TREES			
	Ceratonia siliqua	Carob trees	Filthy
	Citrus	Citrus (all fruit trees, except @ EATM)	Attractive nuisance and filthy
	Eucalyptus species	Blue, Lemon, Paperbark, etc.	Prone to lerr psyllid
	Fraxinus species	Ashes	Aphids and mold
	Gingko biloba	Gingko	No females
	Jacaranda mimisifolia	Jacaranda	Filthy
	Lagerstroemia indica	Crape Myrtle	Overplanted on campus
	Malus	Apple (all fruit trees, except @ EATM)	Attractive nuisance and filthy
	Pinus canariensis	Canary Island Pine	Overplanted on campus
	Pinus halepensis	Allepo Pine	Overplanted on campus
	Pinus radiata	Monterey Pine	Turpentine & Bore Beetles
	Platanus species	Sycamores	Overplanted on campus
	Populus species	Poplars	Invasive rooting
	Pyrus species	Pear species	Fireblight
	Quercus agrifolia	Coastal Live Oak	Not in lawns
	Schinus species	Pepper trees	Filthy
	Ulmus species	Elms, except Chinese	Fireblight



Opiopogon japonicus/ Mondo Grass

Sollya heterophylla/ Australian Bluebell Creeper

Agave species/ Agave species

Bamboo/ Sasa species/ Bamboo

Ulmus species/ Elms

Ginko biloba/ Ginko

LANDSCAPE

PLANT MATERIAL MATRIX

BOTANICAL AND COMMON NAMES	FLOWERS	THORNS	HEDGE / BARRIER	SPECIMEN FOCAL PT.	IN COURTYARDS	IN LAWNS	ALONG WALKS	FOR DRY AREAS	BANK COVER	SCREENING	WINDBREAKS	FULL SUN	PART-SUN & SHADE	FULL SHADE	ATTRACTS BEES	FRUIT, BERRIES, PODS	POISONOUS
TREES (Evergreen / Small to 20 ft.)																	
Acacia farnesiana / *Sweet Acacia*	Y					■						■					
Geijera parviflora / *Australian Willow*					■	■	■	■				■					
Laurus nobilis / *Grecian Laurel*										■		■					
Lysiloma thornberi / *Featherbush*	Y				■							■					
Olea europaea "Majestic Beauty" / *Fruitless Olive*				■	■	■	■					■					
Pittosporum phillyraeoides / *Willow Pittosporum*	Y			■		■				■		■					
Podocarpus macrophyllus / *Japanese Yew*			■			■	■			■		■					
Prunus caroliniana / *Carolina Laurel Cherry*	W				■	■						■				■	
Rhus lancea / *African Sumac*				■	■	■	■			■		■					
Tecoma stans / *Yellow Bells*	Y		■							■			■				
Thevitia peruviana / *Yellow Oleander*	Y		■		■							■					■
TREES (Deciduous / Small to 20 ft.)																	
Albizia julibrizzen / *Silk Tree*	P			■	■							■			■		
Bauhinia forficata / *White Butterfly Orchid Tree*	W			■	■							■	■				
Cercidium floridum / *Blue Palo Verde*	Y					■		■				■					
Cercidium microphyllum / *Little-Leaf Palo Verde*	Y			■				■				■				■	
Chilopsis linearis / *Desert Willow*	M					■						■				■	
Lysiloma thornberi / *Featherbush*	W				■			■				■				■	
Melia azedarach / *Chinaberry*	LP					■		■				■			■	■	■
Parkinsonia aculeata / *Mexican Palo Verde*	Y	■						■				■					
Tamarix aphylla / *Tamarisk*			■							■	■						
Vitex agnus-castus / *Chaste Tree*	BWP				■	■						■					
Zizyphus jujuba / *Chinese Date*	Y		■		■							■				■	
TREES (Evergreen / Medium 20 - 35 ft.)																	
Casuarina stricta / *Mountain She-Oak*						■		■				■					
Cupressus arizonica / *Arizona Cypress*								■		■	■						
Geijera parviflora / *Australian Willow*					■	■	■	■		■		■					
Ligustrum lucidum / *Glossy Privet*	W		■			■				■		■				■	■
Magnolia grandiflora / *Magnolia*	W			■	■	■	■					■					
Pinus pinea / *Italian Stone Pine*						■						■					
Pinus thunbergiana / *Japanese Black Pine*						■						■					
Prosopis species / *Mesquite*	Y					■	■	■				■			■	■	
Rhus lancea / *African Sumac*				■	■	■	■			■		■					
Tamarix aphylla / *Tamarisk*	WPO		■					■		■	■			■			
Ulmus parvifolia "Sempervirens" / *Chinese elm*						■	■					■					

BOTANICAL AND COMMON NAMES	FLOWERS	THORNS	HEDGE / BARRIER	SPECIMEN FOCAL PT.	IN COURTYARDS	IN LAWNS	ALONG WALKS	FOR DRY AREAS	BANK COVER	SCREENING	WINDBREAKS	FULL SUN	PART-SUN & SHADE	FULL SHADE	ATTRACTS BEES	FRUIT, BERRIES, PODS	POISONOUS
TREES (Deciduous / Medium 20 - 35 ft.)																	
Albizia julibrizzen / *Silk Tree*	P			■	■	■						■			■	■	
Cercis canadensis / *Eastern Redbud*	P			■		■	■					■	■				
Chorisia speciosa / *Floss Silk-Tree*	ORW		■	■	■	■						■					
Melia azedarach / *Chinaberry*	LP					■		■				■			■	■	■
Morus alba / *Mulberry (Fruitless var. only)*				■	■	■	■			■		■					
Pistache chinensis / *Chinese Pistache*				■	■	■	■					■				■	
TREES (Evergreen / Tall 35 - 100 ft.)																	
Araucaria bidwillii / *Bunya-Bunya*				■		■						■					
Casuarina cunninghamiana / *River She-Oak*																■	
Cedrus atlantica "Glauca' / *Atlas Cedar*				■		■	■					■	■				
Cedrus deodara / *Deodar Cedar*				■		■	■					■					
Chorisia speciosa / *Floss Silk-Tree*	ORW			■	■	■						■					
Cupressus sempervirens / *Italian Cypress*										■	■	■					
Ficus microcarpa / *Indian Laurel Fig*						■				■		■					
Grevillea robusta / *Silk Oak*	YO			■	■	■	■					■	■				
Magnolia grandiflora / *Magnolia*	W			■	■	■	■					■	■				
Pinus pinea / *Italian Stone Pine*						■						■					
Pinus thunbergiana / *Japanese Black Pine*						■						■	■				
Quercus agrifolia / *Coast Live Oak*				■		■	■	■	■	■		■				■	
Quercus engelmannii / *Pasadena Oak*				■	■	■	■	■				■				■	
Quercus suber / *Cork Oak*				■	■	■	■	■		■		■				■	
TREES (Deciduous / Tall 35 - 100 ft.)																	
Gingko biloba / *Gingko Tree (male only)*				■	■	■						■					
Pistache chinensis / *Chinese Pistache*																	
Quercus lobata / *Valley Oak*				■	■	■	■	■				■				■	
Quercus virginiana / *Southern Live Oak*				■	■	■	■	■				■				■	
Robinia ambiqua "Purple Robe" / *Purple Robe Locust*	PP			■	■	■	■	■				■			■		
Robinia pseudoacacia / *Black Locust*	W			■	■	■	■	■				■			■		

LANDSCAPE

PLANT MATERIAL MATRIX

BOTANICAL AND COMMON NAMES	FLOWERS	THORNS	HEDGE / BARRIER	SPECIMEN PT. / FOCAL IN COURTYARDS	IN LAWNS	ALONG WALKS	FOR DRY AREAS	BANK COVER	SCREENING	WINDBREAKS	FULL SUN	PART-SUN & SHADE	FULL SHADE	ATTRACTS BEES	FRUIT, BERRIES, PODS	POISONOUS
SHRUBS (Evergreen / Small to 3 ft.)																
Abelia grandiflora "prostrata" / *Prostrate Abelia*	W		■			■			■		■			■		
Buxus japonica / *Japanese Boxwood*			■		■	■					■	■				
Carissa grandiflora / *Natal Plum*	W		■			■		■			■				■	
Euonymus fortunei / *Euonymus*			■		■	■			■	■	■	■				
Justicia species / *Mexican Honeysuckle*	RO					■		■			■	■				
Lantana camara / *Lantana*	WYOR		■		■	■		■			■					
Myrtus communis "Compacta" / *Compact Myrtle*			■			■		■			■	■				
Nandina domestica "Nana" / *Heavenly Bamboo*	W			■		■					■	■				
Pyracantha k. "Santa Cruz" / *Santa Cruz Firethorn*	O		■	■				■			■	■			■	
Santolina chamaecyparissus / *Lavender Cotton*	Y					■	■	■			■					
Santolina virens / *Green Santolina*	Y					■	■	■			■					
SHRUBS (Evergreen / Medium to 3 - 6 ft.)																
Abelia grandiflora / Glossy *Abelia*	W		■			■			■		■			■		
Atriplex canescens / *Saltsage, Chamiso*	Y		■			■	■	■	■		■				■	
Atriplex lentiformis "Breweri" / *Brewer saltbush*	Y		■			■	■	■	■		■				■	
Atriplex lentiformis / *Quail Bush*	Y		■			■	■	■	■		■				■	
Caesalpinia species / *Bird of Paradise*	O		■				■	■	■		■				■	■
Carissa grandiflora / *Natal Plum*	W		■					■			■				■	
Cassia artemisiodes / *Feathery Cassia*	Y		■				■	■	■		■				■	
Cotoneaster lacteus / *Red Clusterberry*	W		■			■		■	■		■				■	
Elaeagnus ebbingei / *Ebbing Silverberry*	S		■			■			■		■				■	
Leucophyllum frutescens / *Texas Ranger*	PMW		■			■					■					
Ligustrum japonicum "Texanum" / Texas *Privet*	W		■			■			■	■	■	■		■	■	
Myrtus communis / *True Myrtle*			■	■		■			■		■					
Nandina domestica / *Heavenly Bamboo*	W			■		■					■	■				
Osmanthus fragrans / *Sweet Olive*	O		■	■		■			■			■				
Plumbago auriculata / *Cape Plumbago*	B		■			■		■	■		■					
Simmondsia chinensis / *Jojoba*			■				■	■			■				■	
Viburnum tinus "Lucidum" / *Dwarf Laurustinus*	P		■		■			■			■	■			■	

BOTANICAL AND COMMON NAMES	FLOWERS	THORNS	HEDGE / BARRIER	SPECIMEN PT. / FOCAL IN COURTYARDS	IN LAWNS	ALONG WALKS	FOR DRY AREAS	BANK COVER	SCREENING	WINDBREAKS	FULL SUN	PART-SUN & SHADE	FULL SHADE	ATTRACTS BEES	FRUIT, BERRIES, PODS	POISONOUS
SHRUBS (Evergreen / Large to 6 ft. +)																
Cocculus laurifolius / *Cocculus*			■						■		■					
Cotoneaster lacteus / *Red Clusterberry*	W		■			■		■	■		■				■	
Elaeagnus ebbingei / *Ebbing Silverberry*	S		■			■			■		■				■	
Laurus nobilis / *Grecian laurel*			■			■			■		■	■				
Ligustrum japonicum "Texanum" / Texas *Privet*	W		■			■			■	■	■	■		■	■	
Ligustrum lucidum / *Glossy Privet*	W		■						■	■	■			■	■	■
Olea europaea "Majestic Beauty" / *Fruitless Olive*				■		■					■					
Platycladus orientalis / *Arborvitae*			■						■	■	■					
Pyracantha koidzumii "Victory" / *Victory Firethorn*	O		■	■							■	■			■	
Rhus ovata / *Sugar Bush*	W		■				■	■	■						■	
Syringa persica / *Persian Lilac*	L		■								■	■				
Viburnum suspensum / *Sandankwa Viburnum*	P		■			■		■			■	■			■	
Viburnum tinus / *Laurustinus*	P		■			■		■			■	■			■	
GROUNDCOVERS																
Atriplex semibaccata / Australian *Saltbush*							■	■			■					
Euonymus fortunei radicans / *Trailing euonymus*						■		■			■	■				
Lantana montevidensis / *Trailing lantana*	LW					■		■			■				■	
Osteospermum fruticosum / *Trailing African daisy*	PW							■			■					
Pyracantha k. "Santa Cruz" / *Santa Cruz Firethorn*	O		■	■				■			■	■			■	
Rosmarinus officinalis "Prostratus" / *Dwarf rosem*	B						■	■			■			■		
Teucrium chamaedrys "Prostratum" / *Germander*	RPW					■					■					
Trachelospermum asiaticum / *Asian star jasmine*	W					■					■	■				
Trachelospermum jasminoides / *Star jasmine*	W					■					■	■				

PLANT MATRIX LEGEND

Plant Matrix Legend: (Flower Color)

Symbol	Color Code
B	Blue
L	Lavender and/or Purple
M	Magenta
O	Orange
P	Pink
R	Red
S	Silvery
W	White
Y	Yellow

by Oasis Landscape Architecture and Planning

Landscape

Campus Landscape and Planting Information for Site Assessment and Visit

****Available for Design Professional's Review**

__Campus Site Plan (2004 Master Plan) – Review the exact phasing and phased areas to determine the impact on the current scope of work. Take note of all construction staging areas. Include these areas in those phases.

__Centralized Controller Master Plan

__Planting Plan (Master Plan As-built)

__Irrigation Plan (Master Plan As-built)

__Demolition Plan (Proposed)

__Existing Utility Plan

__Aerial Survey, Topography Maps and/or Grading Plan (with field-shot elevations taken at existing trees)

__Soils Map and Types

__Drainage Systems

__List of Inherent Site Plant Diseases and Pests (insects, rodents, fungi, etc.)

__Water Availability, Pressure and Tests

__Soil Tests

__Site Photos of the Construction Site

Planting Plan

__It is mandatory for the Landscape Architect to walk the campus to get the "feel" of the existing landscape and observe first-hand those plants that are thriving and those which are not. Inspect all trees to remain or be removed. Visually review the scope and impact of the proposed project.

__For planting selections, refer to the Moorpark College Plant Matrix, pages 83-84. Additional and alternative plant selections and suggestions are encouraged. The Matrix shall be expanded based on newly-identified plant performance.

__Refer to the Do Not Use Plant List, page 82 for plants to avoid.

__To conserve water, backfill amendments and mulching of individual plants and planting beds shall be utilized throughout.

__Contact the M&O Director, Mr. John Sinutko at Phone:(805) 378-1454 Fax: (805) 378-1593 for answers to questions and to gather additional information.

__To discourage plant diseases and mortality rates, planting bed themes should display a variety (heterogeneous) rather than a mass (homogenous) planting of one type of plant.

__"Standard" themes (eq. Raphs, Pittosporum, Gazania, Agapanthus, Daylilies, etc.) are discouraged.

__Plants that will climb, overlap eaves, have inherently shallow and/or invasive roots, excessive branch, fruit and/or litter drop, are poisonous and disease prone are discouraged.

__Evergreen shrubbery (flowering or not) is encouraged

__Deciduous and/or evergreen trees are encouraged

__Deciduous trees should be used in middle of lawns.

__Tree canopies shall not overlap hardscapes.

__Theme will reflect a clean appearance.

__Plant theme overall must display continuity throughout the campus. However, using a variety of "new" plants is encouraged.

__Turf will be used in large, generally level areas, as this allows for additionally-needed and usable space. Maintenance is also decreased.

__Plant material selections must reflect the ability to survive high wind and heat, possible foot traffic, and dusty conditions.

__Selective native plant material shall be approved by campus staff prior to use.

__Plant selections shall be drought tolerant, when and where possible.

__Master-planting in each hydro-zone shall reflect matched precipitation irrigation requirements, (i.e., no water-loving plants shall be planted in a drought tolerant plantings and vise-versa.)

__Discuss all plant selections with campus grounds maintenance director prior to final design decisions. Refer to the LANDSCAPE DESIGN APPROVAL LIST, pages 83-84-for systematic approval of planting plan.

Landscape

Irrigation Upgrades

The existing irrigation system has been upgraded numerous times throughout the development of the campus. The result is a fragmented system that presents difficulties for the maintenance personnel and creates inconsistencies with the equipment and controllers. The graphic proposal on the opposite page will provide various loops controlled by new, upgraded or existing controllers that will manage determined areas.

The implementation of this system could be phased into the development of each project, but should look at this plan to understand the overall intent and how it affects each individual project. In addition, page 60 provides specific information for irrigation equipment.

A: Replace stand alone clock, and add new 48 station controller. Connect back to the M&O building. Add flow sensor and master valves.

B: Replace stand alone clock, and connect to new 48 station controller at the M&O building.

C: Stub water and wires for Zoo area off EATM.

D: Replace existing stand alone clock, and add a 48 station clock .

E: Add new flow sensor and master valve and connect to existing controller.

F: Add wire drops for future parking lot irrigation.

G: Enlarge mainline and backflow device. Add flow sensor and master valve connecting to music building clock.

H: Add wire to HSS Building.

I: Split irrigation point of connection (2 back flows). Add flow sensors and master valves for both back flows, and existing controllers.

J: Upsize proposed controller from 24 stations to accommodate adjacent existing valves.

K: Replace stand-alone clock, and connect to new 48 station at CDC.

L: Add flow sensor and master valve, and connect to existing controller.

M: Upgrade existing clock with 48 station and connect to flow sensor and master valve.

N: Connect valves to new 48 station controller at the CDC Building.

O: Install new 48 station controller at CDC Building to replace the existing 12 station at the Student Center.

P: Replace existing stand-alone clocks and add single 48 station clock, and connect to flow sensor master valve.

Q: Add phone line off Gym.

R: Wire drops and landscape stub outs for frontage.

Quad are set up for graduation commencement

Garden and lawn arrangement at the center of campus

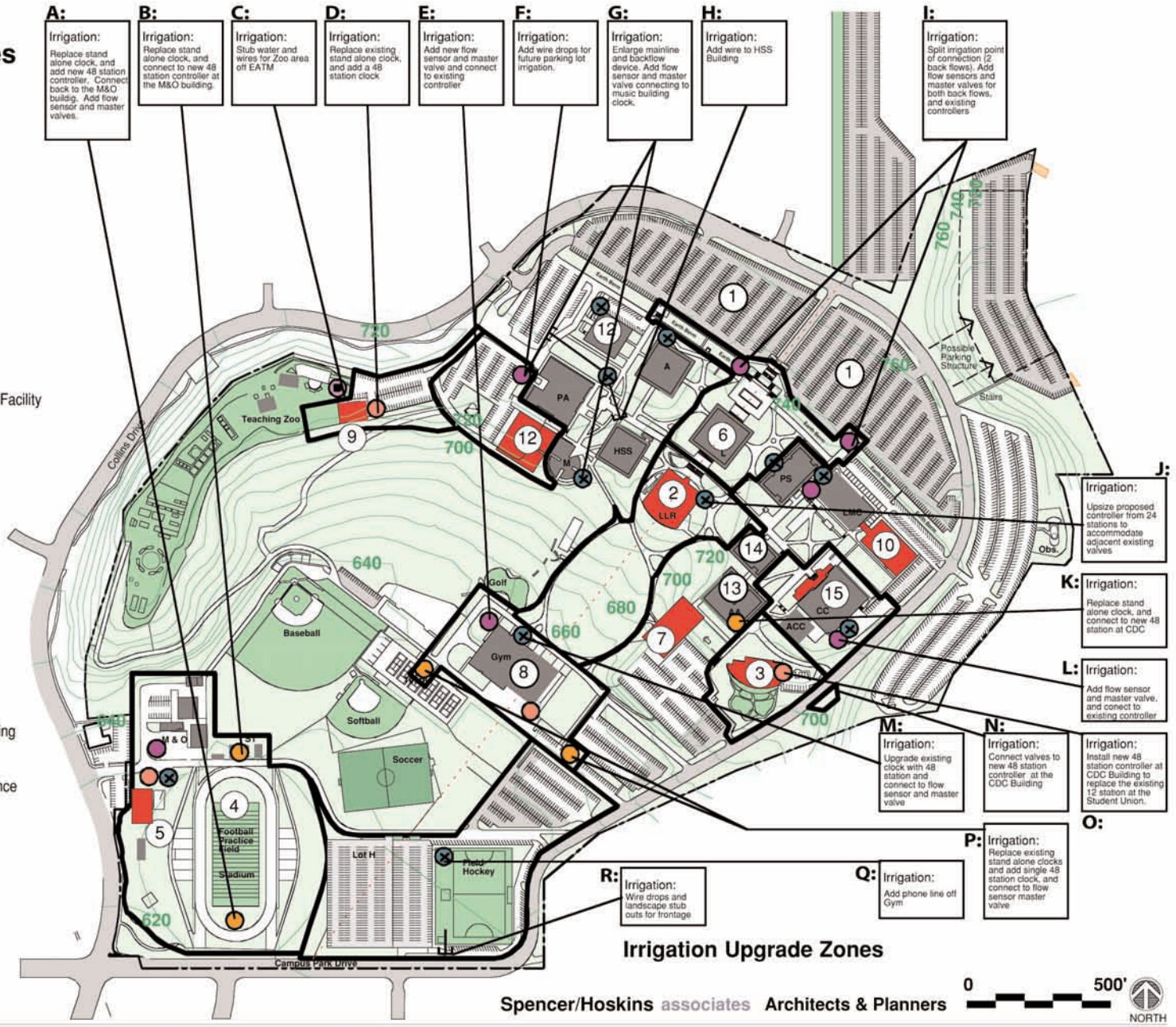
Landscape Area Southwest of the P-Building

Moorpark College 2005-2015 Facilities Master Plan

19,000 Student Campus

Bond Projects

1. Parking Lots A, AA, B, C, D, E
2. Library/Learning Resources Building
3. Child Development Center
4. Track & Field Improvements
5. Warehouse
6. Library Renovation
7. Academic Center
8. Physical Education Renovation
9. Exotic Animal Training & Management (EATM) Facility
10. Health Sciences Complex
11. Conejo Valley Center
12. Arts Complex and Communications Building Remodel
13. Secondary Effects: Applied Arts
14. Technology Building Modernization
15. Student Center (Union) Remodel/Expand
16. Simi Valley Center
17. Infrastructure Update Projects
18. Landscape and Irrigation
19. Parking Projects
20. Expansion of Library/Learning Resources Building
21. Remodel Campus Entrances
22. Retrofit Remaining Buildings for Code Compliance



Landscape

Campus Irrigation Information for Site Assessment and Visit

Irrigation Plan

-Place IRRIGATION BACKGROUND DESIGN DATA, (see page 90 for template) on final irrigation plan verifying the following information:

-On-site water pressure (static and working)

-PSI info provided and verified

-By whom and dates provided

-On-site water line size, pipe type and location(s)

-Mainline inspection(s) and dates

-Review interfacing (phased) irrigation system(s) with maintenance staff.

-Temporary disconnections and/or re-routing of any interim irrigation mainlines and/or system(s) shall be clearly delineated on the plan, both as notes, as well as diagrammatically. The intent will be clearly indicated that those lines temporarily re-routed shall be either re-connected to provide continued permanent service, or be abandoned as per plan intent.

-Determine per the irrigation master plan phasing that those controllers to be replaced and/or added, have been clearly depicted as such.

-Verify that all master shut-off valves and/or flow-sensors will be, or are provided for in a particular phase and are separated between the individual controllers and water points of connection.

-All irrigation systems shall be designed for reclaimed water use, utilizing non-potable / purple pipe and associated hardware.

-Recycled water and irrigation systems shall be designed to meet and/or exceed all local and/or state codes.

-Hydro zone water use calculations

-Irrigation system valves and water-zone areas shall be depicted using matrixes on standard forms on the final irrigation plan(s)

-Irrigation water allowance calculations shall be noted.

-Irrigation signage on campus (to educate the student-body & public regarding reclaimed water use)

-Irrigation system tie-in to future phases shall be depicted.

-Establish a water budget as it relates to the overall campus master irrigation plan.

-Irrigation water allowance calculation (See attached irrigation water calculation sheet.)

-Irrigation equipment: Refer to Moorpark College Grounds Department “Irrigation Standardization” list, updated November 14, 2003. Utilize as listed.

-Provide for winter freezing protection of backflow device(s)

-Provide lockable cage(s) for protection of backflow device(s)

-Note all (POC’s) point of connections and water pressure (static and working)

-Master-irrigation plan shall reflect for each planting area matched precipitation irrigation requirements, (i.e., no water-loving plants shall be planted in a drought tolerant plantings and vise-versa)

Landscape Construction Development Plan

-Establish a phased work perimeter. Note on the plans to fence or cordon off specimen trees or plants and/or areas to remain undisturbed during construction. If desirable area(s) are, or will be impacted, mitigation measures shall be noted and/or depicted on both the irrigation and planting plan, defining the complete restoration to same. (Reference Pre-Construction Site Pictures)

-The landscape contractor for each and any phase shall be responsible for all on-going plant maintenance of the existing landscape within the phased scope of work boundaries, as well as any job related “construction staging area(s)”. Said work shall include, but not be limited to the following: mowing, watering, pruning, fertilizing, and pest control as necessary to maintain the existing landscape to campus standards. The existing landscape maintained under this note, shall be returned to campus jurisdiction in as good or better condition than prior to construction activities. Site photographs and job walks shall be conducted to memorialize site conditions prior to construction. Upon approval and acceptance of the existing landscaped area(s) by the Project Architect and campus M&O Director, the campus shall immediately resume maintenance of these areas.

-Upon landscape completion of each phase, the landscape contractor shall maintain the newly installed landscape for the period noted in the specifications.

-Existing trees, other plantings and irrigation hardware within the construction and staging area(s) to remain, shall be shown on this LANDSCAPE

CONSTRUCTION DEVELOPMENT PLAN. The final as-built plan(s) shall reflect their inclusion.

-The final grading plan shall interface with previously noted existing plants “to remain”. No cut and/or fill at existing trees and/or shrubs within canopy driplines, labeled to remain shall take place.

Details & Specifications

-Refer to District’s Standards, page 90

As-Built Plans Standards Guidelines

-Irrigation Controller Charts: Final irrigation chart shall depict all hydrozones for each controller with a separate color. Chart(s) shall be clearly defined, easily read and hermetically sealed within 20 mil thick plastic for water-proofing. The plan/chart shall be reduced to either fit easily within the controller itself, or be installed within a separate waterproof, keyed containment box, provided and mounted on the controller pedestal or on a wall adjacent to same. Clearly define the box as the location for the Irrigation Controller Chart.

-Pre-construction, construction, and post-construction photo-booklet.

-Verify that all plants labeled “to remain” are in good condition at the completion of construction.

-Verify that all drainage problems have been remedied.

-The Landscape Contractor is to submit the following irrigation mainline and wire routing as-built information on a clean final field as-built plan, provided by the Landscape Architect. The Landscape Architect shall CAD draft the final information submitted by the Landscape Contractor for final submittal to the Architect and/or College as requested. All submitted CAD information shall be per the district’s standards.

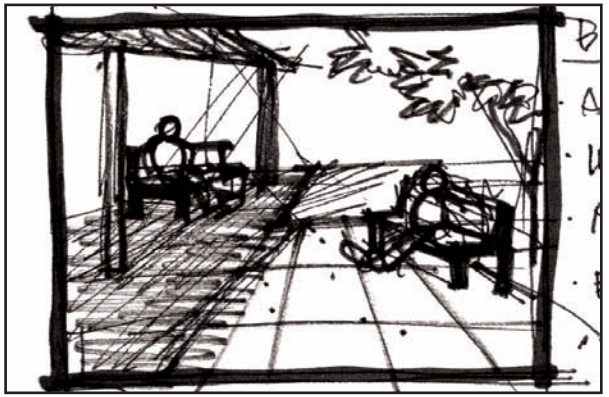
-Minimum As-built Field Information Required:

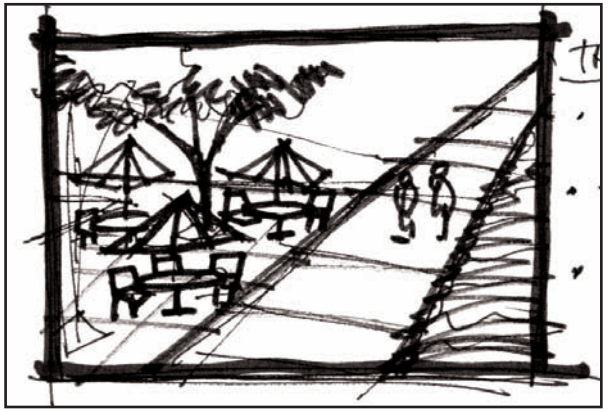
The following shall be located by triangulating from a minimum of (2) two permanently fixed points, submitted, and recorded as noted above:

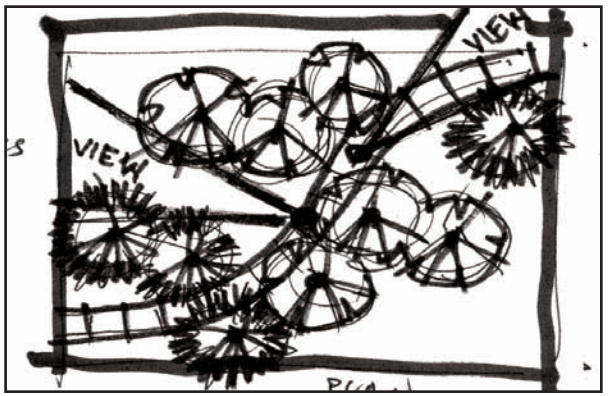
- -All valves and/or manifolds
- -Boxes (eq. isolation valves / wire splices, etc.)
- -Controllers
- -Moisture sensors
- -Backflow devices
- -Points of connection
- -Mainline & wire runs / directional changes
- -Sleeve locations / hardscape under crossings

-Upon final walk-through with the Landscape Architect, and a Rainmaster representative shall approve all controllers and connections. Sign and date IRRIGATION BACKGROUND DESIGN DATA box acknowledging approval. See page 90.

Central quad during graduation setup







Sketch design for walkways with proposals for sitting areas, and planting

Irrigation List

ITEM	MANUFACTURER	MODEL NUMBER	NON-POTABLE
Automatic Controller (Include flow-sensor and master valve connection per clock)	Rainmaster	Evolution DX2 Hardline or cell com line SS Enclosure	n.a.
Backflow Preventer	Febco	825/825YA Galvanized pipe assembly	Tag
Electric Valves	Rainbird	EFB-CP KBI BTU-T upstream King Bros./3M Connectors	NP-HAN
Electric Valve Boxes	Applied Engineering	1320-1G2G with extensions (traffic rated, locking lids)	1L2L Lavender
Isolation Valves	American AVK	Gate valve with 2" square handle (at mains/sub-mains) in 12" round traffic rated box	Tag Lavender
Control Wire		14 ga.-600v. direct burial (min.) White common, black lead	n.a.
Spray Sprinklers	Rainbird	1800 series (SAM-PRS)	NP-Cover
Rotory Sprinklers	Rainbird Hunter	Talon PGM, PGP, I-10, I-20, I-40	n.a. R
Slopes	Toro	300 series	n.a.
Impact Sprinklers	Rainbird	Cast iron/brass assembly	n.a.
Mainline/Lateral Pipe	Various	Sch.40 PVC	Purple
Fittings	Various	Sch.80 PVC (Sch.40 Galv. where specified)	n.a.
Sprinkler Risers	Various	Sch.80 PVC (triple-swing joint for pop-ups)	n.a.
Quick Coupler Valves	Rainbird	33DLRC (10" round traffic rated box)	33DNP Lavender
Flow Sensor	Data Industrial	IR-220P	n.a.

LANDSCAPE DESIGN APPROVAL LIST:
Place on Construction Document Cover Sheet (sample template)

Description	Information	Approval / Personnel Authorized Signature(s)		Date(s)
SUBMITTAL DESIGN PHASE	Project: Location: Phase:	____Grounds Maintenance ____Architect	_____ Sign _____ Title	Submitted: / /
DESIGN DEVELOPMENT PHASE	NOTES:	____Grounds Maintenance ____Architect	_____ Sign _____ Title	Submitted: / /
CONSTRUCTION DEVELOPMENT PHASE	NOTES:	____Grounds Maintenance ____Architect	_____ Sign _____ Title	Submitted: / /
DSA BACKCHECK FINAL	NOTES:	____Grounds Maintenance ____Architect	_____ Sign _____ Title	Submitted: / /

IRRIGATION BACKGROUND DESIGN DATA Place on Irrigation Plan (sample template)

Description	Information	Authorized Personnel	Authorized Signature(s)	Date(s)
IRRIGATION PRESSURE VERIFICATION Location: _____ _____ _____ REVIEWED IRRIGATION MASTER PLAN	_____ Pipe Type _____inches _____Static PSI _____Working PSI	___ City of Moorpark ___ Campus Maint. Personnel ___ Fire Dept. ___ Other	_____ Sign _____ Title _____ Sign _____ Title	
FINAL IRRIGATION PLAN ACCEPTANCE	NOTES:	___ Campus Staff ___ Landscape Arch't ___ Rainmaster Representative	_____ Sign _____ Title	