

**Mt. San Jacinto Community College District
Facilities Master Plan
Project Description**

Mt. San Jacinto Community College District's District Wide Facilities Master Plan (FMP) will guide the District's future growth and development incorporating the following goals:

- Provide quality facilities to accommodate the projected growth and demand for increased programs and services as articulated in the District's Educational Master Plan.
- Develop a full complement of campus facilities associated with a mature community college.
- Create campuses that strongly support student learning and contribute to a high standard of student life.
- Create campuses and facilities that promote increased student-faculty interaction and interdisciplinary and collaborative learning.
- Create visually appealing campus environments, that are attractive and that further enhance the District's image and connections with its communities.
- Create campuses that provide for the efficient use of staff resources for administrative support, student services, maintenance and operations.
- Create safe and healthy environments for all users of District facilities and grounds.
- Create campuses that promote the effective and efficient use of natural resources and that are environmentally sustainable.

LPA Inc., will assist the District in the development of the of the FMP and provide the following scope of services:

1. Develop Implementation Plan

Develop an implementation plan for the Facilities Master Plan (FMP) planning process. Plan will include recommendations for various committees and consensus groups and an initial project schedule including an outline agenda for the proposed meetings and workshops. Review and confirm the overall vision and goals of the FMP as stated above and align the objectives with the proposed projects in the Education Master Plan.

2. Reconnaissance

Review all available district documents including but not limited to:

Education Master Plan
Previously completed Facility Master Plans

Previously completed Environmental Impact Reports
Previously completed Facilities Assessment Reports
District Space Inventory
District Five Year Construction Plan
Previously completed topographic surveys/maps including information related to setbacks, easements, existing utilities and local conditions.

3. Workshops and Meetings

Meet with various constituent groups including the FMP Steering Committee, the Board of Trustees, District Administration and related sub-committees as necessary to obtain program validation, program consensus, program approval and FMP approval. LPA, Inc. is to document goals/objectives, program parameters, planning/building solutions and management strategies at each phase of planning.

Following number of meetings is anticipated:

District Administration – three (3) meetings
FMP Steering Committee – ten (10) workshops/meetings
Public Forums – two (2) meetings
Board of Trustees – two (2) meetings

4. Program Document

Provide a program document that validates the initial programming assumptions regarding spaces to be provided in immediate projects being considered for construction and funding. Prepare a final document that summarizes the following tasks and includes a written narrative, schedule, diagrams, tables, and initial budget. Tasks associated with this phase of the plan development include:

- A. Create a space use matrix by department/use for every assignable room on campus based on Report 17 – Space Inventory Report (to be provided by the District).
- B. Create project list for each campus/center/outreach location four (4) total that lists project name, approximate assignable square feet (ASF) and Gross Square Feet (GSF) and initial estimated construction and project cost.
- C. Confirm District project priorities and validate them with the District's Five Year Construction Plan.
- D. Prepare initial site analysis diagrams including:

Existing Location and Setting

Exterior Open Space (courtyards, malls, plazas)
Parking and Vehicular Circulation
Pedestrian Circulation
Campus Gateways and Edges
Interior Building Spaces
Athletic/Recreational fields

5. Site and Infrastructure Digital Data Base

Provide a site and infrastructure digital database to accurately reflect existing conditions that shall include researching relative site information such as record maps, improvement plans and general design criteria. Tasks associated with this phase include:

A. Aerial Surveys

Topographic mapping for the project to be done with aerial photography and mapping. All mapping to be done in Imperial Units to a scale of 1 inch = 100 feet with a two (2) foot contour interval. A less dense contour may be shown in areas of heavy vegetation. A digital photo with a 0.5-foot pixel resolution is to be provided for the undeveloped sites. This mapping will be compiled to the Base Map described below. It is assumed that all four sites would be flown at the same time.

B. Ground Survey

(1.) Densify the aerial mapping by providing a ground survey. The survey will locate evidence of underground utilities such as manhole lids and paint marks by others. Measure to the inverts of pipes that can be safely accessed, attempt to identify the pipe material and diameter from the ground surface and compile this information into the Base Map.

(2.) Provide a Base Map that will be a compilation of the aerial mapping and the data collected from the ground surveys. Plot four (4) easements per site based on preliminary title reports and easements deeds to be provided by the District. The horizontal control system will be based upon the State Plane Coordinate System 1983 using CORS information. The vertical control will be based upon NAVD 1988 datum.

(3.) Develop a digital data based in a geographic information system (GIS) database and/or AutoCAD format to reflect existing ground and infrastructure conditions at the four (4) sites. A combination of aerial topographic survey, ground GPS survey, and record plans review should be used to develop a comprehensive Base Map for each site. Base Map compilation at

the undeveloped sites will be limited to topographic/contour mapping since utilities may not be present on site. The GIS should contain the following features and functionality:

- a. Topographic Base Map: buildings, contours, vegetation, infrastructure etc.
- b. Digital, graphical representations of the water, sewer, storm water, natural gas, telecommunications systems and electrical systems.
- c. Attribute/tabular information about the size, material, rim and invert elevations, and installation data of existing utilities (additional fields can be added as needed).

6. District Wide Facilities Master Plan (FMP)

A. Technical Master Plan (TMP)

Prepare a TMP that defines space/building needs as determined by the Educational Master Plan, detailed discussions with all constituent groups and that meets the stated goals. Tasks associated with this include:

- (1.) Develop planning principles that will guide future development.
- (2.) Create three (3) alternate campus site studies including coverage for academic and support buildings, childcare facilities, performing arts venues, recreation and athletic courts and facilities and parking.
- (3.) For each campus/center/outreach site prepare the following FMP diagrams:
 - a. New Building Locations and Massing
 - b. Renovation vs. Demolition
 - c. Open Space Structure
 - d. Parking and Circulation (including public transportation, bike, emergency and service)
 - e. Pedestrian Circulation
 - f. Land Use – Recreation/Athletic, Child Care, Performing Arts Venue
 - g. Program Adjacencies
- (4.) Prepare Building Design Standards
- (5.) Provide base map information and coordination with the Landscape, Grading/Drainage, Parking and Circulation, Utility Master Plan, and Signage and Wayfinding Master Plans.

B. Landscape Master Plan (LMP)

Prepare a LMP to define the character of each campus/center/outreach center.

- (1.) Prepare a LMP for each of the four (4) District sites.

(2.) Prepare Landscape Standards:

- a. Benches
- b. Tables and Chairs
- c. Recycle containers
- d. Trash Cans

C. Grading/Drainage Master Plan

(1.) Grading Master Plan (GMP)

Prepare a GMP that will identify potential pad elevations, surface grades, drainage patterns, vehicular access, accessible pedestrian access paths, athletic fields, and preliminary earthwork analysis.

(2.) Drainage Master Plan (DMP)

Prepare a DMP that will identify and establish pre- and post-development on-site hydrology issues related to the 10, 25, and 100-year storm events. The DMP will evaluate the capacity of on-site storm drain systems to carry post development flows and the preliminary locations and sizing of on-site storm drain and potential detention facilities. The DMP will address concerns and regulations centered on storm water quality requirements and provide recommendations for best management practices (BMPs) for each site.

D. Parking and Circulation Master Plan

(1.) Parking Master Plan (PMP)

a. Parking Inventory

Complete parking supply and utilization counts for the two existing campuses – San Jacinto and Meniffee Valley – including all on-site and off-site facilities. Collect information from the District regarding parking pricing, peak days and times existing full time equivalent (FTE) information, and existing building square footage.

b. Future Parking Demand

For the two (2) existing campuses, estimate the parking demand generated by the existing campus on a FTE and square foot basis. Use these rates to develop a parking projection model, which will be applied to future anticipated growth. Identify the appropriate number of parking spaces needed to serve the projected increase in student enrollment and/or facility size.

For the two new campuses, utilize FTE Parking generation rate and/or observed rates at the existing campuses to calculate parking demand. Utilize enrollment projections for FTEs and proposed square footage from District to assess parking. Based on this information, estimate the parking demand generated by

the campus during its opening year on a FTE and square footage basis. Use these rates to develop a parking projection model that will be applied to future growth. Identify the appropriate number of parking spaces needed to serve the projected increase in student enrollment and/or facility size.

(2.) Circulation Master Plan (CMP)

a. Site Investigation

For the two (2) existing campuses, visit the sites to verify existing parking areas, current site layout, and identify control devices at the intersections around campus. Identify and document any sight-distance issues and potential hazards at the current access points and at up to two (2) additional proposed access points.

For the two (2) new campuses, upon receipt of the conceptual master plan, visit the sites to identify existing roadways and control devices, as well as site distance issues and potential hazards. Identify and document any transit routes and alternatives mode facilities proximate to the proposed access points.

b. Review Conceptual Site Plans and Develop Recommendations

Review any conceptual plans developed during planning process and identify any potential circulation and parking issues due to their alignment plans.

(3.) Technical Memoranda

Summarize the results of the above tasks into a written narrative and associated tables to be included in the comprehensive District FMP.

E. Utility Master Plan (UMP)

Prepare narrative and a schematic utility plan which identifies off-site utility connections and in coordination with the drainage master plan, on-site water, sewer, electrical, natural gas and communications. Evaluate and determine the capacity of existing systems as well as potential flows and capacities for future expansions. Provide a composite utility master plan including all utility infrastructures.

(1.) Water Systems

The existing and future water systems are to be analyzed for system demands, pressures, system layout and connections to locally provided water systems. Determine necessary fire flow, emergency storage and backflow requirements. Provide recommendations for up grading (size and material) existing waterlines and installation/layout of new waterlines to accommodate future development.

(2.) Sewer Systems

The existing and future sewer systems are to be analyzed for system flows during dry and wet weather flow conditions. For the new sites, topography and piping layout analysis is to be conducted to determine if the system can operate by gravity or if pressure/lift stations will be required. Provide recommendation for upgrading (size/material) existing sewer facilities and installation/layout of new gravity or pressure sewer pipes/lift stations to accommodate future development.

(3.) Electrical Service and Distribution System

The electrical systems at the two existing campuses are to be analyzed for capacity and flexibility and the capacity to serve future facilities planned for the campuses. Total anticipated load requirements of existing and proposed facilities are to be estimated. Requirements for additional capacity beyond that indicated in the master plan shall be estimated through meetings with District personnel. Necessary coordination with the utility providers for each site will be carried out to review any modifications of capacity required by the service provider to support planned expansion. Options available with the utility provider for providing a redundant service to the campuses are to be evaluated. Methods of providing back up power for critical loads on each of the campuses are to be evaluated. Load flow and short circuit studies are to be conducted. A single line diagram and schematic site distribution plan based on load information is to be prepared. Proposed routing of utility ducts are to be established by coordinating with other major site services.

(4.) Natural Gas System

The gas systems at the two existing campuses are to be evaluated and modeled to determine existing capacity. Future requirements are to be determined based on standard planning factors and total required capacities will be determined based on future planned facilities. New campus sites system needs are to be evaluated based on master planned facilities. Schematic options to provide necessary increases in capacity are to be provided.

(5.) Communication Systems

Review existing and future communication applications and needs with District personnel. Establish design criteria for inter-building pathway systems that will be used as a basis for the infrastructure improvements. Develop criteria to address voice, data, and video inter-building cable requirements for existing and proposed

facilities. Prepare a schematic distribution plan showing existing and proposed pathways.

Following utilities are to be reviewed outside of this FMP: Central Plant and Chilled Water and Heating Hot Water Distribution, and Site Lighting.

F. Phasing Master Plan

Provide a Phasing Master Plan that addresses the following:

- (1.) Alternatives for maintaining student/staff/faculty and visitor, pedestrian and vehicular access.
- (2.) Diagram that establishes project scope of work including grading and demolition limits.
- (3.) Utility relocation requirements associated with both building projects and stand-alone utility projects.
- (4.) Diagram that identifies potential construction staging areas.
- (5.) Identify temporary space needs as buildings are taken out of services and identify temporary improvements required to support interim project stages.

G. Implementation Schedule

Provide a recommended implementation schedule that includes the following:

- (1.) Overview schedule that includes project timelines linked to phasing considerations, budgets and funding targets.
- (2.) Schedule to be created in Microsoft Project.
- (3.) Individual project schedules to include:
 - a. Overall phases of design
 - b. Funding of professional fees
 - c. Agency Processing
 - d. Construction Funding
 - e. Construction Duration
 - f. Project Occupancy

H. Rough Order of Magnitude (ROM) of probable costs

Provide a rough order of magnitude of probable construction cost that links the FMP and funding sources.

I. Perspective Renderings

Provide one (1) perspective rendering for each campus site - four (4) total. This is in addition to the illustrative facilities and landscape master plans.

J. Signage and Wayfinding Master Plan

- (1.) Assess current signage at San Jacinto and Meniffee Valley campuses and list any and all design concerns and considerations related to signage.
- (2.) Review current local, State, and Federal codes/ordinances, and interpret applicability to the project.
- (3.) Prepare two (2) conceptual design options for the established sign types. It is assumed that a consistent District signage conceptual design will be created to be used for each campus. Established sign types to include:
 - a. Campus identification elements at primary and secondary campus entries.
 - b. Code, Fire, Life Safety and ADA required signage
 - c. Traffic control/regulatory signage
 - d. Information Kiosks
 - e. Decorative Graphics and Banners
 - f. Donor recognition elements
 - g. Prepare sign location plan and sign legend for each for the four (4) campuses

7. 24 Draft copies / 24 Final Copies

Provide 24 draft copies and 24 final copies of the FMP in hard copy and provide an electronic copy of the FMP as directed by the District.

8. Final Product

Provide a draft and final District Facilities Master Plan to include, but not limited to:

- Executive Summary
- Introduction
- Planning Context and Determinants
- Educational Master Plan Review per Facilities Master Plan and College Mission and Vision
- Campus Background History, Status and Dynamics
- Goals of Physical Development
- Planning Principles
- Technical Master Plan
 - Land Use Designations
 - Capacity and Massing
 - Building Design Standards/Guidelines

Landscape Master Plan
Signage and Wayfinding Master Plan
Grading/Drainage Master Plan
Parking and Circulation Master Plan
Utility Master Plan
Implementation Schedule
Statement of Probable Costs
Campus Illustrations

Schedule: (Dates to be determined with District staff)

Project Orientation	May 2010
Planning Meetings	6-8 months
Draft Plans Developed	2 months
Public Forums and Comment	1 month
Plan Review and Discussion	2 months
Final Plan Presentations	2 weeks
Plan Adoption by Board of Trustees	1 meeting