

The current campus infrastructure has been in place for approximately thirty (30) years. On-site utilities include storm drainage, sanitary sewer, domestic water, fire system water, natural gas, electrical, telecommunications, data, fire alarm, and CCTV lines. The routing of all the major campus utilities generally follows the pathway of the inner loop road of the campus.

Civil Site Utilities — The civil site utilities are in fair shape, with minor repairs and upgrades being required during the execution of the master plan. The existence of transite pipe is anticipated, and will require mitigation when encountered during the construction/repair process. The pathway for the drainage and sewer system generally follows the interior loop road of the campus, with extensions in the north/south direction for main lateral line extensions to each facility. Domestic water is supplied by the Santa Clara Water Department. The fire water system is also supplied by the Santa Clara Water Department and is distributed through post-indicator valves (PIV's) located at each building. These water lines also follow the pathway of the inner loop road of the campus. Available water supply and water pressures appear adequate throughout the campus to handle the anticipated complete master plan buildout.

Existing Central Plant HVAC System — The existing Central Plant system currently services the heating and cooling needs of the Main Building, and the heating only of the adjacent Gymnasium on the campus. The design utilizes heated and chilled water piped through boiler/chiller/cooling tower assemblies to the appropriate facility. With the slated demolition of the Central Plant occurring concurrently with the Main Building demolition, there is a need to determine whether or not the existing (2) 5,230,000 BTU/Hr low-pressure boilers, (2) 350-ton chillers and (2) cooling towers are to be salvaged and re-utilized elsewhere in the District. A complete heating/cooling system will be required at the Gymnasium facility to replace the current connection prior to the demolition work commencing on the Central Plant.

Electrical System — The current electrical system is aging and will require moderate upgrades and repairs to accommodate the execution of the master plan. The 12 KV service to the site is supplied by Silicon Valley Power, City of Santa Clara, and enters the site immediately south of, and adjacent to, the existing main campus entrance. The main switch gear panels are located in the far northeast corner of the adjacent Yahoo! parking area (owned by Mission College and leased to Yahoo!). The power feed splits into two (2) loops which supply the south/west and north/east portions of the campus, with the exception of some minor crossover. There are a series of numbered manholes which are interspersed throughout the campus. There are multiple transformers (both exterior and interior) and sub-panels (interior) located throughout the campus site and buildings. Electrical services to the various facilities are 277/480V and 120/208V, 3-phase 4-wire. The manholes are subject to groundwater influx, which has damaged some of the cable support brackets. Overall power supply to the campus appears adequate to support the complete master plan buildout. There is currently a 725 KW Williams & Lane diesel generator, powered by a Detroit Diesel engine, which automatically activates and supplies lighting to various interior and

exterior portions of the campus during emergency power outages. With the anticipated demolition of the current Central Plant, the relocation and re-use of this generator assembly will be required by the master plan and located in the new Corp Yard/Facilities project.

Fire Alarm System — The fire alarm system is currently comprised of a number of disjointed systems. The primary system in the Main Building is by Simplex, but other buildings have either Notifier or Fire-Ex systems. These systems are monitored by HMS, the monitoring service for the campus, and contact local fire authorities during an emergency event. Several buildings currently have their own stand-alone systems which, when activated, do not set off the entire campus system, but only the alarm in the specific building. An upgrade of this system is anticipated as part of the master plan. A recent study has been performed by the District Security/Fire Alarm consultant. Among the study's recommendations is that the college install a Notifier networked, fully-addressable fire alarm, detection, and notification system. The study also suggests the concurrent replacement of the main panel and installation of sub-panels in each District building. There is currently a state-funded fire alarm replacement project in the design phase, with completion anticipated throughout the campus within the next 2-3 years.

Telecommunications/Data Infrastructure — Current capacity of these systems is at its maximum and will require immediate expansion and/or replacement prior to commencement of any remodel or new construction work. One of the requirements of the master plan is to combine a replacement voice/data infrastructure and consolidate the WVMCCD District I.S. staff and campus infrastructure into a new permanent facility on campus adjacent to the front entry sequence. In the current topology, the primary conduits route around the Main Building through maintenance holes at each corner of the building. Conduit routes to other buildings fork off from the maintenance holes around the existing Main Building, with additional pull boxes and conduits feeding each discrete location. All infrastructure cabling (voice/data) homes back to the MPOE/MDF in the Main Building. Because of the proximity to the Main Building, it is not clear if the surrounding conduit infrastructure can be preserved when the building is demolished. Since the main point of connection (MPOE/MDF) will be demolished, the determination is that the conduits around the Main Building will also be rendered unusable and that a completely new low voltage campus infrastructure will be required. Current routing, conduit counts, and space availability on the Mission College campus have recently been documented through a verification project.

It is imperative that the new infrastructure be constructed and fully functional prior to any termination/demolition activities on the campus. This includes, but is not limited to, the following:

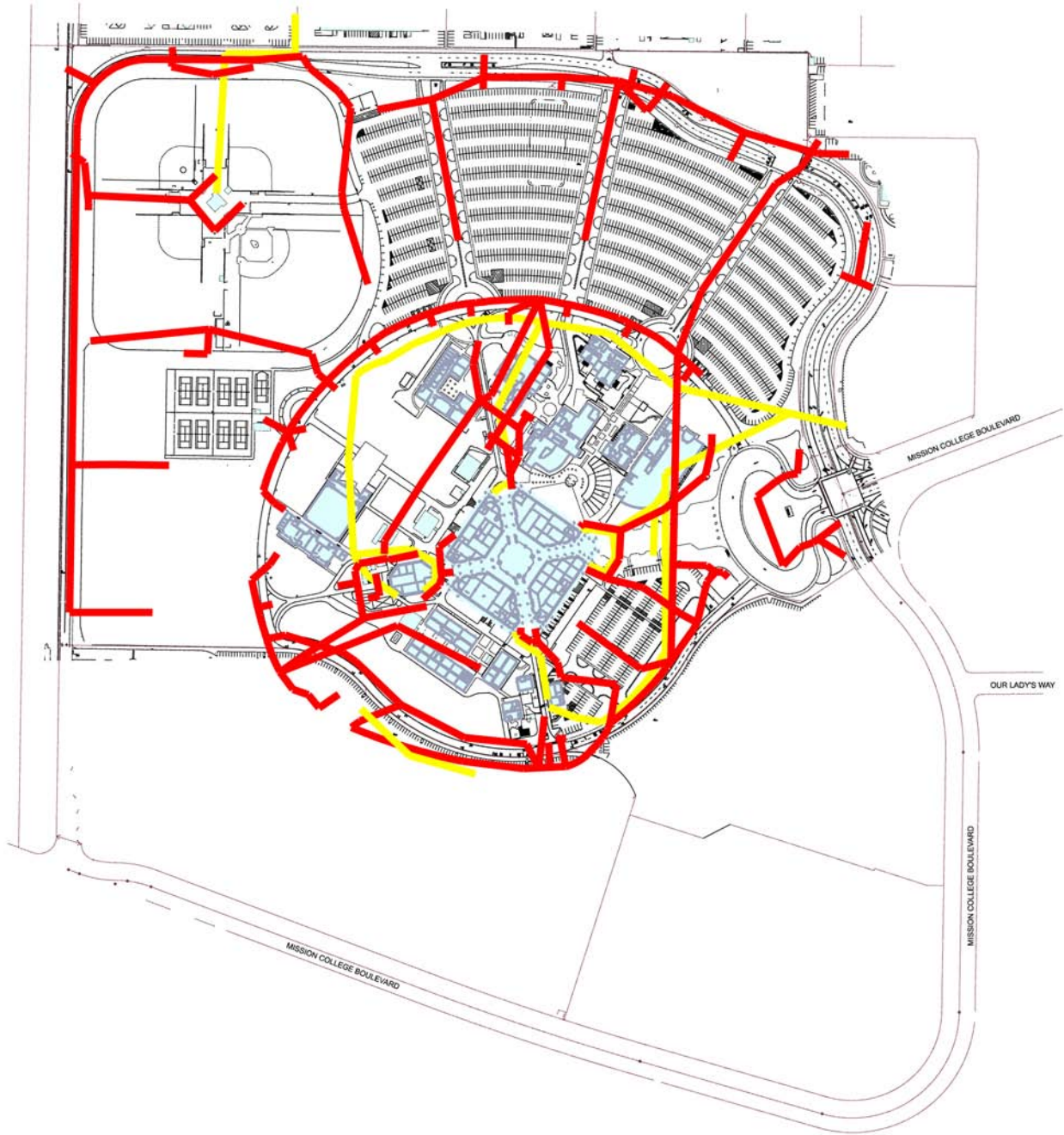
- Design/Construction of the new conduits/maintenance holes
- Installation of new fiber/copper backbones to all campus buildings
- Installation of new, or relocation of existing data switching equipment
- Cutover to new data connectivity

- Installation of new AT&T copper backbone
- Cut over of new data T1 circuits
- Installation of new, or relocation of existing voice/voicemail equipment
- Cutover to new voice connectivity on campus
- Cutover to new voice T1 circuits
- Cutover of new 1MB lines on campus (fax, alarm, modem, etc.)

Security Systems – A draft Security Master Plan, dated May 2007, was performed by Catalyst Consulting Group, Inc., the District’s security consultant. These preliminary documents provided the District with a comprehensive analysis of both the existing on-campus and district-wide existing security systems and recommended modifications. Currently, the systems are varied and operate in a facility specific manner. Among the options proposed to the District are the following:

- District-wide Access Control and Alarm Monitoring System (ACAMS)
- Digital Video Surveillance System (DVSS)
- Integration of a complete Emergency Communication System (ECM) combining the two (2) systems noted above
- Improved site lighting within the parking areas, pedestrian pathways, and building areas
- Mechanical key control locks for better facilities access control
- Improved landscaping models to allow for better visual control

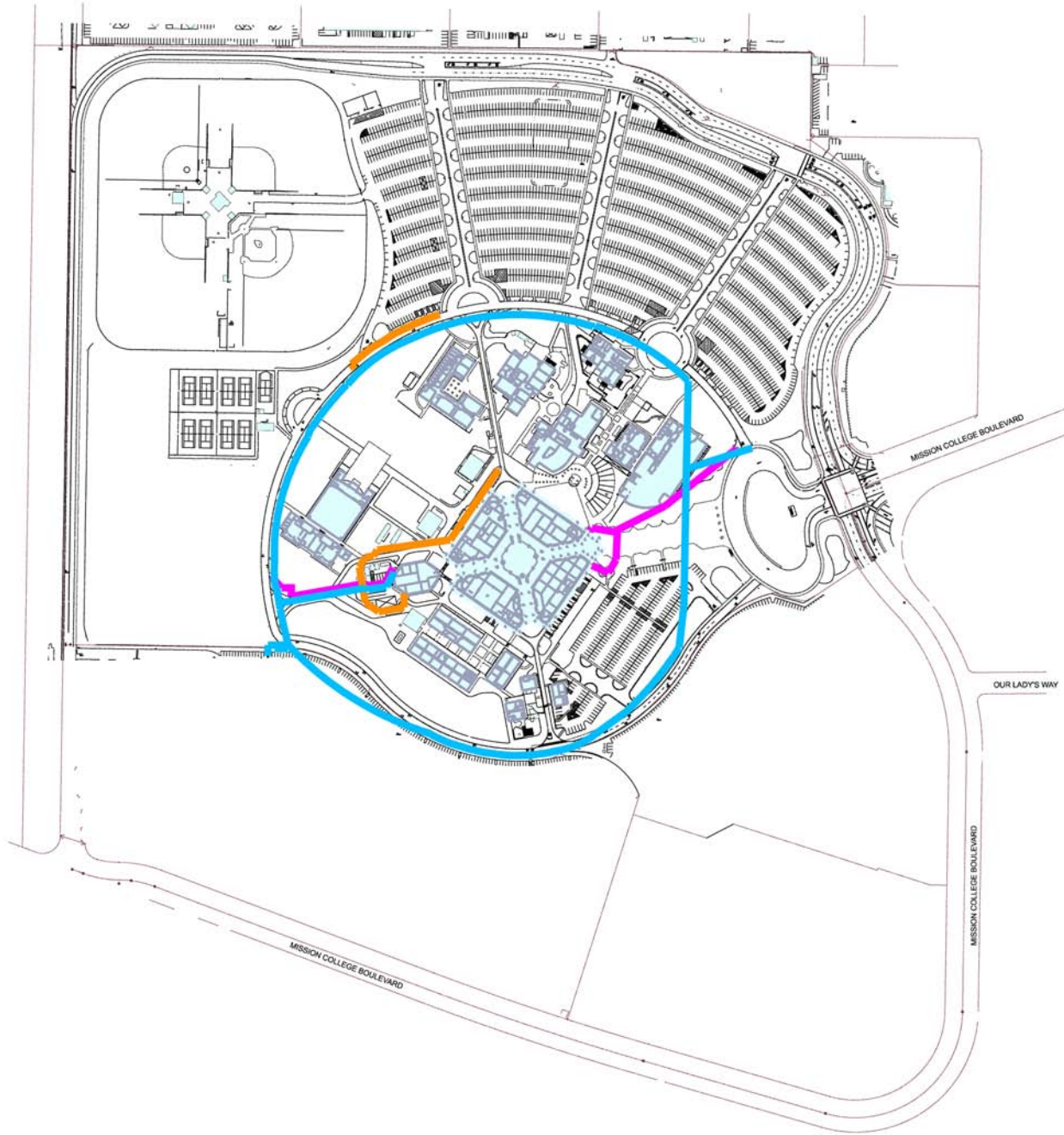
The District is currently reviewing the options presented in this report. No final decision has been made to date on the scope of work desired.



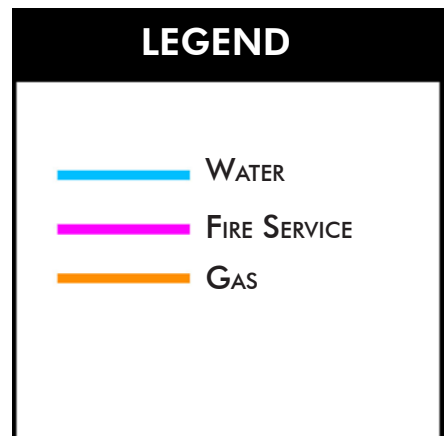
LEGEND

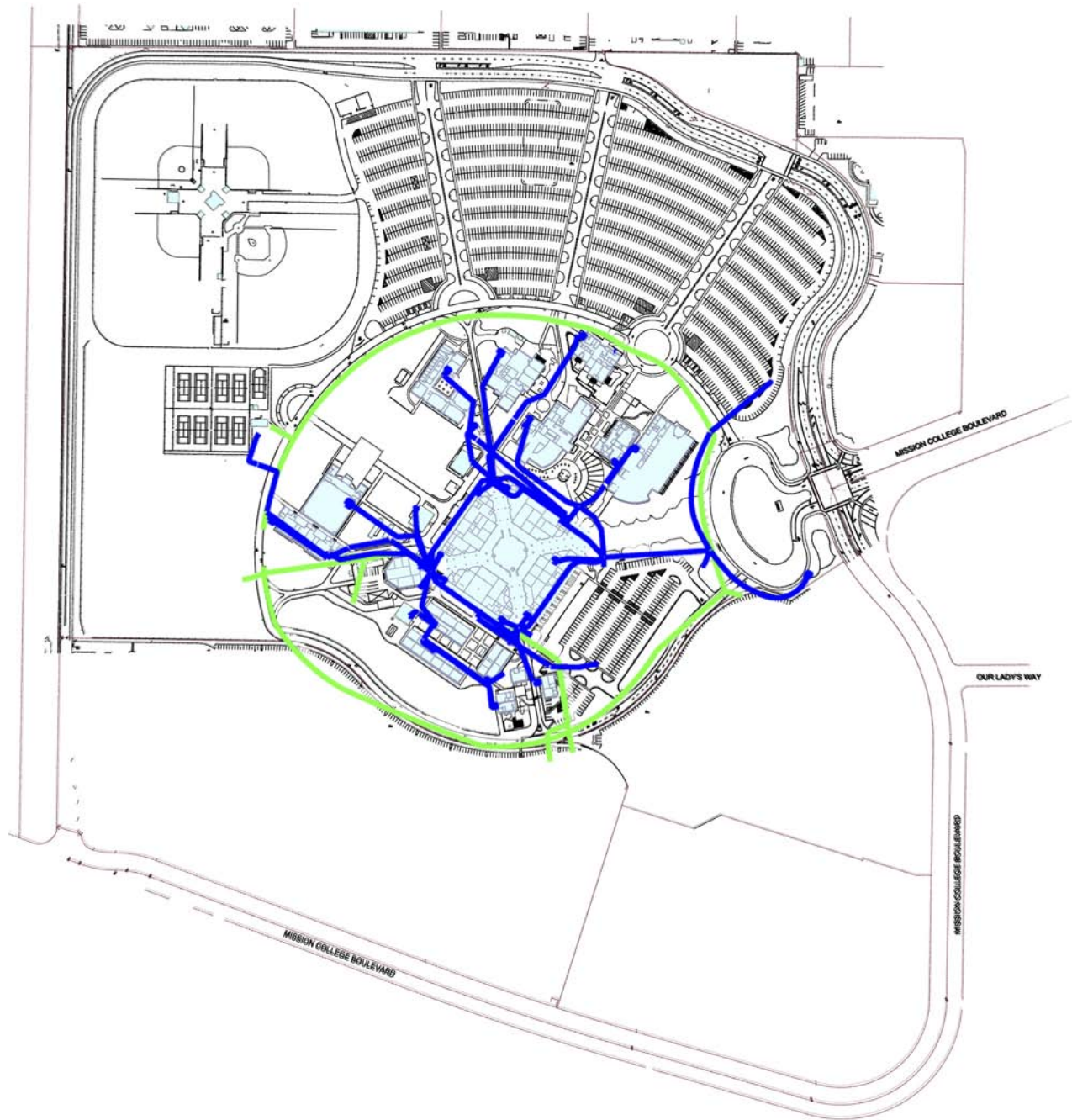
-  STORM DRAINAGE
-  SANITARY SEWER

SANITARY SEWER & STORM DRAINAGE UTILITIES





WATER, FIRE SERVICE & GAS UTILITIES





LEGEND

 ELECTRICAL

 TELECOM

ELECTRICAL & TELECOMMUNICATIONS UTILITIES

The current building inventory for Mission College includes a total of approximately 435,000 gross square footage (g.s.f) of building area, comprised of both permanent and relocatable buildings. The following is a list of the existing building inventory:

Main Building	235,066 g.s.f.
Central Plant	2,478 g.s.f.
Relocatable Buildings	30,336 g.s.f.
Hospitality Management	15,283 g.s.f.
Gymnasium	19,887 g.s.f.
Locker Room Building	11,365 g.s.f.
Campus Center	39,421 g.s.f.
Library/AV Building	38,932 g.s.f.
Child Development Center	10,234 g.s.f.
Science Building	32,442 g.s.f.
<i>Total Building Area</i>	<i>435,444 g.s.f.</i>

The buildings indicated in **bold type** above are slated for either demolition (Main Building and Central Plant) or possible re-use (Relocatable Buildings) elsewhere within the District. Of the twenty six (26) relocatables on site, only two to four (2-4) units are in re-usable condition. In 2003, 3D/I International submitted the Facility Condition Assessment Report to the District. 3D/I International performed the corresponding study to assess and document the facility repair, rehabilitation, and modernization requirements relative to the District at that time. Independent observation during the master plan preparation process, along with discussion with the District's facilities staff and consultants, has corroborated the findings of the study. The following information represents the current Mission College facilities and the determination of their status within the context of the master plan.

Current Facilities Inventory/Approximate Construction Dates:

- Main Building/Central Plant
1978
- Mission Transportables (MT) - MT2 through MT24
1978
- Hospitality Management
1983
- Gymnasium
1994
- Childcare Portable Bldg. - MT17
1999
- Campus Center
1999
- Mission Transportables (MT) - MT 25,26
2000
- Information Systems Transportable (MT)
2000
- LRC and A/V Bldg.
2001
- Child Development Center
2002
- P.E. Phase II (Locker Rooms)
2003
- Science Bldg.
2004



Main Building — The Main Building on campus contains assembly rooms, classrooms, instructional labs, and office area which total approximately 235,000 g.s.f. of area. The majority of the utility infrastructure systems (electrical, plumbing, fire alarm, etc.) are reaching the end of their useful lifespan. The main skylight and roof assembly at the atrium is leaking. A recent seismic study of the building indicated that it would take a tremendous amount of effort and money to upgrade the facility and, in fact, it would be more cost effective to demolish and replace the building with new construction. The District approached the California Community College Chancellor's Office (CCCCO) about this issue. The CCCCCO agreed with the District's analysis and supported the replacement of the Main Building with new construction. The Main Building will serve as interim housing/ swing space during the Sequence I construction period and will be demolished during the latter stages of this phase of the master plan. This demolition is also mandated by the CCCCCO through the District's application for matching State funding for the new construction. Concurrent with this demolition is the demolition of the adjacent Central Plant facility, which provides HVAC to the Main Building, as well as heating only to the Gymnasium. One of the secondary effects of the Central Plant demolition is that a complete HVAC system, including both cooling and heating, will need to be installed directly at the Gymnasium.



Mission Transportables (MT) MT2 through MT24 — Originally constructed in 1964, and located on the campus in 1978, the Mission transportables contain approximately 24,600 g.s.f. of total area. These portable classroom structures are currently in poor shape and have reached the end of their useful lifespan. They are slated for demolition and replacement with a new building as part of the Phase I construction of the master plan. The District will apply for matching State funding for the demolition and new construction required for replacing the existing facilities.



Hospitality Management (HM) — Originally constructed in 1983, this facility contains approximately 15,300 g.s.f. of total area. Overall condition of the facility indicates normal wear for a building of its age. Review of the facility indicates that the building does not require demolition and replacement, but should undergo a comprehensive modernization. The master plan indicates that this program has high growth potential, especially within the public-private sector. An addition will also be required in order to further expand the current HM program and enable the desired collocation of the Retail Floristry program to this facility if feasible. Some degree of upgrades to all major building systems and most of the interior finishes will be required. The structural system will likely require minor seismic upgrades. Additionally, any potential addition to the building may have further structural impacts

or requirements. It is recommended that a seismic review be performed by a licensed engineer prior to the commencement of any work on this facility. The HVAC system is provided by rooftop package units which are nearing the end of their useful lifespan. The College replaced the existing roof system in 2002 and it appears to be performing well. The exhaust fans in the rest rooms will require replacement. However, the lighting and fire alarm systems are aging and problematic and should be replaced. The gas supply to the facility has been increased and will require additional upsizing based on the potential building addition. Restroom fixtures and partitions will require replacement and modifications for ADA access. Current electrical power of 120/208V and 277/480V, 3-phase, 4-wire to the facility is adequate for operational needs. There is currently a fire alarm system, but no fire sprinkler system in this facility. A fire sprinkler system will likely be required to allow for any addition(s) to the building.

Gymnasium — The Gymnasium, completed in 1994, contains approximately 20,000 g.s.f. of total area. Due to its relatively recent construction period, all major structural, utility infrastructure, and finish assemblies are in good operational condition. The main issue of concern with this facility is the existing HVAC system. Currently, the Gymnasium does not have an air conditioning component. It receives heating from the gas-fire boilers located in the Central Plant facility, with fresh air supplied by air handling units. Due to the impending demolition of the Central Plant, the construction of a self-contained heating/cooling system will be required for the Gymnasium. This work will be required during the initial sequence of construction of the master plan and needs to be completed and operational prior to the demolition of the Main Building and Central Plant facilities. The electrical system is fed through a pad-mounted transformer which delivers 120/208V and 277/480 V, 3-phase, 4-wire power. The building contains both a fire alarm system and fire sprinkler system.

Child Care Mission Transportable (MT) MT 17 & MT 18 — Originally constructed in 1982, and located on the campus in 1999, this portable building contains approximately 1,900 g.s.f. of total area. Showing normal wear for a building of its age, it is currently in poor condition. In order to accommodate the anticipated construction sequencing of the master plan, the vacating of the existing facility will be required. The decision to vacate the existing building would be in favor of an addition to the permanent Child Development facility located along the northern boundary of the campus. A third option of the master plan also accounts for the potential construction of a new child care facility located directly east of the existing Child Development facility. Play yard area capacity should be carefully considered for all of the options listed above.





Campus Center — Constructed in 1999, the facility contains approximately 39,500 g.s.f. The facility houses the campus food facilities, bookstore, meeting rooms, offices, and the campus police functions. The condition of this building is generally very good other than some ongoing problems with the electrical/lighting controls and operation. Due to several shorts in the system, the smaller breakers in the panels do not trip, but the main breaker for the building does. Power to the entire building is shut down when this occurs and efforts continue towards resolving this troublesome issue. Ongoing problems with the lighting system are also present. The original consultants for the lighting design, and even the lighting controls manufacturer, have not been able to provide a long-term remedy for the issues, even after examination of the problem. The extreme number of light bulb sizes and ballast configurations within the building are problematic for the facilities and maintenance staff. There is a computer server room located in the facility which may require additional cooling capacity as the campus needs grow. All other structural, utility infrastructure, and finish assemblies are in very good shape. This facility will require minimal modifications or upgrades as part of the master plan. HVAC is provided by a combination of gas-fired boilers and rooftop condensing units. Fresh air is provided by air handling units. The electrical system is fed through a pad-mounted transformer which delivers 120/208V and 277/480 V, 3-phase, 4-wire power. The building has both a fire alarm system and fire sprinkler system.

Mission Transportables (MT) MT 25 and MT 26 — These relocatable buildings, occupied in 2000, are located adjacent to portable buildings MT 2-24, and are in reasonably good condition. These buildings are slated for removal as part of the master plan for the college, but may have potential use elsewhere within the District. At the District's discretion, they may also provide a source of revenue generation through their sale to another educational institution.

Information Systems Transportable — Also occupied in 2000, this relocatable building houses approximately 3,500 g.s.f. of support office and data equipment for campus I.S. functions. Similar to relocatable buildings MT25 & 26, they may also provide a source of revenue generation through their sale by the District to another educational institution. In order to mitigate telecom infrastructure costs, the master plan anticipates the relocation of this group to a new I.S. facility located near the main campus entry, adjacent to the main point of entry (MPOE) of the campus telecom services. Collocation with the campus police services group within this facility is anticipated within the master plan for the campus.

P.E. Phase II (Locker Rooms) — Completed in 2003, this 11,365 g.s.f building houses student and faculty lockers, showers, and restrooms. The overall condition of the facility is very good and will require minimal work. HVAC is provided by rooftop units and various exhaust fans, along with a gas-fired boiler. The electrical system is fed through a pad-mounted transformer which provides 120/208V and 277/480V, 3-phase, and 4-wire power. Fire alarm is controlled with a Notifier 500 panel which is addressable, and monitors the building's fire sprinkler system.

Learning Resource Center and A/V Building — Constructed in 2001, this 38,932 g.s.f. facility is comprised of two (2) separate buildings. The overall condition and performance of this newer facility has been very good to date, although there are minor maintenance issues due to the multiple number of light bulb and ballast configurations within the many different light fixture types within the facility. General condition and operational issues of all other utility and finish systems is appropriate for the age of the building. HVAC is provided through a combination of gas-fired boilers and rooftop condensing units. Fresh air is provided by air handling units. The electrical system is fed through a pad-mounted transformer which delivers 120/208V and 277/480 V, 3-phase, 4-wire power. These buildings contain both a fire alarm and fire sprinkler system.



Science and Technology Complex — Constructed in 2004, this 32,442 g.s.f. building is constructed with concrete panels and cement plaster systems. The general condition and operational capacity of its utility and finish systems is good to very good. The exterior wood slatting is aging quickly and requires some maintenance. HVAC is provided by roof top air handlers and gas-fired boilers. Multiple exhaust fans/hoods are utilized for lab ventilation purposes. The electrical system runs through a pad-mounted transformer which delivers 120/208V and 277/480V, 3-phase, and 4-wire power to the building. The building utilizes a Class 'B' addressable fire alarm system, and has a complete fire sprinkler system throughout the facility.



Child Development Center — The 10,234 g.s.f. facility, completed in late 2001, is in very good condition and exhibits normal wear for a building of its age. In order to accommodate the anticipated construction sequencing of the master plan, the addition/remodel of this facility to incorporate the Child Care facility relocation from the south side of the campus is a strong possibility. Play yard area capacity should be considered carefully for the option listed above due to legal and operational requirements. The HVAC is a ducted system with rooftop boilers. Fresh air is supplied by rooftop package units. The electrical system is through a pad-mounted transformer which provides 120/208V and 277/480V, 3-phase, 4-wire power. This facility also has a diesel generator for emergency power requirements. A fire alarm and fire sprinkler system are both incorporated into this facility.



VEHICULAR CIRCULATION AND PARKING

Vehicular access is from Mission College Blvd. entering the site via the main entry loop in front of the campus on the east side of the property. Student parking (Lots A-D) is located along the northern portion of the site, while staff parking (Lot E) resides in the southeast quadrant of the campus. There are additional smaller parking locations scattered throughout the campus. Reflected below is a listing of the current parking inventory:

Staff Parking (Lot 'E')	314 stalls
Student Parking (Lots 'A' through 'D')	2,238 stalls
Accessible Stalls	31 stalls
Child Care	19 stalls
30 Minute Parking	27 stalls
Special Permit Parking	12 stalls
<i>Total Parking Stalls</i>	<i>2,641 stalls</i>

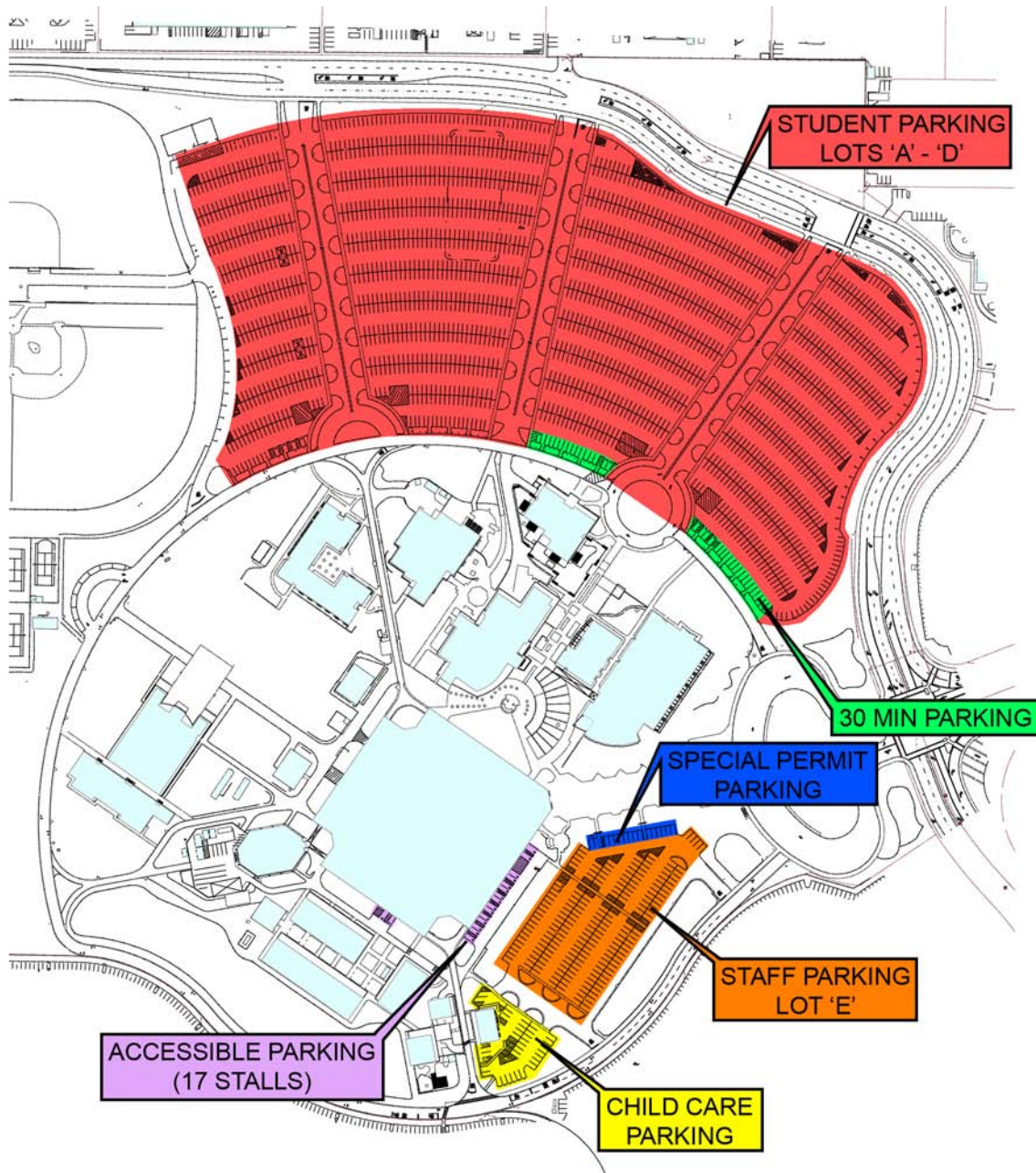
Excluded from above are areas for motorcycle parking (Lots A-D) and parking areas related to loading zones. The current parking ratio of Bldg. Area S.F./Stalls is approximately 1/165 S.F. The master plan will require a minor amount of additional parking in order to maintain the current parking ratio, and will be constructed in phases which correspond to the actual construction of additional square footage on the campus. Additional accessible parking will also be required throughout the campus.

The campus is currently designed with an "interior" loop road which rings the immediate area of the academic facilities and provides emergency vehicle access to service the site. Mission College Blvd. serves as the "outer" loop road, with a main circulation path to and around the campus site, and connects with the frontage road along the north side of Hwy. 101, just south of the Mercado Center and Yahoo! developments.

The master plan anticipates a re-design of the main front entry sequence into the campus, a reorganization of the internal loop road routing and directional control, and the elimination of the connectivity of the interior loop road on the west side of the campus for increased pedestrian access and safety, as well as for connecting the athletic facilities with the academic portion of the campus.

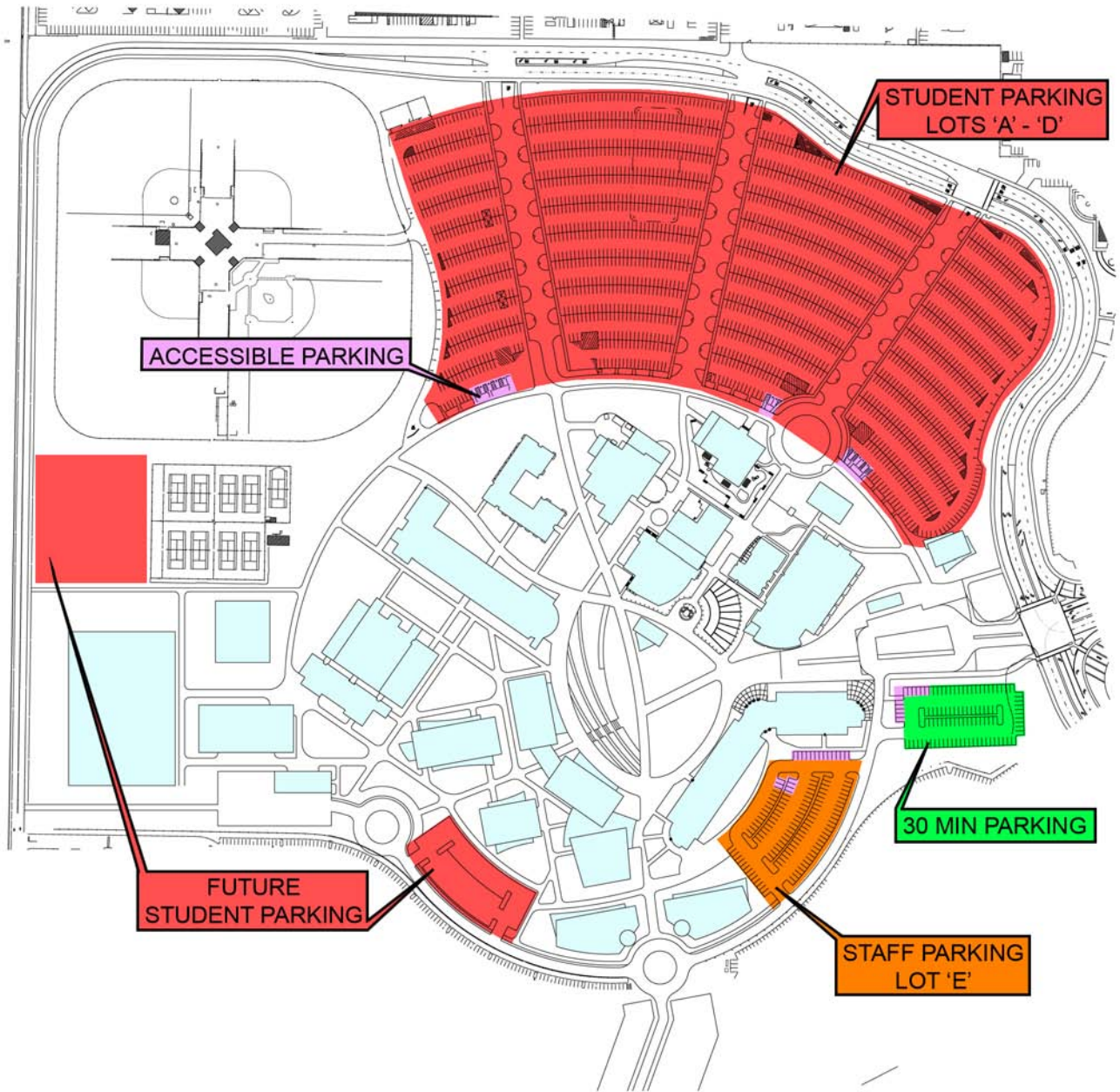
While ensuring adequate roadways and access for private automobiles, service, and emergency vehicles (standards discussed to follow), the Mission College Master Plan prioritizes its pedestrian and bicycle networks (interior and connecting to the surrounding region), transit accessibility, and reduced auto dependence, in part, by following these guidelines:

- Provide the campus with convenient alternatives to single-occupancy vehicles.
- Identify station locations, possible routes, and connections to existing public transit
- Work with the surrounding municipalities to improve bicycle routes and pedestrian connections from transit stations to the campus.
- Provide adequate bicycle parking and additional amenities (such as showers) as feasible.



EXISTING PARKING

Staff Parking (Lot 'E')	314 stalls
Student Parking (Lots 'A' through 'D')	2,238 stalls
Accessible Stalls	31 stalls
Child Care	19 stalls
30 Minute Parking	27 stalls
Special Permit Parking	12 stalls
Total Parking Stalls	2,641 stalls



FUTURE PARKING

Staff Parking (Lot 'E')	116 stalls
Student Parking (Lots 'A' through 'D')	2,265 stalls
Accessible Stalls	45 stalls
30 Minute Parking	87 stalls
Future Student Parking	250 stalls
<i>Total Parking Stalls</i>	<i>2,763 stalls</i>