

Prioritized Master Plan El Molino High School

General

The following summarizes the various elements of work proposed in the Master Plan for this campus. These elements are prioritized in accordance with their level of need. The priorities are:

- **Mandatory Improvements:** This describes work required to bring the facility into conformance with the code requirements of regulatory agencies and to resolve health and other safety issues.
- **Necessary Improvements:** This describes work required to maintain the facility and to preserve the school plant. This section also describes classroom and technology upgrades necessary for a twenty-first century school.
- **Discretionary Improvements:** This describes work that will improve the usability of the facility. It also includes work to implement program changes and enhancements to the overall educational environment.

Refer to the attached cost estimate and the facility assessment and recommendations reports (Facilities Master Plan – Volume 2) for more detailed descriptions of findings. These reports are:

- Architectural Assessment and Recommendations
- Roofing Assessment and Recommendations (Roof Asset Management Program)
- Civil/Site Assessment and Recommendations
- Landscape Assessment and Recommendations
- Mechanical Assessment and Recommendations
- Electrical and Data Systems Assessment and Recommendations
- Energy Assessment and Recommendations

Also refer to the attached Architectural Planning Diagrams:

- Aerial view of existing campus
- Site/floor plan of existing campus
- Master plan site/floor plan diagram

Note that these plans are diagrammatic in nature and are provided to give a general description of program needs and wishes. They do not represent actual building designs or design solutions. These will be developed cooperatively as a separate contract for the architectural modernization programming and design of the District's approved projects.

Mandatory Improvements

FIRE/LIFE SAFETY

- Deficiencies
 - Unprotected attic and crawl spaces in some locations
 - Exposed electric conduits and wiring in some accessible locations causing trip hazard
 - Number and location of on-site fire hydrants appear deficient
 - Wood fiber bed under fitness equipment is insufficient
 - No earthquake valve at site gas meter
 - Missing gas isolation valves at buildings
 - Missing grade accessible gas shut off valves at buildings
 - Gas piping spans between independent structures at Buildings A, B, C, D, I, J and K
 - Building D has fire protection system only in cafeteria and stage
 - The entire Gymnasium heating and ventilating system is beyond its life expectancy and will require accelerating maintenance expense
 - Non-functioning water heater in Gymnasium
 - Rusted transformer enclosures
 - Insufficient path of travel emergency lighting
 - Obsolete fire alarm system
- Recommendations
 - Repair attic and crawl space damage and provide adequate screening
 - Conceal/reroute/protect exposed electric conduits and wiring in accessible locations
 - Coordinate fire hydrant location and quantity with local fire jurisdiction and add as required (approximately 2)
 - Replace safety fiber under fitness equipment
 - Add earthquake valve to site gas meter
 - Install missing gas isolation valves at buildings
 - Provide missing grade accessible gas shut off valves at buildings

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- Seismically separate gas piping between independent structures at Buildings A, B, C, D, I, J and K
- Extend fire protection system to include all of Building D
- Replace the entire Gymnasium heating and ventilating system
- Replace Gymnasium water heater
- Replace rusted transformer enclosures
- Upgrade path of travel emergency lighting
- Replace obsolete fire alarm system in its entirety

ADA ACCESSIBILITY

- Deficiencies
 - Non-compliant circulation accessibility in many building spaces
 - Non-compliant hand and guard rails in many places
 - Some toilets have non-compliant accessibility
 - Non-compliant door thresholds and landings in many locations
 - Non-compliant weight and locker room access
 - Non-compliant work stations and sinks
 - Most areas of site have non-compliant paths of travel including the stadium and sports fields
 - Some parking and drop off areas are non-complaint
 - Non-compliant signage at parking
 - Inaccessible stadium/track path of travel
 - The majority of drinking fountains do not meet accessibility requirements
- Recommendations
 - Provide modifications for circulation accessibility
 - Provide compliant hand and guard rails
 - Modify toilets for accessibility
 - Replace threshold and landings
 - Rearrange walls and install wheel chair accessible lift to weight room
 - Provide compliant work stations and sinks
 - Provide compliant site path of travel
 - Provide compliant parking and drop off areas

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- Provide compliant parking signage
- Provide accessibility modifications to stadium/track
- Replace inaccessible drinking fountains with new high/low

STRUCTURAL

- Deficiencies
 - Review and analysis of the buildings' seismic and other structural sufficiency as well as hazardous materials testing is beyond the scope of this report and has not been included.
- Recommendations
 - Any deficiencies such as dry rot damage or other damage discovered during modernization shall be repaired in accordance with applicable current codes.
 - New construction shall conform to all applicable current codes.

Necessary Improvements

EXISTING SITE

- Deficiencies
 - Drive and parking paving and striping is deteriorated in some locations
 - Site drainage deficient in some areas
 - In many cases landscape plantings are in poor condition and are water inefficient
 - Non-compliant stage area at quad
 - Natural turf football/soccer field requires excessive water use and is not playable in winter months
 - Insufficient bleachers
 - Extremely expensive landscape water usage
- Recommendations
 - Replace/repair deteriorated drive and parking paving and striping
 - Add new drop inlet and storm line outside of Room C2.
 - Add new inlet and reconfigure paving at sump condition north of Building A.
 - Replace landscape plantings with water efficient species
 - Remedy non-compliant stage area at quad
 - Stadium- Other District Identified Need
 - Install synthetic turf at football/soccer field

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- Provide additional bleachers
- Install new water well and tank for landscape irrigation

EXISTING BUILDINGS

- Deficiencies
 - Worn/damaged exterior finishes
 - Worn/damaged interior finishes
 - Unbalanced classroom natural light
 - Inadequate audio/visual in classrooms
 - Greenhouse in poor repair
 - Varying types of exit signs
 - Some failing roofs, gutters and rainwater leaders
 - Some roofs require recoating
- Recommendations
 - Repair worn/damaged exterior finishes
 - Investigate for structural damage and repair
 - Repair worn/damaged interior finishes
 - Investigate for structural damage and repair
 - When roof is replaced install tubular skylights classrooms to balance natural light and to save electricity
 - When roof is replaced install tubular skylights in interior spaces to save electricity
 - Install overhead projectors in instructional spaces
 - Repair greenhouse
 - Replace exit signs with one style to eliminate confusion (possible hazard)
 - Replace failing roofs, gutters and rainwater leaders
 - Recoat needed roofs

EXISTING SYSTEMS

- Deficiencies
 - Individual site irrigation operation per irrigation zone
 - Aged heating and ventilating systems are near end of functional life in Buildings A, B, C, D, Administration, I, J, and K

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- Dirty duct work effects air quality
- Apparent imbalance in air flows
- Water inefficient plumbing fixtures throughout
- Inadequate power branch circuit panel boards
- Manual lighting controls
- Recommendations
 - Provide “smart” central irrigation control to save operational and maintenance time
 - Replace aged heating and ventilating systems in Buildings A, B, C, D, Administration, I, J, and K
 - Clean duct work all buildings
 - Test and balance all heating and ventilating systems
 - Replace inefficient plumbing fixtures with low flow meeting current energy saving requirements
 - Replace power branch circuit panel boards and test distribution feeders (repair/replace/upgrade as required)
 - Replace manual lighting controls with automatic (occupancy sensors) to save energy

Discretionary Improvements

EXISTING SITE

- Deficiencies
 - High maintenance, non-integrated landscaping
 - Insufficient storage for baseball/softball
 - Worn JV softball dugout benches
 - Varsity softball drainage issues behind dugout
 - JV baseball backstop needs paint
 - Baseball pitcher’s mound is too low
 - Tennis court surfaces worn
 - Expensive irrigation water from local source
- Recommendations
 - Replace landscape with low water/low maintenance plants material and systems
 - Provide storage for baseball/softball
 - Replace worn JV softball dugout benches

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- Remedy varsity softball drainage issues behind dugout
- Paint JV baseball backstop
- Raise baseball pitcher's mound
- Repair and restripe tennis court surfaces
- Install well and district owned irrigation supply

EXISTING BUILDINGS

- Deficiencies
 - Underutilized library
 - No theater
- Recommendations
 - Library
 - Provide wireless computer access. Reorganize space to provide a casual gathering area for interactive computer use. Possibly relocate computer classroom into the space into a room with a glass wall facing the stack area.
 - Performing Arts Theater – **Other District Identified Need**
 - Provide a new 425 seat Performing Arts Theater (and meeting space) at the entry to the campus adjacent to the existing library and parking.

EXISTING SYSTEMS

- Deficiencies
 - Manual HVAC temperature control systems
 - Insufficient main electrical service IF additional buildings are constructed or electrical loads are increased
 - Aged, low light quality interior light fixtures
 - Existing data station cabling has limited bandwidth compared to modern multi-media requirements
- Recommendations
 - Provide automatic HVAC temperature control system
 - Commission building systems to establish a baseline for functionality and to provide additional contractor accountability
 - Test and balance heating and ventilation systems

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- Increase main electrical service IF additional buildings are constructed or electrical loads are increased
- Replace aged, low light quality interior light fixtures
- Upgrade station cabling and fiber backbone cabling to higher bandwidth (1Gbps minimum)

End of Prioritized Master Plan – El Molino High School

Prioritized Cost Estimate El Molino High School

June 2011 Project Costs (Construction, Contingencies & Fees)

	Amount	Subtotal	Total
Mandatory Improvements			
Fire/Life Safety	732,469		
ADA Accessibility	5,340,202		
Structural			
Dry Rot Allowance	250,000		
Other Code Issues	417,817		
Total Mandatory		6,740,487	
Necessary Improvements			
Site Work	2,996,411		
Buildings			
Basic	2,063,458		
Roofing	1,483,626		
Building Systems	2,263,173		
Total Necessary		8,806,668	
Discretionary Improvements			
Site Work	1,819,663		
Buildings	393,633		
Building Systems	2,317,802		
Total Discretionary w/out Additions		4,531,098	
Temporary Facilities During Construction			
Not calculated		0	
BASIC MODERNIZATION			\$20,078,253
Other District Identified Needs			
Stadium - All Weather Field & Bleachers	2,460,204		
Performing Arts Theater	9,134,336		
		11,594,540	
TOTAL			\$31,672,794

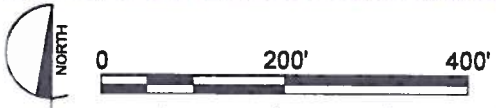
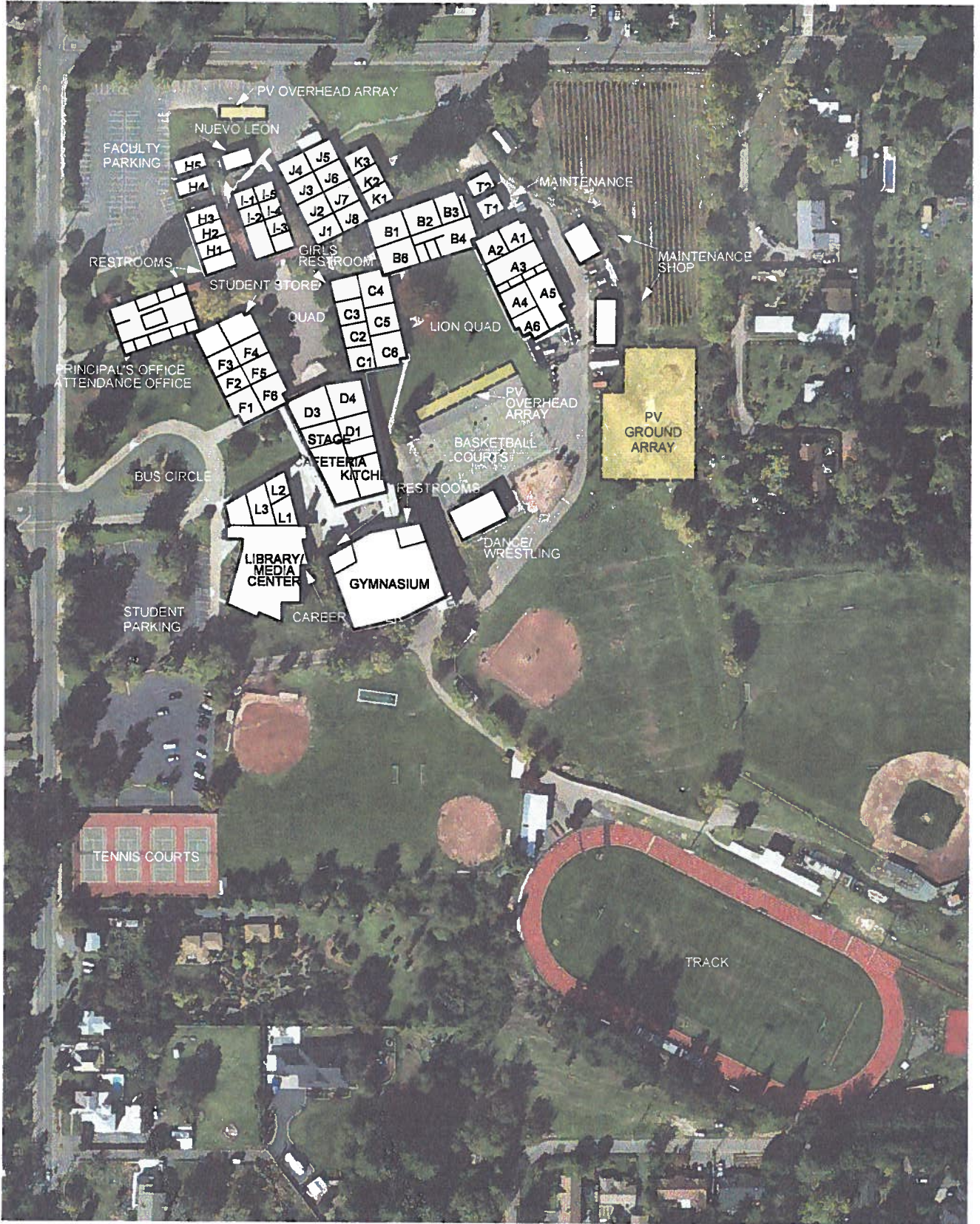


EL MOLINO AERIAL VIEW OF EXISTING CAMPUS

West Sonoma County Union High School District



QUATTROCCHI KWOK
ARCHITECTS
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6/15/2011

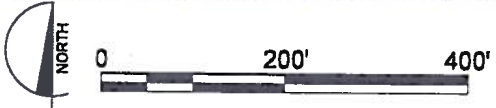
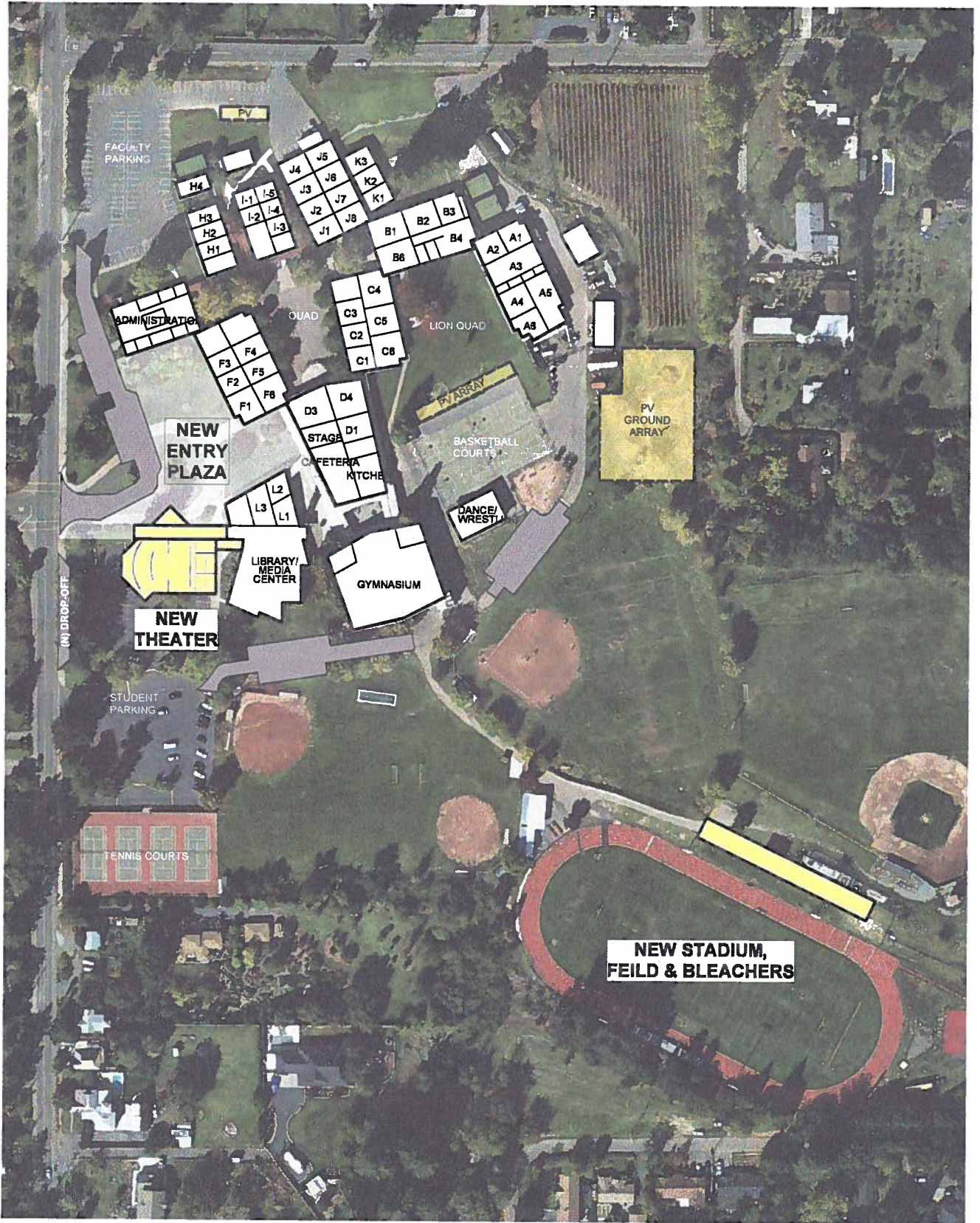


EL MOLINO SITE/ FLOOR PLAN OF EXISTING CAMPUS

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EL MOLINO MASTER SITE PLAN

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