S.1 PROJECT DESCRIPTION

This Draft Phase 1 Campus Impact Analysis evaluates the potential project-level impacts resulting from the development of the first phase of the UC Merced campus (2004-05 through the 2007-08 academic year). The Phase 1 Campus would be located on approximately 96 acres of the southwestern corner of the Virginia Smith Trust property, on a portion of the area occupied by the Merced Hills Golf Course. The proposed Phase 1 Campus consists of the following facilities:

- **Science and Engineering Building**. This building is planned for Fall 2004 and would provide faculty office and laboratory space, class laboratories, offices for the two Divisional Deans, a small-animal vivarium, and support space for the building.

- **Classroom and Office Building**. The Classroom and Office Building is planned for 2004-05 would contain an auditorium-type space, two major lecture halls, regular and seminar-sized classrooms, computer classrooms, multi-media, studio and performing arts class laboratories, and faculty and divisional offices.

- **Library/Information Technology Center**. This building is also planned for Fall 2004 and would house an undergraduate and graduate collections library and extensive information and instructional technology services as well as, initially, student services and campus administration spaces.

- **Student Housing**. Student housing would be constructed in three phases. The first phase of housing would be ready for opening day (2004-05 academic year), and would consist of approximately 160 units. Additional housing for approximately 1,600 students will be built in phases between 2005 and 2008, as feasible, to maintain the campus goal of housing 50% of campus students. A student dining commons, recreational facility, and multi-purpose community center would also be constructed as part of the student housing services.

- **Social Science and Management Building**. This building is planned for Fall of 2008 and is planned to include research offices for faculty and graduate students, a large lecture hall, conference and scholarly activity space (case study and team rooms), open class labs, department administrative and administrative support space, and a large auditorium.

- **Second Science and Engineering Building**. This building is planned for occupancy in the Summer of 2007 and would be similar in design to the initial Science and Engineering Building. It would house research and academic facilities, and would be connected to the vivarium of the initial Science Building via an underground tunnel.

- **Access, Roadway, and Parking Improvements**. The circulation/roadways for the Phase 1 Campus has been designed with a "Main Street" theme to create a sense of community for the campus population. The initial circulation system for the campus through 2008 would consist of two road types: the primary entrance roadway (Main Street), and secondary campus streets. Main Street would serve as the main access point to the Phase 1 Campus, with the entrance off of Lake Road approximately 500 feet north

of Bellevue Road. Pedestrian and bike paths would be provided throughout the Phase 1 Campus, and surface parking areas are proposed.

- **Recreational facilities.** Playing fields and an athletic building would be provided for the Phase 1 Campus.
- **Utilities and Support Facilities**. Provision of utilities and expansion of off-site facilities would be required to operate the campus upon its opening in Fall 2004 through 2008. Facilities and utility systems for potable/fire water, irrigation water, storm water, wastewater treatment, solid hazardous waste disposal, telecommunications, natural gas and electricity would be provided. A central plant to deliver hot water and chilled water to the academic buildings for the purposes of heating and cooling, and chilled water only to student residences and other support buildings would also be constructed. A utility tunnel would be constructed on campus to connect necessary infrastructure from the Central Plant to campus buildings. A Campus Logistical Support Services Facility Building, which would be constructed near the entrance to the Campus by 2006, would house the Campus Environmental Health and Safety Department (EH&S). The Logistical Support Services Facility Building would include hazardous waste storage areas, offices for EH&S staff, and materials management and building and landscape maintenance materials storage. A service yard and outdoor storage area would also be provided.

This Draft Phase 1 Campus Impact Analysis evaluates the potential environmental effects resulting from the development of the proposed facilities, and recommends project-specific or LRDP EIR (Volume 1) Mitigation Measures, as appropriate. Please see the Project Description (Section 2) for a complete description of the project.

S.2 PROJECT OBJECTIVES

All of the objectives identified for the full Campus in Volume 1 apply to the Phase 1 Campus. Additionally, specific objectives of the Phase 1 Campus project include:

- Construct the first set of buildings that are flexible in design, both individually and collectively, to support future changes in campus population, advances in technology, and/or shifts in research programs
- Provide facilities to develop programs that will relieve demand pressure at other UC campuses.
- Design an educational foundation that encourages new forms of collaboration across disciplinary lines.
- Develop facilities in a manner that promotes a logical development pattern of later campus phases over time.
- Develop facilities in a manner that facilitates obtaining necessary permits and other approvals in a timely manner.
- Undertake these activities within the practical constraints of available funding sources.

S.3 DRAFT PHASE 1 CAMPUS IMPACT ANALYSIS

This environmental analysis is for the proposed Phase 1 Campus. The analysis for the proposed project builds upon the broader analysis of the environmental impacts from the implementation of the LRDP, that are described in Volume 1. Volume 1 analyzes full implementation of uses and physical development proposed under the Long Range Development Plan (LRDP) to meet an enrollment of 25,000 full-time-equivalent students and identified measures to mitigate the significant adverse program-level, project-level, and cumulative impacts associated with that growth.

The organization of the environmental analysis for the proposed project allows this volume to avoid repetition of general background and setting information for environmental topic areas, overall growth-related issues, issues that were evaluated in sufficient detail in Volume 1 for which there is no additional information that would require further analysis, cumulative impacts, and broad project alternatives.

The additional analysis presented in this volume reflects the more detailed information available regarding the Phase 1 Campus, as compared to the broader, planning-level of information known about the Campus as a whole. Therefore, this volume addresses only those resource areas where it was determined that additional review was necessary to assess the more detailed information available for the Phase 1 Campus. The Draft Phase 1 Campus Impact Analysis evaluates potential impacts of the project in the following resource areas:

- Aesthetics
- Air Quality
- Biology
- Cultural Resources
- Geology, Seismicity, and Soils
- Hazards and Hazardous Materials
- Noise
- Recreation
- Traffic

S.4 IMPACT SUMMARY

Table S-1 that follows provides a complete listing of all Phase 1 Campus impacts and mitigation measures. For each impact identified for the Phase 1 Campus analysis, Table S-1 presents the significance of the impact before mitigation, applicable project-specific mitigation and/or applicable LRDP EIR (Volume 1) Mitigation Measures, and the level of impact after implementation of the mitigation measures.

S.5 ALTERNATIVES

The alternatives analysis for the Phase 1 Campus is summarized from the alternatives analysis for the full Campus presented in Section 5 of Volume 1. A summary of the on-site and off-site alternatives for the larger UC Merced Campus (including Phase 1) is presented, along with alternative locations for the Phase 1 Campus site within the 910-acre Main Campus, and potential alternative Phase 1 Campus sizes within the proposed Phase 1 Campus footprint. The specific alternative Phase 1 Campus sizes evaluated in this document include the following:

- Smaller Phase 1 Campus/Increased Density Alternative
- Smaller Phase 1 Campus/Fewer On-Site Programs Alternative
- Phase 1 No Project Alternative

Detailed descriptions and an analysis of potential impacts of these alternatives compared to the proposed Phase 1 Campus project are presented in Section 5 of this document.

Table S-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PHASE 1 CAMPUS DEVELOPMENT

Impact		Level of Significance Prior to Mitigation[1]	Mitigation Measures	Level of Significance Following Mitigation[1]
3.2 Aesthetics				
3.2-1	Implementation of the Phase 1 Campus would not substantially degrade the visual qualities and character of the site and its surroundings. This impact is considered a *less-than-significant* impact.	LS	*No mitigation required.*	LS
3.2-2	Lighting for Phase 1 Campus buildings and other facilities would create a new source of light or glare that could spill onto Lake Yosemite Regional Park and other sensitive areas. This is considered a *significant* impact.	S	*See mitigation measure 4.1-4 in Volume 1.*	SU
3.3 Air Quality				
3.3-1	Construction activities as part of development allowed under the Phase 1 Campus could result in short-term generation of fugitive dust (PM_{10}). This is considered to be a *significant* impact.	S	*See mitigation measures 4.3-1(a)-(b) in Volume 1.*	LS
3.3-2	Development of the Phase 1 Campus would generate increased levels of CO, O_3 precursors (ROG and NO_x), and PM_{10} emissions. This is considered to be a *significant* impact.	S	*See mitigation measures 4.3-2(a), 4.3-2(c)-(e) in Volume 1.*	SU
3.3-3	Development of the Phase 1 Campus would result in localized increases in CO concentrations from vehicular traffic at intersections, but CO concentrations would not exceed the significance criteria. This is considered to be a *less-than-significant* impact.	LS	*No mitigation required.*	LS

LS: Less than significant; NI: No impact; PS: Potentially significant; S: Significant; SU: Significant and Unavoidable

Impact		Level of Significance Prior to Mitigation[1]	Mitigation Measures	Level of Significance Following Mitigation[1]
3.3-4	Development of the Phase 1 Campus would not generate significant emissions of toxic air contaminants from combustion sources and research laboratories. This is considered to be a *less-than-significant* impact.	LS	*No mitigation required.*	LS
3.4 Biological Resources				
3.4-1	Development of the Phase 1 Campus would not result in the direct loss or adverse modification of wetlands or other waters of the U.S. that fall under the jurisdiction of the U.S. Army Corps of Engineers and the Regional Water Quality Control Board. Therefore, there would be *no impact* to these resources.	NI	*See mitigation measures 4.4-10(a)-(b) in Volume 1.*	NI
3.4-2	Development of the Phase 1 Campus would not directly impact special status plant and wildlife species. Therefore, there would be *no impact* to special status plant and wildlife species.	NI	*No mitigation required.*	NI
3.4-3	Development of the Phase 1 Campus would not result in the direct loss of nesting habitat for resident and migratory avian species of special concern and raptors. This is considered to be a *less-than-significant* impact.	LS	*See mitigation measures 4.4-5(a)-(e) in Volume 1.*	LS
3.4-4	Development of the Phase 1 Campus would not adversely affect habitat potentially used for movement of special status mammal species. This is considered to be a *less-than-significant* impact.	LS	*See mitigation measures 4.4-6(a)-(b) in Volume 1.*	LS
3.4-5	Development of the Phase 1 Campus would not result in indirect impacts to wetlands and other undisturbed habitat adjacent to the 96-acre site. This is considered	LS	*See mitigation measures 4.4-7(a)-(h) in Volume 1,* *3.4-5 The Phase 1 Campus shall avoid adverse changes to existing hydrological conditions that could result in*	LS

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Impact		Level of Significance Prior to Mitigation[1]	Mitigation Measures	Level of Significance Following Mitigation[1]
	to be a *less-than-significant* impact.		*increases, decreases or elimination of flows sustaining vernal pools and swales to the south and east of the Phase 1 Campus boundary. The Phase 1 Campus includes an approximately 250-foot buffer separating campus development from vernal pools and swales to the south and east. The University shall adjust the buffer width, or take such other appropriate steps, as may be necessary to assure no significant adverse changes occur in the biological functioning of the vernal pools and swales outside the Phase 1 Campus boundary due to increases, reductions or elimination of flows into those vernal pools.*	
3.4-6	Development of the Phase 1 Campus would not conflict with local applicable policies protecting biological resources or provisions of an adopted habitat conservation plan. Therefore, there would be *no impact* to local or regional policies for biological resources from the Phase 1 Campus.	NI	*No mitigation required.*	NI
3.4-7	Off-site improvements related to constructing utility lines for the Phase 1 Campus would have *no impact* to sensitive biological resources.	NI	*See mitigation measures 4.4-10(a)-(b) in Volume 1.*	NI
3.4-8	Construction activities for the Phase 1 Campus would not result in temporary construction impacts to sensitive biological resources, including wetlands or special status plants and wildlife, adjacent to the project site. This is considered to be a *less-than-significant* impact.	LS	*See mitigation measures 4.4-10(a)-(b) in Volume 1.*	LS

LS: Less than significant; NI: No impact; PS: Potentially significant; S: Significant; SU: Significant and Unavoidable

Impact		Level of Significance Prior to Mitigation[1]	Mitigation Measures	Level of Significance Following Mitigation[1]
3.5 Cultural Resources				
3.5-1	Development of the Phase 1 Campus has the potential to disturb or destroy archaeological resources. This impact would be *potentially significant.*	PS	*See mitigation measures 4.5-1(a)-(d) in Volume 1.*	LS
3.5-2	Development of the Phase 1 Campus has the potential to result in disturbance or destruction of Native American human remains. This is considered a *potentially significant* impact.	PS	*See mitigation measures 4.5-1(a)-(d) and 4.5-2(a)-(c) in Volume 1.*	LS
3.5-3	Development of the Phase 1 Campus has the potential to disturb or destroy paleontological resources. This is considered a *potentially significant* impact.	PS	*See mitigation measures 4.5-4(a)-(b) in Volume 1.*	LS
3.6 Geology, Soils and Seismicity				
3.6-1	3.6-1 Implementation of the Phase 1 Campus would result in construction of facilities on expansive soils, creating risks to life or property. This is considered to be a *potentially significant* impact.	PS	*3.6-1(a)* *If construction activities are performed during or subsequent to wet weather, implement measures to reduce excessive soil moisture and facilitate earthwork operations, such as disking to aerate, stabilization with a geotextile fabric or grid, or other similar, equally effective method.* *3.6-1(b)* *Implement the site-specific measures regarding soil scarification and compaction, as identified in the Phase 1 Campus Geotechnical Investigation Report (Kleinfelder, Inc. 2001), for individual building sites.* *3.6-1(c)* *Soils used for engineered fill shall meet the minimum requirements for moisture content as recommended in the Phase 1 Campus Geotechnical Investigation Report (Kleinfelder, Inc. 2001).*	LS

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Impact		Level of Significance Prior to Mitigation[1]	Mitigation Measures	Level of Significance Following Mitigation[1]
3.8 Hydrology and Water Quality				
3.8-1	Development of the Phase 1 Campus would not affect the quality of surface runoff water quality and would not result in a violation of water quality standards. Therefore, there would be *no impact* to these resources.	NI	*No mitigation required.*	NI
3.9 Noise				
3.9-1	Implementation of the Phase 1 Campus would result in traffic increases on the regional road network, which could significantly increase ambient noise levels. This is considered to be a *significant* impact.	S	*See mitigation measure 4.10-1 in Volume 1.*	SU
3.9-2	Construction of Phase 1 Campus facilities could expose nearby receptors, especially users of the Lake Yosemite Regional Park, to elevated noise levels. This is considered to be a *potentially significant* impact.	PS	*See mitigation measures 4.10-3 and 4.10-5 in Volume 1.*	LS
3.10 Recreation				
3.10-1	Development of the Phase 1 Campus would increase the area population and result in an increased demand for recreational facilities, which could cause a deterioration of facilities. This impact is considered a *less-than-significant* impact.	LS	*See mitigation measures 4.13-1(a)-(d in Volume 1.*	LS
3.10-2	Development of the Phase 1 Campus would include construction of recreational facilities. The construction of these facilities would not have adverse physical effects on the environment beyond those discussed within the impact analysis for the LRDP. Therefore, this impact is considered *less than significant*.	LS	*No mitigation required.*	LS

LS: Less than significant; NI: No impact; PS: Potentially significant; S: Significant; SU: Significant and Unavoidable

Impact		Level of Significance Prior to Mitigation[1]	Mitigation Measures		Level of Significance Following Mitigation[1]
3.11 Traffic, Circulation, and Parking					
3.11-1	Implementation of the Phase 1 Campus would result in exceedance of the level of service threshold at the Lake Road/Bellevue Road intersection. This is considered a *significant* impact.	S	*3.11-1*	*Install a traffic signal at the intersection of Lake Road and Bellevue Road, and widen the intersection to provide a left-turn lane on the northbound and eastbound approaches.*	LS
3.11-2	Implementation of the Phase 1 Campus may result in operational deficiencies at the Lake/Yosemite intersection. This is considered a *potentially significant* impact.	PS	*3.11-2*	*The County can and should analyze the expected future operations of the Lake/Yosemite intersection at the following milestone points: 1) on determination of the conceptual alignment for Campus Parkway, 2) on preparation of the Geometric Approval Drawings for Campus Parkway, and 3) each October, beginning in the opening year of the UC Merced campus. If any of these analyses determine that the Lake/Yosemite intersection will operate at unacceptable LOS, the University will contribute its fair share (as described in Section 4.14.3.2 of Volume 1) toward the cost of any improvements deemed necessary at the intersection.*	LS
3.11-3	Construction of the Phase 1 Campus may result in excessive deterioration of County roads leading to campus and the need for physical expansion at the Lake/Yosemite intersection. This is considered a *potentially significant* impact.	PS	*See mitigation measure 4.14-3(a)-(b) in Volume 1.*		LS
3.11-4	Increased traffic volumes during the development of the Phase 1 Campus could result in hazardous traffic conditions along approach routes. This is considered to be a *potentially significant* impact.	PS	*See mitigation measures 4.14-3(a) and 4.14-6 in Volume 1.*		LS

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