4.0 COMMENTS ON THE DRAFT EIR AND RESPONSES TO COMMENTS

4.1 INDEX TO COMMENTS

As described in Section 1.0, Introduction, all comments on the Draft Environmental Impact Report (EIR) received either in writing or orally at the public hearings on the Draft EIR has been numbered, and the numbers assigned to each comment are indicated on the written communication and the public hearing transcripts that follow. All agencies, organizations, and individuals who commented on the Draft EIR are listed in Table 4.0-1, Index to Comments, below.

Table 4.0-1
Index to Comments

Commenter Number	Agency/Organization/Individual – Name
SA-1	Governor's Office of Planning and Research, State Clearinghouse – Terry Roberts
LA-1	City of Berkeley Planning and Development Department – Dan Marks
LA-2	East Bay Municipal Utility District – William R. Kirkpatrick
Org-1	The Berkeley Architectural Heritage Association – Carrie Olson
Org-2	Committee to Minimize Toxic Waste – Pamela Sihvola
Org-3	Friends of Strawberry Creek, - Jennifer Mary Pearson, PhD., and Carole Schemmerling
Org-4	Save Strawberry Canyon - Shirley Dean, Lesley Emmington Jones, Sylvia McLaughlin, Phila Rogers, John Shively, Janice Thomas
Org-5	Save Strawberry Canyon - Shirley Dean, Lesley Emmington Jones, Sylvia McLaughlin, Phila Rogers, John Shively, Janice Thomas
Org-6	Strawberry Creek Watershed Council - Carole Schemmerling
I-1	Laurie Brown and Jonathan Fernandez
I-2	Nancy Delaney
I-3	Julie Dickinson
I-4	Gianna Ranuzzi (1)
I-5	Gianna Ranuzzi (2)
I-6	Barbara Robben
I-7	Phila Rogers

Commenter Number	Agency/Organization/Individual – Name
I-8	John R. Shively
I-9	Stewart Jones
PH 1-6	Barbara Robben
PH 7-13	Amy Beaton
PH 14-18	Zachary Running Wolf
PH 19-26	Sylvia McLaughlin
PH 27-31	Gianna Ranuzzi
PH 32	Ayr
PH 33-39	Marilee Mitchell
PH 40-44	Lesley Emmington-Jones
PH 45-55	Janice Thomas
PH 56	Marilee Mitchell
PH 57-64	Amy Beaton
PH 65-69	Barbara Robben
PH 70-72	Lesley Emmington-Jones
PH 73-75	Hank Gehman
PH 76-77	Zachary Running Wolf
PH 78-81	Gianna Ranuzzi
PH 82-85	Nancy Delaney

SA: State Agency; LA: Local Agency; Org: Organization; I: Individual; PH: Public Hearing

4.2 MASTER RESPONSES

4.2.1 Master Response No. 1, Alternative Site – Richmond Field Station

Many comments request consideration of the Richmond Field Station as an off-site alternative. As noted in Section 6.0, Alternatives, CEQA requires that the EIR analysis contain a detailed analysis of a range of alternatives that could feasibly attain most of the project objectives while avoiding or substantially lessening any significant impacts. The Draft EIR considered analysis of the Richmond Field Station for development of the project and found that the site could provide occupiable building space for the CRT

project. The Richmond Field Station is located on relatively flat ground and would afford more ease of construction. However, many of the project objectives, including those to expand the functionality of Lab facilities, provide for cross-disciplinary research, and foster collaborative work environments among researchers would not be met because the location would be separate from related research activity on the Lab site. The Office of Advanced Scientific Computing Research (OASCR) of the US Department of Energy Office of Science is the primary source of funding for the activities and equipment that would be housed in the CRT building. The LBNL site would allow the OASCR to integrate the computer research efforts of the NERSC Center with other OASCR-funded programs that are located at the Lab. The computer systems that would be installed in the CRT building are research instruments used by interdisciplinary teams of domain scientists (biologist, physicists, chemists, etc.) in collaboration with mathematicians and computer scientists. Contrary to the traditional view of a scientist as a lone investigator working in a laboratory, much of science today is done by such teams. The process of creating these collaborative teams is not unlike that of creating any community from a diverse population; the specialists have their own language, scientific culture, and colleagues within their area of specialization. Telecommuting, which would be required from Richmond Field Station, does not work well on a permanent basis. The person-to-person interaction that is so conducive to collaborative research and technical fields would be lost, as would the climate of innovation occurs when people are physically co-located, preferably within the same building or even on the same floor. The role of the CRT building is to create the interdisciplinary community needed to address future science problems. The NERSC Center has been off-site for several years in Oakland, and the program has suffered from lack of integration with the rest of LBNL and distance from the UC Berkeley campus, which makes it difficult to include students in NERSC projects. The Richmond Field Station would be too distant from the main UC campus, where many student and staff researchers who would use the CRT Facility are located, to provide for convenient collaboration and access from campus. Returning to the LBNL site is essential to these goals of the project.

In addition, the computer equipment would require frequent reconfiguration to respond to changing research program needs, and physical access to the equipment would therefore be necessary. Locating the computer equipment at the main Hill campus is also a security requirement of the Department of Energy, which would provide funding for some of the CRT programs.

Furthermore, the Richmond Field Station lacks the electrical infrastructure to support a High Performance Computer facility. That infrastructure already exists at LBNL. Provision of adequate electrical power supply at the Richmond Field Station would be prohibitively expensive and would require the installation of new infrastructure that could itself have significant environmental impacts. For example, installation of a new substation and power supply lines would require extensive utility

trenching, which has the potential to encounter contaminated soil, to expose workers and the public to risks of accidents when utility lines are exposed, and to disrupt traffic during construction. Even if the infrastructure were upgraded, the project would be substantially more expensive to operate at the Richmond Field Station because the electrical power would be provided at commercial rates. At LBNL, the electrical rates are much lower (about 40 percent) because of contracts with the Western Area Power Authority, which would not be available at Richmond Field Station. Therefore, as stated in the Draft EIR analysis, the Richmond Field Station would not meet the CRT project objective of providing accessibility to a large, reliable, and economical electrical power source that could serve both the immediate and potential future needs of the Berkeley Lab's computing programs. For the reasons stated above, an off-site location at the Richmond Field Station was rejected from further consideration in the EIR.

4.2.2 Master Response No. 2, Building Height

Many comments are concerned with the height of the proposed CRT facility and views from various public vantage points not included in the Draft EIR. As noted in the Draft EIR, views of the CRT site are limited or not available from most areas located beyond the Lab itself due to screening provided by intervening vegetation, topography, and existing development (CRT Draft EIR, p 4.1-3). For these reasons, the Draft EIR concluded that visual impacts would be less than significant.

Viewpoints from the public vantage points throughout the project area were considered in preparation of the Draft EIR. As part of the evaluation of visual impacts, a visual and photographic survey of the area was conducted that focused on the visibility of the project site from locations throughout Berkeley and Oakland. The viewpoints selected have the most direct views of the CRT project site.

Subsequent to publication of the Draft EIR, and in response to comments received on the project design from the City of Berkeley and other commenters, the project was redesigned to lower the height of the building (see Section 2.0, Changes to the Project Description, of this Final EIR). As revised, the building would be 96 feet high on the western (downhill) façade, which would reduce its visibility from public viewpoints in the project vicinity. The roofline elevation of the building would be lowered from 773 feet above sea level for the original project to 740 feet above sea level for the revised project. Trees would be planted along the entire width of the west side of the building to provide additional screening. The revisions to the project design would further reduce the less than significant visual impacts of the project.

4.2.3 Master Response No. 3, Strawberry Canyon Cultural Landscape Claims

Several commenters assert that the Draft EIR should have evaluated Strawberry Canyon as a cultural landscape. (See, for example, Letter ORG-1.) This master response addresses those comments suggesting Strawberry Canyon must be evaluated as a cultural landscape or a significant cultural resource.

In summary, the proposed CRT facility is not located within Strawberry Canyon, and therefore would not affect the Canyon or any designation it might have as a cultural landscape. The Lab acknowledges, however, that Strawberry Canyon is an important resource, and the proposed project is consistent with the Lab's and the University's policies and management practices related to Strawberry Canyon. Nonetheless, as evaluated pursuant to criteria established by the National Park Service and the California Department of Parks and Recreation, Strawberry Canyon is not a cultural landscape. The Draft EIR evaluated whether the Canyon constitutes a cultural landscape, and concluded that the project would not result in a significant adverse impact on Strawberry Canyon as a potential cultural landscape. LBNL has further evaluated this conclusion in light of the comments received, and based on the analysis set forth below; LBNL confirms that construction and operation of the CRT facility would not have a significant adverse impact on Strawberry Canyon as a cultural landscape. The evidence indicates that Strawberry Canyon does not meet the criteria for designation as a cultural landscape. If Strawberry Canyon were designated as a cultural landscape, development on the Lab site is consistent with and furthers the features that would be the basis for a "cultural landscape" designation, because this development is consistent with the Lab's historical efforts of providing research facilities for leading scientists. As such, even if the Canyon were designated a cultural landscape, the proposed project would have no significant impact on the Canyon as such a landscape.

The Project Is Not Located Within Strawberry Canyon

As shown in Figure 4.0-1, Strawberry Canyon Map, (shown at the end of Section 4.0), the proposed CRT facility is located on the far western side of the Lab site. The facility is flanked on three sides by Buildings 70 and 70A to the east, the Building 50 complex to the north, and Cyclotron Road and the Lab's Blackberry Canyon entrance gate to the west. Strawberry Canyon, however, is on the far eastern side of the Lab site, roughly centered along an axis formed by Centennial Drive. The project is not located within Strawberry Canyon, and would not have any affect on the Canyon even if it were designated a cultural landscape.

The Project Is Consistent with Lab and University Policies and Management Practices Related to Strawberry Canyon

The Lab's management of the Strawberry Canyon area and the Strawberry Canyon watershed is consistent with preservation of the character of Strawberry Canyon. As discussed in the Lab's 2020 LRDP EIR, the LRDP includes several strategies for preserving and reinforcing open space on the Lab site, including the characteristics of Strawberry Canyon. For example, in the "vicinity of Strawberry Canyon, the LRDP Land Use Plan identifies the Perimeter Open Space land use zone" where "future development would be primarily reserved for minor maintenance or support structures or paths" and, thus, the "open, wooded, or grassland character of the hillside site would be retained to the extent feasible." (See LRDP Draft EIR at III-26.) Much of the Perimeter Open Space zone includes areas where "development potential is restricted due to constraints such as habitat quality and vegetation, seismic risk, utility easements, adjacent uses, and similar limitations." (See LRDP EIR at IV-62.)

Further, the LRDP Landscape Framework Plan identifies two categories of landscape treatments in the vicinity of Strawberry Canyon: Rustic and Screening Trees. The "Rustic Zone" is a "diverse landscape mosaic of oak and mixed hardwood forests, native and non-native grasslands, chaparral, coastal scrub, marsh and wetland communities, and riparian scrubs and forests." (See LRDP Draft EIR at III-26 & III-32.) In general, "most Lab activities would not occur in these rustic zones" and, thus, the majority of land within these zones "would be retained in its natural state." (See LRDP Draft EIR at III-26 & III-32.) The "Screening Tree Zone" utilizes "existing or proposed tree stands" to "screen views of Lab buildings." (See LRDP Draft EIR at III-32.) "Screening trees would ...be added within the main site along Centennial Drive ...[to] provide a visual buffer for those passing the Lab site on Centennial Drive on the way to areas higher up in the hills, such as the Lawrence Hall of Science or the University's Space Sciences area." (See LRDP Draft EIR at III-32.)

In addition, to coordinate stormwater management efforts within the Strawberry Creek watershed, the Lab expanded its stormwater management practices to reflect the continuing best practices outlined in the LRDP EIR. Among the measures adopted by the Lab in accordance with those best practices is the requirement that development which encroaches on creek channels and riparian zones will be restricted. (See Draft EIR, page 4.7-18.) The University has also prepared a Strawberry Creek Management Plan, which contains recommendations on best management practices for the Strawberry Creek watershed to control nonpoint-source pollution and reduce degradation of water quality. (See Draft EIR, page 4.3-22.) The University has also prepared a Management Plan for Strawberry and Claremont Canyons setting forth an ongoing program of fire fuel management in the hill area adjacent to the Lab to reduce the spread of fire in the event of a wildfire. (See Draft EIR, page 4.3-22.)

The proposed project will implement the management practices identified in the Strawberry Creek Management Plan. As set forth in the Draft EIR, the Lab "will implement an urban runoff management program containing the [Best Management Practices] included in the Strawberry Creek Management Plan." (See Draft EIR, page 4.7-18.) The proposed project is also consistent with the fire fuel management policies identified in the Management Plan for Strawberry and Claremont Canyons. For example, the Draft EIR discusses the Lab's compliance with its vegetation management program to minimize the threat of wildland fire damage to facilities and personnel on the Lab site, including the Strawberry Canyon area. (See Draft EIR, page 4.6-29.)

Evaluation of Strawberry Canyon as a Cultural Landscape

The concept of "cultural landscapes" is utilized by a number of agencies to plan for certain geographic areas. For example, the National Park Service has issued Preservation Brief 36, "Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes," which describes methods the Park Service can use in evaluating "cultural landscapes." The California Department of Parks and Recreation also utilizes the "cultural landscapes" concept to evaluate landscape types, relying in part on the Park Service's definition of "cultural landscapes."

Based on a review of the definition of a cultural landscape as set forth by the National Park Service and the California Department of Parks and Recreation, however, Strawberry Canyon is not a significant cultural landscape. The National Park Service's Preservation Brief 36 defines a cultural landscape as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values." According to Preservation Brief 36, there are four general types of cultural landscapes: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes. Based on the descriptions of these categories as set forth in Preservation Brief 36, Strawberry Canyon does not fit within the definition of any of the cultural landscapes categories.

The "historic site" type of cultural landscape is "a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and president's house properties. Strawberry Canyon is not a landscape or feature such as a battlefield or president's house which is associated with any particular historic event, activity, or person. Areas near Strawberry Canyon have significant associations with historical events, including historical research and discovery events at the Lab, but the Canyon itself does not.

The "historic designed landscape" type of cultural landscape is a "landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to

design principles, or an amateur gardener working in a recognized style or tradition." Strawberry Canyon is a natural feature with a number of disparate improvements, and not the product of any overall intentional design. The UC Botanical Gardens were established in 1928 and contain a large number of plants, many of which are native to California. The gardens occupy only a small portion of the Canyon (approximately 25 acres), however, and do not constitute any designed "landscaping" within the Canyon. In addition, the existing trails, roads, athletic facilities, and practice fields within the Canyon were not "consciously designed or laid out ...according to design principles" or any other intentional landscape design."

The "historic vernacular landscape" type of cultural landscape is a "landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. ...Examples include rural villages, industrial complexes, and agricultural landscapes." Strawberry Canyon is not a landscape such as a rural village, industrial complex, or agricultural landscape that reflects the physical, biological, and cultural character of everyday lives. The Strawberry Creek watershed, which includes Strawberry Canyon, is a topographical feature created by natural processes. The existing trails, roads, athletic facilities, and practice fields within the Canyon are an assortment of improvements unrelated to any particular historical development within the Lab site.

The "ethnographic landscape" type of cultural landscape is a "landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites, and massive geological structures." Strawberry Canyon does not contain a variety of natural or cultural resources that would be defined as "heritage resources." The Canyon is not the site of any contemporary settlement, and it does not contain any religious sacred sites or massive geological structures. Strawberry Creek, which is the tributary that flows through Strawberry Canyon, is an urban creek that serves as drainage for the Strawberry Canyon watershed. The site and creek are not known to be of particular historical or religious significance, either prior to or after European settlement in the area.

In addition to the Park Service's criteria for "cultural landscapes," the California Department of Parks and Recreation (CDPR) has posted on its website information for evaluating whether a landscape constitutes a cultural landscape. (See California Department of Parks and Recreation, Cultural Landscapes and Corridors <available at www.parks.ca.gov/default.asp?page_id=22854>.) This information includes a list of seven "preferred project characteristics" that can be applied to determine whether a landscape is a cultural landscape. Strawberry Canyon does not satisfy any of these "preferred project characteristics."

First, CDPR borrows the definitions of a cultural landscape from the Park Service's Preservation Brief 36. As discussed above, none of those definitions applies to Strawberry Canyon.

Second, State Parks landscapes are candidates for management as "cultural landscapes" if they "contribute to important themes in California history" and "convey a special significance in California's development." Strawberry Canyon does not contribute or convey any important themes of special significance related to California history. The trails, road, and facilities within the Canyon are unremarkable in terms of the state's development.

Third, State Parks landscapes are candidates for "cultural landscapes" if they are of a "sufficient scale and character to provide an accurate representation of the cultural area, time period, and human achievement for which they are being considered." Strawberry Canyon is not of this scale or character. The improvements within the Canyon have no particular association with any singular "cultural area, time period, or human achievement."

Fourth, cultural landscapes are those landscapes "that are strategically located to provide a complete or potential linkage to other federal, state, or local protected lands (or protective easements)." Strawberry Canyon is surrounded on several sides by development such as the Lab on the north side, the Panoramic Hills neighborhood on the south side, and Memorial Stadium and other athletic facilities on the west side. Although the Canyon is located near Tilden Park and the Claremont Regional Preserve, it is not "linked" to these lands because of this existing development.

Fifth, the CDPR is particularly interested in landscapes that "complete intended original cultural acquisitions to encompass the whole theme or resource." Strawberry Canyon is not a landscape that would "complete" any "cultural acquisition," because it does not have any identifying features demonstrating it is merely a part of any overall "theme or resource."

Sixth, cultural landscapes possess some combination of the seven aspects or qualities that define physical integrity for eligibility to the National Register of Historic Places criteria: location, design, setting, materials, workmanship, feeling, and association. As evaluated above, Strawberry Canyon's location is not unique, as it is merely a topographic feature similar to other such features within the Berkeley Hills. Further, it does not constitute any kind of significant design, setting, materials, workmanship, feeling, or association, because the Canyon itself is only the product of unremarkable natural processes. As discussed in the draft EIR, none of the improvements within Strawberry Canyon constitute any kind of

historical resources, which would include resources constituting a significant design, setting, materials, workmanship, feeling, or association.[1]

Lab Development Is Consistent With Any Possible Designation of Strawberry Canyon as a Cultural Landscape

A substantial portion of the Lab site is not within Strawberry Canyon (see Figure 4.0-1, shown at the end of Section 4.0). Because of the Canyon's proximity to the Lab, development on the Lab site would be consistent with and further the features that would be the basis for a cultural landscape designation for Strawberry Canyon, if the Canyon were designated a cultural landscape. As noted in the comments, one of the features that is asserted in support of the designation of Strawberry Canyon as a cultural landscape is the proximity of historic activities at the Lab and at the University. While the Lab does not agree with the argument that Strawberry Canyon is a cultural landscape, if in fact it were to be so designated, continuing development at the Lab consistent with the LRDP, which continues the Lab's historic research role and also provides for the preservation of the Canyon itself, and thus would be consistent with such a designation.

As discussed above, the Park Service's Preservation Brief 36 sets forth a "historic vernacular landscape" definition of a cultural landscape, which is a "landscape that evolved through use by the people whose activities or occupancy shaped that landscape." Under this definition, development and other such "activities" and "occupancies" of the Lab is a continued "shaping" of the landscape – a "shaping" that started with the construction in 1929 of the world's first cyclotron. (See Draft EIR, page 4.4-3.)

As described in the Lab's Long Range Development Plan, the Lab holds the distinction of being the oldest national laboratory since its inception on the UC Berkeley campus in 1931. (See LRDP at 4.)

> As the county's oldest national laboratory, Berkeley Lab has a long history of constructing facilities on an as-needed basis in response to national scientific priorities. When new scientific initiatives warranted, new facilities designed to meet the specific need at the time were constructed on the relatively level areas available on the main site. (See LRDP at 56.)

Development on the Lab site is consistent with the Lab's historical efforts of providing research facilities "for leading scientists to solve major challenges of our time on behalf of humankind and the environment." (See LRDP at 30.) These historical efforts or events include, for example, the invention of

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1 The final criteria for DPR candidate sites is that the site could possess the potential for outdoor recreation that would not destroy the character of the cultural resource. Parts of Strawberry Canyon are developed for outdoor recreation, including the athletic fields and trails, but there is not an underlying cultural resource that is affected by such recreation.

the cyclotron, research associated with nuclear weapons and energy, and the discovery of transuranium elements.

The LRDP's EIR includes project objectives that further these efforts. For example, one of the LRDP's objectives states: "Construct new scientific facilities to support future research initiatives and continued growth in existing programs." (LRDP EIR at III-20.) Accordingly, the LRDP EIR evaluates continuing and projected uses and activities on the Lab site. (LRDP EIR at III-1.)

The proposed project evaluated in the CRT Draft EIR is consistent with these policies and the Lab's efforts to provide world-class research facilities. This is captured in the Draft EIR's project objectives, which include the objective to "create a facility that draws upon the intellectual, technological, and material resources of LBNL and UC Berkeley to support and stimulate research in developing sciences and technologies and that encourages the next scientific discovery." (See Draft EIR, page 3.0-1.)

Thus, to the extent the Canyon constitutes a cultural landscape, development of the Lab and its proximity to the Strawberry Canyon area furthers the evolution of that landscape "through use by the people whose activities or occupancy shaped that landscape." (National Park Service, Preservation Brief 36 at 2.) Because this development is consistent with and promotes any such cultural landscape character of Strawberry Canyon, the proposed project would have no significant impact on a Strawberry Canyon cultural landscape.

Evaluation of Strawberry Canyon under CEQA

For CEQA purposes, projects that may cause a substantial adverse change in the significance of an historical resource are considered to be projects that may have a significant effect on the environment. (See Pub. Res. Code § 21084.1). Under State CEQA Guideline 15064.5, a resource is considered an "historical resource" if it is listed or eligible for listing in the California Register of Historical Resources. Sites officially designated as historically significant in a local register of historic resources are presumed to be historically or culturally significant. Sites that are not listed on a register, but that have been determined to be significant or eligible for listing in accordance with an approved historical resources survey are also presumed to be significant.

A resource is eligible for listing on the California Register of Historical Resources if it: is associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage; is associated with the lives and persons important in our past; embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or has yielded, or may be likely to yield, information important in prehistory or history. (See Pub. Res. Code § 5024.1; 14 Cal. Code Regs. § 4852).

Using these standards, the Draft EIR evaluated whether the impact of the proposed project on any cultural resources would be considered significant. The Draft EIR concluded that no project-level impact on historic resources would occur within the project site and that the project would not contribute to the loss of any historic resources. (See Draft EIR, page 4.4-11.) Strawberry Canyon does not meet the criteria for listing because it is not associated with any particular events or important persons that are contributory to California's history. The Canyon also does not embody any distinctive construction or work characteristics or artistic value. Instead, the Canyon is the result of natural processes, and the improvements within the Canyon are unremarkable. Finally, previous site-wide studies indicate that the Lab site contains no indications of historic or prehistoric archaeological resources, and as such, the Canyon is not likely to yield any information important in prehistory or history. (See Draft EIR, page 4.4-3.)

The Draft EIR also evaluated whether Strawberry Canyon constitutes a cultural landscape, and concluded that there is currently no basis for determining that the project would result in an impact on Strawberry Canyon as a potential cultural landscape. (See Draft EIR, page 4.4-1 to 4.4-2 & 4.4-11.)

In this regard, it should be noted that the concept of a cultural landscape is not a concept recognized in CEQA, either as a means of determining whether an impact is significant or otherwise. The phrase cultural landscape is not mentioned in any CEQA statute, guideline, or in the CEQA case law. It is not a criteria for determining the significance of a project, or for evaluating whether a project is a historic resource, under the provisions of the CEQA statute, the State CEQA Guidelines, or the Appendix G checklist for environmental impacts set forth in the Guidelines. Also, an electronic search of California court decisions performed on March 31, 2008, as part of the preparation of this response indicates that the terms cultural landscape and "significant cultural landscape" have not been used by the California courts in any CEQA cases or any case involving historic resources (see Appendix A).

This absence of legal reference to cultural landscapes does not mean that the concept lacks merit in the right context, and in fact The Regents have applied the concept to certain parts of the University campus. (See, for example, UC Berkeley, Landscape Heritage Plan <available at www.cp.berkeley.edu/lhp/about/index.html>.) However, contrary to the suggestion in the comments, there is no legal basis in CEQA or otherwise for stating that preparation of a cultural landscape report is required to evaluate the significance of this project's impact under CEQA. Instead, as discussed above, the concept of a cultural landscape is a management and preservation tool that a number of institutions use at times for developing a management strategy for areas or sites that fit within the various definitions of what is a cultural landscape.

4.2.4 Master Response No. 4, Requests for Recirculation of the Draft EIR

Some commenters asserted that the Draft EIR should be revised and recirculated for further comment. (See, for example, Comment LA-1-34.) Section 15088.5 of the State CEQA Guidelines requires a lead agency to recirculate an EIR when "significant new information" is added to the EIR after public notice of its availability but before its certification. "Significant new information" requiring recirculation is generally information showing that a new significant environmental impact or a substantial increase in the severity of an environmental impact would result from the project. Recirculation is not required where the new information added to the EIR merely clarifies or amplifies, or makes insignificant modifications in an adequate EIR.

The comments asserting recirculation of the draft EIR are generalized and do not specifically identify any "significant new information" that would require recirculation. For example, the City of Berkeley generically states only that "appropriate corrections be made in the document and that it be recirculated for further comment." (Comment LA-1-34). Nevertheless, changes to the EIR as a result of these and other comments merely clarify or amplify the information already contained in the EIR, and do not result in any "significant new information" that would require recirculation of the EIR.

In addition, changes to the project to reduce its height also do not require recirculation of the EIR. As described in Section 2.0 of the Final EIR, the project has been revised to reflect a more horizontally linear form. This form would not include the previously proposed narrow, multi-story office structure that jutted above the lower-lying horizontal structure on an east-west axis. This revised conceptual design would allow the building roofline to be lowered by approximately 30 feet by removing three floors and moving the building slightly down the hill. At the west façade of the building, the building height from grade to the roofline would be 96 feet (compared to 166 feet for the original project). The air intakes along the west façade would be lowered by 14 feet, reducing their visibility. (See Figure 2.0-2, Revised Conceptual Design of this Final EIR.) The design would maintain the same length span extending north-south across the site and include approximately the same square footage as the proposed building in the original conceptual design. The footprint would largely remain the same. The building site and size of the facility would remain consistent with the Lab's 2006 Long Range Development Plan.

The revised project design's reduction in height would result in a reduction of the proposed project's visual impacts on the Lab site, scenic vistas, and other public views. (See the visual simulations in Figures 2.0-4 through 2.0-7 of this Final EIR.) In light of the fact that the other aspects of the revised project design would remain the same, and because the revised design would reduce the proposed project's aesthetic impacts, these revisions to the proposed project design would not result in a new significant environmental impact or a substantial increase in the severity of any environmental impact

identified in the Draft EIR. Accordingly, the revised project design would not require the Lab to recirculate the Draft EIR.

4.2.5 Master Response No. 5, Traffic Demand Management

Many comments request information on the status of LBNL's on-going Transportation Demand Management (TDM) plan, its provisions, and how its implementation may help mitigate some of the potential effects of the proposed CRT and Helios projects. Of particular interest are project effects on LBNL parking supply, local traffic, cumulative project traffic, and intersection level of service, including the Hearst-Gayley-La Loma intersection.

LBNL's current TDM plan was drafted in conjunction with the Lab's 2006 Long Range Development Plan (LRDP) EIR, which was certified in July 2007. The TDM plan is identified as part of LRDP EIR Mitigation Measure TRANS-1d, which set forth conditions under which the TDM plan would be developed and implemented. These include implementation phasing and provisions for TDM plan revision, oversight, and adoption.

The 2006 LRDP includes the projection of 500 net new parking spaces being added to the Laboratory over the 20-year planning period, along with a population increase of roughly 1,000. Furthermore, the 2006 LRDP EIR analysis concludes that a trigger point for significant traffic impacts could be reached if the Lab's net new parking spaces were to exceed 375 new spaces. It is therefore the goal of the TDM Plan to implement measures over the course of the LRDP time frame, reducing the demand for parking and discouraging any increase of greater than 375 net new parking spaces.

In conjunction with outside experts and the City of Berkeley transportation planning staff, LBNL developed a course of potential new TDM measures. These measures would require additional study to determine cost and benefit before they could be prioritized and implemented. As a result, the TDM plan was devised to be implemented in three phases as follows:

- Phase 1: Initial TDM Planning (commencing October 2007, primarily through fiscal year 2008). The Lab will proceed with an initial planning phase which will examine more closely some of the key aspects of managing transportation demand. In Phase 1, staffing will be established to handle the tasks and benchmarks will be set for meeting the goals of the TDM Plan.

- Phase 2: Feasibility Analyses of Additional TDM measures (primarily through fiscal year 2009). Based on surveys and studies conducted in Phase 1, in Phase 2 the Lab will conduct more detailed feasibility analyses on the implementation of additional TDM measures, examining cost of implementation and associated benefits.

- Phase 3: Feasibility of TDM Measures Requiring Significant Capital Expense (triggered primarily by reaching 2,675 parking spaces – an increase of 375 parking spaces over the base 2006 inventory of

2,300.) It is anticipated that the implementation of TDM measures in Phases 1 and 2 will sufficiently control the transportation and traffic impacts. If it were to become necessary to add more than 375 LBNL parking spaces within the 2006 LRDP time frame, the Lab would consider additional options to ease traffic impacts.

Mitigation Intersection Study: Hearst Avenue / Gayley Road / La Loma Avenue (2006 LRDP EIR Mitigation Measure TRANS-1c). As part of 2006 LRDP EIR Mitigation Measure TRANS-1c, LBNL shall fund and conduct a study to evaluate whether there may be feasible mitigation (with design standards acceptable to the City of Berkeley) at the intersection of Hearst Avenue at Gayley Road / La Loma Avenue. In consultation with City staff, the Lab will conduct a further study to re-evaluate whether there may be feasible mitigation at this intersection. If such mitigation is determined by Berkeley Lab to be feasible, then LBNL shall contribute funding on a fair-share basis, to be determined in consultation with UC Berkeley and the City of Berkeley, for the installation of improvements.

TDM Progress to Date

Since implementation was begun on the TDM plan following the 2006 LRDP EIR certification in 2007, the following progress has been made:

Phase 1: Initial TDM Planning

- Identify LBNL TDM Coordinator – completed

  The Berkeley Lab has appointed two part-time TDM Coordinators. One coordinator, the LBNL Site Access Manager, is planning, monitoring, and implementing TDM measures in coordination with the departments overseeing parking and access. The other coordinator, the Sustainability Engineer, is overseeing studies evaluating the cost and benefits of further TDM measures.

- Form LBNL Transportation Task Force – completed

  An LBNL Transportation Task Force has been initiated and members currently consist of TDM Coordinators (Site Access Manager and Sustainability Engineer), Chief Facilities Planner, Traffic Engineer, Bus Services Manager, and Site Construction Coordinator.

- Conduct Commuter Surveys and TDM Measure Cost Studies – in progress

  Fiscal year 2008 funding has been secured to conduct a commuter survey. The LBNL Transportation Task Force has developed a draft survey for this purpose. The results of the survey will be used to identify baseline commute patterns of employees and to identify transportation modes that can be improved. It will also document the current situation to establish a baseline for measuring improvement. Studies to compare the costs of implementation of additional TDM measures vs. the cost of building parking structure will be assessed in future years.

- Conduct Parking Management Study – completed

Transportation consultants were commissioned by the acting TDM Coordinator to conduct an LBNL Parking Supply and Demand study in 2007. As part of the study, the consultant verified the number and designation of available parking stalls and observed parking demand during mid-morning and afternoon periods.

- Initiate Commuter Outreach – in progress

  The TDM Coordinator, who is also the Lab's Site Access Manager, has contacted several programs to learn about how LBNL staff can benefit by using their programs. The TDM coordinator is inquiring and/or marketing the following programs (initially at the LBNL Badge Office):

  - "Wage Works" – pre-tax benefit for commuters.
  - Guaranteed Ride Home – members have access to free transportation (taxi or car rental) from work to home in event of emergency.
  - 511 Vanpooling – coordinated service to link interested commuters to a vanpool in the area.
  - BART Discount Tickets – if enough staff members sign up, LBNL will qualify for discount tickets.
  - AC Transit Discount Tickets – being researched.

- Develop Contractor Delivery Routes and Construction Traffic Management Plans – in progress

  The TDM Coordinator, sustainability engineer, and Site Construction Coordinator are in discussions with LBNL Project Managers to determine the status of this effort. Projects for immediate attention include the Guest House, the Computation Research & Theory (CRT) facility, Helios, and the User Support Building (USB).

- Expand Bicycle Infrastructure – to be determined

  All Lab buses currently have two bike racks in front and five or six bike racks in back. The Potter St. Shuttle has two bike racks in front and two in back. Security Vehicles can also accommodate bikes and riders after normal business hours (after 7 pm). The number of bike racks to be added will be determined in the commuter survey.

- Investigate Parking Fee at Leased Buildings – in progress

  LBNL will be reviewing the possibility of initiating a parking fee at the Oakland Scientific Facility, the leased facility in Downtown Oakland. (The Lab's lease at Building 937, an office building in downtown Berkeley, will be terminating and staff will be relocated to the Lab's main site starting in July 2008.) Information about the Parking Cash-Out Program (AB2109) has been received and is being reviewed for applicability to the Lab's leased facilities. .

- Mitigation Intersection Study: Hearst Avenue / Gayley Road / La Loma Avenue – to be determined

This action item will be taken up by the LBNL TDM coordinator, task force, and traffic consultant, in coordination with the City of Berkeley. The goal is to accomplish this task prior to the beginning of construction of the Helios and CRT projects.

Phase 2 and Phase 3 of the TDM Plan are expected to be initiated after the completion of Phase 1 tasks; nevertheless, LBNL has made the following early progress on these TDM phases:

Phase 2: Feasibility Analyses of Additional TDM Measures

- Parking Fee at the Lab – in progress

  In February 2008, the Facilities Division Director and the Berkeley Site Office Director met to discuss the possibility of having a Charge for Parking program on the LBNL site, and this possibility is under review.

- Shuttle Coordination Plan – in progress

  Several meetings have taken place with representatives from the Berkeley Lab, City of Berkeley, AC Transit, Bayer Corporation, and Alta Bates Hospital regarding the feasibility of developing coordinated shuttle scheduling to reduce transportation related impacts in the area.

- Enhanced Pretax Transportation Program – in progress

  TDM Coordinator is investigating the feasibility of enhancing pretax programs, such as Wage Works, and discount tickets for BART and AC Transit (see task under Phase 1).

- Alternative Fuels Program – in progress

  Several government vehicles (about eight in the Facilities Division) were replaced with electric vehicles at the beginning of fiscal year 2008 (Oct 2007). The Facilities Division Director has also ordered three hybrid diesel buses to replace three existing diesel buses. The buses are expected to arrive in fiscal year 2009.

Phase 3: Feasibility of TDM Measures Requiring Significant Capital Expense

- Discount Group Pass Program – in progress

  The TDM Coordinator is investigating the possibility of obtaining discount tickets for LBNL staff on BART and AC Transit.

4.3 RESPONSES TO INDIVIDUAL COMMENTS

This section presents all written comments received on the Draft EIR and response to individual comments. It is recommended that reviewers use the index to comments on pages 4.0-1 through 4.0-2 to locate comments from specific agencies or persons and the responses to those comments.

Letter No. SA-1

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

January 7, 2008

Jeff Philliber
University of California, Regents of the
One Cyclotron Road, MS 69-201
Berkeley, CA 94720

Subject: Computational Research and Theory Facility
SCH#: 2007072106

Dear Jeff Philliber:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 4, 2008, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2007072106
Project Title Computational Research and Theory Facility
Lead Agency University of California, Regents of the

Type EIR Draft EIR

Description Lawrence Berkeley National Laboratory (LBNL) proposes to construct and operate the CRT Facility Project that would be located in the western portion of LBNL in Berkeley, Alameda County, California. The proposed project includes an approximately 140,000-gross-square-foot building and associated infrastructure. The proposed facility would provide new advanced computational equipment and office space to support LBNL and UC Berkeley's research and academic programs and the needs of computer scientists, mathematics, computer scientists, and theoreticians who are currently engaged in high performance computing and high performance production computing and computational research.

Lead Agency Contact

Name Jeff Phillibe
Agency University of California, Regents of the
Phone (510) 486-5257 **Fax**
email
Address One Cyclotron Road, MS 69-201
City Berkeley **State** CA **Zip** 94720

Project Location

County Alameda
City Berkeley
Region
Cross Streets Cyclotron Road / Seaborg Road
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-80, SR 13
Airports
Railways
Waterways
Schools UC Berkeley, Emerson School, numerous
Land Use Research and Education

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 1; Department of Parks and Recreation; Native American Heritage Commission; Cal Fire; Department of Fish and Game, Region 3; Department of Water Resources; Department of Conservation; California Highway Patrol; Caltrans, District 4; Department of Toxic Substances Control; State Water Resources Control Board, Clean Water Program

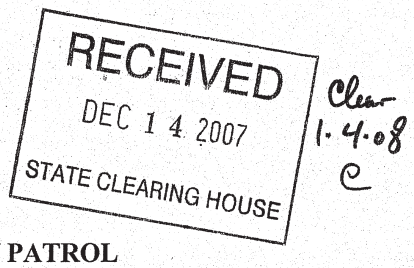
Date Received 11/19/2007 **Start of Review** 11/19/2007 **End of Review** 01/04/2008

Note: Blanks in data fields result from insufficient information provided by lead agency.

State of California Business, Transportation and Housing Agency

M e m o r a n d u m

Date: December 12, 2007



Clear 1.4.08

To: State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: **DEPARTMENT OF CALIFORNIA HIGHWAY PATROL**
Oakland Area

File No.: 370.011086.CRT

Subject: COMPUTATIONAL RESEARCH AND THEORY FACILITY
SCH#2007072106

The Oakland Area Office of the California Highway Patrol (CHP) received the "Notice of Completion" environmental document from the State Clearinghouse regarding the Computational and Theory Research Facility project, State Clearinghouse (SCH#2007072106), proposed by the Lawrence Berkeley National Laboratory (LBNL). After review, we have concluded that the implementation of this project will have a minimal impact on traffic management and traffic safety within our jurisdiction. 2

If you have any questions, please contact Lieutenant M. Sherman at (510) 450-3821.

for D. E. MORRELL, Captain
Commander

cc: Special Projects Section
Golden Gate Division

Safety, Service, and Security

CHP 51WP (Rev. 11-86) OPI 076

Response to Comment Letter SA-1

Response to Comment SA-1-1

The letter is an acknowledgement that LBNL has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. No response is required.

Response to Comment SA-1-2

The Department of Highway Patrol concluded that "implementation of this [CRT project] will have minimal impact on traffic management and traffic safety within our jurisdiction." The comment is noted, and LBNL agrees with this comment.

Letter No. LA-1

CITY OF BERKELEY
Planning and Development
Office of the Director

January 4, 2008

Mr. Jeff Philliber, Environmental Planner
Lawrence Berkeley National Laboratory
Once Cyclotron Road
Berkeley, CA 94720

Dear Mr. Philliber:

The City of Berkeley appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Computational Research and Theory Facility (CRT). Our comments relate to the City's major areas of concern as follows:

- Aesthetics
- Air Quality
- Hydrology and Water Quality
- Hazards and Hazardous Materials
- Land Use and Planning
- Transportation and Traffic
- Utilities, Service Systems and Energy: Wastewater
- Cumulative Impacts
- Alternatives

In summary, the City is perhaps most concerned with the scale of the proposed building and its visual impacts and with the lack of meaningful assessment of alternatives. The building as shown in the DEIR is 160 feet tall, about the same size as the tallest buildings in downtown Berkeley. It would be highly visible from locations throughout Berkeley and other portions of the inner Bay Area. This size building would not seem to be permitted under LBNL's Long Range Development Plan (LRDP) policies adopted less than a year ago. Subsequent to the issuance of the DEIR, City staff has made initial informal comments on the scale of the building at meetings with LBNL staff, and understands that LBNL is looking at ways it can address those comments. We look forward to an ongoing dialogue with LBNL in

Planning a Safe and Sustainable Future for Berkeley
2118 Milvia Street, Suite 300, Berkeley, CA 94704 Tel: 510.981-7400 TDD: 510.981-7474 Fax: 510.981-7470
E-mail: planning@ci.berkeley.ca.us

regard to the building. Nevertheless, it is unfortunate that the initial presentation of the building in the DEIR shows a structure that would be a significant presence in the hills behind the University, contrary to the spirit, intent and explicit language of the LRDP.

Aesthetics

The LBNL Long Range Development Plan (LRDP) contains explicit policies regarding the maximum height of buildings in Section III, and for the design of projects in its Guidelines in Appendix B-1 of the LRDP. In its response to City comments on the application of the Design Guidelines in the LRDP FEIR (page IV-55), LBNL states that

> *All future proposed development projects would be evaluated for consistency with the 2006 LRDP. A proposed project's scope of development, location, population and objectives would be reviewed for consistency with the LRDP and a finding of conformance would be an essential first component to any proposed project. Any deviations from the LRDP would be fully explained and analyzed, as appropriate, under CEQA.*

The City notes that in the LRDP Building Height Map (Figure III-6, page III-24, LRDP DEIR), the CRT location allows for a maximum height of 6 stories. While the LRDP does not define the maximum height in feet of a six story structure, even buildings with very tall floor to floor heights average no more that 15 feet, for a maximum height of perhaps 90 feet. The proposed building at 160 feet (DEIR page 3.0-1) clearly violates this standard. If built as proposed, it would be approximately the same height as the tallest buildings in Berkeley (e.g., the Wells Fargo building). The City fails to find any reference in the CRT DEIR to the LRDP height guidelines, contrary to the commitments made in the LRDP as described above, and contrary to CEQA which requires that a DEIR evaluate a project against relevant plans and policies. While the City does not agree with many of the conclusions of the aesthetic impact analysis in the CRT DEIR (as described further below) the DEIR does reference many of the guidelines (DEIR, page 4.1-8 - 4..1-11) as applicable to this project. 1

In regard to the remainder of its aesthetic analysis, the DEIR is highly deficient. While presenting some of the applicable guidelines, the DEIR fails to provide an evaluation of conformance with those policies. It does not state that conformance with those Guidelines is a criteria for determining a significant impact under CEQA (although it does so under "Land Use", as described below). It therefore does not determine, as it clearly should have, that the project as proposed would have significant visual and aesthetic impacts. 2

The site of LBNL forms a backdrop for the whole City of Berkeley and is therefore a critical aesthetic resource. In our comments on the LRDP, we noted significant concerns with taller buildings (see LRDP FEIR, City of Berkeley Comment Letter C, page 6 of 29), because they have greater visual impacts and are difficult to screen. We strongly recommended stepping buildings with the terrain (page 7 of 29) rather than adopting the strategy of the Molecular Foundry which cantilevers the buildings over the hillside. Our fundamental request was for buildings "to fade into the background," and this goal was seemingly supported by language in the Guidelines (page B-8) that called for the following: 3

- *Building footprints shall be designed with long-narrow aspect ratios in parallel to natural terrain to the degree consistent with program needs.*

- *To the degree feasible, the massing of new buildings will be configured to minimize their visibility when viewed from equal and lower elevations, and to complement the hillside terrain.*

- *Large buildings shall be designed to reduce their perceived mass and impart a human scale to the site. Buildings with a horizontal dimension greater than 200 or a vertical dimension greater than 4 stories shall incorporate changes in both façade plane and vertical height to reduce their perceived scale and bulk.*

- *Building heights for all new buildings are typically limited to four stories. However, in locations where the site's topography creates a natural backdrop or provides appropriate visual screening, building heights may be increased. New buildings shall conform to the height limits indicated on the building height map. (emphasis added)*

3

This comment letter quotes each of these guidelines because the DEIR does not do so. The DEIR therefore provides no analysis of conformance with these critical height and bulk guidelines. In fact, the DEIR has very little analysis of conformance of the project with the LBNL Design Guidelines, again contrary to the commitment made by LBNL in its response to our comments on the LRDP, and in violation of CEQA.

Had some analysis been conducted of conformance with these Guidelines, it would have found the following:

- The building footprint is designed with a long-narrow aspect cantilevered away from the hill (except for the structure holding the computer which is parallel but less tall) rather than parallel to the natural terrain. This may reflect program needs and the requirements for reducing building energy needs, but the DEIR fails to provide any analysis of over-riding programmatic requirements that may have led to a project design that seemingly violates design guidelines.

- As illustrated by Figures 4.1-3 and especially 4.1-4, the massing of this building is clearly not configured to minimize its visibility and does not complement its hillside terrain. The DEIR fails to analyze the impact or to recognize it as a significant impact in its assessment.

4

- This very large building is clearly not designed to "reduce its perceived mass and impart a human scale to the site". Since it is not identified as an issue, the DEIR fails to evaluate how this building that clearly has horizontal dimensions greater than 200 feet and is more than 4 stories tall has incorporated changes to reduce its perceived scale and bulk.

- The building does not conform to the height limits indicated on the building height map nor explain its lack of conformance.

Among the requirements of CEQA is that a DEIR evaluate a project's conformance with adopted policies intended to minimize its impacts. Simply quoting them (or some of them) is not sufficient. This DEIR fails in meeting this fundamental requirement of CEQA in regard to this issue. 4

Air Quality

Construction and Transportation Emissions.

The City expects that Hearst and University Avenues will be used for construction transportation, including the many trucks associated with construction on this site (page 4-12-36). The cumulative impacts on public health from this and other construction/transportation activities for people living close to these streets should be assessed, especially on sensitive receptors such as the many childcare and elderly care facilities on these routes. A mitigation could include the use of alternative fuels and/or the use of very low-particulate generating vehicles. 5

Hydrology and Water Quality

LBNL recognizes that its drainage travels west and into the Bay through the City of Berkeley. Therefore, LBNL must coordinate the requirements of its projects with the requirements of its neighbors. In general, this means that the minimal level of performance for their efforts is the Maximum Extent Practicable (MEP), as reflected in the Stormwater NPDES permit for Berkeley and Oakland. 6

Page 3.0-13, 3.6.3 Storm Water, 2nd paragraph. This paragraph describes the drainage system for the project and refers to Figure 3.0-7. The DEIR indicates that final sizing of its hydromodification vaults will not be determined until after approval of the final project design. It is not clear whether any planning level computations have been performed for sizing the vaults and other stormwater management infrastructure to ensure that they are feasible on this steep and highly constrained site. The City believes that, at minimum, such information should be provided in the FEIR to ensure that the mitigations as proposed are feasible and would not, in themselves, have potentially significant impacts. 7

Page 4.7-5, Header: Surface Water Quality, 8th line of first full paragraph. This section describes existing conditions, but includes discussion on the proposed project and future conditions. The Best Management Practices (BMPs) are being limited to meeting LBNL's Storm Water Pollution Prevention Plan (SWPPP). The City believes that to meet the requirements of the Regional Water Quality Control Board, LBNL should use BMPs to meet the requirements of the SWPPP or to the Maximum Extent Practicable (MEP), whichever is greatest. 8

Page 4.7-20, CRT Impact HYDRO-1, 3rd line, second full paragraph. It is not clear if the author means only "most" or if "all" the runoff from the roof will be directed to the vegetated swales. 9

Page 4.7-21, CRT MM Impact HYDRO-1. See previous comment regarding the hydromodification vaults and the lack of information as to feasibility. This section indicates that preliminary sizing has occurred based on the Bay Area Hydrology Model (BAHM), however information on the size and extent of the vaults is not provided to determine feasibility or the impacts of providing these vaults. 10

Page 4.7-21, CRT Impact HYDRO-2. As described in this section, potential project impacts would affect Oxford Street Culvert at the west end of the campus, with potentially significant impacts on the City. Nevertheless, the mitigation for the impact is subject to review only by LBNL staff, and not by the City. The City believes that since impacts are on the City, it should have some purview over the calculations used to determine whether that impact will occur, including the protocols to be used for determining the runoff for the 25- 50-, and 100-year storm conditions. 11

Hazards and Hazardous Materials

City of Berkeley Fire Department staff met with the LBNL Fire Marshal to consider access issues for the CRT project just prior to the issuance of the DEIR. Provided the building meets current codes and required fire department access and water supply requirements, the Berkeley Fire Department does not believe additional mitigations are necessary. 12

The DEIR does not include a comprehensive list of hazardous materials that may be used on the site, besides a non-specified quantity of aqueous ammonia and possibly 2200 gallons of diesel fuel. While the City does not expect that the uses in this particular building will lead to the use of any significant amount of hazardous materials, the City is unable to comment without a more complete list and requests that it be provided, including more specific information on quantities. 13

Health Risk Evaluations should incorporate the emissions from the emergency generators. LBNL should use a conservative number of days of use of generators. The City believes that "conservative" means the maximum number of days of "brownouts" that has occurred in any given year over the past 10 years. 14

There may also be some hazard related to electromagnetic fields (EMF) from the very large amount of electricity needed for this facility. The DEIR includes no assessment of any risks associated with EMF levels and possible impacts on human health. 15

Land Use and Planning

The Land Use and Planning section considers conformance with local plans and policies. As LBNL is not subject to City of Berkeley regulation, it should at least fully consider conformance with its own policies. As noted above, this DEIR does not identify some policies that are of key concern to the City of Berkeley, and completely fails to address fundamental height policies. Since the DEIR identifies "conflict with applicable land use plan, policy, or regulation…" as a significant impact, it should have 16

concluded that lack of conformance with its own height policies (see above) is a significant impact. Similarly, lack of conformance with the design guidelines described earlier under Aesthetics should also have been described and discussed in this section as well as in the Aesthetics section. Again, this lack of conformance should have been identified as a significant impact. 16

Transportation and Traffic

The City has the following comments.

1. No figure shows the location of the handicapped spaces. It appears that they would be located on the upper level. Since the spaces are not shown, comments cannot be provided on their design. It should be noted, however, that a walkway needs to be provided that does not require a wheelchair user to pass behind a vehicle other than his or her own. The handicapped parking space supply needs to provide reasonable accommodation and logically should be based to a large extent on the amount of parking spaces that would be required for a building by itself. Given 300 employees and a parking space for every 1.7 employees, which is the current LBNL standard as presented in the Draft EIR, the building would require approximately 175 spaces. The ADA requirement of 2% of parking supply would require six handicapped spaces. Justification should be provided for any reduction from this number. 17

2. Page 4.12-24. Page 4.12-24. Even though parking is not in itself an environmental impact, it directly relates to trip generation and is an issue when major decreases in trip generation are assumed due to an absence of parking. With a campus having a large existing parking supply, excess existing parking could partially meet the demand of new buildings, but the feasibility of such a strategy needs to be examined when any excess existing supply is scattered throughout a large, hilly campus. The Draft EIR states that occupancy rates vary throughout the campus. Information on existing occupancy rates is needed for those facilities closest to the CRT project. The City does not believe it is reasonable to expect that a new building's transportation impacts will be uniquely addressed through TDM measures while existing facilities operate as usual. Mitigation measure TRANS-1d in the LBNL LRDP indicates that an " . . . an enhanced TDM Program has been drafted in consultation with the City of Berkeley and is proposed to be adopted by the Lab." This new TDM program has not yet been designed or implemented, and yet is assumed to have significant beneficial impacts in relation to trip generation for this project. In fact, the Draft EIR refers only to reductions in trips for the two new facilities, and does not estimate the overall reductions that are likely to be necessary to address the overall transportation demands of LBNL. 18

   Since the TDM programs have not as yet been implemented, the wording of the Draft EIR suggests that parking passes will be issued to 52% of the Helios and CRT employees but to 100% of existing LBNL employees, since a trip reduction of 52% has been assumed for trip generation at the two new facilities. Assumptions even differ for the parking spaces provided for the project, as 100% occupancy is assumed for the new 50 spaces adjacent to the Helios facilities

while only 90% for the other spaces. Existing parking spaces are located nearby but no mention is made of the current occupancy of these lots. The overall occupancy for LBNL is 81% but certain lots have higher occupancies. The confusing status of the proposed TDM measures makes analysis of project traffic impacts difficult and inadequate.

The Draft EIR mentions that parking for service vehicles will be provided, but such spaces are not shown on any of the site plans in the document. Also, it is likely that visitors with daily parking passes will visit the facility. It is recommended that at least five visitor parking spaces be provided adjacent to the building. Also, the location where shuttle buses would stop for boarding and alighting passengers should be shown to ensure that this need has been adequately considered.

The City is supportive of LNBL adopting effective TDM measures, but what the Draft EIR has done is work backwards from available spaces and assume that a TDM program that has not been implemented will create the desired results. The traffic analysis should be based on existing trends, and the impact of mitigation measures can then be assessed along with other mitigation measures.

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The City considers the DEIR's assumption regarding reduction in trips for the CRT facility to be greater than what can be justified for a single project. As noted, the City believes trip generation can only be assessed in the context of the LBNL campus-wide TDM program.

It is possible that the DEIR underestimates the availability of parking spaces on the campus. For parking lots serving daily commuters, 95% occupancy is routinely achieved, and it is suggested that this number be used. Calculating total demand based on the current parking space to employee ratio would yield a demand for 2,630 spaces (2,160+470). Increasing the occupancy from 81% to 95% would yield a "new" supply of 302 vehicles, which added to the 50 parking spaces provided would be an available supply of 352 vehicles, which is approximately 74% of the demand for the new facility based on the current supply ratio. Thus, a reduction of 26% would appear to be reasonable as a mitigation measure but only if a commitment to campus-wide TDM measures were adopted and the impacts could be documented. The parking supply, as noted above, should explicitly provide for the incidental vehicle trips by visitors, service vehicles, and shuttle buses.

3. Off-site traffic impacts. Now that both the University and LBNL LRDPs have been completed as well as several project specific EIRs have also been prepared, the City feels that all intersections have been identified that are likely to be impacted by development of the two institutions. The agreement that monitoring will occur on a regular basis with the involvement of these two groups and the City to identify when improvements are required will enable the timing of mitigations to be identified when they are required. This agreement offsets to a large degree the City's concerns regarding the identification of impacted intersections. The only two drawbacks are that this process is not proactive and may not lead to the timely installation of

19

improvements and that the issue of who pays what portion of a "fair share" distribution has not yet been defined. 19

4. Page 4.12-3. Project Impacts. The TDM mitigation measure that is included in the LRDP has been included as a mitigation measure for the proposed project. As mentioned already, mitigation measures should not be used to justify trip generation for baseline project conditions, especially if they have not been approved and their impact documented. 20

5. Construction Impacts. The Gayley/Hearst intersection will be impacted by construction of both the Helios and CRT facilities. The City believes that any low cost improvements to this intersection must be implemented before construction begins for either of these projects. The City would like to work with LBNL to conduct the study for this intersection identified in LRDP MM TRANS-1c as soon as possible so that feasible improvements can be identified. 21

Utilities, Service Systems and Energy: Wastewater

Page 4.13-11, CRT Impact UTILS-2, 4th line of the first paragraph.
This sentence lists specific design features. The sentence needs to indicate that others will be examined as well, to maintain ability to meet Maximum Extent Practicable (MEP) standard. 22

Wastewater from the proposed CRT project flowing through the Hearst Monitoring Station and to the sanitary sewer lines on Hearst Avenue will not have any significant impact on the capacity of the sewer collection system in this subbasin area.

Pg. 4.13-3 Sewer System Conditions and Upgrades

The statistics on the portion of the City sewer collection system that has been upgraded, replaced or rehabilitated should be revised:

2nd paragraph , 4th sentence should be replaced as follows:

As of 2006 , over 50 percent of the City sewer collection system has been replaced and rehabilitated and 12 miles of new relief sewer lines had been installed. 23

3rd Paragraph, 2nd sentence

The sanitary sewer lines on Hearst Avenue are in good condition ant they flow directly into the interceptor on ***"Oxford Street."***

Cumulative Impacts

Aesthetics/Land Use

One of the ways in which the cumulative impacts of the Long Range Development Plan are to be minimized is by following the policies and Design Guidelines in the LRDP (see LRDP DEIR, page IV-A-21). While the LRDP FEIR concluded that impacts may still be significant, the application of the LRDP Guidelines is clearly defined as a mitigation. When LBNL fails to follow its own Guidelines, it calls into question any reliance on the aesthetic, land use or other mitigations included in the LRDP and of the potential cumulative impacts of development where there are no reliable aesthetic/height guidelines or mitigations. 24

Page 5.0-25, CRT Cumulative Impact HYDRO-1 , 5th paragraph. Without close coordinate and consistent requirements between the various entities that contribute to City of Berkeley stormwater, it is difficult to determine how a conclusion can be reached regarding the cumulative impacts of all of the parties that affect stormwater quality and quantity in the Strawberry Creek watershed. In general, this means that the minimal level of performance for LBNL's efforts should be the Maximum Extent Practicable (MEP), as reflected in the Stormwater NPDES permit for Berkeley and Oakland, for peak flow control and water quality BMPs. 25

Alternatives

A typical strategy for dismissing potential alternatives to a project is to define the project objectives in such a way as to make various alternatives infeasible because they do not satisfy project objectives. This seems to be the case in this instance in regard to some of the potential alternatives for this facility. The existing "super-computer" used by LBNL is currently off-site. By defining a project objective as providing "researchers with convenient access to other Lab scientific facilities, programs…" off-site locations are essentially precluded. 26

What is not clearly described in the objectives or elsewhere in this DEIR is *why* this particular facility needs to be conveniently located on-site. What work is physically done with the computer that requires convenient access to it? The computers of major corporations are located hundreds and thousands of miles from company headquarters. The main computers for some Bay Area based companies are specifically located away from the Bay Area due to the risks associated with being in close proximity to major earthquake faults. Given the size and impacts of this project in this location, the issue of why such a facility must be on-site at LBNL must be more fully addressed.

In regard to the specific alternatives, the City has the following comments: 27

6.3.1: Reduced Density Alternative. Because the DEIR fails to disclose the significant aesthetic/land use impacts described earlier in this letter, it fails to conclude that the reduced density alternative would mitigate that impact by making the project considerably smaller and less visible. While the DEIR found that construction related traffic impacts were less than significant (because they are temporary), the project would still generate 1166 trips by large trucks carrying fill, as well as hundreds of other trips by trucks carrying concrete and other loads (not described in the DEIR) on city streets leading to the site. 28

These temporary impacts would also be considerably reduced (both in length of construction time and number) by a reduced size project. 28

Alternate On-site locations. As previously discussed, because the DEIR fails to identify significant aesthetic/land use impacts, it does not fully address the potential reduction in those impacts due to other on-site locations. For example, the Building 51 A site is part of a large relatively level, previously developed site that could accommodate the large building program proposed for the CRT with less visual impact on the City and an overall lower building envelope. It's unclear why some minor delay in the schedule that might be required in order to use this much better site (from an aesthetic/land use impact point of view) is infeasible. 29

Alternate Off-Site Locations. As described above, unexplained project objectives make off-site locations infeasible. Further explanation as to why this computer must be on-site is needed. This not only relates to aesthetic impacts, but to the construction impacts mentioned earlier. The issue of power supply is also raised here (and elsewhere), but page 3.0-16 seems to indicate that significant improvements are needed for the LBNL power supply to accommodate this facility. It is unclear why such upgrades are not feasible for other potential off-site locations, yet are feasible for the proposed on-site location. 30

Alternative 2, Low Profile Alternative. Again, because the significant aesthetic/land use impacts of the project are not identified, the importance of reducing the height to avoid those impacts is dismissed (page 6.0-12). This is highly unfortunate as the City believes the impact is very significant. The City hopes that LBNL follows through with its informal response to the City that it is working on significant reductions to the height of the building. 31

The City believes that the remainder of the alternatives assessment is flawed for the reasons described above. 32

Finally, in regard to alternatives, we'd like to reiterate our comments on the LBNL LRDP:

> *The City does not believe LBNL has sufficiently justified the need for the amount and location of space it is proposing. The lab is located in an extraordinarily difficult place for development: steep hillsides adjacent to a major fault hazard, in a wildland fire hazard area with very limited access. While the City recognizes the value the Lab places in its being in close proximity to the University, and in the importance of synergy and collaboration to achieving the Lab's mission, it has previously located some facilities off the hill campus. There is some discussion of off-site locations in the Alternatives Analysis, but given the significant impacts of continuing to expand in the hillside location, the City does not believe that there is sufficient explanation as to why, for example, a two-campus option with regular shuttles would be so detrimental to the mission of LBNL as to make this option infeasible. Moreover, a project variant is to bring back to the hill campus some of the functions that have been decanted to other locations. Again, while there may be advantages to bringing all of LBNL into the same general location, those must be weighed against the impacts and risks associated with increasing the number of people and the* 33

amount of built space at the hill campus location. The City does not believe that these tradeoffs have been sufficiently considered in the DEIR.

We continue to have these concerns. While we understand the desire to have such facilities on-site, LBNL has not yet explained why it is a necessity and/or the significant benefits from this particular project that would outweigh the obvious costs. In this instance, LBNL has experience with maintaining such a facility off-site. It therefore should be able to state in fairly concrete and specific terms why it is necessary to bring it to this highly vulnerable and difficult-to-develop location with potentially significant impacts on the City. 33

In conclusion, we believe this DEIR fails to disclose significant impacts of the project and therefore fails to identify necessary mitigations and alternatives to address those impacts. We respectfully request that appropriate corrections be made in the document and that it be recirculated for further comment to address those new significant impacts as required by CEQA. 34

Sincerely,

Dan Marks
Director
Planning & Development Department

cc: Phil Kamlarz, City Manager
Mayor and Council
Claudette Ford, Public Works Director
Zach Cowan, Acting City Attorney
Pamyla Means, City Clerk
Transportation Commission Secretary
Planning Commission Secretary
CEAC Secretary
Public Works Commission Secretary

Response to Comment Letter LA-1

Response to Comment LA-1-1

As indicated in Section 2.0, Changes to the Project Description, the proposed building is now planned to be 96 rather than 160 feet high (see Master Response No. 2, Building Height). As discussed in the Master Response, the revised project design would eliminate the east-west oriented office tower and place the office portion of the building atop the HPC floor on the same roughly north-south axis. The southern and northern sides of the office section would not feature uninterrupted façade planes of greater than 85 horizontal feet. The western side of the office section would be 380 horizontal feet, but this view would have limited off-site exposure and it is 33 vertical feet lower than the original project design. These project refinements further implement and achieve consistency with the LBNL 2006 LRDP Design Guidelines. Because this comment pertains to the original building design, however, the following response discusses the building as originally proposed.

Building-height-related objectives and guidelines, as well as others related to visual impacts, were summarized in Section 4.1, Aesthetics (page 4.1-10) of the Draft EIR. LBNL 2006 LRDP Design Guidelines relevant to building height include the following from "A. The Land, Topography, & Views:"

> Objective: Mass and site buildings to minimize their visibility.
>
> - To the degree feasible, the massing of new buildings will be configured to minimize their visibility when viewed from equal and lower elevations, and to complement the hillside terrain.
>
> - Large buildings shall be designed to reduce their perceived mass and impart a human scale to the site. Buildings with a horizontal dimension greater than 200' or a vertical dimension greater than four stories shall incorporate changes in both façade plane and vertical height to reduce its perceived scale and bulk.
>
> - Building heights for all new buildings are typically limited to four stories. However in locations where the site's topography creates a natural backdrop or provides appropriate visual screening building heights may be increased. New buildings shall conform to the height limits indicated on the building height map.

Although the CRT office section under the original project design would range from three to five stories, from off-site viewpoints, the CRT building would not expose an uninterrupted façade plane of greater than four stories due to its siting, orientation, and alignment in relation to screening trees. In addition, the southern and western sides of the office section, as originally proposed, would not feature uninterrupted façade planes of greater than 200 feet in horizontal length. The northern side of the office section plane would be marginally longer than 200 horizontal feet, but this view would have limited off-

site exposure, be positioned obliquely to the viewing plane, and feature varied changes and interruptions in its lower dimensions. These southern, western, and northern views of the building are identified and analyzed in the CRT Draft EIR. Eastern views are not available from off-site locations.

The proposed CRT building's foundation would be situated along a slope and the building's apparent height would be different depending on an observer's viewpoint. The original proposed building generally conforms to the six-story height zone; the west elevation of building is five stories of offices plus one tall story of computer floor. Beneath the computer floor are retaining walls, some exposed basement levels, and stairwells. These structures would be located below the midpoint of the slope on which the building would stand. The mid-point of the building, halfway up the slope from west to east, includes five stories of offices and one tall story of computing floor, with little or no exposed basement/retaining wall. The eastern elevation of the building, measured from ground to roofline, is two stories plus the height of the bridge connection to the Plaza at Building 50. The project as originally proposed is therefore consistent with the design guidelines regarding building height. As noted above, the revised project design is also consistent with the building height design guidelines because the revised design further minimizes the massing and height of the proposed building.

Response to Comment LA-1-2

LBNL disagrees with the statements in this comment to the effect that the aesthetics analysis is not sufficient because it does not provide an evaluation of conformance with the policies of the LBNL 2006 LRDP Design Guidelines. The CRT Draft EIR included a discussion of LBNL 2006 LRDP Design Guidelines in the Regulatory Considerations subsection of each resource section, including aesthetics. The design guidelines were separated into each applicable resource section to mimic the format of the 2006 LBNL LRDP EIR and to focus the reader on the design guidelines that applied to that environmental topic. LBNL summarized the design guidelines rather than setting forth the full text of those guidelines.

As the comment notes, the proposed project's consistency with the design guidelines was also analyzed in Section 4.8, Land Use and Planning. The impact discussion for CRT Impact LU-1 includes several areas of consistency analysis with the 2006 LRDP, specifically including height. The consistency analysis for design guidelines is located on pages 4.8-14 to 4.8-15. This discussion included consistency for all environmental topics, including aesthetics.

The determination in the EIR that the project would not have significant visual and aesthetic impacts was based on a variety of factors, including principally the facts that the building would be screened from view from most public viewpoints and would not substantially alter the visual character of the LBNL site. As noted in Response to Comment LA-1-1, with modifications that are now included in the proposed

project in response to the City's comments, the aesthetic impact, even though already less than significant, has been further reduced.

Response to Comment LA-1-3

Please see Response to Comment LA-1-1 above.

Response to Comment LA-1-4

As discussed in Response to Comment LA-1-2, the project was determined in the EIR to be consistent with the 2006 LBNL 2006 LRDP Design Guidelines. With respect to the design guideline referenced in this comment related to building footprints and their orientation to natural terrain, the cruciform footprint of the CRT building described in the Draft EIR is oriented with the dominant axis (the HPC structure footprint) parallel to the slope, while the subordinate axis (the office section footprint) is aligned perpendicularly to the slope. As noted both in the comment and in Section 3.0, Project Description, of the Draft EIR, the orientation of the office portion of the proposed building would reduce solar heat gain and thus reduce energy requirements, meeting LBNL 2006 LRDP Design Guidelines objectives for energy efficiency. The revised project design would orient the entire building parallel to the slope, and would further reduce solar heat gain and reduce energy requirements.

With regard to other specific aspects of building design, please see Response to Comment LA-1-1 above. With regard to evaluation of the project's conformance with adopted policies, please see Response to Comment LA-1-2 above.

Response to Comment LA-1-5

The Laboratory considered the health impacts from air emissions exhausted from heavy-duty diesel-powered vehicles traveling through the streets of Berkeley when it conducted its human health risk assessment for its LRDP, as it modeled its bus routes around campus and through downtown Berkeley for both existing conditions (i.e., year 2000) and future year LRDP conditions. Impacts from this activity were estimated over the entire modeling area established for the Laboratory's human health risk assessment, which also included several hundred sensitive receptors identified jointly with the University of California at Berkeley for use in their own risk assessment.

The Laboratory's buses are in a comparable class of vehicles for emissions analysis purposes as construction vehicles expected to visit the site during the LRDP period. An outcome of this is that the diesel particulate matter emissions from both types of vehicles are comparable and any differences are considered minor. Emission estimates along these bus routes were then derived using the California Air

Resources Board's most current EMFAC emissions model. The ensuing risk results from the LBNL bus route modeling therefore serves as an excellent indicator of the risk that could be expected from construction vehicles traveling through Berkeley as well, provided that two important and appropriate adjustments are made.

The first adjustment involves exposure duration. For the human health risk assessment, all off-site receptors, including sensitive receptors, were assumed to be exposed to the predicted diesel particulate matter concentrations for essentially 70 continuous years (i.e., 350 of 365 days each year). This follows standard industry risk assessment methodology. In the case of construction traffic for the CRT project, the exposure duration would be considerably less at 2.5 years (30 months). This represents a 28-fold difference, or reduction, in exposure.

The second adjustment relates to the daily activity level of heavy-duty diesel-powered vehicular traffic. This adjustment also significantly lowers risk, relative to the human health risk assessment. The risk modeling of the Laboratory's bus route assumed approximately 100 round trips per day. Construction vehicle traffic estimates for the CRT project are 10 round trips per day, or 10 times less.

Cancer risk estimates in the human health risk assessment from the Laboratory's diesel buses in the one block width on either side of Hearst Avenue along the UC Berkeley campus exceeded 10 in one million under existing conditions, dropping approximately 25 percent under future LRDP conditions. The maximum estimated risk in both scenarios in this area was approximately 25 in one million. It is important to note that with the exception of one small area on the northern boundary of the Laboratory, the off-site risk associated with implementation of the LRDP as compared to both the baseline and the no project scenarios decreased. Even at the northern boundary, the risk increase was less than a 10-in-a-million. Additionally, no construction traffic would travel through the northern area since this area is isolated from the main access roads to the Laboratory.

Because the bus routes diverge at Hearst Avenue and Oxford Street, cancer risk estimates for the remainder of the routes through downtown Berkeley are much less than along Hearst Avenue. With the two adjustment factors discussed above being multiplicative, a conservative figure for risk related to off-site CRT construction traffic can be arrived at through dividing the figure for the LRDP shuttle buses under existing conditions by the factors identified above: 28 to adjust for the number of years of exposure for the CRT project and 10 to adjust for the number of daily vehicular trips. The resultant cancer health risk from CRT-related construction traffic going through the streets of Berkeley is then considerably below the 10-in-one-million significance criteria. For instance, this translates the maximum cancer risk from heavy-duty diesel vehicles under existing and LRDP conditions, estimated at

approximately 25 in one million, into an estimated risk from construction vehicles of no more than 0.09 in one million.

In support of the above conclusion, based on the Draft EIR consultant's experience with health risk assessments of projects with much larger trucking operations, the health impact due to heavy-duty trucks traveling through the area would be expected to be much less than the cancer risk significance threshold of 10 in one million. The EIR consultant prepared an HRA that evaluated the cancer risk from truck trips associated with a materials recovery facility. The project evaluated the 70-year cancer risk associated with up to 424 diesel trucks per day and found that the cancer risk was less than 10 in one million for residential receptors. Therefore, the small number of truck trips associated with the construction phase of the CRT project is unlikely to result in a human health risk greater than 10 in one million. However, as noted, the Draft EIR conservatively concludes that although the overall cumulative impacts from toxic air contaminant emissions would decrease over time, the toxic air contaminant emissions from activities associated with the project would make a cumulatively considerable contribution to the significant cumulative human health risk impacts related to toxic air contaminant emissions. This additional discussion does not change the conclusions of the Draft EIR with respect to the significance of emissions impacts.

Furthermore, the Bay Area Air Quality Management District considers projects that implement all appropriate mitigation to minimize fugitive dust, reactive organic gases, and oxides of nitrogen to be considered less than significant. During construction of the proposed project, the Lab would implement LRDP EIR Mitigation Measure AQ-1a to minimize fugitive dust as well as LRDP EIR Mitigation Measure AQ-1b to minimize emissions associated with equipment and vehicle exhaust. In addition, the presence of heavy-duty trucks on city streets would be temporary in nature and would be limited following completion of site grading and excavation.

With regard to the use of alternative-fuel or low-particulate-emissions vehicles, new trucks in vehicle fleets are subject to the 2007 emissions standards and must include particulate control, but the phasing-in of such vehicles is expected to occur slowly over time for an existing fleet that consists mostly of older vehicles. A requirement for use of low-emissions trucks would therefore be impracticable. Also, while, as noted, the project's contribution of toxic air contaminant emissions, including those from heavy-duty trucks transporting materials, would be very low, it would still be considered a considerable contribution to a significant and unavoidable cumulative significant impact from toxic air contaminant emissions, even with the mitigation measures described above.

Response to Comment LA-1-6

As noted in Section 4.7, Hydrology and Water Quality of the Draft EIR, LBNL is generally exempt from local regulations and is therefore not subject to the Alameda Countywide Clean Water Program National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer Systems. (The permit would also exempt LBNL based on an exemption for pre-existing coverage by other stormwater permitting programs). However, LBNL generally seeks to cooperate with local jurisdictions. LBNL has therefore included design measures in the proposed project to manage hydromodification. The project would implement a number of best management practices (BMPs), addressing management practices, control techniques and system, design and engineering methods. LBNL's Storm Water Pollution Prevention Plan (SWPPP) includes BMPs that EPA acknowledges will realize the Maximum Extent Practicable (MEP) standard. The Draft EIR also includes a list of potential best management practices. The BMPs are not limited to meeting SWPPP provisions. Pages 4.7-14 through 4.7-24 of the Draft EIR describe all measures, including LBNL practices reflecting the "Continuing Best Practices" outlined in the UC Berkeley 2020 LRDP EIR and project-specific mitigation measures, that will ensure that the project will create less than significant stormwater-related impacts.

Response to Comment LA-1-7

As discussed in Response to Comment LA-1-6 above and in the Draft EIR (pages 4.7-14 through 4.7-24), the current design incorporates best management practices. Despite the topographic limitations of the site, both hydromodification and treatment measures are included.

The hydromodification and treatment measures would occur within the footprint of the project site, as analyzed in this EIR, and would reduce potential impacts to hydrology and water quality to a less than significant level. Therefore, the hydromodification and treatment measures would not substantially increase an existing significant environmental impact or result in a new significant impact.

Response to Comment LA-1-8

The referenced discussion of the proposed project and future conditions has been removed from the existing conditions section (see Section 3.0 of this Final EIR). The BMPs are not limited to meeting SWPPP provisions. Pages 4.7-11 through 4.7-24 of the EIR describe all measures, including LBNL practices reflecting the "Continuing Best Practices" outlined in the UC Berkeley 2020 LRDP EIR and project-specific mitigation measures that will ensure that the project will create less than significant stormwater-related impacts.

Response to Comment LA-1-9

After publication of the Draft EIR, it was determined that permeable pavers would be infeasible because of the presence of bedrock at shallow depths. Rather than using such pavers for part of the site, all roof runoff would be treated in vegetated swales or flow-through planter boxes. The final project design would reflect this requirement.

Response to Comment LA-1-10

Planning level computations have been completed, along with sizing and feasibility review of the proposed vaults. The computations were based on the BAHM program as provided by Alameda County. Based on these calculations, the hydro-modification vaults were determined to be feasible.

Response to Comment LA-1-11

For stormwater conveyance, a 10 year storm event would typically be used when sizing storm piping and designating design slopes. The calculation of stormwater conveyance is separate from water quality and hydromodification requirements. The information used to calculate stormwater runoff from the project, including assumptions and protocols, would be shared with the City of Berkeley when it becomes available.

Response to Comment LA-1-12

The comment is noted. The building would meet current codes and required Fire Department access and water requirements.

Response to Comment LA-1-13

As noted in Section 4.9, Hazards and Hazardous Materials, certain hazardous materials could be used in facility operations and maintenance. The Draft EIR indicated that proposed project could include storage of aqueous ammonia solution that would be used to remove nitrogen compounds from exhaust from electrical cogeneration equipment, if the option for larger-scale cogeneration were implemented. Under the revised project large-scale cogeneration is not proposed, and the smaller cogeneration engines that could ultimately be installed do not utilize ammonia or urea. No on-site use or storage of ammonia compounds is planned.

Approximately 500 to 800 pounds of biocides would be used on the site each year for use in treating the cooling tower water. As noted in the comment, if the proposed project includes an emergency generator (required if the cogeneration option is not implemented), an aboveground diesel fuel storage tank with a

capacity of 2,200 gallons would also be installed. Other hazardous materials would be limited to typical household-type cleaning and maintenance products, with on-site storage of no more than a few gallons of each. Since the proposed project would be used as a computer facility and offices, it is not expected to involve handling of other non-radioactive hazardous chemicals (solvents, organic compounds, reagents) or radioactive materials that are typically used in research activities. Hazardous materials beyond those disclosed above are not expected to be used on site.

Response to Comment LA-1-14

As discussed in Section 4.2, Air Quality, of the Draft EIR, the air quality analysis and Health Risk Assessment (HRA) performed for the proposed CRT project included emissions from emergency generators. The analysis was based on operation for 50 hours per year, with operation spread out over several testing events during the year. Golder Associates, which prepared the HRA, also analyzed emissions from a single 40-hour operating event for the proposed Helios project emergency generator. LBNL has indicated that 40 hours is the maximum period of time that such generators would be expected to run due to a power outage, based on historical data; this data includes years in which "brownouts" occurred, and can therefore be considered to provide a conservative estimate of emergency generator use. The results of both analyses showed that emissions from emergency generator operation would not cause a significant increase in lifetime excess cancer risk or acute or chronic hazard index.

Response to Comment LA-1-15

Electromagnetic fields (EMFs), associated with electromagnetic radiation, are generally defined as radiation that comes from the interaction of electric and magnetic fields. Electric and magnetic fields are part of the spectrum of electromagnetic radiation, which includes static electricity, light, magnetic fields, radiofrequency, infrared radiation, and x-rays, among other energy forms. This radiation energy spreads as it travels and has both natural and human-made sources. Electric and magnetic fields are common throughout nature, and are produced by all living organisms. However, concerns with EMFs generally pertain to human-made sources, and the degree to which result in adverse biological effects or interfere with other electromagnetic systems.

The California Public Utilities Commission initiated an investigation in 1991 to consider its role in mitigating health effects, if any, of electric and magnetic fields from utility facilities and power lines. As part of the investigation, the CPUC created the California EMF Consensus Group to incorporate scientific facts and concerns expressed by the public. The group filed recommendations with the CPUC in March 1992. The CPUC based its decision in November 1993 on the work of the Consensus Group, written

testimony, and evidentiary hearings about possible EMF health effects from electric utility facilities. The conclusions and findings included the following:

> We find that the body of scientific evidence continues to evolve. However, it is recognized that public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure.
>
> We do not find it appropriate to adopt any specific numerical standard in association with EMF until we have firm scientific basis for adopting any particular value.

This continues to be the stance of the CPUC with regard to establishing standards for EMF exposure. Currently, the state has no adopted policies or regulations that establish a safe or unsafe distance for residential structures from power transmission lines.

The proposed CRT facility would not include overhead power lines and would not be located adjacent to or include large electrical facilities such as substations. All medium-voltage cabling would be enclosed in underground duct banks and terminated in approved electrical switch gear. All electrical installation would be in compliance with requirements of applicable National Electrical Codes for buildings and data centers.

There is no conclusive evidence of health effects of electromagnetic fields (EMFs). While some regulatory requirements have been established, they apply to transmission lines rather than distribution lines, substations, appliances or other sources of EMF. Because the risks to the environment and human health associated with EMFs emitted from electrical lines and computers in the proposed facility are not understood at this time, analysis of risks associated with EMF levels at the CRT project site would be speculative, which CEQA discourages, and therefore is not required in the EIR.

Response to Comment LA-1-16

Please see Response to Comment LA-1-2. As indicated in Section 2.0, Changes to the Project Description, the project design has been modified to reduce the building height from 166 feet to approximately 96 feet (from ground to roof) since publication of the Draft EIR. The building roofline elevation has been lowered from 773.5 feet to 740.0 feet above sea level.

LBNL disagrees with the statement that the EIR fails to address fundamental height policies. The determination of consistency with the LBNL 2006 LRDP Design Guidelines specifically includes building height. LBNL recognizes that the City disagrees with this consistency determination, but LBNL stands by the determination for the reasons stated in the EIR and in these responses. In any event, in response to the City's comments, as noted above in Master Response No. 2, Building Height, the height of the

facility has been substantially reduced. This further demonstrates compliance with the requirement of consistency with the LBNL 2006 LRDP Design Guidelines, and also further demonstrates that the height of the building does not result in significant impacts.

Response to Comment LA-1-17

As stated in the comment, the precise location of accessible spaces for the site has not yet been determined. The project would provide four accessible spaces (page 3.0-12). These spaces will be designed to comply with Americans with Disabilities ACT (ADA) Guidelines.

ADA Guidelines require provision of accessible spaces as a proportion of total parking spaces provided. Since the proposed project does not provide any parking facilities, it is not required to provide additional accessible spaces and is compliant with ADA Guidelines. There would be no impact related to parking spaces under CEQA.

Response to Comment LA-1-18

As requested, the LBNL Parking Supply and Demand Memorandum (Appendix B) provides the parking supply and demand at each parking facility within the LBNL campus. The parking facilities in the vicinity of the proposed CRT facility currently have peak occupancies ranging from 85 percent to more than 90 percent.

As stated in the comment and in the Draft EIR (pages 4.12-24 and 4.12-25), the project trip generation was reduced by 48 percent to account for the limited parking supply on the LBNL Campus. As correctly stated in the comment, this reduction in trip generation is not realistically expected to occur only at the new CRT and Helios facilities. This reduction is expected to occur campus-wide due to the limited parking supply throughout the LBNL campus and for the purposes of this environmental analysis is assumed to occur at the new CRT and Helios facilities. In other words, this trip reduction is accounted for in the new projects, even though it would occur throughout the LBNL campus. It is expected that the number of parking permits issued to all employees and visitors to the LBNL campus would be monitored and controlled to ensure that adequate parking supply is provided. The reduction in trip generation is expected to occur due to the limited parking supply and not the implementation of the TDM program. The TDM program is expected to be enhanced to meet the increased demand for alternative commute modes that would result from the limited parking supply and to reduce parking demand in the unlikely event that measures to reduce demand become necessary.

As stated in the comment, the traffic analysis presented in the Draft EIR assumes that the practical capacity of the entire LBNL parking supply is estimated to be 90 percent (see page 4.12-9). Considering

that the parking facilities of various sizes are scattered throughout the LBNL campus, this is a reasonable assumption. However, a sensitivity traffic impact analysis was completed to determine if there would be additional impacts at the study intersections if trip generation is not constrained by the limited parking supply (i.e., this analysis assumes that all employees and visitors to the project site who want to drive would drive to the site). Thus, the project would generate vehicle trips at the same rate as the LBNL campus as documented in the LBNL LRDP EIR. The project would generate 48 percent more vehicle trips under this analysis than assumed in the CRT Draft EIR analysis. Parking demand under this analysis would exceed the current LBNL campus parking supply. Based on this sensitivity analysis, the CRT project (by itself or combined with the Helios project) would not trigger any additional impacts at the study intersections under Near-Term or Cumulative conditions.

The few parking spaces that would be constructed as part of the CRT project have not been assigned to specific uses yet. It is expected they will be assigned to accommodate handicapped accessible spaces and service and delivery vehicles. Visitors to the site, similar to regular site employees, are expected to use other LBNL parking facilities.

Response to Comment LA-1-19

Please see Master Response No. 5, Traffic Demand Management. "Fair share" mitigation distribution would be determined by monitoring-based assessment of impact distribution at the time in which improvements are triggered.

Response to Comment LA-1-20

The vehicle trip generation for the proposed CRT project would be limited by the available parking supply at the Lab (see page 4.12-24 of the Draft EIR), and not the required TDM program. As discussed in Response to Comment LA-1-18 above, a campus-wide reduction in trip generation, including the CRT project is expected to occur due to the limited parking supply and not the implementation of the TDM program. The TDM program is expected to be enhanced to meet the increased demand for alternative commute modes that would result from the limited parking supply and to reduce parking demand in the unlikely event that measures to reduce demand become necessary.

Response to Comment LA-1-21

Please see Master Response No. 5, Traffic Demand Management. The Hearst Avenue/Gayley Road/La Loma Avenue intersection would operate at an acceptable LOS D or better during both AM and PM peak hours under Near-Term with Project conditions (see Table 4.12-5 on page 4.12-27). Thus, the construction of the CRT project (by itself or combined with the Helios project) would not have a significant impact at

the intersection. However, as correctly stated in the comment, the proposed project, combined with other proposed and planned LBNL, UC Berkeley, and other projects in City of Berkeley, would have a significant impact at this intersection under cumulative (2025) conditions. Thus, LRDP Mitigation Measure TRANS-1c provides that the Lab will fund and conduct an evaluation of the feasibility of mitigation measures at this intersection. Although potential mitigation measures would not be needed to accommodate the construction of CRT and Helios projects, LBNL will negotiate with City of Berkeley to determine the timing for funding the feasibility study.

Response to Comment LA-1-22

Please see Response to Comment LA-1-6. As stated page 4.13-10 in Section 4.13, Utilities, Services and Energy Systems, wastewater from the proposed project flowing through the Hearst Mining Station and to the sub-basin 17-013 is not expected to result in exceedances of capacity for the capacity of the sewer collection system in the sub-basin area. This impact was considered less than significant. The comment is noted.

Response to Comment LA-1-23

The suggested text revisions have been made in the Utilities, Services and Energy Systems subsection in Section 3.0, Revisions to the Draft EIR.

Response to Comment LA-1-24

As stated in Section 1.0, Introduction, of the Draft EIR, The Regents have adopted the 2006 LRDP and mitigation measures identified in the 2006 LRDP EIR. The Draft EIR incorporates LBNL 2006 LRDP Design Guidelines by reference and applicable guidelines and measures are stated within each technical section. Draft EIR page 4.1-10, LBNL Design Guidelines, explains how the project would be subject to design review as part of the approval process. Therefore, the proposed project would be evaluated for adherence to the LRDP, the LRDP Land Use Map, the design guidelines, the Building Heights Map, and any other relevant plans and policies. Approvals would be subject to satisfactory compliance with these provisions.

As stated in Master Response No. 2, Building Height, the project design has been revised subsequent to publication of the Draft EIR. The revised project design would further decrease the less than significant impacts to visual character and scenic resources.

Response to Comment LA-1-25

As discussed in Section 5.0, Cumulative Impacts (page 5.0-25), of the Draft EIR, the 2006 LRDP mitigation measures require that all projects on the LBNL site must include design features to limit post-development flows to pre-development levels. Projects on the UC Berkeley campus would be required to meet the same standard under the campus's 2020 LRDP. Adherence to this standard would ensure that the CRT project's contribution to any cumulative impact would not be cumulatively considerable. With regard to the MEP standard, please see Response to Comment LA-1-6 above.

Response to Comment LA-1-26

Please see Master Response No. 1, Alternative Site – Richmond Field Station. With respect to the comment that some companies locate main computers off-site, the computers to be housed at the CRT facility have a very different function than a computer system that is serving an office. The computers at CRT are intended to be used for interdisciplinary research, not for support of office functions. The presence of scientists from different disciplines in physical proximity to the computers and to each other furthers the goals of the interdisciplinary research, while such proximity is substantially less important for computers that are providing office support functions.

Response to Comment LA-1-27

As required by CEQA, the Alternatives analysis focused on reducing the potentially significant impacts of the project. The alternatives chosen for detailed evaluation therefore included those that could potentially reduce impacts related to aesthetics (during the construction phase), biological resources, hydrology and water quality, noise, and traffic, as these were identified as significant impacts of the project. The Reduced Density Alternative would not have achieved significant reductions in these impact areas and was therefore not carried forward for detailed analysis.

As noted in the comment, the Draft EIR analysis concluded that aesthetic impacts related to project design would be less than significant. For a response to the commenter's disagreement with this conclusion, please see Response to Comment LA-1-1 above. However, the Alternatives analysis did include detailed evaluation of an alternative (Alternative 2, the Low Profile Design Alternative) that would reduce the project's visibility and would reduce or eliminate some of the design features the commenter has singled out as having adverse aesthetic impacts. This alternative was identified as the environmentally superior alternative, in part because it would further reduce the less than significant visual impacts. This alternative is similar to the revised project design (see Section 2.0, Changes to the Project Description, of this Final EIR).

Response to Comment LA-1-28

As noted in the comment, the less than significant temporary construction traffic impacts could potentially be reduced by implementation of the Reduced Density Alternative. As discussed above in Response to Comment LA-1-27, the Alternatives analysis evaluated in detail alternatives that could reduce significant project impacts, as required under CEQA.

Response to Comment LA-1-29

With regard to the Draft EIR conclusions that aesthetic and land use impacts related to project design are less than significant, please see Response to Comment LA-1-1.

As part of near-term planning projects, demolition of Building 51/51A, the Bevatron, is not anticipated to occur until 2008-2011.

As the comment notes, the Draft EIR (page 6.0-6) explains that construction of the project at the Building 51A site would be precluded by the demolition schedule for that site. The Draft EIR includes a detailed analysis of an alternate LBNL location on the Building 25 and 25A site.

Response to Comment LA-1-30

Off-site locations were not considered in detail because they would not meet project objectives to provide convenient access to other Lab scientific facilities, programs, researchers, and services, or locate the facility such that it fosters interaction and collaboration between the project and UC Berkeley programs, since it would place the project on a site more distant from the Building 70 complex. With regard to power supply and the need for computer equipment to be on site, please see Master Response No. 1, Alternative Site – Richmond Field Station. As described in Section 3.0, Project Description and in greater detail in the Master Response, the electrical service upgrades needed to supply power to the proposed CRT project would be relatively minor and could be achieved without causing further significant environmental impacts; this would not be true of off-site locations.

Response to Comment LA-1-31

As discussed in Response to Comment LA-1-27, the Alternatives analysis discusses the reduced aesthetic impacts and visual prominence of the Low Profile Design Alternative (pages 6.0-11 to 6.0-12) and bases the conclusion that it is the environmentally superior alternative in part on its reduced visibility (page 6.0-21). This alternative is similar to the revised project design (see Section 2.0, Changes to the Project Description of this Final EIR).

Response to Comment LA-1-32

The comment restates an opinion expressed earlier in the comment letter. Please refer to Responses LA-1-26 through LA-1-30 above.

Response to Comment LA-1-33

The LBNL 2006 LRDP Final EIR includes an analysis of an Alternative Off-Site Alternative that would result in new development at the Richmond Field Station (RFS) to accommodate a portion of the Lab's projected growth. Please refer to Master Response No. 1, Alternative Site – Richmond Field Station, for an explanation of why the RFS was rejected as a feasible alternative for the proposed CRT project. A cost analysis is not a CEQA requirement and does not require discussion in the EIR. The comment is noted and will be considered for project approval.

Response to Comment LA-1-34

The comment restates opinions expressed earlier in the comment letter. Responses LA-1-1 through LA-1-33 address concerns related to the Draft EIR. Recirculation is not required because this comment does not consist of significant new information which would show that a new significant impact or substantial increase in the severity of an impact would result from the project. As discussed in Section 2.0 of this Final EIR and in Master Response No. 4, Requests for Recirculation of the Draft EIR, the Draft EIR disclosed all significant impacts that would be reasonably foreseeable under the CRT project. Therefore, conditions that would trigger recirculation under CEQA §15088.5 have not been met.

Letter No. LA-2

EAST BAY
MUNICIPAL UTILITY DISTRICT

January 3, 2008

Jeff Philliber, Environmental Planner
Lawrence Berkeley National Laboratory
Environmental Planning Group
One Cyclotron Road, MS 90J0120
Berkeley, CA 94720

Re: Draft Environmental Impact Report for the Computational Research and Theory Facility, Lawrence Berkeley National Laboratory

Dear Mr. Philliber:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Draft Environmental Impact Report (EIR) for the Computational Research and Theory (CRT) Facility located at the Lawrence Berkeley National Laboratory (LBNL) in the Oakland/Berkeley Hills. EBMUD has the following comments.

WATER SERVICE

EBMUD's Shasta and Berkeley View Pressure Zones currently serve the existing LBNL facilities. If additional water service is needed, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions for providing additional water service to the existing parcels. Engineering and installation of water services requires substantial lead-time, which should be provided for in the project sponsor's development schedule. 1

WATER RECYCLING

EBMUD recommends adding the following discussion regarding Water Recycling in Section 4.13 -- Utilities, Service Systems, and Energy of the EIR: 2

EBMUD's Policy 8.01 requires that customers use non-potable water for non-domestic purposes when it is of adequate quality and quantity, available at reasonable cost, not detrimental to public health and not injurious to plant life, fish and wildlife to offset demand on EBMUD's limited potable water supply. Based on the Draft EIR, the CRT facility would require approximately 29.3 million gallons per year, or

375 ELEVENTH STREET • OAKLAND • CA 94607-4240 • TOLL FREE 1-866-40 -EBMUD

80,300 gallons per day (gpd) at buildout for potable and cooling water. The proposed project would generate wastewater from restrooms and cooling tower blowdown. The combined wastewater source would generate on average approximately 6,000 gpd, with up to 21,000 gpd during peak periods, at buildout. Depending on the irrigation demands at the project site, the CRT facility could be a potential candidate for recycled water through a satellite treatment system. The combined wastewater source could be treated through a satellite treatment system to be located in the vicinity of the CRT facility to meet irrigation demands, thereby offsetting demands for potable and cooling water. EBMUD recommends that LBNL coordinate the development of this project closely with EBMUD to determine the feasibility of providing recycled water to the project area. 2

WATER CONSERVATION

EBMUD recommends adding the following discussion regarding Water Conservation in Section 4.13 -- Utilities, Service Systems, and Energy of the EIR:

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD would request that LBNL include requirements for the project to incorporate WaterSmart technology and design standards in the landscape and building design. At a minimum the landscape design should be designed to a water budget as described in the State Model Water Efficient Landscape Ordinance in Division 2, Title 23, California Code of Regulations, Chapter 2.7, sections 490 through 495. Provisions should be established to monitor the water budget for compliance after project completion. EBMUD reviews applications for new standard water services and applications for expanded service for compliance with EBMUD Water Service Regulation Section 31, Water Efficiency Requirements. Although the Draft EIR indicates that no new or expanded water service connections would be needed to serve the project, implementation of Section 31 water efficiency requirements for nonresidential service is recommended. Section 31 requirements identify specifications for toilets, urinals, showerheads, lavatory and kitchen faucets, cooling towers, commercial refrigeration, outdoor landscaping and irrigation. EBMUD recommends that LBNL coordinate the development of this project closely with EBMUD to incorporate the most water efficient appliances and fixtures practical, even if not specifically noted in Section 31. Note that some of EBMUD's Section 31 requirements exceed the Uniform Plumbing Code requirements. EBMUD staff would appreciate the opportunity to meet with applicant's staff. A key objective of this discussion will be to explore timely opportunities to expand water conservation via early consideration of EBMUD's conservation programs and best management practices applicable to the project. 3

If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, at (510) 287-1365.

Sincerely,

William R. Kirkpatrick
Manager of Water Distribution Planning Division

WRK:JAJ:djr
sb07_361.doc

Response to Comment Letter LA-2

Response to Comment LA-2-1

The comment concerning scheduling of any necessary system upgrades with EBMUD is noted. Berkeley Lab would be responsible for any on-site upgrades required to accommodate the project. The Lab would coordinate with EBMUD regarding any necessary off-site facilities upgrades.

Response to Comment LA-2-2

LBNL will coordinate with East Bay Municipal Utility District (EBMUD) to develop plans for the proposed project and will continue to work with EBMUD to develop long-term plans for water reuse and recycling. As stated in the Draft EIR, EBMUD indicated that it can provide sufficient water to LBNL from existing supply sources to serve the CRT project. A satellite treatment system would not be required to provide water supply to the project. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. A discussion regarding water recycling has been added to Utilities, Service Systems and Energy, in Section 3.0.

Response to Comment LA-2-3

As noted in the comment, Impact UTILS- 3 found there is sufficient water supply to serve the project and the project would not result in a significant impact associated with water supply. Furthermore, as stated in the 2006 LRDP Principles and Strategies, the Lab seeks to design new facilities in accordance with University of California Policy on Sustainable Practices to reduce water consumption. The Lab will work with EBMUD to design water conservation measures appropriate for the project. See the discussion regarding water recycling that has been added to Utilities, Service Systems and Energy, in Section 3.0 of this Final EIR.

Letter No. ORG-1

THE BERKELEY ARCHITECTURAL HERITAGE ASSOCIATION

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January 4, 2008

Jeff Philliber
Environmental Planning Group
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Berkeley, California 94720

Re: Comments on the Lawrence Berkeley National Laboratory (LBNL) Computational Research and Theory Facility (CRT) Draft Enviromental Impact Report (DEIR)

Dear Jeff Philliber:

> *... Some, doubtless, would talk of the beautiful flowers which mantle the hills like an exquisitely varied carpet; some of the birds, their habits, their color, their song; some would talk of the early history of Berkeley and would give reminiscences of the Golden Age of youthful Berkeley. But underlying all these, and forming the condition of their existence — without which there never would have been any Berkeley — are the Hills with their rounded and infinitely varied forms, their noble out-look over fertile plain and glistening Bay shut in beyond by glorious mountain ranges through which the Golden Gate opens out on the boundless Pacific. It was* this *that decided the choice of the site of the University, and determined the existence of Berkeley.*
>
> *...These Hills, therefore, like all mountains, were formed by* upheaval, *or by igneous forces at the time mentioned; but all the details of their scenery — every peak or rounded knob, every deep cañon or gentle swale, is the result of subsequent sculpturing by water. If the greater masses were determined by* interior *forces, all the lesser outlines — all that constitutes scenery — were due to exterior forces. If the one kind of force* rough-hewed, *the other* shaped *into forms of beauty.*
>
> **Joseph Le Conte "The Making of the Berkeley Hills" from A Berkeley Year, Published by Women's Auxiliary of the First Unitarian Church of Berkeley, 1898**

The Berkeley Architectural Heritage Association (BAHA), dedicated "to educate the community to encourage and secure the preservation of those structures, sites, and areas which have special architectural, historic, or aesthetic value contributing to the enrichment of the Berkeley environment and to the understanding of its heritage" and representing over 1200 members, wishes to register concern regarding the potential environmental impacts of the proposed CRT project. BAHA was overlooked in the formal noticing and distribution of the CRT project DEIR, in compliance with the California Environmental Quality Act (CEQA). 1

This oversight is curious as BAHA did comment (see attached) regarding the 2006 Lawrence Berkeley National Laboratory (LBNL) Long Range Development Plan (LRDP). While the Christmas/Holiday is a difficult time to study and digest the profound implications of the proposed CRT project, BAHA understands that this is a critical opportunity for any concerns and questions to be expressed toward an effort to encourage the Regents of the University of California, LBNL, and the United States Department of Energy (DOE), to give adequate consideration of alternative location(s) other than that of the Berkeley-Oakland East Bay Hills, a significant geographic feature of the Coast Range. 1

Intrinsic to Berkeley's own sense of place and physical beauty are the East Bay Hills. Their steep rise behind the city and the University of California (University) Campus afford unforgettable views and vistas expanding out and beyond, "On the Edge of the World."1 Looking inward from the sea they, in turn, shape the San Francisco Bay Area. Since the beginnings of Berkeley, University ownership of this vast hillside backdrop has been appreciated by all, town and gown alike, as a traditional cultural property, associated with a deeply shared community history and a love for the natural environment.

That the ridges today suffer from many intrusive developments is due cause to be diligent in analysis of the potential impacts of the proposed CRT project. The introduction of the Molecular Foundry building (approved without an EIR) upon the Hills already stands as a stark warning. Its utilitarian hard-edged style of architecture, exhibiting industrial-park proportions with reflecting glass facades, not only changes the natural ambiance of the hillside itself, but also dramatically and substantially changes views and vistas of Berkeley (overshadowing the Campanile and Claremont Hotel, both listed on the National Register of Historic Places). The proposed CRT project, notably as sizable as any building within the city's urban context below, also promises to become visually intrusive from above upon the landscape and to destroy yet another natural site of the un-spoilt hillside (the simulated photographic depictions in the DEIR are not adequate). By the definition of its research and development functions, whether for "educational" or commercial uses, placing the CRT project on the LBNL hillside property begs reconsideration. Why would LBNL sacrifice unnecessarily, again and again, Berkeley's stretch of the celebrated East Bay Hills for the purpose of amassing high-tech facilities when there are other land use options? 2

An initiative to undertake a cultural landscape survey of the East Bay Hills, directly opposite the Golden Gate on University lands (including LBNL hillside property), would seem to be a mandatory and necessary action at this time, in compliance with the CRT project CEQA review. Defined most clearly as Strawberry Canyon and its watershed, the hillside landscape deserves public recognition as an invaluable asset meriting protection from further degradation. In-depth research and scholarship documenting the shared community history and the irreplaceable natural resources are long overdue. Below is a limited narrative to reflect only a broad sweep of the community's historic setting, linked initially to the watershed found in the Strawberry Creek and then permanently connected to a sense of place. 3

It was in 1846 when Colonel John Charles Frémont and his troops first rode over the East Bay Hills to discover an enclosed harbor and out stretching sea before them. Standing on the ridge Frémont then wrote across his map the words "Golden Gate" and thus crystallized an image of stunning grandeur for the world to see. When Henry Durant selected the site for the University along the hillsides of the East Bay, in the spring of [1856], accounts, again, tell of an awe inspiring panorama of beauty: "He had set out to seek a place where learning might find a peaceful home on our Pacific shore. And he had come to the spot, where rising calmly from the sunlit bay, the soft green slope ascended, gently at first and then more abruptly, till it became a rugged storm-worn mountain and then disappeared in the sky. As he gazed upon the glowing landscape he knew he had found it." Durant is said to have exclaimed, "Eureka, I have found it!"

In 1865 when Frederick Law Olmsted, the patron saint of American landscape architecture, was briefly in California and commissioned by the University to prepare a plan for the property, he envisioned a campus aligned with views of the Golden Gate, placing the buildings on a lower terrain of the open landscape where it might be "less commanding and dignified, but more secluded and protected and in this respect more consistent with the idea of Scholarship." The campus, then, would be alongside a thriving commercial town enhanced by gracious "civilized" neighborhoods of homes and parks – all to be shaped by the "steep declivities of the coast range." Olmsted recognized the contrasting beauty of the wild areas up Strawberry Canyon "following a stream of water from the open landscape of the bay region into the midst of the mountains it [the road] offers a great change of scenery within a short distance, and will constitute a unique and most valuable appendage to the general local attractions of the neighborhood."

By the 1890s efforts to develop Berkeley with a respect for the Hills became a self-conscious passion. Images of William Keith painting live oaks along Strawberry Canyon's creek banks or, perhaps, Professor Andrew Lawson leading his students to explore geological tracings in Wildcat Canyon, are only two of the many deep-rooted associations in the community for a love of the landscape. Out of such appreciation a group of spirited ladies formed the Hillside Club. The Hillside Club was transforming, creating a civic pride to influence the building of roads, homes and gardens to reflect the contours of the hillside. The Club founder, Madge Robinson, wrote in 1899: "One looks towards God's everlasting hills for rest and peace, but where can rest and peace be found, so long as our portion of these, God's hills, is scarred with such unhealthy growths, such freaks of houses?" (While she meant ornate Victorians painted white, she most certainly might be turning over in her grave about the proposed CRT project.)

What the 20th century brought to Berkeley rooted the community even more conscientiously in its own sense of place. The Simple Home, written by Charles Keeler, extolled a natural style of family living on the Berkeley hillsides. The developers Duncan McDuffie and John Spring planned residential subdivisions, inspired by Olmsted's landscape principles that were first

envisioned for Berkeley in the 1860s, with gracious hillside homes enhanced by park-like amenities. The University selection of John Galen Howard to design a *Beaux Arts* plan for the Campus also heralded a new pride for the community. Berkeley become its own force of nature, drawing inspiration from its own unique setting and developed aesthetic:

> *"The First Bay Tradition" is a term that has been given to a new direction in architectural design begun in San Francisco about 1890. It took root and flowered most distinctively in the North Berkeley Hills just North of the University of California Campus. While it had its beginnings in the Arts and Crafts Movement in England in the mid-nineteenth century, it was brought to the Bay Area by a group of architects which included Ernest Coxhead, Bernard Maybeck, A.C. Schweinfurth, Willis Polk and later John Galen Howard and Julia Morgan. These architects were classically trained and were inspired by the wide vistas of open rolling hills and winding verdant creek beds. Their designs expressed a philosophy characterized by the use of materials indigenous to the area, in a straight forward and simple manner: structural members were left exposed and became the decorative elements, wood was left unpainted, exteriors were often covered with shingles, although board and batten siding as well as half-timbering, brick and stucco were also used; subtle historical references are found occasionally. Landscaping featured informal gardens, native stone-work and vine covered arbors, the overall effect was intended to be compatible with the natural beauty of the Bay Area. The architectural idiom was so influential that between 1900-1915 the majority of homes built in North Berkeley, branching out from the Daley Scenic Park tract, were built in this simple rustic style. In other California cities rustic shingled homes were referred to as "Berkeley Frown Shingles."*
>
> **Susan Dienkelspiel Cerny, "Northside,"**
> **Published by the Berkeley Architectural Heritage Association, 1990**

In citing the above historic events and references to Berkeley's architectural history, BAHA wishes to remind the preparers of the CRT DEIR that the City of Berkeley Landmarks Preservation Ordinance is inclusive in its scope, beginning with: "It is found that structures, sites and areas of special character or special historical, architectural or aesthetic interests or value have been and continue to be unnecessarily destroyed or impaired, despite the feasibility of preserving them...." (3.24.010, and following). Furthermore, State and National criteria for recognition of historic and natural resources were created to identify irreplaceable resources on behalf of the public benefit and for future generations.

4

When the East Bay Regional Park District was established in 1934, it was made possible because of an outpouring of public support preserve and protect a vast network of watershed lands for the public benefit. The proposed park lands and sebsequent park land acquisitions did not include the University owned property in the East Bay Hills. Perhaps it was assumed then that the University would forever be a conservator of its vast and beautiful holdings, containing the Strawberry Canyon watershed. At the time the "Report on Proposed

Park Reservations for East Bay Cities," prepared for the Bureau of Public Administration, University of California, by the Olmsted Brothers, landscape architects, and Ansel F. Hall, National Park Service, was written it did not raise the question of the future of the University property. This is the time. The CEQA process for the 2006 LBNL LRDP, the CRT, and the Helios Energy Research Facility will be inadequate without a meaningful exploration of alternative sites. 5

Thank you for your consideration of BAHA's concerns.

Sincerely,

Carrie Olson

Carrie Olson, President

Attachment: Letter to Jeff Phillíber, LBNL, March 23, 2007, from BAHA Re: LBNL 2006 LRDP

FILE COPY

THE BERKELEY ARCHITECTURAL HERITAGE ASSOCIATION

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March 23, 2007

Jeff Philliber
Environmental Planning Group
Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 90J-0120
Berkeley, California 94720 SEND Via FAX 510-486-4101

Re: Comments on the Lawrence Berkeley National Laboratory 2006 Long Range Development Plan Draft Environmental Impact Report

Dear Jeff Philliber:

The Berkeley Architectural Heritage Association (BAHA) appreciates this opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Lawrence Berkeley National Laboratory (LBNL) Long Range Development Plan (LRDP). BAHA, a long standing membership organization dedicated to the education, encouragement, and protection of Berkeley's unique historic environment, is commenting in its capacity as a public stake holder with serious concerns about the profound environmental impacts that these plans would have upon the irreplaceable assets of Strawberry Canyon as a Cultural Landscape.

The LRDP, a programmatic document only, proposes to utilize the Strawberry Canyon area for almost a million square feet of new and, as of yet, unconstructed building space and to create 500 additional parking spaces for 1,000 new employees. Concurrently, the project objectives are proposed to strengthen, expand, and design for *new* institutional growth. While these projected plans and objectives would appear to be rational and in sync with current institutional research practices or business models, they are, in reality, not logical or socially responsible at this location. The natural and physical terrain of the hillside area, plus the University's plans already proposed in the adjoining Southeast Campus, and the significance of Strawberry Canyon as a Cultural Landscape make this proposal not only unwelcome, but incredulous.

At this juncture the environmental review in the LRDP is lacking an adequate understanding of the project scale and building(s) mass that would, in fact, be needed to fulfill the programmatic plans outlined in the DEIR. The stated intent to expand current facilities and to rehabilitate current facilities is too vague. The sketchy "illustrative design" concepts portraying the physical imprint of potential "new scientific facilities" are insufficient. There is a need to disclose true architectural plans, including magnitude, location, height, design, materials, mechanical apparatus, and waste systems of such building(s) providing for such "national" research facilities "programmed to accommodate multiple disciplines in advanced

infrastructure suitable for future scientific endeavors...[and] to support future research initiatives and continued growth in existing programs" that might serve the combined uses of academic research, federal/state interests, and industrial capital/business interests. Lacking such full disclosure at this juncture, the following questions are posed:

- Which existing LBNL facilities would be expanded?
- Which existing LBNL facilities would be rehabilitated?
- How would existing facilities and rehabilitated facilities connect physically to "new scientific facilities" in order to "enhance collaboration, productivity, and efficiency?"
- Will the Final EIR disclose full architectural plans for all the buildings needed to fulfill the programmatic plans and project objectives outlined in the DEIR?
- Will any LBNL contracts with outside state/federal and private industry be available for public review at the time of the Final EIR?
- Will any LBNL contracts with outside state/federal and private industry be completed at the time of the Final EIR?
- How will the California Governor's pledge to secure $40 million, or more, determine the size, scope, demands of the projected "new scientific facilities?"

In the case of the "illustrative design" building concept(s) in the DEIR, sited across from the University's historic Botanical Garden, and next to the Stephen Mather Redwood Grove, the following questions seem appropriate now to ask:

- Why would "new scientific facilities" of such magnitude be placed across from the University's Botanical Garden, a cultural resource ranking with other major Botanical Gardens as the one of the world's leading Gardens in the number of plants it contains?
- Would not the "new scientific facilities" adversely effect the integrity of the adjacent California Area, the largest area of the Botanical Garden that boasts of having the largest area devoted to a regional collection of native plants?
- What would the effect of an industrial-park-like development be upon the necessary mild climate that sustains the Botanical Garden?
- How would the LBNL "new scientific facilities" complex, including parking, effect the natural flow of water in the Botanical Garden?
- Is it not alarming that the LBNL "new scientific facilities" complex, including parking, be proposed adjacent to the Mather Redwood Grove, thus removing a context area that defines its integrity?
- Is the projected location for "new scientific facilities" the only location in Strawberry Canyon that could accommodate new building(s) and parking of that magnitude?

As a public stake holder it is expected that BAHA, would concur with the finding of the DEIR that the LRDP, as proposed, would cause "significant" environmental impacts. The public health and safety issues alone – such as water pollution, air pollution, landslides, earthquakes, acts of terrorism, traffic congestion, and extreme fire hazards – are conspicuous. Strawberry Canyon is a special place defined by a natural environment that is already under the stress of over-development. Further alteration of its geologically formed hillsides – formed by the timeless interaction of earthquakes, water flow, and precipitation off the Pacific Ocean – to accommodate unlimited "new scientific facilities" is, indeed, an alarming proposal. BAHA joins the City's Planning Commission and Landmarks Preservation Commission in requesting that alternatives be sought elsewhere on University owned property. The following questions seem critical to understand:

- Why would the LBNL LRDP DEIR finding of "significant" environmental impacts be "*unavoidable*" (italics ours) when the University owns property elsewhere that is potentially suitable for scientific research and development?
- What property owned by the University in Richmond has been set aside for potential University research and development?
- When was University property in Richmond identified as a potential for research and development?
- Is any of the University property in Richmond contaminated?
- Is any of the University's Strawberry Canyon property contaminated?
- Given the current practice of global partnerships and collaborations, technological flexibility, and shared advanced research locations, why would a LBNL LRDP project objective be limited to one "main site" within the University, Berkeley, area?
- Would not LBNL elect to give leadership to environmental solutions that will have a positive local, regional environmental impact as well as to global environmental solutions?

The University, Berkeley, and, indeed, LBNL gained their historical roots because of Strawberry Canyon. As early as the 1850s the site was recognized to be a provider of constant water, making possible the location of a future educational institution. The sense of place then was poetic among those who selected the site:

> *The line of the horizon sweeps in the distance round almost half a circle, commencing at the summit near New Almaden and following a mountain line till it passes west of [San Francisco], where it becomes an ocean horizon for a considerable distance...The extent, the variety of the life embraced in the scenery presented in this view, including as it does land and water, bay and ocean, islands, plains and mountains, city and country, are seldom equaled.* Rev. S. H. Willey, 1858

Later, in 1865, Frederick Law Olmsted, America's father of landscape architecture, was to describe the dramatic impressions of the "steep declivities of the coast range" and the "native foliage of a very beautiful character" that defined the effect of Strawberry Canyon as it graced what would become the urban town. The origins of LBNL in Strawberry Canyon, beginning in the WWII era, should be remembered as having its origin in such a rustic and unapproachable area because of the need to have a nearly secret and inaccessible location.

Again, BAHA takes the lead from the City's Landmarks Preservation Commission which responded to the DEIR with the comment "the Strawberry Canyon Area is a potential Cultural Landscape...[that] the DEIR does not acknowledge the adverse impacts...therefore, alternatives, including alternative sites for the proposed development(s), need to be identified and analyzed in the FEIR."

Thank you for your attention to BAHA's comments and for your consideration of BAHA's concerns.

Sincerely,

Wendy Markel

Wendy Markel, President

Response to Comment Letter ORG-1

Response to Comment ORG-1-1

The commenter has been added to the distribution list for notices regarding the proposed project.

Response to Comment ORG-1-2

The Lab disagrees with the comment that the Molecular Foundry building overshadows the Campanile and the Claremont Hotel. The CRT project is not located on a ridge, and as shown in visual simulations for the revised project (Figures 2.0-4 through 2.0-7) and described in Section 2.0, the project site would be partially screened from publicly available views of the site. The revised project would not be visually prominent in most views of the site.

As noted in Section 4.1 of the Draft EIR, the visual simulations in the Draft EIR were taken from the locations with the most direct view of the site changes that would occur under the proposed project. Computer modeling and rendering techniques were employed to produce the visual simulation images. The computer-generated visual simulations are the results of an objective analytical and computer modeling process and produce a realistic depiction of the project's bulk and relationship to the site. Because the simulations used in this EIR included a minimum of surface detail that could soften the building's appearance, they may, if anything, exaggerate the building's visibility and provide a conservative or "worst-case" basis for analysis of the project's visual impacts. The visual simulations shown on Figures 2.0-4 through 2.0-7 of this Final EIR provide a similarly conservative basis for analysis of the revised project and demonstrate that it would not have significant visual impacts.

While the specific location within the LBNL campus in which the project is proposed is currently undeveloped, the site is previously disturbed and predominantly vegetated with non-native tree species (eucalyptus). The larger context of the hillside is that of institutional, laboratory buildings of various scales interspersed with groupings of native and non-native trees and grassland. The Draft EIR visual simulations and photos of public views toward the project site demonstrate that views of the existing hillside include a number of large-scale buildings. (In particular, see Photo 8 on Draft EIR Figure 4.1-2b from the Lawrence Hall of Science, Draft EIR Figure 4.1-3 from Hearst at Shattuck Avenue, and Figure 4.1-4 from Ridge Road near Euclid Avenue.) Furthermore, although the specific materials for the project have not been chosen at this point, they are proposed to be similar to adjacent structures. As described in the LBNL LRDP, mitigation measures require that, where feasible, surfaces of the proposed project minimize reflectivity (CRT Draft EIR, page 4.1-17).

As described in Section 3.0, Project Description, of the Draft EIR, the CRT building is being considered for this particular site because it meets the project objectives, including those to expand the functionality of Lab facilities, provide for cross-disciplinary research, and foster collaborative work environments among researchers. (See Master Response No. 1, Alternative Site – Richmond Field Station, for more detailed discussion of the relationship of project objectives to the project site.) Project Alternatives, including off-site alternatives, are discussed in section 6.0 of the Draft EIR.

Response to Comment ORG-1-3

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims. As noted in that master response, a cultural landscape survey of Strawberry Canyon (or of the East Bay Hills including Strawberry Canyon) is not a mandatory part of CEQA review for the CRT project. The discussion following this comment relates more to the University campus than to Strawberry Canyon or to the CRT site.

Response to Comment ORG-1-4

The CRT Draft EIR includes a comprehensive discussion and analysis of all applicable historic regulations and significance criteria in Section 4.4, Cultural Resources. The Berkeley Landmarks Preservation Ordinance is discussed on page 4.4-7.

Response to Comment ORG-1-5

Potential off-site alternatives are discussed in Section 6.0, Alternatives, of the Draft EIR. Also, please see the Master Response No. 1, Alternative Site – Richmond Field Station.

Letter No. ORG-2

Committee to Minimize Toxic Waste

Jeff Philliber, Environmental Planner
Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 69-201
Berkeley, CA 94720

January 3, 2008

Subject: Comments on the Draft Environmental Impact Report (DEIR) for the Construction and Operation of the Computational Research and Theory (CRT) Facility at the Lawrence Berkeley National Laboratory (LBNL) site.

Dear Mr. Philliber,

It is extremely troubling to see yet another proposal by the University of California (UC) to construct huge facilities (140,000 square feet in this case, for personnel of 300) on one of the MOST hazardous sites in the state, i.e. on top of the active Hayward Fault, within the Alquist-Priolo Eartquake Fault Zone, on a steep hillside slope without adequate ingress/egress! 1

It appears that the LBNL's Oakland Scientific Facility is a much better suited location to house ultra-sensitive super-computers, as is the case currently, and we ask that the NERSC (National Energy Research Scientific Computing) Center remain in Oakland. 2

We also ask that the UC's Richmond Field Station (RFS) site be given very serious consideration to house all the other UC/LBNL Computational Science and Engineering Program facilities, i.e. to spread the risk in case of a natural disaster, such as the predicted "Big One" on the Hayward Fault. 3

The proposed building site is one of the very few areas of virgin land at LBNL in the Strawberry Creek Watershed, and it should be preserved as such! In addition special consideration should be given to Cafeteria Creek, to preserve and improve one of the still daylighted tributaries of Strawberry Creek. 4

1

The CRT DEIR is extremely deficient with regard to addressing the many potential, serious hazards associated with earthquakes and landslides in the steep-sloped Strawberry Creek Watershed site.

These concerns were raised by the Committee to Minimize Toxic Waste (CMTW) and other community groups and individuals already in 2003, when UC/LBNL proposed the construction of Building 49 (B 49)at this very same location. 5

The comments provided in the B 49 CEQA process are still valid, and we ask that they are taken into consideration and responded to within the context of the CRT DEIR process.

Pages 3-4 of this letter include CMTW's comments. We are also including the transcript of Public Comments provided at the June 30, 2003 scoping meeting for the preparation of the DEIR for B 49, a total of 68 pages of community concerns about the site. (Attachment 1) 6

In addition we are enclosing Appendix A (as Attachment 2) and Appendix B (as Attachment 3) from the September 2003 DEIR for B 49 Project. Pages A-1 to A-82 and B-1 to B-182 reflect grave community concern and opposition to UC's plans to build on this treacherous site!

As our general comments, for the CRT DEIR sections related to: Air Quality, Biological Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Population and Housing, Public Services, Transportation and Traffic, Utilities, Service Systems and Energy, we are submitting our March 2007 Report (as a CD) titled:

CONTAMINANT PLUMES OF THE LAWRENCE BERKELEY NATIONAL LABORATORY AND THEIR INTERRETATION TO FAULTS, LANDSLIDES AND STREAMS IN STRAWBERRY CANYON, BERKELEY AND OAKLAND, CALIFORNIA.(Attachment 4).

We ask that the Report text and maps be included in their entirety (as hard copies and maps in color) as part of the CRT Final EIR, and responded to. In addition we are providing 13 Report maps, 11"x17" in full color, titled: LBNL SITE MAP, groundwater contamination plumes and contaminated soil sites (F2), INTERPRETATION OF HISTORIC CHANNEL NETWORK at LBNL in Strawberry Creek Watershed (F5), GROUNDWATER CONTAMINATION PLUMES IN RELATION TO THE MODERN AND HISTORIC DRAINAGE NETWORKS AT LBNL (F6), SELECTED EXAMPLES OF FAULT MAPPING STUDIES AT LBNL IN STRAWBERRY CANYON (F9), COMPILATION OF FAULT MAPPING at LBNL in Strawberry Canyon relative to soil and groundwater contaminant plumes(F10). 7

2

Of special interest is map titled:
GROUNDWATER CONTAMINATION PLUMES AND RADIOACTIVE CONTAMINATION IN SOIL RELATIVE TO FAULTS AND EARTHQUAKE EPICENTERS AT LBNL IN STRAWBERRY CANYON (F12b).

In Figures 12a and b we compiled the fault mapping by others (See Figure 9) and overlaid the epicenters of seismic events that have occurred in the Strawberry Canyon during the last 40 years, which amounted to over 57 earthquakes. Such a high incidence of seismic activity within the mapped traces of Wildcat Fault and between the Wildcat and the Cyclotron Faults provides compelling evidence that additional faults, other than just the Hayward Fault should be considered ACTIVE in Strawberry Canyon. See section on Fault Mapping on pages 24-35 of the Report. 8

Other map titles: MAPS OF LANDSLIDE STUDIES AND SURFICIAL DEPOSITS GEOLOGY (F13a-13e),INTERPRETATION OF HISTORIC CHANNEL AND LANDSLIDE NETWORK AT LBNL IN STRAWBERRY CANYON (F13f), COMPILATION OF LANDSLIDE AND SURFICIAL GEOLOGY MAPS 13a-13f IN STRAWBERRY CANYON (F14), COMPILATION OF SELECTED LANDSLIDE MAPPING(Fs 13a,b,e) IN STRAWBERRY CANYON IN RELATION TO GROUNDWATER CONTAMINATION PLUMES (F15), COMPILATION OF MONITORING WELLS AND FACTORS WITH POTENTIAL INFLUENCES ON GROUNDWATER TRANSPORT AT LBNL (F 17a), ZONES OF CONCERN FOR GROUNDWATER PLUME EXPANSION ALONG COMPILED FAULTS, BEDROCK CONTACTS, LANDSLIDES, HISTORIC AND MODERN CREEKS (F18a), and VARIOUS COMPILED SITE CONDITIONS AT FUTURE BUILDING SITES OF LBNL'S LONG RANGE DEVELOPMENT PLAN (F20a). 9

The maps referenced above are provided to supplement the inadequacies of the CRT DEIR, and to provide a more comprehensive picture of the natural and man-made hazards at LBNL.

On page 1.0-3 of the CRT DEIR there is a reference to the possibility that the federal government (i.e. Department of Energy) might close LBNL. It is our understanding that this is being considered and will possibly happen on or around CY 2010. Both the CRT and Helios projects are funded by other than DOE sources. Please, provide updated information what impacts might DOE's closing of LBNL cause. How are the lands under UC or other non-DOE funded projects being transferred out of the DOE's currently lease-held lands (50 year land lease)? Please, provide a site map that shows which land tracts/areas are being considered to be transferred out of DOE's current land lease. This is of specific interest with respect to the areas of contamination at LBNL, and who will be responsible for cleaning up the DOE's legacy contamination?What kinds of Environmental Review documents are being considered for these potential land transfers? What is the situation with the proposed CRT lands? 10

11

In conclusion we ask that the NERSC Center stay in Oakland, and that the Richmond Field Station site be considered for all other UC and non-DOE funded future projects. This is the only way to mitigate the horrendous traffic and diesel exhaust impacts along the corridor from the northeast to the southeast corners of the UC Berkeley Campus. 11

In addition we ask that all remaining virgin lands in the Strawberry Creek Watershed be preserved and all creeks, tributaries of the Strawberry Creek be restored and protected! 12

We hope that UC/LBNL will finally acknowledge that the Canyon is already overbuilt, and cannot safely accommodate any new development and that the focus of the University should be in planning for the WORST CASE SCENARIO, i.e. how to quarantee the survival of the maximum amount of students and Berkeley residents when the Hayward Fault erupts!

Sincerely, Pamela Sihvola

Pamela Sihvola
P.O. Box 9646
Berkeley, CA 94709

PS. Please enclosed also find a copy of the transcript from the August 8, 2007 Public Scoping Meeting on the CRT and Helios Projects (Attachment 5) and copies of the written comments provided by the public regarding the above referenced projects (Attachment 6). We feel that the public concerns were <u>not</u> adequately taken into consideration in the CRT DEIR! 13

20

Response to Comment Letter ORG-2

Response to Comment ORG-2-1

The Draft EIR identifies the project's location relative to the Hayward Fault and within the associated Alquist-Priolo Zone (see Section 4.5, Geology and Soils, page 4.5-4). Project site access is described in Section 3.0, Project Description, and emergency access and evacuation routes are discussed in Section 4.6, Hazards (pages 4.6-12 to 4.6-13).

Response to Comment ORG-2-2

The NERSC facility in Oakland does not meet the following programmatic requirements: (1) provide an integrated and appropriately designed facility for advanced research in computational science and engineering; (2) foster interaction and collaboration between the project and UC Berkeley programs; (3) provide adequate space to accommodate next-generation computing equipment and allow for regular upgrades to such equipment; and (4) provide a reliable power source for the project's computer equipment needs. The NERSC facility does not have the electrical capacity to allow for it to remain in Oakland beyond the current lease and lifetime of current equipment, which is due to be replaced in 2009, and again in 2011. Next-generation computer equipment scheduled to be installed at that time to allow research programs to continue would require more electricity than is available at the current site.

Response to Comment ORG-2-3

The Richmond Field Station was evaluated and eliminated as an option because it does not meet the CRT project objectives to expand functionality of Lab facilities, provide for cross-disciplinary research, or foster collaborative work environments among researchers. The Richmond site does not provide accessibility to a large, reliable, and economical electrical power source.

Please see Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment ORG-2-4

As noted in Response to Comment ORG-1-2 above, although the specific location within the LBNL campus in which the CRT project is proposed is currently undeveloped, the site is not virgin land. It has been previously disturbed and is predominantly vegetated with non-native eucalyptus trees. The site is in an area of the hillside that is developed with institutional and laboratory buildings of various scales interspersed with groupings of native and non-native trees and grassland. The proposed project would not include any structures or grading within Cafeteria Creek and would include a 50-foot setback from

the creek for construction activities (see Draft EIR page 3.0-19). The proposed project would not drain to the open channel of Cafeteria Creek (above Cyclotron Road).

Response to Comment ORG-2-5

LBNL disagrees with the statement that the CRT Draft EIR is deficient with regard to addressing potential hazards related to landslides and earthquakes. Geologic and seismic hazards are discussed in Section 4.5, Geology and Soils. With regard to comments previously submitted for the earlier proposed B49 project, the commenter's October 31, 2003 letter addresses a different project from the presently proposed CRT project and does not include comments on the adequacy of the present CRT Draft EIR, and all of the environmental topics raised in the letter are addressed in the Draft EIR for the CRT project. The letter is included in the material that will be made available to The Regents for their review and consideration of the CRT EIR.

Response to Comment ORG-2-6

The attachments included as part of the comment letter will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. The scoping comments were all considered in the preparation of this EIR. The attachments relating to the prior project proposed on this site will be part of the record for consideration of this project, but do not specifically relate to the environmental issues relating to this project.

Response to Comment ORG-2-7

The Final EIR will include reproduction of all Draft EIR comments received during the official comment period. Because voluminous appendices and attachments were also submitted by various commenters, the CRT Final EIR may include an accompanying compact disk that holds these large attachments. Hard copies of the attachments as well as the accompanying compact disks will be presented along with all other relevant EIR materials to the UC Regents for their review and consideration of the CRT EIR.

Response to Comment ORG-2-8

Section 4.5 of the Draft EIR includes a discussion of seismic risks related to the proposed project's location near the Hayward Fault. The Hayward fault is the only active fault in the vicinity of Strawberry Canyon that is recognized by registered Geologists, Geotechnical Engineers and the California Geologic Survey (CGS). The presence of other fault traces within the Berkeley Hills is not relevant to the CRT EIR. None of the secondary fault features on the commenter's referenced figure crosses the CRT site. The Draft EIR recognized that a portion of the CRT site lies within the Alquist-Priolo zone for the Hayward Fault (see

page 4.5-2), and, as required, a fault trace study of the site was conducted. As stated in the Draft EIR (page 4.5-11) this study found no active fault traces at the project site, and therefore potential impacts due to fault rupture are less than significant.

Response to Comment ORG-2-9

Please see Response to Comment ORG-2-7, above. The maps attached by the commenter represent conditions of LBNL as a whole, and do not appear to highlight any additional potential impacts of the CRT project that were not already addressed in the Draft EIR. In fact, the figures support statements in the Draft EIR that: (1) the CRT site is located in a landslide prone area (see page 4.5-3); (2) There are no active faults on the CRT site (see page 4.5-11); and (3) the CRT site does not overlie an area of groundwater contamination (see page 4.7-7).

Response to Comment ORG-2-10

There is no plan for the Department of Energy (DOE) to close Lawrence Berkeley National Laboratory, and the possibility of any such closure at this time is entirely speculative. The current LBNL management contract between the UC Regents and DOE is due to expire on May 31, 2010. The contract includes an award term provision that permits the DOE to extend the contract unilaterally until May 31, 2025. The initial award term extension is for three years and would extend the contract to May 31, 2010; thereafter, extensions are in one-year increments. DOE has advised UC that it has met the performance criteria for the initial three-year extension but is completing some agency internal administrative matters before extending the term of the contract. Future one-year extensions will be determined annually.

LBNL is a federally-funded research and development center for which DOE has ground leases of UC land independent of the UC management contract and outright ownership of nearly all structures and facilities. The terms of many of the ground leases extend beyond the maximum term of the existing laboratory management contract between DOE and UC. At the conclusion of the current contract DOE will either re-bid the contract or, pursuant to statutory authority, enter into a sole source contract with UC or some other contractor. Regardless, the ground leases will remain. There is a very low likelihood that the DOE would stop funding LBNL.

The CRT building will not be located on land currently leased to DOE. A small part of the project site (on which it is anticipated that a footbridge and some mechanical equipment will be located) is on land currently leased to DOE that will be the subject of an anticipated lease-line adjustment. No legacy contamination is known to exist at the CRT project site, which has not previously had a building or other structure located on it.

Response to Comment ORG-2-11

As stated in the comment, the proposed CRT project, together with other planned future development, would result in significant impacts on traffic and transportation. The Draft EIR identifies impacts and proposed improvements to mitigate these impacts to less than significant levels or lessen the magnitude of impacts. These mitigation measures range from physical improvements such as installation of new signals to enhancing the existing Transportation Demand Management (TDM) program at LBNL that would increase the number of employees and visitors who would not drive their vehicles to the site. The comment and the opinions of the commenter will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment ORG-2-12

The commenter's assessment of the Strawberry Creek watershed area is noted. The proposed CRT project is consistent with development anticipated and analyzed in the Lab's 2006 Long Range Development Plan EIR as well as in the analysis undertaken in the CRT EIR.

Response to Comment ORG-2-13

Please see Response to Comment ORG-2-7, above regarding the inclusion of attachments. The public scoping process for the CRT Draft EIR is discussed in Section 1.0, Introduction (page 1.0-5). Any scoping comments received on environmental topics to be covered in the Draft EIR are summarized at the beginning of each relevant topical section and are addressed in the analysis contained within that section.

Letter No. ORG-3

Subject: Comments on DEIR for CRT Facility Planning Process
Date: Fri, 04 Jan 2008 16:04:45 -0800 (PST)
From: info@strawberrycreek.org
To: planning@lbl.gov
CC: caroleschem@hotmail.com, jennifer.maryphd@gmail.com

Concerning the DEIR for the Computational Research and Theory Facility

Dear Board of Regents of the University of California
Chancellor of University of California at Berkeley
Director of Lawrence Berkeley Lab,
Planning Staff at LBL;

The following comments were compiled from members of Friends of Strawberry Creek Watershed:

1) Is not Strawberry Canyon a PLACE where life moves freely from one side of the Canyon passing to cross the waters of Strawberry Creek and its headwater tribulets in an intimately connected ecology? Isn't Strawberry Canyon a sensitive ecosystem of which we are a part?

2) Lately, people quote an axiom of climate scientists "THE FUTURE HAS ARRIVED SOONER THAN WE EXPECTED". Do you not embrace this warning? Doesn't the Canyon with its natural life contribute to our well-being, our health and our survival as a species?

3) What is the rationale then to set in rapid motion a series of construction projects in Strawberry Canyon that would change the ecosystem, and further, contribute to even more air pollution for the Canyon and adjacent ecosystem? 1

4) DOESN'T THE 2007 IPCC REPORT TO THE UNITED NATIONS on GLOBAL WARMING state that resident Carbon Dioxide has a 60 to 100 year life span which informs us that we MUST NOT DO MORE HARM to our sensitive ecosystems? Couldn't preserving the Canyon enhance the sucking out of the greenhouse gases along with the unknown syncretic changes those gases are reputed to be contributing to--which in turn, harm our human health?

5) Can you claim that the physical construction and operation of the CRT facility will improve air and water quality locally? 2

6) What of the construction and drainage impacts from buildings and transportation systems on the CONNECTIVITY of the precious waters of Strawberry Creek catchment that dynamically flow from the hills to the San Francisco Bay above and below the Earth's ssurface? 3

7) What can we see there in the Canyon? What can't we see there? Where are the boundaries--physical and metaphorical? 4

8) Simply stated, doesn't good science inform us that the Canyon merits PROTECTION and RESTORATION for our future survival? 5

9) Why can't the descision makers declare a MORATORIUM on any future building? Don't we need to know much more on the predictability of risks 6

to human life and the environment that sustain us BEFORE further impacting the Canyon? 6

10) Are local people included in the descision making? Where? When? At what sites? Or, are decisions made far away by outsiders intimately unfamiliar with the landscape? 7

11) And what of future water harvesting from the Lennert Aquifer drinking water bank should we suffer a community disaster? If humans can only survive 3 days without water—the waters of the Canyon MUST be protected to prevent death and illness for Lab employees and local people, mustn't they? 8

12) And what is the plan for disasters from severe earthquakes? And what of an extreme heat wave (1995 Chicago with over 1000 deaths; 2003 Europe with over 50,000 deaths?) Or, even a man-made disaster such as LBL workplace violent crime from disgruntled employees or a rejected survivalist group? 9

13) Wasn't there a recent incident from a child and father (a lab employee) innocently playing with a remote controlled toy airplane where Lab security staff were alarmed and future playing was prohibited? (It was reported in the press.) 10

14) Can you claim that there is a distinct public space and private space in the Canyon? Who is accountable for the public space? 11

15) Have you analyzed the logic of various risk management technologies and chosen those that include potential impacts on local people living and working in the surrounding area--when even more and bigger building at the Lab is planned? Have locals embraced those risk scenarios, and has the Lab assisted them in planning what to do? 12

16) Have local well-established community groups been invited to be included in reviewing the range of risk scenarios that Homeland Security has already identified and that could possibly harm human and environmental life? What are those risks? 13

17) Would more and more sped up building in the Canyon put unsuspecting subjects lives and future health at greater risk, and at a more rapid rate? What is the predicted range of miles for the risks you work with? How would those risks impact the richness of non-human species life that currently thrive in the Canyon? 14

18) Where in State law does it say that a government agency using land belonging to the people of the State of California-- legally has the freedom to EXPLOIT with impunity? 15

19) Please, couldn't you consider stepping back and MITIGATING present harms and potential future harms with a generous goal of PREVENTION of "do no more harm' that would instead care for the Strawberry Canyon environment which would serve as a community benefit for all of us? 16

20) Finally, would you consider a MORATORIUM on future building to CONSERVE the ecosystem of the Canyon--again, so as to reduce risk and secure the future for all of us? 17

21) In conclusion, in this moment in modern time--couldn't the 'openness' of the West Coast paradigm to expand populations at work and home in dense urban centers be re-thought? The CRT planning could be set aside to consider other more dispersed sites for the CRT and companion facilities--sites where there is less chance of high risks--both natural and manmade? 18

Thanking you in advance for your kind attention,

Sincerely, Jennifer Mary Pearson, Phd. and Carole Schemmerling,
Co-facilitators for Friends of Strawberry Creek Watershed

--
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tel:510-486-4387 - fax: 510-486-6641

Response to Comment Letter ORG-3

Response to Comment ORG-3-1

Numbering within this response corresponds to the paragraph numbering in the comment letter.

(1) The ecosystems in the area of influence of the proposed project are fully described in Draft EIR Section 4.3, Biological Resources.

(2) Please refer to response to Response Org-3-1, above, for reference to biological resources discussions. Climate change, as it relates to greenhouse gas emissions, is discussed in Draft EIR Section 4.2, Air Quality.

(3) The proposed project site is not located in Strawberry Canyon. The rationale and objectives for the proposed CRT project are set forth in Draft EIR Sections 3.3, Project Need, and 3.2, Project Objectives. Although short-term and temporary in nature, construction activities would implement all appropriate mitigation measures to minimize the generation of criteria air pollutants. Following completion of the proposed project, all construction-related emissions would cease. Operational emissions associated with the day-to-day activities of the proposed project (with the addition of provided offsets), would not exceed any of the BAAQMD thresholds of significance.

(4) Discussions of global climate change and greenhouse gas emissions, including references to IPCC reports, are included in Draft EIR Section 4.2, Air Quality. Although there are no regulatory thresholds for carbon dioxide gas emissions against which to measure the project, the relatively modest reduction of carbon-absorbing plants in the project construction area (approximately 2.5 acres of eucalyptus stands and grassland) would not make a discernable impact on the global carbon dioxide output, estimated to be well over 30,000 CO2-equivalent million metric tons for anthropogenic (man-made) sources alone. Furthermore, it is beyond the scope of an EIR to discuss the complex relationships of one ecosystem (i.e., Strawberry Canyon) and its influence on global climate. The tools for such an analysis are not available.

Response to Comment ORG-3-2

The purpose of the Draft EIR is to analyze the potential environmental impacts of the project as proposed, which includes as analysis of impacts to air and water quality and not an analysis of the project's improvements to air and water quality.

Response to Comment ORG-3-3

The proposed project's potential impacts related to drainage, including potential impacts to Strawberry Creek, are addressed in Section 4.7, Hydrology and Water Quality.

The proposed CRT project site does not include any tributary stream channels of Strawberry Creek, and therefore stream connectivity impacts are not considered in the CRT Draft EIR. In addition, the proposed CRT project includes the use of hydromodification vaults intended to mimic pre-project runoff conditions (see page 4.7-20).

Response to Comment ORG-3-4

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims.

Response to Comment ORG-3-5

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims. This is a comment on the merits of the project, and will be included in the record for the decision-makers to consider.

Response to Comment ORG-3-6

In its consideration of the LRDP, the Lab evaluated the amount of development that should take place within the LBNL site and substantially reduced that amount of development in response to concerns from the City of Berkeley. The Lab is not otherwise considering a moratorium on future development. It should be noted that the CRT project site is not located within Strawberry Canyon.

Response to Comment ORG-3-7

The decision makers for the proposed project and for certification of the CRT EIR are the UC Regents. The Board of Regents is composed of members from throughout California, including the San Francisco Bay Area. The Regents will receive and review all EIR materials prior to rendering decisions as to the project and EIR certification.

Response to Comment ORG-3-8

There would be no adverse effect on the potential beneficial uses of the Lennert aquifer from CRT project construction or operations. The aquifer is located approximately 2,000 feet upgradient (i.e., opposite the direction of groundwater flow at the CRT project site). The proposed project's potential for impacts to groundwater are discussed in Section 4.7, Hydrology and Water Quality, of the Draft EIR (see page 4.7-19).

Response to Comment ORG-3-9

LBNL has a disaster plan for response to earthquakes, other natural disasters, and workplace violence. The 2006 LRDP program includes measures to minimize the effects of catastrophic events on the LBNL site. The LRDP EIR considered the potential impacts of a catastrophic event such as a natural disaster or terrorist attack (LRDP EIR pages IV.F-32 through 39). As discussed in the LRDP EIR, the Lab recognizes the potential for and continues to plan for natural or man-made occurrences that could disrupt Lab operations or require evacuation of Lab facilities. The Lab's Master Emergency Program Plan and Continuity of Operations Plan, which cover environment, health and safety, and emergency operations, ensure the provision of essential services such as fire protection and emergency response in the event of a catastrophic occurrence. The Lab also participates in the National Incident Management System, a nationwide, standardized approach to incident management and response that establishes a single, comprehensive system for incident management and cooperation among departments and agencies at all levels of government, from federal to local. Disaster and emergency response planning at the Lab is coordinated with similar planning efforts by local agencies, including the cities of Berkeley and Oakland and Alameda County. Continued implementation of these programs would ensure that impacts associated with potential catastrophic events to the incrementally increased population and facilities of LBNL would not be significant or substantially more severe than under existing conditions.

Response to Comment ORG-3-10

The comment does not raise an environmental issue regarding the content of the Draft EIR. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment ORG-3-11

Depending on how Strawberry Canyon is defined in terms of property ownership, there are publicly-owned spaces (East Bay Regional Parks District), University-owned spaces, City of Oakland- and City of Berkeley-owned spaces (public roads, etc.), and privately-owned spaces (e.g., Panoramic Hills Neighborhood) in the canyon. Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims. Also, please see the map of Strawberry Canyon (Figure 4.0-1, shown at the end of Section 4.0), which depicts the geomorphological boundaries of the canyon.

Response to Comment ORG-3-12

See Response to Comment ORG-3-9. The Draft EIR discusses the potential risks and impacts on the surrounding area from the CRT project and from cumulative development at the Lab and in the surrounding area.

Response to Comment ORG-3-13

LBNL's disaster response plan addresses security risks. Disaster and emergency response planning at the Lab is coordinated with similar planning efforts by local agencies, including the cities of Berkeley and Oakland and Alameda County.

Response to Comment ORG-3-14

Please see Response to Comment ORG-3-12. There would be no significant risks to persons inside or outside the CRT building from the work being conducted within the building, which would consist of computer operations and computational research. For a discussion of health risks related to the project and cumulative health risks from other planned development at the Lab, please see Section 4.2, Air Quality, of the Draft EIR. Also see Response to Comment I-6-3, below. Potential impacts to plant and animal species are discussed in Section 4.3, Biological Resources, of the Draft EIR.

Response to Comment ORG-3-15

The Lab disagrees with the commenter's suggestion that it is "exploiting" the land. The Lab in fact provides substantial benefits to the area and the community, including wildfire protection and vegetation management. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment ORG-3-16

With regard to mitigation and prevention of harm, as summarized in Table 2.0-1 on pages 2.0-7 to 2.0-20, the Draft EIR includes several mitigation measures for significant impacts related to the project. These mitigation measures address the project's significant impacts. In addition, the Draft EIR describes a variety of best management practices and design features that would be used by the Lab to minimize impacts related to, for example, water quality (see pages 4.7-15 to 4.7-18). The Lab provides substantial benefits to the Strawberry Canyon environment as well as to the City, including wildfire protection and vegetation management.

Response to Comment ORG-3-17

With regard to a moratorium on building in Strawberry Canyon, in its consideration of the LRDP, the Lab evaluated the amount of development that should take place within the LBNL site and substantially reduced that amount of development in response to concerns from the City of Berkeley. The Lab is not otherwise considering a moratorium on future development. It should be noted that the CRT project site is not within Strawberry Canyon. Please see the map of Strawberry Canyon (Figure 4.0-1, of this Final EIR, shown at the end of Section 4.0).

Response to Comment ORG-3-18

The comment expresses a preference for an off-site project location. Alternatives to the project site, including off-site alternatives, are discussed in Section 6.0, Alternatives, of the Draft EIR. Please see Master Response No. 1, Alternative Site – Richmond Field Station. The comment will be included as part of the record and made available to The Regents prior to a final decision on the proposed project.

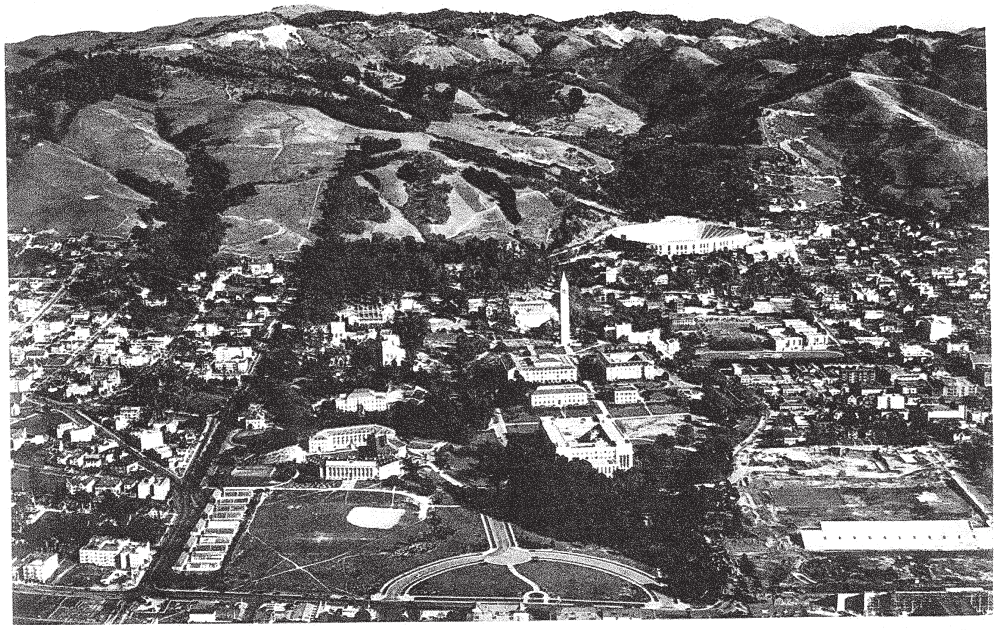

FIG. 126. University of California, in the Berkeley Hills. The Hayward fault system lies at base of the hills passing under stadium. *Photo courtesy U. S. Army Air Corps.*

January 4, 2008

Jeff Philliber, Environmental Planning Group Coordinator
Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 69-201
Berkeley, CA 94720

Dear Mr. Philliber,

We, the undersigned concerned members of the public, are submitting the following comments and questions in response to the information provided in the Draft Environmental Impact Report (DEIR) for the proposed Computational Research and Theory (CRT) Facility. We are concerned as residents of Berkeley and Oakland, and as citizens of California and the United States, that as the University of California considers its mission, it must do a better job of protecting the natural environment and reducing its impact during periods of growth and development. With that overarching concern in mind, we direct these comments and observations to you.

1

Although we welcome the opportunity to comment on the project, we first must object to the timing of the public comment period. Regrettably, the public process ran from 11/19/07 to 1/4/08, which although 45 days in length, overlapped with three national holidays (Thanksgiving, Christmas Day, and New Year's Day), the winter recess for the University of California, and the winter recess for the City of Berkeley City Council. The practical obstacles to adequate participation in the process are illustrated by the comments made by the Planning Commission on 12/19/07. Despite the public's input and the Planning Commission's input at the 12/19/07, as of 12/31/07 the minutes of the meeting were not available on-line, and it remains to be seen whether or not the city government is returned from winter recess and able to submit comment before the close of the CRT DEIR public comment period. 1

In consideration of the importance of the environmental review process, we are also troubled by the failure to prepare an Environmental Impact Statement. Given that Lawrence Berkeley National Laboratory (LBNL) is a federal facility, and given that the National Energy Research Scientific Computing (NERSC) Center is a federal program, on what grounds was environmental review, pursuant to the National Environmental Protection Act (NEPA), exempted? 2

This project goes ahead at pell-mell speed despite the legal challenge to LBNL's 2006 Long Range Development Plan (LRDP). Since the Regents certified the 2006 LRDP in July 2007, a petition has been filed – *Jones v. Regents of the University of California* – in Alameda County Superior Court, challenging the alleged "unlawful action" taken by the Regents to adopt and certify the 2006 LRDP in violation of the California Environmental Quality Act (CEQA). Of particular concern, given the lack of an off-site alternative in the CRT DEIR, is the alleged failure of the LBNL LRDP to evaluate the following: 3

> "…a reasonable range of alternatives, including, for example, an alternative with no-growth at the hill campus coupled with expansion off-site. The EIR's discussion of a single off-site alternative is vague, insufficient and not supported by substantial evidence."

Given that the Jones et al.'s petition might prevail in court, an off-site alternative, e.g. the University of California Richmond Field Station property, should have been analyzed in the CRT DEIR. Instead, other than the no-project alternative, all the alternatives are located at the LBNL hillside campus even though the choice of sites carries with it three acknowledged cumulative impacts and, arguably, other unacknowledged impacts as well. This is unacceptable.

These concerns are heightened by the intensification of proprietary interests resulting from institutional mergers between the University of California and various corporations. Increasingly, the corporation supports salaries and structures. Please clarify the funding streams and sources for the construction and operation of CRT Facility and NERSC. 4

Muddled is the extent to which this LBNL project is a University of California at Berkeley project. Is it true that it is funded by UC Berkeley even though the environmental review is through LBNL?

Also, please disclose the range of projects which and partners whom could participate in the CRT Facility and NERSC missions as there may be relevant growth-inducing impacts. For example, are collaborations with Lawrence Livermore Laboratory either existing already or anticipated in the near- and/or long-term? Would the range of work include projects with, or for the benefit of, the National Ignition Facility (NIF)? To what extent will businesses in the Green Corridor be participating in research at CRT? Please evaluate growth-inducing impacts as they are relevant to off-site collaborative partners who would occasionally travel to the CRT Facility.

4

If any portion of the CRT Facility is privately funded, if any portion of the research that takes place at the CRT Facility is privately funded, and/or if any portion of NERSC is privately funded, please evaluate growth-inducing impacts which might result from privatization?

As sophisticated alliances between private industry and this public university have grown and as corporate ownership has become less transparent, it is no longer acceptable for the UC Regents to approve the University of California's projects without greater scrutiny into individual Regent's potential conflict of interest. This is to request that the Regents of the University of California, the Lead Agency, disclose their economic ties to the project and to projects which are dependent upon the CRT Facility and which might be reasonably foreseeable in the near- and/or long-term. Will the Board of Regents certify the CRT EIR or only a committee? If only a committee certifies the EIR, why would that be and how could that be?

Also, as growth is anticipated for the CRT Facility and NERSC, please project the number of "guests" who would be visiting the CRT Facility, and please project the cumulative impacts from "guests" who would be visiting both at the CRT Facility and at other reasonably foreseeable developments in the near- and long-term at LBNL. Please describe the methodology used to calculate the projected number of guests who would be visiting the CRT Facility.

5

What guarantees or constraints are in place which would protect the public mission of the University of California?

As stated in the Introduction (section 1.0), "a public agency has an obligation to balance the project's significant effects on the environment with its benefits, including economic, social, technological, legal, and other benefits." Please provide the citation and/or reference for this expanded mission statement. Consideration might also be given to economic benefits to a community (e.g. Richmond, Oakland) as well as economic losses to a community (e.g. nearby Berkeley single-family neighborhoods) in addition to considering the adverse environmental impacts which would be identified pursuant to CEQA.

6

3

The CRT Facility project itself is substantial. It is a 140,000 gsf structure which would be built on the western edge of the LBNL hill site, a location which has prominent, panoramic views of the San Francisco Bay. The hillside location is a steep slope that drops over 100 feet from east to west (p.4.1-3) and with an average grade of about 40% (p.4.5-1,2). This will be expensive construction. Moreover, project elevation is between 620 and 760 feet above sea level, which s a prominent location and above much of the City of Berkeley. (p.4.5-1)

7

Associated infrastructure of the CRT Facility is also significant and would include not only a new 160-foot access driveway and fire turnaround but also cooling towers. The number of cooling towers would be either five or nine (p.4.2-46) and have accompanying generator units which in one of the two configurations would produce diesel particulate matter. The CRT DEIR never provides the physical dimensions of the cooling towers, not even an estimate.

The CRT Facility project is also significant because it represents the first step in the next wave of the Lab's new construction – 980,000 gsf – that was approved by the UC Regents on July 19, 2007. Being the computer infrastructure for all that follows, this first building has growth-inducing impacts which are acknowledged to some limited degree in the Revised Draft EIR text which identifies three cumulative impacts, specifically, for air quality, transportation, and noise. Rather than considering off-site alternatives for laboratory expansion, the proposed project represents the UC Regents' decision to build out at this hillside location. This is a mistake.

The mistake is evident from reviewing the Project Objectives in relation to LBNL Design Guidelines. The two policy directives are inherently incompatible.

8

On the one hand, the Project Objectives direct that researchers would have "convenient access to other Lab scientific facilities, programs, researchers, and services…(and) locate the facility such that it fosters interaction and collaboration between the project and UC Berkeley programs…" (p.2.0-3) On the other hand, the LBNL Design Guidelines require that projects "protect and enhance the site's natural and visual resources…" (p.4.1-8) and "preserve and enhance the native rustic landscape…" (p.4.1-8).

Not only is the just-mentioned Project Objective inherently incompatible with LBNL Design Guidelines, it is also an opinion not adequately grounded in fact. If there is an empirical basis for this opinion, please provide the relevant data.

It is unfortunate that the LBNL Design Guidelines are being used to justify the CRT Facility's project location given that the LBNL 2006 LRDP is being challenged as legally inadequate. One of the relevant grievances in the plaintiffs' petition is LBNL's failure to adequately consider alternative locations, which is most certainly because of the directive, based on the above-mentioned specious assumption that 300 researchers have to have convenient access to other researchers in nearby buildings (Buildings 70, 70A,

9

4

Building 50 complex). How many researchers will be in adjacent buildings? Toward that end, the LBNL Design Guideline to "(d)evelop research clusters in a way that is mindful of future expansion…" (p.4.1-11) has become license to ignore environmental impacts for what is assumed to be an overarching cause. This is unacceptable.

In fact, researchers will be spread throughout the Green Corridor of the East Bay and as far as away as Stanford University in Palo Alto. Yet for some reason, all of the researchers in the vicinity of the University of California at Berkeley and Lawrence Berkeley National Laboratory must be clustered around each other and "mindful of future expansion." From an environmental standpoint, the inevitability of expansion at this natural resource intense, aesthetically sensitive, and geologically complex site is extremely disturbing. 9

Indeed, the proposed CRT Facility is located for purposes of this DEIR in a research cluster and would be "…flanked by Buildings 70 and 70A to the east, the Building 50 complex to the north…" (p.4.1-3). Less harmful to the local ecosystem, cultural landscape, and scenic hillside vista would be Alternative 3 which is located at the geographical center of LBNL. However, even this alternative is unsuitable given the cumulative impacts from this project at presumably any LNL hill site location and given the enormous growth-inducing impacts from this development.

In addition to these general concerns about the CRT DEIR, the LBNL LRDP, and the University of California's ability to serve the public mission, specific comments about individual impact categories are as follows:

Aesthetic Impacts

In order to identify aesthetic impacts and evaluate the significance of those aesthetic impacts, it would be necessary to adequately describe the physical characteristics of the project in relation to other buildings in and near the project area. Other than mentioning the proposed conformity to building materials, there is no meaningful physical description of buildings in the vicinity. Please provide the square footage and height and elevations of buildings in the vicinity as the CRT Facility would seem to be out of scale to other nearby buildings. 10

It has not been shown that other LBNL buildings would screen the CRT Facility. Given the vast number of perspectives from which to view the CRT on the spur ridge between Strawberry and Blackberry canyons, this would seem unlikely.

The assertion that "(t)he CRT building would generally be lower than nearby Lab buildings…" is erroneously used to justify the conclusion that the CRT building "would not be visually prominent from most off-site locations." Even though the CRT building is lower in elevation than other nearby Lab buildings, the CRT building is still at a higher elevation than much of Berkeley. It would be at an elevation of 620 feet up to 760 feet.

The CRT DEIR submits that the CRT building "would be relatively unobtrusive from most locations and would not be visible from large areas of the City of Berkeley because of intervening terrain, trees, and buildings..." (p.4.1-19) This conclusion, too, is unsupported. Although several photographs were included which show the eucalyptus in the foreground of the photograph and blocking anything that might occur on the other side, what needs to be demonstrated is whether the eucalyptus, which would potentially screen the CRT Facility, are in fact the eucalyptus which would be removed in order to build the CRT Facility. If the trees are removed, they would obviously no longer screen the visual impact of the building. 10

The CRT DEIR Aesthetic Impact section fails to evaluate the potential impact of the cooling towers. As such, it fails to analyze the aesthetic impact of either of the two configurations of cooling towers and generators. In the Air Quality Impacts section of the CRT DEIR (e.g. p.4.2-46), the cooling towers are described as having one of the following two configurations: (1) Nine cooling towers and two 1.5 megawatt natural – gas-fired cogeneration units; (2) Five cooling towers and one 250-kilowatt diesel emergency generator. In the Noise Impact section of the CRT DEIR (p. 4.9-19), the cooling towers are described as being located "near the east side of the building." Yet in the Aesthetic Impact section, the cooling towers are not even mentioned. Please provide a visual rendering of each of the cooling tower configurations and physical specifications of the cooling towers and associated equipment in order to better evaluate the aesthetic impacts of this physical aspect of the infrastructure. 11

The CRT DEIR Aesthetic Impact section fails to evaluate the potential impact from the interior being lit during the nighttime. 12

The LBNL Design Guidelines which would be used to screen the visual impact is inadequate as mitigation. This is because the CRT Facility would be 160 feet tall, and would have prominent, panoramic views from the west which would contraindicate shading with vegetation under any circumstances. 13

Also, although the CRT DEIR describes the proposed building as compatible with those in the vicinity, an architect and chair of the City of Berkeley's Planning Commission begged to differ. As shown in the attached article in the *Berkeley Daily Planet* (12/21/07), Mr. Samuels criticized the CRT building design at a public Planning Commission meeting and described it as "unacceptable."

The project setting description is inadequate for placing the CRT Facility within its visual context. Although the project setting is described in the Aesthetic Impact section as being located "in the eastern hills of the cities of Berkeley and Oakland in Alameda County...", it is also helpful to know, as described in the Hydrology Impact section, that "(t)he hills are roughly parallel to the northwest-southeast trend of the major mountain ridges in the province with spur ridges and canyons oriented perpendicular to main ridges." (p.4.7-1) In other words, the hills run parallel to the San Francisco Bay, and the 14

vast plain between the hills and the Bay is where the majority of Berkeleyans reside. LBNL itself is located on a spur ridge that is banked by Strawberry Canyon to the south and Blackberry Canyon to the north. The CRT Facility project is on the western edge of the LBNL site.

The CRT DEIR definition of visual or aesthetic resources is "…generally defined as the natural and built landscape features than can be seen. The overall visual character of a given area results from the unique combination of natural landscape features including landform, water, and vegetation patterns as well as built features such as buildings, roads and other structures." (p.4.1-1) Using this definition, the natural landscape is the hillside which has a form and structure of spur ridges and intervening canyons; the Berkeley hills are parallel to the San Francisco Bay. The built feature of the Berkeley hills is predominantly low density residential, historically low density development in high visibility locations at the Lab, and wildlands and open space dominating Strawberry Canyon. Part of this scenic vista is the Panoramic Hill neighborhood, which is an historic district listed on the National Register of Historic Places, and which has contributing features related to choosing materials and design which are compatible with the surrounding natural environment.

These hills, the Berkeley hills, are an important scenic vista. The hills define the eastern edge of Berkeley just as the panoramic vista of the San Francisco Bay defines the western edge of Berkeley. The geography and topography have not only significance in natural history and physical sciences but also cultural and aesthetic significance.

14

These hills are a coastal range, which is *the* backdrop to the city of Berkeley and the UC Berkeley campus. It is a different backdrop from the hills of Oakland in relation to the rest of Oakland and the Bay; or the hills of San Francisco in relation to the rest of San Francisco and the Bay. In other words, the Berkeley hills define the physical character of the city landscape as a whole.

The pattern of residential development of the Berkeley hills has evolved from the architectural heritage of the First, Second and Third Bay Area Traditions, the social and cultural predominance of the Hillside Club during the period of early hillside development, and the continuous land use pattern of predominantly single-family residential. The development of Strawberry Canyon and Blackberry Canyon evolved in tandem with the university in which development patterns respected open space in Strawberry Canyon by virtue of building relative low profile structures and reducing the footprint on the hill landscape and horizon.

The CRT DEIR fails to adequately describe the project in relation to either Blackberry Canyon or Strawberry Canyon. Neither does the CRT DEIR evaluate the place of LBNL within the whole. The scenic vista is not the LBNL site per se but the LBNL site in relation to the Berkeley hills and as part of this larger, historic whole.

7

Although various maps in the CRT DEIR show the spur ridge upon which the project is located, and although the elevation of the structure in combination with the height of the structure and the removal of eucalyptus trees would suggest a visible structure from points north, south, east and west, photographic simulations are quite limited in the arc of directionality. As the Cyclotron is visible from Oakland at Broadway near State Route 13, please expand your scope of photographic simulations.

There should be story poles and there should be a 3-dimensonal rendering of the proposed facility in relation to Blackberry Canyon, Strawberry Canyon, and points north, south, east, and west. If the experience with the public review process for the Molecular Foundry taught us anything, it is that the LBNL environmental review process will not disclose all pertinent visual simulations which would otherwise reveal environmental impacts. Please reference the Molecular Foundry Initial Study in which views from Panoramic Hill are shown but simulated views from either Rim Road or Memorial Stadium were lacking. As the attached photograph shows, a quite prominent view of the Molecular Foundy is available from Rim Road and even inside Memorial Stadium. 15

In light of these observations, it can be reasonably shown that there is a scenic vista that would satisfy the definition provided in the CRT DEIR, that is, "an open and expansive public view encompassing valued landscape features such as ridgeline, open bay waters, distinctive urban skyline or major landmarks." (p.4.1-18) It can, moreover, be shown that the scenic vista would be interrupted and disturbed by the proposed construction of the CRT Facility, and that there would be cumulative aesthetic impacts which would also be significantly adverse.

This conclusion is further supported by the extent to which the proposed CRT Facility project conflicts with the General Plans of two cities. The City of Berkeley General Plan policy states: "Construction should avoid blocking significant views, especially ones toward the Bay, the **hills**, and significant landmarks such as the Campanile, Golden Gate Bridge, and Alcatraz Island. Whenever possible, new buildings should enhance a vista or punctuate or **clarify the urban pattern**." (p. 4.1-11) (emphasis added) The CRT project would disturb the existing pattern by introducing a larger building, and presumably other large buildings, and presumably in clusters. This would intensify the building density on the Berkeley hillside and commercialize – or worse, industrialize – the Berkeley hillside in ways which are patently objectionable. 16

As stated in Oakland's General Plan, Policy OS-10.1, "(p)rotect the character of existing scenic views in Oakland, paying particular attention to: (a) views of the Oakland **Hills from the flatlands**…" (. 4.1-12) (emphasis added)

The proposed project design underestimates aesthetic impacts in that it fails to satisfy "development strategies" laid out in the 2006 LRDP. The large and tall building does not "protect and enhance the site's natural and visual resources…" (p.4.1-8). The proposed facility does not preserve open space but instead uses undeveloped open space. The proposed project fails to "preserve and enhance the native rustic landscape…" (p.4.1-8) by virtue of building a large, commercial-type building of glass and metal. By removing

72 trees, the project fails to "maintain and enhance tree stands to reduce the visibility of Laboratory buildings from significant public areas in neighboring communities." (p.4.1-8)

The proposed project also fails to satisfy LBNL Design Guidelines. (1) The proposed project fails to "respect view corridors…"; (2) Using landscape elements to screen the tall building with the panoramic western view is unrealistic; (3) "The project would create new sources of light and glare within an already developed area." (p.4.1-20) In fact the site is undeveloped, and the project intensifies development of the area generally; (4) "During the nighttime, the project site would be lit for nighttime operations and security reasons. These new sources could potentially affect day and nighttime views and could conflict with local lighting regulations and policies." (p.4.1-20) 16

Remarkably, despite these acknowledged impacts, the CRT DEIR concludes that "implementation of LRDP Mitigation Measure VIS-4a and LRDP Mitigation Measure VIS-4b…would ensure the project's potential lighting impacts are less than significant." (p.4.1-20. These mitigations are as follows:

VIS-4a: "All new buildings on the LBNL hill side …shall incorporate design standards that ensure lighting would be designed to confine illumination to its specific site in order to minimize light spillage…" (p.4.1-17) This mitigation would be ineffective in that the scenic vista would be degraded even if the lighting were confined to "its specific site." 17

VIS-4b: "New exterior lighting fixtures shall be compatible with existing lighting fixtures and installations in the vicinity of the new buildings…" (p.4.1-17). This addresses exterior lighting but does not eliminate or reduce the effect of interior lighting as a fixed source that has nocturnal impacts.

Although the CRT DEIR correctly concludes that "(t)he proposed project could alter views of the LBNL site…", the CRT DEIR incorrectly concludes that the project "would not result in a substantial adverse effect to a scenic vista or substantially damage scenic resources." There would be a substantial adverse impact.

The project might also cause cumulative aesthetic impacts. This is because there are no constraints on development which would prevent the cumulative degradation of the scenic hillside vista on the LBNL portion of the Berkeley hills. There are cumulative impacts which have not been acknowledged. 18

Should this project go forward, the cumulative aesthetic impact is to shift the balance of open space, residential and commercial/industrial to a greater predominance of commercial/industrial and to change the form of the built environment from low-profile to high-profile and from residential to commercial. The hillside vista would increasingly appear as an industrial park rather than as a campus building in a relatively relaxed, residential, quasi-rural cum suburban hillside setting.

The panoramic vistas enjoyed by scientists would be at the public's expense.

Air Quality Impacts

To summarize from the Revised Draft EIR Text (p.5.0-17), "the proposed project would make some incremental contribution to cumulative cancer risk impacts associated with future development of LBNL and UC Berkeley." It is a "significant" effect, which the Revised Draft EIR Text also describes as "unavoidable."

Given that the Board of Regent must ultimately decide whether or not to certify the CRT EIR, it is important to consider the project impact – increased cancer risk – on the affected student population at UC Berkeley. As explained in the Revised Draft EIR Text (p. 5.0-17, 18), one of the off-site areas, where the cumulative risk exceeded the CEQA significance criteria, is for the residents of Foothill student housing.

> "…the area immediately southwest of the CRT project site between the Horseshoe parking lot and UC Berkeley Foothill student housing where the LBNL cumulative analysis for the 2006 LRDP EIR indicated that the lifetime excess cancer risk under the cogeneration unit configuration reached up to approximately 40-in-a-million (with LBNL activities accounting for about 95 percent of this value…" (p.5.0-18)

Also, do residents of Stern Hall have the same increased risk as the students at Foothill student housing? To clarify, please identify all specific, and various locations which were considered as locations of sensitive receptors.

19

The CRT DEIR recognizes that there are "sensitive land uses in the vicinity of the proposed project." (p.4.2-7).

> "Sensitive land uses in the vicinity of the proposed project include residential neighborhoods, open space recreational areas, university student dormitories, and day care centers. Residential neighborhoods are located along the western and northern boundary of the proposed project. The nearest residences are approximately 600 feet away." (p. 4.2-7)

In the list of recreational areas mentioned in the CRT DEIR, it fails to mention the numerous UC Berkeley recreational uses in the immediate vicinity. These include Witter Rugby Field, Levine-Fricke Field, Strawberry Canyon Recreation Area, Memorial Stadium, Maxwell Family Field. The dormitories near the project include not only Foothill Student Housing but also Stern Hall and Bowles Hall. Please locate these facilities in terms of distance from the proposed CRT Facility so that the Regents might be aware of the extent to which their students, as sensitive receptors, are in close proximity to the proposed project.

Although the Panoramic Hill neighborhood does not abut LBNL, the neighborhood is on the other side of the canyon from LBNL. As the crow flies, or as the air particle drifts, what is the distance from the proposed CRT Facility to the Panoramic Hill

neighborhood? This is particularly important given that the neighborhood is located southeast of the project site and wind directionality is southeast. 19

In consideration of the ultimate weighing of values, i.e. between the presumed benefits of the project and the various environmental impacts of the project, please note that the human health risk assessment methodology prepared for this project is limited and introduces uncertainty. Among these limitations are the uncertainties associated with adequately modeling air movement in hilly terrain. This is acknowledged as a limitation in the Human Health Risk Assessment prepared by Goulder Associates. Even with the uncertainties of hilly terrain, the maximum impact is estimated to exceed "the 10-in-one-million threshold" established as the level of significance in CEQA Guidelines. 20

In weighing the presumed benefits of the project in relation to environmental impacts of the project, please consider that impacts might be underestimated. As it is, the maximum impact is estimated to exceed "the 10-in-one-million threshold" established as the level of significance in CEQA Guidelines.

Another methodological limitation is the quality of the data itself. Is it true that the air quality data was from a BAAQMD monitoring station at 822 Alice Street in Oakland which is approximately five miles from the project site? (p. 4.2-5) 21

Given that the San Francisco Bay Area Air Basin (SFBAAB) is "currently designated as a marginal nonattainment area with respect to the national standard for ozone and is designated as attainment or unclassifiable for all other pollutants" (p. 4.2-3), did the CRT DEIR evaluate air quality impacts by any other standard?

Were each of the following greenhouse gas (GHG) emissions assessed: Carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perflurocarbons, hydrochloroflurocarbons, 111-trichloroethane, chlorofluorocarbons? 22

Does the Bay Area Air Quality Management District (BAAQMD) Small Facility Banking account have enough credits in it to offset *cumulative* air impacts?

Did the Human Health Risk Assessment evaluate acute hazards? If not, this is one more type of air quality impact, that whether rigorously estimated or not, causes harm. It adds to the overall cumulative degradation of the environment. 23

The CRT Facility's cooling towers would be one source of transient air contaminants (TACs). One of the cooling tower configurations has a cogeneration unit and the other has a backup generator. The lifetime excess cancer risks from the cogeneration option are "at least two orders of magnitude higher than the risks of the backup generator option…" (p.5.0-17). In light of the heightened lifetime cancer risk for the cogeneration unit, what reasons other than cancer health risk would be used to choose between the types of electrical power? 24

11

The CRT DEIR asserts that any air quality impact from tree removal (and reduction in carbon sequestration) would be offset by replacing trees at a 1:1 ratio. Please clarify whether the Lab intends to replace mature tree for mature tree with equivalent trunk diameters. If not, what is the difference in carbon sequestration? 25

Biological Resources Impacts

The project site has biological resource value that will be compromised should the CRT Facility project go forward.

Among the biological resources identified in the CRT DEIR as having "at least a moderate potential to occur within the project vicinity" is the Alameda whipsnake, listed as "threatened under both federal and state law." (p.4.3-7).

In addition to Alameda whipsnake, there are other special status wildlife-species that have "at least a moderate potential to occur within the project vicinity." Some of these have been placed on a national "watch list" by two leading conservation organizations – the National Audubon Society and the American Bird Conservancy. These include the Allen's Hummingbird, which has "at least a moderate potential to occur within the project vicinity" (p.4.3-7), the Oak titmouse (p.4.3-38) and the Olive-sided flycatcher (p.4.3-39) which have a "low potential" of occurrence, and the California thrasher (p.4.3-41) whose occurrence is "unlikely". 26

Raptors are considered special-status species, even if not listed as endangered, according to Fish & Game Code Section 3503.5. (p. 4.3-6) Among the raptors having "at least a moderate potential to occur within the project vicinity" are the Cooper's hawk, Great Horned Owl, Red-Tailed Hawk, Red-Shouldered Hawk, and American Kestrel (p.4.3-9,10,11).

Special status bats with at least a moderate potential of occurrence in the project area include Pallid Bat, Fringed Myotis, and Long-Eared Myotis.

In spite of cattle grazing in the late 1800s and early 1900s, and aggressive vegetation management in the late 1900s, the following plant species were determined to have some potential to occur: (1) big-scale balsamroom, (2) Diaiblo helianthella, (3) large-flowered leptosiphon, (4) Oregon meconella, and (5) robus monardella. (p.4.3-12,13).

Although the California Natural Diversity Database (CNDDB) lists several sensitive plant communities, including riparian plant communities and freshwater marsh and Mediterranean-climate-based seep communities, as occurring in the project area, the CRT DEIR acknowledges none. "No sensitive plant communities occur on the project site." (p.4.3-13). Yet by the same token, the CRT DEIR acknowledges that "purple needlegrass occurs in varying densities on the project site" (p.4.3-14) including one area within "an approximately 30 feet by 50 feet area." (p.4.3-14). And yet the CRT DEIR also acknowledges that the bay woodland associated with the North Fork of Strawberry Creek 27

is a riparian plant community and that there is a "small area of arroyo willow scrub" that is associated with the Cafeteria Creek drainage. (p.4.3-14). 27

The CRT DEIR acknowledges that four sensitive habitats are located within the project area (p.4.3-15) and that the North Fork of Strawberry Creek and Cafeteria Creek are subject to the jurisdiction of the Army Corps of Engineers and the California Department of Fish and Game. (p.4.3-15) 28

Although this baseline list of biological resources is substantial, it may be an underestimate of the actual population density at the project site and in the project vicinity. Please provide the work product of the "qualified biologist" who evaluated for the presence of Alameda whipsnake on June 28, 2007. Please provide information about the time of day of the survey, the duration of the survey, and the method of surveying the area. 29

The CRT DEIR neglects to mention whether tree-cutting and/or other disturbances in the area were taking place at the time the biologist examined the area. During the summer of 2007, eucalyptus trees were being cut on the southern slope of Strawberry Canyon as part of a fire fuel mitigation project. The CRT DEIR fails to describe the tree-cutting project – the Lower Strawberry Canyon Fuel Management Project. http://oep.berkeley.edu/programs/fire_mitigation/documents/LowerStrawberry.pdf The tree-cutting project on the south-facing slope of Strawberry Canyon and near the project site would have been a significant disturbance which would have confounded the validity of the survey results taken during this time period.

The CRT DEIR states that the mature eucalyptus stand is nesting habitat for numerous species of raptors. (p. 4.3-4) Although it was generally acknowledged that raptors nest in tall trees and hunt in grasslands, there was inadequate consideration given to the fact that the project would eliminate potential nesting sites including 32 eucalyptus with trunk diameters greater than 20 inches. Furthermore, eliminating grassland would eliminate habitat of prey. What biological resources are expected to remain after construction of the CRT Facility? Would any of the trees which currently occupy the 2.25 site remain afterwards? 30

The CRT DEIR underestimates biological resource impacts by failing to consider the effect of a tall building, 160 feet in height (p. 3.0-1) on raptor behavior? How would the building affect nesting and hunting? Would the building be hostile to raptor habitat? Would the exterior building materials of glass and metal deter nesting or interfere with hunting? Would the building itself displace raptors?

Neither does the biological resources analysis consider the effect of noise from the cooling towers on raptors and other special-status species? There is no mention of the noise from the cooling towers in the Biological Resources section of the CRT DEIR.

Neither does the biological resources analysis consider the effect of night lighting on raptors, or other special-status species.

The project reduces the amount of Alameda whipsnake habitat. The LRDP mitigation MM BIO-5a (relocating snakes when encountered during construction) and LRDP MM BIO-5b (excluding snakes from construction zones) do not compensate for this serious project impact. LRDP MM BIO-5b talks about fencing of project sites within high potential areas so as to "exclude snakes prior to project implementation." (p. 4.3-25) This is nonetheless a reduction of Alameda whipsnake habitat for an already threatened species. Also, would ongoing operations of the CRT Facility, cooling towers, and fire/turnaround affect Alameda whipsnake habitat adjacent to the project area? 31

Biological resource impacts have been underestimated by virtue of assuming that plant communities *near* the project site would not be impacted. Among the plant communities near the project site is well-developed California bay woodland that includes coast live oak and big leaf maple, *120 feet north* of the project site. If the woodland is north of the project, and the building is south of the woodland, would the building shade the plant community and change the ecosystem? The CRT DEIR assumes there is no impact on habitat for special-status species if construction and ongoing operations are as much as 120 feet away. This is a faulty assumption that serves to underestimates impacts. 32

The CRT DEIR fails to *comprehensively* describe contiguous open space. The LBNL site, and by extension the proposed CRT site, is contiguous with open space in UC Berkeley's Ecological Study Area, Tilden Regional Park, *and* Claremont Canyon Regional Preserve. Please describe the amount of acreage in contiguous undeveloped open space. The answer would clarify the range of potential animal species within the LBNL campus generally, and the project site specifically and would also help to better estimate cumulative impacts. Without this information, existing biological resources are underestimated and impacts not identified. 33

The CRT DEIR errs in assuming there are no "waters of the United States" or "waters of the State" on the project site, and that the project is outside the jurisdictions of these entities. Although the waters are not within the 2.25 acre site, they are part of an ecosystem that is very much affected by disturbances, either acute or chronic, at the 2.25 acre site. Impacts from development of the project site are too narrowly defined. The project is "proximate to potentially jurisdictional waters." 34

Remarkably the CRT DEIR asserts that there would be no indirect adverse impacts to nearby creeks and seeps that would be subject to Army Corps of Engineers (ACOE) and California Department of Fish and Game (CDFG) jurisdiction and that there would be no adverse effects on sensitive plant communities and habitats. The CRT DEIR concedes that "(i)n the absence of avoidance measures, these habitats (North Fork of Strawberry Creek and known habitat for Lee's micro-harvestman, and willow riparian scrub habitat associated with Cafeteria Creek) could be indirectly affected during construction of the proposed project." (p.4.3-30). But the CRT DEIR asserts that by using the LBNL's "best management practices," construction-related problems would be avoided. 35

The description of the surrounding land uses is inadequate. The DEIR points out that "(t)he hills surrounding LBNL contain low- to moderate-density residential neighborhoods" but neglects to mention that wild lands are also in the hills which surround the LNBL campus. The effect of this inadequate environmental setting description is to minimize the relationship of the LBNL to the natural environment. The effect is further reinforced by leaving out any maps or other graphic illustrations which would demonstrate the relationship. LBNL is represented as if it exists in a vacuum. For example, Figure 4.3-1 describes the vegetation at the LBNL site but leaves out the vegetation surrounding the LBNL site. 36

The CRT DEIR concludes that all biological resources impacts are "less than significant." Mitigation measures from the 2006 LRDP were identified to presumably further reduce project impacts. However, the mitigation measures would hardly be effective for either purpose. For example, regarding LRDP MM BIO-3, a "no disturbance buffer zone (would) be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged." (p.4.3-23). To avoid disturbance "from noisy or intrusive activities (such as concrete breaking) that will commence during the breeding season" (p. 4.3-23), "a qualified biologist shall conduct preconstruction surveys of all potential special-status bird nesting habitat in the vicinity of the planned activity…" (p.4.3-23). Among the interventions to mitigate harm is to create a "no-disturbance buffer zone … around active nests…. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG, taking into account factors such as …noise and human disturbance levels at the project site." (p.4.3-23). 37

Rather than waiting until construction to estimate the size of the buffer zone, please calculate the size of the buffer zone for purposes of this EIR. Anticipated noise levels from construction are already known values given the noise impact analysis accompanying this DEIR. Please disclose the size of the buffer zone in light of reasonably foreseeable noise impacts during construction. Given that construction will be ongoing for a 26 to 30 month period, construction would be ongoing through multiple breeding seasons. It is anticipated that the buffer zone would interfere with construction because nests would be close to the project site.

UC Berkeley's Strawberry Creek Management Plan (SCMP) contains a description of the plant and animal species in the upper Strawberry Canyon watershed. This is therefore to request that the SCMP be added to the administrative record so as to better evaluate the recovery potential of the species and so as to better evaluate the adverse impacts from LBNL's vegetation management program over time. 38

Given that the area has been subject to "aggressive vegetation management" protocols for many years, and given the acknowledged impact to environmental resources, (p. 4.3-12, 13) please disclose the history of CEQA documentation for annual vegetation management for fire fuel reduction at the LBNL site. Pursuant to CEQA, have other vegetation management alternatives, e.g. chaparral, been considered? 39

More importantly in light of documenting the environmental impacts from the CRT DEIR, and the cumulative impacts from CRT, is aggressive vegetation management a cost of doing business in the high risk fire zone at the LBNL hill campus? If so, this is an unacceptable cost. 39

Also, please describe existing or proposed plant restoration programs at the Lab. Has the *Recovery Plan for Chaparral and Scrub and Community Species East of San Francisco Bay, California* been implemented? (rf. attached Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California, November 2002). Has LBNL made any efforts to restore Alameda whipsnake habitat as recommended in the USFWS recovery plan? Also, although the recovery plan is referenced in the text as "USFWS 2005d," the reference list in the back of the section on Biological Resources does not include USFWS 2005d. This is to request, therefore, that the reference be included in the reference list and the CRT DEIR administrative record. 40

Federal law, specifically, the Endangered Species Act, "mandates the preparation of recovery plans for listed species unless such a plan would not contribute to their conservation…" (p. v – U.S. Fish and Wildlife Service, Region 1, Portland, Oregon. November 2002. *Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California,* hence referred to as Draft Recovery Plan) and requires "…protection of identified habitat from development, fragmentation, degradation, and incompatible uses." (p. vi – Draft Recovery Plan). Moreover, "(s)pecified recovery areas are secured and protected from **incompatible uses."** (emphasis added). Has a recovery plan been adopted, and if not, why not?

The project does not conform to at least one of the development strategies included in the LRDP which would be to "minimize potential environmental impacts" i.e. to "protect and enhance the site's natural and visual resources, including native habitats, riparian areas, and mature tree stands by focusing future development primarily within the already developed areas of the site." New construction and landscaping (e.g. using "native, drought-tolerant plants) may well be energy efficient, but in other ways the project is harmful to biological resources and poorly compensated for by what are in fact paltry mitigations. 41

The CRT DEIR remarkably concludes that the biological resources impact from the project in all its aspects is less than significant. The analysis dismisses the biological importance of 64 mature eucalyptus trees on the basis that the trees are non-native. It dismiss the biological importance of non-native plant species on the basis they are common (p.4.3-30) Yet these common species have supported special-status species and have played a vital role in their survival. 42

The mitigation of the 1:1 ratio tree replanting somewhere on the LBNL site is no mitigation for extant ecosystems. The mitigation of revegetating disturbed areas is evidently limited given that disturbed areas may be covered by a building or access road or cooling towers.

16

In this fragmented view of biological resources, a building can be placed anywhere, and biological resources can be relocated anywhere. In this way, the University of California would be contributing to the degradation of habitat for endangered species and would fragment ecosytems. 42

In short, the CRT Facility project is incompatible with species preservation. Rather than restoring habitat, the University of California is the Lead Agency for a project that is degrading habitat. 43

The project site itself is a very small 2.5 acres. However, the impacts from this small development would reach beyond 2.5 acres. Please consider the cumulative impacts to biological resources which can be reasonably anticipated from near-term cumulative projects, including the Helios Energy Research Facility, Guest House Seismic upgrade-Phase I, Advanced Light Source USB Project, Building 77 Rehabilitation, Bevatron Demolition, Building 6 Seismic Upgrade, Strawberry Canyon Water Storage Tank, Student Athlete High Performance Center, and Clark Kerr Campus Renovation and Utilities. (rf. Table 5.0-1 "Near-Term Cumulative Projects" in Revised Draft EIR Text) 44

Cultural Resources Impacts

The CRT DEIR concludes that impacts to the region's cultural resources are "less than significant." We respectfully disagree, and assert, moreover, that impacts have been underestimated for the following reasons.

For one, the CRT DEIR uses a very narrow definition of "cultural resources." Although quoting from the National Park Service (NPS), the CRT DEIR defines "a cultural landscape" as "'a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person exhibiting other cultural or aesthetic values. There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designated landscapes, historic vernacular landscapes, and ethnographic landscapes.'" (p.4.4-1). Yet in spite of acknowledging the importance of landscapes and historic sites, and geographic areas as subject, the CRT DEIR only evaluates historically significant buildings and archeological resources. 45

The CRT DEIR dismisses the important cultural landscape element of the LBNL site by negating the area's history. Disingenuously it would seem, the CRT DEIR demurs that "it is not clear what historic event, activity, or person would be the basis for significance of the area as a cultural landscape." (p.4.4-1)

Whereas the University of California at Berkeley Long Range Development Plan requires Historic Structures Assessment as mitigation to planned development when a project could cause substantial adverse change, the LBNL LRDP does not offer a similar mitigation. For the CRT DEIR, LBNL offers a future survey of potentially historically 46

significant buildings and structures at LBNL, but not a completed survey. Better yet would be a survey in advance of the project. 46

Aside from the poor timing of the cultural resource survey, the scope is also problematic. The scope of the survey in progress is limited to the historically significant buildings and structures at the LBNL hill campus. What is urgently needed, and what should have been prepared in advance of the 2006 LRDP, is a cultural landscape report (CLR). A CLR would have been a useful guide for developing University of California's mission at LBNL while not harming extant cultural resources in Strawberry Canyon and the Berkeley hills more generally. Such a CLR would have established levels of investigation and landscape characteristics, would have used graphic documentation, geophysical survey techniques, geographic information systems, tree coring, and pollen, phytolith, and macroflora analyses, would have established treatment of plant features and preservation of historic roads and trails.

To follow best practices in the management of cultural resources would have been to prepare a CLR. 47

> "A CLR is prepared in order to minimize loss of significant landscape characteristics and associated features, and materials when existing information about the physical history and condition of the cultural landscape is inadequate to address anticipated management objectives, when impending development alternatives could have adverse effects, or to record actual treatment." (Sited as a source in *Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (2005), page 4, and as excerpted from *Cultural Resource Management Guideline,* Release No. 5)

Neither did LBNL prepare a CLR in advance of the 2006 LRDP. This deficiency was perpetuated rather than corrected when LBNL failed to prepare a CLR in advance of the CRT DEIR.

Yet LBNL was given ample notice in the form of the Landmarks Preservation Commission's comment on the 2006 LRDP DEIR in which it was stated that the "Strawberry Canyon Area is a potential Cultural Landscape." As summarized in the City of Berkeley's response to the 2006 LRDP DEIR, "(t)he Berkeley Landmarks Preservation Commission has noted that the Strawberry Canyon area may be significant as a cultural landscape. While portions of the Canyon are highly disturbed, the experience of the canyon as a wildland adjacent to a highly urbanized and densely populated city continues to make it a special area within the City. The special character deserves consideration in siting and planning for development near this sensitive area."

Moreover, the Berkeley Architectural Heritage Association, a California non-profit, organized a special summer program on "Strawberry Canyon as a Cultural Landscape." Held in August of 2007, in advance of the CRT DEIR publication, the program included a lecture by renowned cultural landscape architect Charles Birnbaum, FASLA, Founder

of the Cultural Landscape Foundation, and former Coordinator of the National Park Service Historic Landscape Initiative.

In spite of this significant city- and community-based interest, the LBNL did not prepare a CLR for the Strawberry Canyon area, and instead offers a future survey of the potentially significant historic structures and buildings and archeological remains on the LBNL site alone. What is missing is a clear directive from the University of California to evaluate the LBNL site in relation to the whole fabric of the Strawberry Canyon area. 48

Prior to such research, it is not clear to what extent the CRT Facility is, or is not, within the boundaries of what would be considered Strawberry Canyon's cultural landscape. The boundaries should be established by systematic and methodical means.

Among the means of establishing the boundaries are photographic surveys which would evaluate whether the proposed facility would protrude visually into the Strawberry Canyon area. To rule out any possibility of this being the case would require a photographic survey more extensive than the one provided to date. This would include simulations of the building from the perspective of the Panoramic Hill neighborhood to the south and the Jordan Fire Trail to the south, both of which occupy the southern geographic border of the Strawberry Canyon area. There is no clarity as to the extent to which the site protrudes out of the hill site and will be visible from the south and hence the edge of Strawberry Canyon. 49

Rather than proceeding with such a study, the LBNL uses the absence of such documentation as expedient opportunity to proceed forthwith. This is inappropriate conduct for this public agency especially in light of the cultural resources at stake, that is to say, public resources.

In short, although LBNL has retained the services of consultants to survey the historic structures on the LBNL site, this does not substitute for a survey of the cultural landscape resources. LBNL, and by extension the University of California, has a public obligation to identify cultural resources in the project area and vicinity in order to adequately evaluate impacts.

As stated previously, the CRT DEIR does not acknowledge any "historic event, activity, or person (which) would be the basis for significance of the area as a cultural landscape." (p.4.4-1) Yet the LBNL as part of the University of California has extensive archives regarding the early history of the university, including the research laboratories at the Lab, and the Strawberry Canyon area generally. The cultural landscape of Strawberry Canyon is inextricably bound with University of California history. Among the records referenced in the CRT DEIR are the Strawberry Creek Management Plan which describes some of the cultural history of the area. 50

The CRT DEIR states that "the Canyon area has been the site of numerous and changing research, recreational and land management activities of the University of California, as well as residential and other development activities on private properties." (p.4.4-2). This

is precisely the point and, as such, does not negate the cultural landscape potential of the site. 50

As stated in the criteria for historic vernacular landscapes from the National Park Services, it is in fact "a landscape that (has) evolved through use by the people whose activities or occupancy shaped that landscape. (And it is) (t)hrough social or cultural attitudes of an individual, family or a community, (that) the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes." http://www.cr.nps.gov/hps/tps/briefs/brief36.htm

In short, the evolution of the landscape at LBNL and the Strawberry Canyon area is such that the research laboratories have been largely out of sight and have maintained a low profile on the horizon. Recreational activities in the area started in the late 1800s and have continued to the present time. These include hiking, swimming, and intercollegiate sports including football, rugby and women's softball.

Development of the Strawberry Canyon area over time has included setting aside open space as part of the Ecological Study Area. Development of the Strawberry Canyon area has also included landscaping interventions as diverse as the Botanical Garden and the tree plantations at the Stephen Mather Redwood Grove and the Woodbridge Metcalf Grove. 51

Residential development starting in the late 1800s and early 1900s was built to be compatible with nature, and low profile development has been the norm. There are a few exceptions to this development pattern, e.g. the recently built Molecular Foundry, but the overall landscape has integrity and character defining features which would be compromised by the intrusion of prominent and dense building, e.g. the proposed 140,000 gsf, 160 feet tall CRT Facility. In short the land use and balance of relationships between land uses have been more or less the same during the cultural history of the University of California.

We applaud the LBNL for evaluating all historic properties at the LBNL site for eligibility for listing in the National Register. However, this approach is too little too late and will not resolve the larger issue of how Laboratory development has evolved within the larger landscape context. The Strawberry Canyon area as it exists today has integrity of spatial organization, land use, circulation and response to natural features. 52

In short, although Strawberry Canyon area has not been designated as an historic site, historic designated landscape, historic vernacular landscape, and/or ethnographic landscape, there is substantial, relevant information in the CRT DEIR administrative record which should guide the lead agency toward recognition of the Canyon's cultural resource value.

Moreover, the information available leads to the inevitable conclusion that the CRT DEIR conflicts with the LRDP development strategy to "(p)reserve and enhance the environmental qualities of the site as a model of resource conservation and environmental stewardship...," fails to preserve "the Hill's rustic landscape…," (p. 4.4-6) and does not state a "clear rationale based on precedent for the architectural expression of (the) project." (p. 4.4-6) In short, the proposed project does not conform to development strategies laid out in the already deficient 2006 LRDP. 52

Hazards and Hazardous Materials

We note the following for the record:

- that soil and groundwater contamination exists at LBNL (p.4.6-2) 53
- that aggressive vegetation management minimizes wildland fire damage (p.4.6-3) although it degrades habitat (p.4.3-13) 54
- that the proposed project is 2,200 feet west of the "tritium plum area." (p.4.6-4) 55

Are nanoparticles and genetically modified organisms defined as hazardous materials? Are there human health hazards associated with nanoparticles and genetically modified organisms? 56

As the CRT Facility project enables other research at the LBNL site, are there cumulative hazards and hazardous materials impacts not considered? 57

Geology and Soils

We note the following for the record:

- that "LBNL is located in an area with a high occurrence of landslides and other slope instability." (p.4.5-3) 58
- that the CRT project area "contains two areas of potential slope instability that have been designated a 'medium risk' area of landslide movement." (p.4.5-3) 59

Hydrology and Water Quality

We note the following for the record:

- that the project is located in the upper Strawberry Creek watershed 60
- that LBNL has not prepared a watershed management plan
- that there are "areas of concern" as close as 0.2 miles northeast of the project site (p.4.7-7) 61
- that the "primary chemical constituents of concern are volatile organic compounds, although polychlorinated biphenyls, petroleum hydrocarbons, and small amounts of polynuclear hydrocarbons have been detected…" (p.4.7-7) 62

- that there are "(f)our other 'areas of concern' for ground water contamination near the CRT site affecting two sanitary sewers, one former diesel tank, and one former PCB storage facility." (p.4.7-7)

63

Please clarify the proximal distance from the project site to Cafeteria Creek and from the project site to the North Fork of Strawberry Creek.

64

Does the Bay Area Hydrology Model apply to steep slopes of 40%?

65

The CRT DEIR asserts that the "building will extend a maximum of 25 feet below the ground surface, above the level at which groundwater is typically observed near the site." (p.4.7-19. Yet, in the Geology and Soils section of the CRT DEIR, it is stated that the "building foundation will be on spread footings lying directly on bedrock and piers drilled at least 10 feet into the underlying bedrock…" (p.4.5-14). Please clarify these two statements so that the lay reader can reconcile what would appear to be a contradiction.

66

Land Use and Planning

Land use and planning has been piecemealed by the University of California by virtue of segregating the LRDP process for two campuses – UCB and LBNL – located in areas of common and mutual public resources and infrastructure. Gayley Road as part of the North-South corridor and Hearst Road as part of the East-West Corridor will be especially impacted by growth at both UCB and LBNL, growth which was considered independently rather than in coordination.

67

There have also been unaccounted for impacts from strategic growth for the benefit of UC Berkeley through LBNL. This is evident from the description of the CRT Facility which will be used for "researchers and students from the Berkeley Lab's Computational Research Division and the joint UC Berkeley/Berkeley Lab Computational Science and Engineering program." (p.3.0-1)

The LBNL 2006 LRDP laid out various mitigation measures to reduce the impact of development. However, the 2006 LRDP was insufficient, according to plaintiffs who have legally challenged the document, pursuant to CEQA. Many of the impacts cannot be mitigated at the LBNL hill site campus, and it is for this reason, that an off-site alternative should have been the preferred alternative.

68

In general, there is insufficient acknowledgement of the seriousness of the issues at stake. Were there understanding of the compounded hazards of earthquake faults, landslide potential, a high risk fire zone, hillside setting, limited access, proximity to residential land use, there would be pause. If there were appreciation of the natural environment and awareness and understanding of potential harm caused by continued LBNL growth at their hill site campus, there would be a halt. Alternative locations must be taken seriously rather than given pro forma treatment.

As an example of the limited approach to these complex issues, the CRT DEIR acknowledges residential neighborhoods to the north, northwest, and west, yet fails to acknowledge the Panoramic Hill neighborhood to the south. Although the neighborhood does not abut LBNL land, it is a short distance away from LBNL on the north facing slope of Strawberry Canyon. From drawing a straight line on a map, what is the distance from LBNL boundaries to the Panoramic Hill neighborhood? Also, what is the air distance from LBNL boundaries to neighborhoods to the north? It is not necessary for a neighborhood to abut LBNL for it to be impacted by LBNL development. Neither should distance by roadway be the standard. 69

Noise Impacts

The surrounding land uses description within the Noise Impacts section minimizes the surrounding land uses. As the project will be on a hillside and in a canyon, there are acoustical realities which extend the range of affected and impacted parties. The CRT DEIR identifies some residential locations which are very close in range, but impacted parties will likely be at farther distances. Please provide noise sampling at various radii from the project site so as to accurately estimate the range of noise impact impacts. Please also disclose the locations sampled. 70

With respect to the source of noise, i.e. the cooling towers and generator/s, what are the decibels at the source? How many decibels will be heard at various distances from the source? Which off-site locations have been studied? Has the cooling tower and generator noise been differentiated from ambient noise? Has the cooling tower noise been measured independently of other noises? Are there noise level differences between the two different types of generators? 71

Sharon Hudson, a Berkeley resident, asks the following question in regards to noise:

"In regard to noises generated from stationary sources and the potential for reflected noise impacts, there have been complaints about noise from the new dormitory projects at Unit II, both about continuous noise generated at the site and about traffic and other noise now reflected by the new buildings into residential neighborhoods, but the University has not mitigated this environmental impact. What will (this project) do differently to ensure that no new or reflected noises are generated by the project, or to mitigate any such noises if they occur?" 72

Public Services

We stand by the City of Berkeley's comments on the 2006 LRDP in which they report the anticipated shortage of public services in the event of a disaster. Given that the Hayward Fault separates the hill campus from the rest of the city, shortages in emergency personnel are a real problem and could be a severe problem. Undoubtedly, there will be emergency personnel shortages in any disaster. But the problem will be exacerbated by what is fundamentally bad planning, i.e. both building up the population on the other side of the fault line, in a high risk fire zone and landslide area, and using hazardous materials. 73

Transportation

The CRT DEIR acknowledges there will be cumulative impacts at intersections. The Level of Service ratings at several intersections are already at the worst rating, which is "F." We agree with the City of Berkeley's comments in the 2006 LRDP in which the City makes clear that the Berkeley Lab is not doing all it could do to reduce transportation impacts. 74

Fundamentally though, it is bad planning to intensify development in an area with limited access. Vehicular traffic will expand, but number of roadways in this already developed area will not. The fundamental limitation is geographic. Access is limited by the hills and many miles of protected wildlands.

Utilities, Service Systems, and Energy Impacts

The CRT DEIR asserts that wastewater would be generated from the cooling tower blowdown. The CRT DEIR further asserts that no hazardous chemicals would be used in the cooling towers? Are bromine compounds defined as hazardous chemicals? And if not, is there a method to calculate the harm to wastewater from bromine compounds? If there is no method, if bromine compounds are a wastewater byproduct, and if bromine compounds are harmful, then wastewater treatment requirements have been underestimated. 75

We note that the CRT DEIR asserts that although the proposed project would cause increases in storm water flows, new storm water drainage facilities or expansion of existing facilities would not be needed. Please put contingencies in place in the event that vegetated swales and hydromodifcation vaults do not suffice. The City storm drain system might be overwhelmed. 76

The CRT DEIR asserts that EBMUD would be able to supply the demand for water and that additional water infrastructure improvements would be unnecessary. The need for chilled water will be provided for with cooling towers, yet the cooling towers have air quality and noise impacts. 77

Alternatives Analysis

As stated previously, the project objectives do not warrant dismissal of an off-site alternative. Instead only on-site alternatives were considered, none of which reduce impacts to a satisfactory level. 78

Closing

In general, the LBNL hill site campus has reached its capacity. Growth at this location cannot continue without causing substantial harm to the environment. Things which are precious, which we now take for granted, may well be lost, never to be recovered. Future generations have as much to gain from experiencing the natural environment as they do from learning the science of the natural environment, although one informs the other. The spectacular natural environment is California's legacy.

These are challenging times in which we must find new ways to move forward. The old ways have failed us. We must grow while not leaving a wake of destruction in our path. 79

It may not seem as if the Lab is overbuilt. After all there is still much land within LBNL jurisdiction which is open space. Yet the north-south corridor access and east-west corridor access are city streets in already developed areas, and biological resources are already seriously undermined.

The proposed project has three significant impacts which are unavoidable only if the proposed location is the selected location. There are other impacts as well, which remain unidentified, and thus unmitigated, in the areas of aesthetic impacts, biological resources, and cultural resources, and possibly more. 80

The Lab, and the University of California more generally, must commit itself to proactive preservation of resources in the Berkeley hills by preparing a Cultural Landscape Report, implementing a Draft Recovery Plan for the Alameda Whipsnake, and developing fire-adapted landscapes as an alternative to "aggressive vegetation management." California's precious resources are more than gold mines, silicon chips, nano-sized materials, and alternative fuel. The most precious things are what can neither be created nor bought. 81

In closing, the proposed construction and operation of the CRT Facility project will add a very large building to a scenic vista which is the Berkeley hills, will increase the industrial and institutional presence on an already elevated land form, will drive away what few special-status species remain, and will harm sensitive receptors with added noise and cancer risk. An alternative off-site location for the first project in LBNL's 20 year growth plan is the preferred alternative.

Thank you for considering our concerns and comments.

Yours sincerely,

Save Strawberry Canyon

Shirley Dean Lesley Emmington Jones
Sylvia McLaughlin Phila Rogers
John Shively Janice Thomas

Enclosures:

- Jones et al. v. UC Regents, verified petition for write of mandate, endorsed and filed 8/17/07
- National Register of Historic Places Listing – Panoramic Hill Historic District
- Compact Disc of photographs of CRT site from different locations
- Photograph of Strawberry Canyon from the interior of Memorial Stadium
- "Sierra Club Pioneers lived near the pre-Stadium canyon" by Daniella Thompson, *Berkeley Daily Planet,* 1/26/07
- Index of Strawberry Creek Management Plan and Updates – webpage
- E-mail correspondence between Jeff Philiber and Janice Thomas 1/2/08
- E-mail correspondence to Jeff Philliber from Janice Thomas 1/2/08
- E-mail correspondence between Janice Thomas and V. Briggs of City of Berkeley's Clerk's Office 12/29/07 and 1/2/08
- "Planning Commission Critiques LBNL Building" by Richard Brenneman, *Berkeley Daily Planet,* 12/21/07
- City of Berkeley's Planning Commission Home Page print out 12/31/07
- City of Berkeley's Planning Commission Agenda 12/19/07
- "50 Bay Area Bird Species placed on National Watch List" by Jane Kay, *San Francisco Chronicle,* 11/29/07, p. A-1.
- "Building the Big C", *California Magazine,* November, 2000. webpage
- "UC Berkeley Strawberry Creek Restoration Project: The Making and Mending of an Urban Creek" PowerPoint
- 13 8-1/2" x 11" photographs from PowerPoint slide show, see above
- Photograph of Strawberry Canyon and "Side Hill Homes", early 1900s
- Photograph of aerial view of Cyclotron and Stadium
- Photograph of aerial view of Strawberry Canyon and Tilden with Cyclotron and Stadium in foreground
- UC Berkeley Office of Emergency Preparedness Fire Mitigation Program Index – webpage
- Lower Strawberry Canyon Fuel Management Project
- Contiguous Open Space – 3 Google Maps
- Claremont Canyon Conservancy – Home page
- Goulder Associates Human Health Risk Assessment for CRT and Helios – Figs. 1 & 4
- Strawberry Creek: A Walking Tour of Campus Natural History
- Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment, and Management of Historic Landscapes – National Park Service website

Response to Comment Letter ORG-4

Response to Comment ORG-4-1

CEQA requires a minimum 45-day comment period for the public to review a Draft EIR. The CRT Draft EIR was circulated from November 9, 2007 through January 4, 2008, a total of 56 days, in part to compensate for the occurrence of the three holidays during that period. The Lab considered ending the comment period after 45 days, which would have avoided coinciding with Christmas and New Years, but it was decided that the public might value having the extra time, even if that extra 11 days were to run concurrently with the end of the year holiday period. The timing of targeted Regents meetings, of which there are only six per year, drives LBNL's schedule for when a Draft EIR must circulate. Delaying two months to a subsequent Regents' meeting in order to avoid a particular review period can create enormous construction escalation costs on a project. Such substantial, additional costs would result in harm to LBNL's scientific mission, as the costs would have to be recovered either through reducing the funds available for constructing, equipping, and operating the CRT building and its computing research function, or through the loss of funds that would otherwise be available for scientific programs and capital improvements elsewhere. Ultimately, these losses would be realized by the public, both as wasteful expenditures of funds, and as the reduction in the state and federal institutional capacity to conduct research that is beneficial to the public.

The City of Berkeley did submit Draft EIR comments, which were received by Berkeley Lab and which are reprinted and addressed in this Final EIR.

Response to Comment ORG-4-2

The project, which is the construction and operation of the CRT facility, is not subject to NEPA review, as per 40 Code of Federal Regulations (CFR) Parts 1500 through 1508, and 10 CFR Part 1021. The project would not be constructed on federally owned or leased land, nor would it be financed or otherwise discretionarily permitted by the US Department of Energy. It is not a "major Federal action" as defined by 40 CFR Part 1508.18.

The CRT facility would be a University of California constructed and owned building. After it is constructed, a portion of the building may be leased by the Department of Energy for housing its NERSC program, but only after NEPA review is conducted at that time for the action of leasing and occupying the building.

Response to Comment ORG-4-3

Please see Master Response No. 1, Alternative Site – Richmond Field Station. On pages 6.0-6 to 6.0-7, the Draft EIR evaluated the Richmond Field Station as a potential alternative off-site location. The Draft EIR determined that this site, among other things, "would not meet the CRT project objectives to expand functionality of Lab facilities, provide for cross-disciplinary research, or foster collaborative work environments among researchers, since it would result in a division of resources between locations." Locating the proposed project on the Richmond Field Station site also would not meet the project objective of "provid[ing] researchers with convenient access to other Lab scientific facilities, programs, researchers, and services; [and] locat[ing] the facility such that it fosters interaction and collaboration between the project and UC Berkeley programs." The Draft EIR therefore determined this off-site location did not warrant further consideration, consistent with State CEQA Guideline 15126.6(c).

The Draft EIR also briefly evaluated other off-site alternatives, including Mare Island, Alameda Air Base, the City of Merced, the State of Nevada, or on the UC Berkeley campus. The Draft EIR determined these off-site alternatives were infeasible or required building space and associated populations that were not included in the UC Berkeley 2020 LRDP, and thus did not warrant further consideration.

In addition, locating the proposed project on the Lab Site furthers the collaboration between researchers at the project facility and researchers at other Lab facilities.

The pendency of the Jones petition and lawsuit is noted in the Draft EIR on page 1.0-4: "That case is currently pending and, unless and until the court determines otherwise, the Regents certification of [the LRDP] EIR remains in effect."

Response to Comment ORG-4-4

UC Berkeley is not funding CRT, although the UC Berkeley College of Engineering is seeking to raise $5 million for CRT for the ongoing joint UC Berkeley/Berkeley Lab Computational Science and Engineering program. This is less than 6 percent of the project cost. The University of California overall is funding the project and the DOE programs will pay to occupy the facility. No portion of the project would be privately funded. No specific collaborations with other programs or businesses have been identified at this time. The potential for growth inducement from the project is discussed in Section 7.0 of the Draft EIR. The operation of the proposed CRT project would be unlikely to attract other businesses or facilities to locate nearby (unlike, for example, a new hospital, which typically attracts other businesses ranging from analytical laboratories to florists). Any collaboration with facilities such as Lawrence Livermore National Laboratory, NIF, or businesses in the Green Corridor would likely take the form of joint research

projects carried out by scientists at each facility on their own sites or small-scale exchanges of scientific personnel. It would therefore not induce significant growth.

With regard to approval, the Board of Regents Committee on Grounds and Buildings would make decisions regarding EIR certification and project approval, pursuant to the authority deferred to it by the Regents. The Regents file statements of economic interests as required by state law.

Response to Comment ORG-4-5

The number of guests will range from zero to 20 per month, based on current facility use patterns. No growth in the project population or the number of guests is projected for the CRT project beyond that described in the Draft EIR. Cumulative analyses in the Draft EIR are based on population projections developed as part of the LRDP; these projections take into account visitors to the Lab.

Response to Comment ORG-4-6

The quoted text from the Draft EIR is taken from the State CEQA Guidelines, Section 15093, and refers to the decision-making process for project approval. Analysis of economic costs and benefits is beyond the scope of CEQA and is not required in an EIR. However, as described in CEQA, public agencies have an obligation to balance economic and other considerations with potential environmental effects in making a decision to approve or deny a proposed project.

Response to Comment ORG-4-7

The proposed CRT Facility would require up to six cooling towers to meet the cooling demands of the proposed building only. Under the cogeneration energy supply option, two 1.5-megawatt cogeneration engines would be installed to meet a portion of electrical demands of the CRT facility. Each cogeneration engine would require two cooling towers as part of its operation; therefore, the building with the cogeneration option would require a total of nine cooling towers. Under the emergency generator energy supply option, no additional cooling towers would be required beyond those for the proposed building; therefore, the emergency generator option would require only five cooling towers. Operation of the cooling towers under either option would generate PM_{10} emissions through the release of water droplets ("drift") that contain dissolved salts; however, these emissions would not be diesel particulate matter. Therefore, the cooling tower PM_{10} emissions shown in Table 4.2-7 and 4.2-8 do not represent diesel particulate matter. Diesel particulate matter would only be generated during the maintenance and testing of the emergency generator and operation during limited power outages. The cogeneration engines would be natural gas-fired engines and would not generate diesel particulate matter.

For purposes of the health risk assessment, the following dimensions were used for each of the cooling towers.

- Length – 14 feet
- Width – 24 feet
- Height – 22 feet

As described in the CRT Draft EIR (page 3.0-16), "Machine floor and office building cooling would be provided by a series of high-efficiency evaporative cooling towers approximately 22 feet high located near the exterior southeast side of the HPC portion of the facility." Under the revised project, the cooling towers would be located at the south end of the building and would be screened within an enclosure. They are not visible in the visual simulations because they are screened by both the building massing and downslope vegetation. The remainder of the comment restates information contained in the Draft EIR, but does not raise an environmental issue within the meaning of CEQA, and no further response is required.

Response to Comment ORG-4-8

The proposed CRT project would not provide the computer infrastructure for all Lab development pursuant to the LRDP. Instead, the computers to be housed in the CRT building would serve project programs, including ongoing programs already in place at the Lab. The cumulative impacts described in the Draft EIR are not the result of any growth-inducing effects of the project, but would be the result of planned or anticipated future projects, including the proposed CRT project. As required by CEQA, the Draft EIR includes a discussion of potential growth-inducing effects of the project (see Section 7.2, Growth-Inducing Impacts, on page 7.0-1). Because the project would not remove an obstacle to growth (for example, by extending infrastructure into previously unserved areas) or create significant employment expansion or new housing, the Draft EIR concludes that it would not have a significant growth-inducing impact.

The Project Objectives and the LBNL 2006 LRDP Design Guidelines are not in conflict, as stated in the comment. The Design Guidelines are followed in that the project includes measures to protect and preserve the environment. One of the reasons the site was selected is because it is one of the least visible of the available building sites at the Lab. As described in Section 3.0, Project Description, the design takes the environment into consideration and will continue to as the design is developed. As the design has developed, the roofline elevation of the building has been lowered approximately 30 feet to lessen its visibility. Please see Section 2.0, Changes to the Project Description.

Response to Comment ORG-4-9

The comment expresses the opinions of the commenter with regard to preferred alternatives and the appropriateness of project objectives. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. Specific aspects of the issues referenced in this comment are answered in Responses to Comments ORG-4-10 through ORG-4-17 below.

Response to Comment ORG-4-10

The aesthetic impacts of the proposed CRT building were evaluated in the context of the project site setting. As described in Section 4.1, Aesthetics (pages 4.1-2 to 4.1-3); the Lab site includes a wide range of building sizes, styles, and construction materials. The proposed CRT project would be located near Buildings 50, 70, and 70A, which are modern, concrete-clad buildings ranging in size from 63,000 to 68,000 square feet and from two to six stories in height. The Building 50 cluster includes a total of 206,584 gsf, and Buildings 70 and 70A include a total of 132,844 gsf. There are nearby buildings located at elevations both above and below the proposed CRT building.

The comment asserts that other LBNL buildings would not screen the CRT project given that a large number of views are available from the "spur ridge" between Blackberry and Strawberry canyon. In fact, the LBNL campus occupies most of this spur ridge and there are few public views from this ridge. As stated in the Draft EIR (page 4.1-3), "Due to screening provided by intervening vegetation, topography, and existing development, the CRT site is not visible from most areas located beyond the LBNL site itself." Regarding public views from above the site at locations such as the Lawrence Hall of Science, "As seen from these locations, the project would largely be screened by existing LBNL buildings and intervening vegetation." The Draft EIR does not assert that these buildings including Building 50 and others that are at higher elevations than the proposed project would provide complete screening from all of these locations.

The Draft EIR states (page 4.1-9) that "The CRT building would generally be lower than nearby Lab buildings and would not be visually prominent from most off-site locations." The project's lower elevation is descriptive; the conclusion that the project would not be visually prominent is based on direct observation from numerous viewpoints in the city of Berkeley and documented in the photos and visual simulations included in Section 4.1. The comment also notes that CRT building is at a higher elevation than much of Berkeley. The comment is noted. However, elevation difference is not the only factor in visibility of the proposed project (or of existing development on the Lab site). The Draft EIR conclusion

that intervening trees, terrain, and buildings would screen views of the proposed project is based on direct observation and documented in the photos and visual simulations included in Section 4.1

Figure 3.0-2 of the Draft EIR delineates the approximate location of the project boundary on an aerial photograph and thus the approximate extent of tree removal. This aerial depicts a large, relatively dense group of trees downslope from the project site above the end of Hearst Avenue. These trees are also depicted on Figure 3.0-4 of the Draft EIR, which shows a conceptual view of the project and takes into account tree removal. The forms of the upper canopies of these trees are also visible in Photo 6 on Figure 4.1-2b taken from the top of Hearst Avenue. These are the trees that would partially screen views of the project from the east. Figures 2.0-2 and 2.0-4 through 2.0-7 of this Final EIR also show the trees that would remain under the revised project, and demonstrate that these trees, as well as the intervening terrain and buildings, would also provide screening for the building under the revised project design. As discussed in Section 2.0, Changes to the Project Description, modifications to the proposed project would result in a reduction in of the building's profile on the hillside and a corresponding reduction in the degree to which it would alter views of the hillside in comparison with those discussed in the Draft EIR.

Response to Comment ORG-4-11

The cooling towers and generators were included in the architectural building model used for the visual simulations. Both towers and generators are located on the lower portion of the building toward the rear (eastern side) of the structure and integrated into the architecture of the overall building. They are not visible in the simulations as they are screened by existing trees downslope from the project. Under the revised project design, the cooling towers would be located near the northeastern end of the building and would be screened from view by trees and the proposed building. The cooling towers were included in the architectural building model used for the visual simulations for the revised project design (Figures 2.0-4 through 2.0-7 of this Final EIR).

Response to Comment ORG-4-12

The proposed project includes mitigation measures identified in the 2006 LRDP EIR that address interior sources of light. See LRDP Mitigation Measures Vis-4a on page 4.1-17 of the CRT Draft EIR. As required by this measure, light spillage off-site will be minimized and "project buildings shall shield and orient light sources so that they are not directly visible from outside their immediate surroundings." CRT Impact VIS-4 (page 4.1-20) addresses the potential for impacts from interior lighting.

Response to Comment ORG-4-13

As described in Section 2.0 of this Final EIR, the revised project design would lower the building height to approximately 96 feet. The existing vegetation would provide partial screening of the project, and new vegetation would be planted to provide additional screening of portions of the building. The analysis does not assume that the project would be rendered invisible from all public views, but that it would generally conform to the larger visual context of the hillside, which is that of larger buildings interspersed between stands of trees.

The remainder of the comment addresses the merits of the project, and will be included in the record for the decision-makers to consider.

Response to Comment ORG-4-14

LBNL disagrees with the commenter's assertion that the setting description in the aesthetics analysis is inadequate for an assessment of aesthetic impacts. The discussion of setting in Section 4.1, Aesthetics, of the Draft EIR does not consist of the single phrase cited by the commenter, but instead consists of a detailed discussion of the setting including text, maps, and photos. This discussion includes the topographical location of the project site as well as the surrounding land uses. The EIR does not evaluate the project's potential aesthetic impacts only with respect to the LBNL site, but also with respect to regional views of the site as well. Please see also Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment ORG-4-15

Photo 4 on the Figure 4.0-2, Additional Site Photos, (shown at the end of Section 4.0), of this Final EIR depicts the requested view from Oakland at Broadway near Highway 13. As shown in this view, the intervening ridge between Claremont Avenue and Highway 24 completely screens views of the project site and the LBNL campus from this location. Other views from the south are depicted in photos 1 through 3 on this figure.

The comment requests story poles and a three dimensional rendering of the proposed facility in relation to Blackberry Canyon, Strawberry Canyon and the larger hillside context. Story poles are appropriate for a residential-scale building or addition, not an institutional-scale one such as this, and are not needed to evaluate aesthetic impacts. For a 3-D graphic of the site and surrounding context, (see Figure 2.0-2 in Section 2.0, of this Final EIR). This figure depicts the project in relationship to adjacent buildings, the north fork of Strawberry Creek (Blackberry Canyon), and the edge of the central Strawberry Creek watershed.

As discussed in Section 4.1 and in Response to Comment ORG-4-14 above, while the broader vistas of the Berkeley Hills available from public viewpoints meet the definition of scenic vista in the Draft EIR, the proposed CRT project would not be a major or especially noticeable feature within such views. The CRT project would appear as an element of the existing development of the Lab site and the hills.

Response to Comment ORG-4-16

The comment addresses the project's conformance with City of Berkeley and City of Oakland general plans and references General Plan policies that development should enhance views of the hills and clarify the urban pattern. The full text of City of Berkeley General Plan Policy UD-31 View, states: "Construction should avoid blocking significant views, especially ones toward the Bay, the hills, and significant landmarks such as the Campanile, Golden Gate Bridge, and Alcatraz Island. Whenever possible, new buildings should enhance a vista or punctuate or clarify the urban pattern."

While it can be argued that the building does not fulfill the secondary and optional goal of this policy and does not "enhance a vista" or "clarify the urban pattern," CRT fulfills the main requirements of this policy as it will not block the listed significant views. As shown in Figures 4.1-3 and 4.1-4, from nearer views (from Shattuck Avenue and closer) the CRT Facility will be visible. However, from many other locations throughout the city of Berkeley, it will be consistent with the context of the hillside and will not block hillside views. From many locations in the city, intervening vegetation, structures, and topography will block views of the project. The project would be visible only in distant views from Oakland, in which it would appear as an indistinct part of the development of the hills.

UC is exempt by the state constitution from compliance with local land use regulations, including general plans and zoning. However, LBNL seeks to cooperate with local jurisdictions to reduce any physical consequences of potential land use conflicts to the extent feasible.

The CRT project site is a previously disturbed site located in an area of the Lab characterized by existing development and non-native trees. The location of the proposed building is consistent with LRDP development strategies to locate new facilities within already-developed areas in order to maximize the proportion of Lab land left as open space. This is consistent with the development strategy to "protect and enhance the [Lab] site's natural and visual resources."

The proposed project would not block view corridors either into the Lab site from public viewpoints nor from Lab viewpoints toward areas to the west. The project site is not located within a view corridor; views into the site are limited by surrounding topography and development. The revised project design would reduce the building's prominence from public viewpoints and provide additional tree screening, and the project would continue to be consistent with the Design Guidelines regarding scenic views. From

public viewpoints, as discussed above, the project would be partially screened from view. The project would not affect the existing trees that provide much of this screening. The project would in fact create new sources of light and glare within a developed area, although not on a developed site, as described in the Draft EIR (page 4.1-20). The Draft EIR identifies the potential for nighttime lighting to conflict with local plans and policies and provides mitigation measures to reduce these impacts to a less than significant level. With regard to the proposed project's conformance with LBNL 2006 LRDP Design Guidelines, also please see Responses LA-1-1 and LA-1-2 above.

Response to Comment ORG-4-17

The comment restates opinions expressed previously regarding impacts to scenic vistas. Please see Response to Comment ORG-4-15 above. As discussed in that response and in Section 4.1, the proposed CRT project would not have significant impacts to scenic vistas. Under nighttime lighting conditions the lights of the proposed project would appear, from most viewpoints, as part of the larger urban fabric that includes streetlights, interior and exterior lights, and car headlights throughout the developed areas of the Berkeley Hills.

Response to Comment ORG-4-18

The comment asserts that the cumulative aesthetic impact would be to transform the hillside from a "residential, quasi rural cum suburban" setting into an industrial one. In reality, the visual setting of the larger hillside region is a mixture of institutional scale buildings, residential buildings, and dense vegetation, with small areas of open grasslands. In the immediate project vicinity, on the spur ridge where the LBNL campus lies, the context is dominated by large-scale buildings nestled between stands of trees. The existing context is that of a laboratory campus, and cannot be characterized as suburban or rural.

While the CRT project involves removal of trees — primarily a stand of non-native eucalyptus with 5 smaller oak trees on an already disturbed site - this impact will be mitigated by planting trees elsewhere on site at a 1:1 ratio. Similarly, many other locations for buildings proposed under the LRDP are also disturbed sites. The LRDP recommends that, where feasible, replacement should be with native species which would be more in keeping with the pre-settlement aesthetic of the hills. Therefore, while trees will be removed on the immediate project site, the net effect on the entire hillside will be less noticeable, particularly as the replacement trees mature. The cumulative impact of the long range LBNL development considers vegetation removal and according to the LRDP, "the developed portion of the LBNL hill site would continue to be less extensive than the vegetated areas of the hill site, and new

buildings would be partially obscured by vegetation and topography, similar to present conditions" (LBNL LRDP, IV.A-19).

Response to Comment ORG-4-19

As defined in the Bay Area Air Quality Management District's BAAQMD CEQA Guidelines:

> Sensitive receptors are facilities that house or attract children, the elderly, and people with illnesses or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors.

While schools are listed as examples above, only K-12 schools, at which children would be present, are generally specifically identified in human health risk assessments (HHRA). University students are considered adults, and not children, due to their physiology.

Furthermore, "residential areas" refer to full-time residences and not transient locations where a person could reside for a limited period. Nonetheless, the HHRA treated all areas outside the boundary of the Laboratory equally and conservatively when estimating exposures and health risks, regardless of whether the receptors could be students, professors, staff, residents, or sensitive receptors, consistent with HHRA risk assessment guidance published by the State of California for carcinogenic and noncarcinogenic evaluations. A uniformly-spaced grid of receptors was placed over all areas outside the Laboratory boundary. For the purposes of estimating cancer risk at all off-site receptors, it was assumed that an exposed person would be present at a given location 24 hours per day, 7 days per week, 50 weeks per year, over 70 years (9 years as a child, 61 years as an adult). This assumption would have resulted in a very conservative estimate of the cancer risk to a student, who would be present for much less than this assumed exposure. Chronic non-cancer health impacts are based on a comparison of the annual concentrations of each chemical to its regulatory criteria, regardless of the receptor type.

Since the receptor grid spacing outside the Laboratory's boundary was more than adequate to identify any peak areas and exposure criteria were independent of receptor type (e.g., sensitive, residential, worker), the HHRA did not include receptor locations for specific buildings (e.g., Stern Hall or Foothill student housing) or specific recreational areas.

The maximum health impacts at any on-campus location were reported in Table 4.2-12 of the Draft EIR. The impacts at any other location would be less than those maximum health impacts. The maximum project-level impacts were found to be substantially lower than the significance thresholds.

Response to Comment ORG-4-20

LBNL disagrees with the statement that the health risk assessment is limited and introduces uncertainty. Based on the fact that the health risk assessment includes assumptions that substantially overstate the length of time receptors will be present, and the fact that the health risk assessment shows that project impacts are substantially lower than significance thresholds, the health risk assessment demonstrates that project impacts will be less than significant. Typically, health risk assessments use conservative assumptions to calculate risks in order to provide a higher level of safety for the public. For example, the Reference Exposure Levels (REL) used to calculate health risks include an animal-to-human safety factor as well as public health safety factor. The REL is a concentration (inhalation) at or below which no adverse health effects are anticipated. These safety factors will reduce the REL to levels much lower than those found to cause detrimental effects in case studies. Therefore, hazard indices (the modeled concentration of a toxic air contaminant divided by the REL) calculated for projects would tend to overestimate the potential for non-cancer health impacts. Nevertheless, in the case of the proposed project, hazard indices associated with the proposed project remain well below the significance threshold of 1.0 as shown in Table 4.2-16 and 4.2-17.

In addition, the calculations used to estimate cancer risks are based on conservative assumptions. Receptors are assumed to remain the same location over a 70-year period for residential exposures and a 40-year period for workplace exposures. People typically do not spend this much time in one location. Also, the model assumes that the receptor will be exposed to the maximum level of pollutants for the duration of the exposure period. Therefore, the modeling approach also includes conservative methods that will lead to an overestimation in cancer risks. Nevertheless, cancer risks associated with the proposed project would not exceed the significance threshold for cancer risk of 10 in one million as shown in Table 4.2-12 and 4.2-13.

In addition, health risk assessments such as that prepared for the proposed project are limited to the tools (e.g., air quality dispersion models) that are available and approved for use by the regulatory agencies. Furthermore, the health risk assessment guidance prescribed by regulatory agencies includes conservative, health-protective assumptions regarding potential routes of exposure. For these reasons, the health risk assessment is not believed to underestimate the health impacts.

Response to Comment ORG-4-21

Air quality monitoring data were obtained from 822 Alice Street in Oakland when data were available, but were used for characterizing ambient air quality and not in the HHRA. (For pollutants not monitored at the Alice Street monitoring station, ambient air quality data were obtained from the next closest

monitoring station that monitors for that pollutant.) The health risk assessment uses the sources of TACs specifically associated with the CRT project for its emissions calculations.

Response to Comment ORG-4-22

The air quality impacts of the proposed CRT Facility were evaluated using the thresholds of significance established by the BAAQMD CEQA Guidelines, Appendix G from the State CEQA Guidelines, and the UC CEQA Guidelines. The standards and significance criteria are discussed further in Section 4.2.4 Impacts and Mitigation. The only relevance of the fact that the San Francisco Bay Area Air Basin is a nonattainment area for ozone to "standards" used for the air quality assessment is that the 80 pound-per-day significance thresholds for reactive organic gases and oxides of nitrogen, which are ozone precursors. These thresholds are based on the offset trigger level of 15 tons per year, which is one of the regulatory criteria for state-designated serious nonattainment areas in the California Clean Air Act.

Greenhouse gas emissions of carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) were assessed. These three compounds represent the three most common greenhouse gases associated with operation of the proposed project. Other greenhouse gases are associated with specific industrial processes and equipment. Some of the other greenhouse gases such as hydrochlorofluorocarbons, 1,1,1-trichloroethane, and chlorofluorocarbons are being phased out as required by the Montreal Protocol and Title VI of the federal Clean Air Act. Accordingly these compounds are not anticipated to be used in the operation of the proposed project.

The availability of offsets from the BAAQMD's Small Facility Banking account is not relevant to this project because the annual permitted emissions from stationary sources at LBNL are expected to be less than the 10-ton-per-year offset threshold for precursor organic compounds and nitrogen oxides with implementation of the proposed project as discussed on page 4.2-41 of the Draft EIR. However, this situation will be evaluated at the time an application for an Authority to Construct is submitted. The Small Facility Bank currently has 784 tons per year of precursor organic compounds and 177 tons per year of nitrogen oxides, which would be more than enough to provide emission reduction credits for the CRT project, even if the need for emission offsets were triggered. The Small Facility Bank has never been depleted and can be re-funded if it starts to run low. Lastly, there has not been much recent activity at the Small Facility Bank. In the unlikely event that the Small Facility Bank is depleted, LBNL could purchase credits from a third party source. Therefore, credits would be available in the unlikely event that LBNL needed to purchase them.

Response to Comment ORG-4-23

Acute hazards (the potential for injury or damage to occur as a result of an instantaneous or short duration exposure, such as from an accidental release) were not evaluated for the operation of the proposed project. An acute reference exposure level[2] has not been established by the California Air Resources Board and/or the Office of Environmental Health Hazard Assessment for bromine compounds (i.e., the only toxic air contaminant associated with cooling towers). For combustion sources, the chronic health effects are expected to dominate health concerns; therefore, as discussed in the Health Risk Assessment prepared for the CRT project, acute hazards were not evaluated. Because the estimated cancer risk and chronic non-cancer risk are below the significance thresholds for both energy options, an acute risk assessment was not conducted. A full discussion of the potential acute hazard impact is provided in CRT Impact AIR-6 on pages 4.2-49 through 4.2-51 of the Draft EIR.

Response to Comment ORG-4-24

As noted in the Response to Comment ORG-4-7, the number of cooling towers would depend on the electrical energy option. Under the cogeneration option, a total of nine cooling towers would be required (i.e., five cooling towers for the building cooling system and two cooling towers for each of two cogeneration engines). Under the emergency generator option, up to six cooling towers would be required (i.e., up to six cooling towers for the building cooling system and none for the emergency generator). The decision to implement one of the electrical energy options would be based on a number of factors. Although in terms of air quality and cancer risk, the cogeneration option would result in higher risks and criteria pollutant emissions, other environmental, economical, and regulatory considerations would be assessed before choosing an electrical energy option. Both options would create project-specific air emission impacts well below significance thresholds and would contribute very little to cumulative TAC emissions, although for CEQA purposes the contribution would be considered a considerable contribution to a significant and unavoidable cumulative impact.

Response to Comment ORG-4-25

The choice of the replacement trees has not been made at this time. Generally, mature trees would not be replanted to replace the trees that have been removed. Replacement of mature trees with mature trees is not a good long-term solution. Transplanting large trees is stressful to them, and the longevity of the transplanted tree is thus compromised. From a carbon sequestration standpoint, an old grove of trees may actually result in a steady state flux of carbon rather than a net gain in sequestered carbon. While

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2 The reference exposure level is the concentration in ambient air below which a toxic air contaminant is not anticipated to cause any health effects.

the existing, mature trees would sequester carbon dioxide through photosynthesis, the decay of old vegetative growth would release carbon dioxide back to the atmosphere.

Response to Comment ORG-4-26

The comment summarizes the special-status wildlife species identified in the Draft EIR as having potential to occur on the project site.

Response to Comment ORG-4-27

As discussed in the Draft EIR (pages 4.3-12 to 4.3-13), the following grassland, coastal scrub, and/or woodland-associated special-status plant species were determined to have some potential to occur on the greater LBNL property given the presence of some suitable habitat: (1) big-scale balsamroot, (2) Diablo helianthella, (3) large-flowered leptosiphon, (4) Oregon meconella, and (5) robust monardella. To determine if these species occur on the project site, a floristic inventory was conducted by Pacific Biology on June 28, 2007, which included a site-specific evaluation of the suitability of on-site habitats for special-status plant species. It was concluded that it is highly unlikely that any special-status plant species occur on the project site based on the generally disturbed condition and types of habitats present. Also, many of the target special-status plant species (i.e., big-scale balsamroot, Diablo helianthella, and robust monardella) would have been visible and identifiable at the time of the survey if present due to their large size and persistence after flowering. The two remaining species—large-flowered leptosiphon and Oregon meconella—are smaller annual species. Large flowered leptosiphon is associated with sandy soils. In general, the soils on the site are loamy and it is highly unlikely the species would occur. Oregon meconella is typically associated with openings in shaded or wooded canyons. There were no such habitats on the site so it is also highly unlikely the species would occur.

As discussed in the Draft EIR (page 4.3-14), purple needlegrass occurs in varying densities on the project site, with the highest density occurring in the southern portion of the project site (within the eucalyptus stand) where purple needlegrass provides 10 to 15 percent ground cover within an approximately 30 feet by 50 feet area. There is no statewide definition of a native grassland, but it is generally accepted that a native grassland contains a minimum of 10 percent cover of native grasses. While there is an isolated patch of native grasses on the project site meeting this threshold, the grassland as whole is dominated by non-native species and has well below a 10 percent cover of native grasses. Therefore, given the relatively sparse occurrence of purple needlegrass throughout most of the understory, the relatively small size and isolated occurrence of the stand of purple needlegrass, and that the small stand of native grasses is within a eucalyptus stand, the understory is more accurately described as a mixed grassland and not a

purple needlegrass grassland. For these reasons, the Draft EIR concludes that purple needlegrass grassland (which is a sensitive plant community) does not occur on the project site.

The Draft EIR (page 4.3-14) identifies sensitive plant communities occurring outside of the project's disturbance boundary, but in proximity to the project site. Specifically, sensitive plant communities occurring in proximity to the project site include the North Fork of Strawberry Creek and associated bay woodland and the small area of arroyo willow scrub associated with the Cafeteria Creek drainage just south of Blackberry Canyon Gate. The Draft EIR (page 4.3-30) provides an analysis of potential indirect impacts to these sensitive habitat types and identifies avoidance measures that would be implemented to control erosion and degraded water quality. Given the distance and/or presence of barriers between these sensitive plant communities and the project site, they would not be directly impacted by the operation or staging of construction equipment.

Response to Comment ORG-4-28

The comment summarizes the sensitive habitats and jurisdictional resources identified in the Draft EIR as occurring in proximity to the project site, but outside of the project's disturbance boundary. The comment is noted.

Response to Comment ORG-4-29

The Draft EIR (pages 4.3-2 to 4.3-4, 4.3-7 to 4.3-12) provides a discussion of the common species of wildlife expected to occur on the project site, as well as the special-status wildlife species with potential to occur. The Draft EIR does not provide an estimate of population densities of wildlife potentially occurring on the project site as such analysis is beyond the scope required by CEQA.

As discussed in the Draft EIR (pages 4.3-7 to 4.3-8), an Alameda whipsnake habitat evaluation was conducted for the entire LBNL campus by Karen Swaim in 2006. Karen Swaim is a recognized Alameda whipsnake expert. The CRT project site was identified in the habitat evaluation and the Draft EIR as being within an area having "highly suitable potential habitat" for Alameda whipsnake. As also discussed in the Draft EIR (page 4.3-8), "a qualified biologist evaluated the site-specific suitability of the project site for Alameda whipsnake on June 28, 2007." This additional work was conducted by Pacific Biology to supplement the findings of the habitat evaluation conducted by Karen Swaim by providing a more detailed discussion of the types of on-site and surrounding habitats. A habitat-based approach was implemented, which included describing the habitat types present within and surrounding the project site and evaluating their suitability relative to the known habitat requirements of the Alameda whipsnake. As this work by Pacific Biology was conducted as part of the preparation of the CRT Facility Draft EIR, a stand-alone technical report was not prepared. However, the findings of the habitat

evaluation, as well as a discussion of the habitat-associations of the Alameda whipsnake are provided in the Draft EIR (pages 4.3-7 to 4.3-8). Consistent with the findings of the habitat evaluation conducted by Karen Swaim, the Draft EIR (page 4.3-32) concludes that Alameda whipsnake could occur on the project site and implements appropriate measures to prevent any loss of the subspecies from occurring.

Response to Comment ORG-4-30

No tree cutting was occurring on the project site or was audible or noticeable at the time of the field survey conducted by Pacific Biology on June 28, 2007. In addition to recording all wildlife species observed, the field survey utilized a habitat-based approach. This approach included creating a list of all locally occurring special-status wildlife and their habitat associations prior to the field visit, describing the habitat types present on the site, and evaluating if suitable habitat occurs on the site to support each species. This method provides a conservative approach to identifying all potentially occurring special-status species and does not rely on observing individual animals during a single field visit. Potential project-related impacts were then evaluated in the Draft EIR for all special-status wildlife species observed or determined to have potential to occur on the project site.

The proposed project includes the removal of all the eucalyptus trees on the project site. The potential use of these eucalyptus trees by special-status wildlife species, including raptors, is discussed in the Draft EIR (pages 4.3-5, 4.3-8 to 4.3-13). While these trees provide potential nesting habitat, no raptor nests or nesting activity was observed during the field survey conducted by Pacific Biology on June 28, 2007. However, as the eucalyptus trees provide potential nesting habitat for raptors and other special-status bird species, mitigation measures are incorporated into the Draft EIR that would prevent the direct loss of an active nest of a special-status species (see LRDP MM BIO-3). The Draft EIR (page 4.3-9) concludes that the loss of wildlife habitat (including trees and other vegetation) from project implementation would be less than significant. This conclusion is supported by the fact that the habitat types to be impacted by the project are abundant in the project region. Eucalyptus groves and non-native grasslands are abundant on LBNL and surrounding areas, including areas that are accessible to any displaced wildlife. Therefore, given that the direct loss of active nests of raptors and other special-status bird species would be avoided through incorporated measures and that similar habitat would still occur in abundance in surrounding and accessible areas, the project-related loss of habitat does not meet any of the Significance Criteria defined in the Draft EIR (see page 4.3-21). The required replacement of all trees to be removed would further minimize the small habitat loss associated with the proposed project.

The proposed CRT Facility would be constructed adjacent to existing buildings on the LBNL campus. While the larger trees on the project site do provide potential raptor nesting habitat, the potential use of these trees by raptors is already limited by the proximity of existing development and associated uses.

Therefore, the construction of an additional building adjacent to existing developed uses, as well as the introduction of a new noise source would not substantially worsen an already compromised condition for raptors and other wildlife. In regards to lighting, the proposed project has been designed not to include light spillage into the open space located to the south of the project site or other nearby sensitive habitats.

Response to Comment ORG-4-31

As discussed in the Draft EIR (page 4.3-32), the project site is located within a eucalyptus grove, has a grassland understory, and does not contain scrub or chaparral communities associated with the Alameda whipsnake. However, the project site is near areas containing high-quality habitat for Alameda whipsnake. Specifically, coastal scrub habitat and open space along south-facing slopes occur to the south of the project site. As such, when considered with nearby habitats, the project site may be part of a mosaic of habitats utilized by the Alameda whipsnake. While core habitat (i.e., scrub and chaparral) does not occur within the project boundary and Alameda whipsnake is not expected to permanently reside on the project site, the species may temporarily occur on the site. Given the marginal suitability of the habitat types present on the project site and the degree of surrounding development, the species would only be expected to rarely occur, if at all, on the project site. Further, the project site is not considered to be part of an expected movement corridor for the whipsnake as core habitat does not occur in accessible areas to the north, east, or west of the project site. Given that the proposed project does not include the removal of any core habitat, that large contiguous areas of suitable habitat (including coastal scrub, oak woodland, and grassland) would be maintained to the south of the project site and elsewhere in open space on the LBNL campus, and that the project site is not part of an expected movement corridor for the species, the project-related loss of whipsnake habitat would not be expected to have a substantial adverse affect on the species.

The coastal scrub habitat located south of the project site is within a designated open space and would not be directly affected by the proposed project. This coastal scrub area is and would continue to be separated from the project site by a fence and steep slopes. These features prevent human entry from the project site to the area of coastal scrub habitat in question. Additionally, the area of coastal scrub habitat is currently located near developed uses, including Cyclotron Road, paved parking areas, and buildings. There are also cooling towers on a neighboring building. Therefore, the proposed project would not substantially increase the level of development and associated noise near the coastal scrub habitat. Additionally, the proposed project has been designed to not include light spillage into this adjacent open space area.

Response to Comment ORG-4-32

As discussed in the Draft EIR (page 4.3-5), the North Fork of Strawberry Creek is located on the north side of Cyclotron Road, north and down-slope of the project site. The creek supports well-developed California bay woodland that at its closest point is approximately 120 feet north of the project boundary. The project site generally slopes steeply down from east to west, there are buildings, tall trees, and/or upslope areas east of the project site, and the creek is located north of the project site. Based on these factors, project-related shading of the creek zone is not anticipated. Additionally, the North Fork of Strawberry Creek is located within a shaded canyon and supports predominantly shade-tolerant plant species. Therefore, in the unlikely event that some shading would occur, the species composition of the creek zone would not be substantially altered.

The Draft EIR (page 4.3-30) provides an analysis of potential indirect impacts to nearby sensitive habitat types (including the North Fork of Strawberry Creek) and identifies avoidance measures that would be implemented to control erosion and degraded water quality. Given the distance and/or presence of barriers between the nearby sensitive plant communities and the project site, it is not expected that these plant communities would be inadvertently directly impacted by the operation or staging of construction equipment. Additionally, LRDP MM BIO-3 is incorporated into the project to protect active nests of special-status bird species. This measure includes conducting preconstruction nesting bird surveys on and in the vicinity of the project site to account for the potential direct loss or noise-related abandonment of an active nest.

Response to Comment ORG-4-33

The Draft EIR (pages 4.3-1 to 4.3-2) has been revised to further describe nearby open space areas. Additionally, a figure showing the location of these nearby open space areas relative to LBNL has been provided (see Figure 4.0-3, Surrounding Land Uses, shown at the end of Section 4.0). The range of potential animal species on the project site and LBNL campus was considered based on accepted methodologies, in accordance with the regulatory considerations described in Section 4.3, Biological Resources, of the Draft EIR. See also the Response to Comment ORG-4-36.

Response to Comment ORG-4-34

The Draft EIR (page 4.3-15) correctly states that there are no "waters of the United States" (including wetlands) regulated by the Army Corps of Engineers (ACOE) or "waters of the State" regulated by the California Department of Fish and Game (CDFG) on the project site. As also discussed in the Draft EIR (page 4.3-15), the North Fork of Strawberry Creek and Cafeteria Creek (which are located near the project site, but outside of the project boundaries) are expected to be under ACOE and CDFG jurisdiction

pursuant to Section 404 of the federal Clean Water Act and Sections 1602–1603 of the California Fish and Game Code.

Given the distance and/or presence of barriers between these nearby jurisdictional areas and the project site, it is not expected that they would be directly impacted by the operation or staging of construction equipment. However, given their proximity to the project site, the Draft EIR (page 4.3-30) provides an analysis of potential indirect impacts to these nearby jurisdictional areas. As discussed, LBNL currently employs, and would continue to employ, a wide array of construction-period "best management practices" to minimize the potential for accidental discharges of fill or other materials into jurisdictional waters. Active management of construction-related stormwater flows from development sites is a standard part of contract specifications on all construction projects undertaken by LBNL. Construction projects incorporate control measures and are monitored to manage stormwater flows and potential discharge of pollutants. For example, LBNL's standard construction specifications include requirements for installation of erosion control netting and riprap to protect slopes and minimize adverse effects of runoff; protection of existing plant materials; application and maintenance of hydroseeding (sprayed application of seed and reinforcing fiber on graded slopes); no washout of concrete trucks to the storm drain system; and proper disposal of wastewater resulting from vehicle washing. LBNL also implements spill prevention and response programs to minimize pollutants in runoff. Construction sites are replanted as soon as practicable following construction. In addition, the Lab's construction specifications require that contractors properly maintain construction vehicles to minimize fluid leaks and that construction equipment not be refueled in proximity to waterways. These ongoing programs would reduce the potential for accidental discharge during construction to adversely affect jurisdictional waters and sensitive plant communities/habitats. In addition to the employment of LBNL best management practices, LRDP Mitigation Measure BIO-2c, which requires that construction be conducted during dry weather months to the extent feasible, is incorporated into the proposed project. The implementation of these measures would ensure that the potential indirect impacts on jurisdictional waters and sensitive plant communities/habitats from accidental discharges of fill or other deleterious substances would be less than significant.

Response to Comment ORG-4-35

Please see Response to Comment ORG-4-34.

Response to Comment ORG-4-36

The Draft EIR (pages 4.3-1 to 4.3-2) has been revised to further describe nearby open space areas. Additionally, a figure showing the location of these nearby open space areas relative to LBNL has been provided (see Figure 4.0-3, shown at the end of Section 4.0).

Figure 4.3-1 shows the plant communities on the project site and the greater LBNL campus. This figure is adequate for determining the plant communities that would be affected by the proposed project. As described in the Draft EIR (page 4.3-2), the hills surrounding LBNL contain low- to moderate-density residential neighborhoods mixed with open space containing a mosaic of plant communities and wildlife habitats, including oak and mixed hardwood forests, native and non-native grasslands, chaparral, coastal scrub, marsh and wetland communities, and riparian scrubs and forests. This discussion correctly characterizes the surrounding area. However, as these surrounding areas would not be affected by the proposed project, it is beyond the scope of this project to map plant communities that are well outside of the project boundaries. The LRDP EIR assessed the potential for indirect impacts to biological resources in the surrounding areas from development under the 2006 LRDP and included mitigation measures to reduce potential impacts to a less than significant level. These measures have been incorporated into the proposed CRT project. Implementation of these measures would ensure that the potential indirect impacts on sensitive plant communities and habitats would be less than significant.

Response to Comment ORG-4-37

As discussed in the Draft EIR (page 4.3-32), the loss of active nests of special-status bird species would be avoided through implementation of LRDP Mitigation Measure BIO-3 which involves pre-construction surveys and implementation of additional measures in case active nests are encountered. The measure requires that preconstruction nesting bird surveys be conducted no more than two weeks in advance of any tree or shrub removal or demolition or construction activity involving particularly noisy or intrusive activities (such as concrete breaking) that will commence during the breeding season (February 1 through July 31). Should a nest of a special-status bird species be present, then a no-disturbance buffer zone will be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG. As bird species have different sensitivities to noise, and because it is not possible to predict what bird species (if any) would be nesting on or near the project site at the time of construction, it would be premature to specify the size of the buffer at this time. However, the adequacy of the buffer to protect the bird species present would be ensured through the required consultation with the CDFG. As stated in LRDP Mitigation Measure BIO-3, factors to be considered by CDFG in specifying the buffer size would include:

- Noise and human disturbance levels at the project site and the nesting site at the time of the survey and the noise and disturbance expected during the construction activity;
- Distance and amount of vegetation or other screening between the project site and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

As noted by the commenter, should an active nest be identified during the preconstruction survey on or near the project site, no work would be permitted within the buffer zone. This measure would be implemented even if the buffer would interfere with construction activities. As discussed in LRDP Mitigation Measure BIO-3, nests initiated during demolition or construction activities would be presumed to be unaffected by the activity, and a buffer zone around such nests would not be necessary.

Response to Comment ORG-4-38

At the request of the commenter, the U.C. Berkeley Strawberry Creek Management Plan has been added to the administrative record.

Response to Comment ORG-4-39

LBNL's vegetation management program, which was developed and eventually instituted in the wake of the disastrous East Bay Hills Fire of 1991, is a program that is designed to responsibly reduce fuel load at the LBNL site. Fuel reduction is intended to protect lives and property at LBNL, UC Berkeley, and the cities of Berkeley and Oakland. A major component of the vegetation management program is to thin, "limb-up," and/or remove invasive (and highly flammable) eucalyptus trees and to replace them with native oak and redwood trees and grasslands.

LBNL's vegetation management program was the subject of a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA, both in 1996. In addition, the vegetation management plan was reexamined in the 2006 LRDP EIR analysis.

Response to Comment ORG-4-40

The Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California, was published by the US Fish and Wildlife Service in November 2002. The Endangered Species Act mandates the preparation of recovery plans for listed species unless such a plan would not contribute to their conservation. Recovery plans detail the actions necessary to achieve self-sustaining, wild populations of listed species so they will no longer require protection under the Endangered Species Act. In general, recovery plans are recommendations for action by Federal and State agencies, other organizations and citizens, and do not obligate the expenditure of funds or require any actions. Therefore, the Draft

Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California, does not require any specific actions by LBNL. However, LBNL is contributing towards the protection of Alameda whipsnake by prohibiting development within the portion of LBNL within designated critical habitat for the species. Specifically, as discussed in the Draft EIR (page 4.3-9), designated critical habitat for the Alameda whipsnake includes the easternmost portion of the LBNL site and this area is designated as a fixed constraint under the 2006 LRDP and development within this area is prohibited.

In the Draft EIR (page 4.3-9), the reference to "USFWS 200d" refers to the Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Alameda Whipsnake. Federal Register Vol. 70, No. 2000, October 18, 2005. This reference has been added to Section 4.3.6, References. Additionally, the Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California, has been added to Section 4.3.6, References.

Response to Comment ORG-4-41

LBNL disagrees with this comment. Impacts to biological resources associated with development of the proposed project have been minimized by the location and design of the project site. Specifically, the project site is located adjacent to existing development, is dominated by non-native vegetation, and does not contain any jurisdictional resources (i.e., wetlands, riparian areas, creeks). Additionally, the project site is not located within a wildlife movement corridor and does not include light spillage into nearby open space areas. The mitigation and avoidance measures incorporated into the Draft EIR would reduce all potential impacts to biological resources to a less than significant level.

Response to Comment ORG-4-42

The potential use of the eucalyptus trees on the project site by special-status and common wildlife species is discussed in the Draft EIR (4.3-5, 4.3-8 to 4.3-13). As the eucalyptus trees provide potential nesting/roosting habitat for special-status bird and bat species, mitigation measures are incorporated into the Draft EIR that would prevent the direct loss of an active nest/roost of a special-status species (see LRDP MM BIO-3 and LRDP MM BIO-4). The Draft EIR (page 4.3-9) concludes that the loss of wildlife habitat (including trees and other vegetation) from project implementation would be less than significant. This conclusion is supported by the fact that the habitat types to be impacted by the project are abundant in the project region. Eucalyptus groves and non-native grasslands are abundant on LBNL and surrounding areas, including areas that are accessible to any displaced wildlife. Therefore, given that the direct loss of special-status species would be avoided through incorporated measures and that similar habitat would still occur in abundance in surrounding and accessible areas, the project-related habitat loss does not meet any of the Significance Criteria defined in the Draft EIR (see page 4.3-21). The

proposed project also includes the 1:1 replacement of all trees to be removed. The replacement of these trees on the project site or greater LBNL campus would further minimize the small habitat loss associated with the proposed project.

Response to Comment ORG-4-43

Impacts to biological resources associated with development of the proposed project have been minimized by the location of the project site. Specifically, the project site is located adjacent to existing development, is dominated by non-native vegetation, and does not contain any jurisdictional resources (i.e., wetlands, riparian areas, creeks). Additionally, the project site is not located within a wildlife movement corridor and does not include light spillage into nearby open space areas. The mitigation and avoidance measures incorporated into the Draft EIR would reduce all potential impacts to biological resources to a less than significant level.

Response to Comment ORG-4-44

The cumulative impact analysis included in the Draft EIR (see Section 5.0, Cumulative Impacts) considers the projects identified by the commenter.

Response to Comment ORG-4-45

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims.

Response to Comment ORG-4-46

As discussed in Section 4.3, Cultural Resources, the on-going effort to conduct historic surveys of all appropriate structures as LBNL is a multi-year effort. However, since no existing (and therefore, potentially historic) buildings will be altered or removed as a result of the CRT project, it is not necessary for this site-wide survey to be complete prior to the CRT approval and EIR certification.

Response to Comment ORG-4-47

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims.

Response to Comment ORG-4-48

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims.

Response to Comment ORG-4-49

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims for a discussion of boundaries of the Strawberry Canyon landscape. Also, please see Figure 4.0-1, (shown at the end of Section 4.0), of this Final EIR depicting the project site's location relative to Strawberry Canyon. Furthermore, as noted in the Draft EIR page 4.1-3, due to screening provided by intervening vegetation, topography, and existing development, the CRT site is not visible from most areas located beyond the LBNL site itself. The project site is not visible from the Panoramic Hill neighborhood or Jordan Fire Trail. Furthermore, as described in Master Response No. 2, Building Height, above, the revisions to the building design would further reduce impacts associated with visual character and scenic vistas.

Response to Comment ORG-4-50

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims.

Response to Comment ORG-4-51

The proposed CRT site has never been part of any present or past designated "Ecological Study Areas." The proposed CRT building is consistent with the scale of development of adjacent and nearby building clusters, including the Building 50 cluster immediately to the northeast and the Building 70 cluster immediately to the east. It is also consistent with 2006 Long Range Development Plan (LRDP) land use designations and other design guidelines analyzed for that site in the 2006 LRDP Environmental Impact Report.

Response to Comment ORG-4-52

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims.

Response to Comment ORG-4-53

The comment restates information contained in the Draft EIR.

Response to Comment ORG-4-54

See Response to Comment ORG-4-39. The vegetation management program is implemented by LBNL in order to minimize wildland fire damage, which could potentially impact harm human health and the environment.

Section 4.3, Biology, of the Draft EIR (page4.3-13) states that "LBNL aggressively manages vegetation on virtually the entire site for fire protection. Therefore, both coastal scrub habitat and stands of eucalyptus

and French broom have converted to grassland in recent years. Although small areas of patchily distributed native grasses remain scattered throughout LBNL, the native herbaceous species observed in these areas are those that are commonly found throughout the Oakland-Berkeley hills (ESA 2002a-c, 2003a-c). Generally, rarer species in the hills tend to be found on serpentine or other ultramafic soils or on thin soils, such as occur in road cuts, where non-native species do not compete as readily. These types of soils were not observed at LBNL during ESA's field surveys." Although vegetation management is reported to encourage the propagation of grassland on the LBNL site, it also reduces the highly competitive, non-native plant species such as eucalyptus and french broom that have hastened the reduction in rare and special-status native plant species.

Response to Comment ORG-4-55

Please refer to page 4.6-2 of the Draft EIR for a discussion of the tritium plume area on the LBNL site. The comment restates information contained in the Draft EIR.

Response to Comment ORG-4-56

Neither nanoparticles nor genetically modified organisms would be created or used with implementation of the project.

Response to Comment ORG-4-57

Research conducted as part of the CRT project would be limited to computational operations that do not require the use of hazardous materials. Use and storage of hazardous materials on the project site was considered a less than significant impact and cumulative impacts were not identified in the Draft EIR. All handling of hazardous materials on the LBNL site are subject to local, state and federal regulations. The types of research that would be performed at the CRT project site are currently being performed at the existing NERSC facility in Oakland and would be relocated to the Lab site; they would therefore not have any new effects with regard to enabling other research on the LBNL site.

Response to Comment ORG-4-58

The comment restates information contained in the Draft EIR.

Response to Comment ORG-4-59

The comment restates information contained in the Draft EIR.

Response to Comment ORG-4-60

The comment restates information contained in the Draft EIR. The Lab has prepared a hydraulic model that provides information and tools for water quality management.

Response to Comment ORG-4-61

The comment restates information contained in the Draft EIR.

Response to Comment ORG-4-62

The comment restates information contained in the Draft EIR.

Response to Comment ORG-4-63

The comment restates information contained in the Draft EIR.

Response to Comment ORG-4-64

The southern boundary of the project site is approximately 140 feet from Cafeteria Creek at its closest point (where Cafeteria Creek enters the culvert near Blackberry Gate). The northern boundary of the project site (where the proposed access road meets Cyclotron Road) is approximately 280 feet from the North Fork of Strawberry Creek.

Response to Comment ORG-4-65

The Bay Area Hydrology Model does allow for slopes of 40 percent.

Response to Comment ORG-4-66

Because of the building's location on sloping ground, a combination of foundation or footing types would be used. The Draft EIR (page 4.7-19, third sentence under "Issues Not Discussed Further") correctly states that the CRT building (at the sub-basement level) will extend a maximum of 25 feet below the existing ground surface. As stated on page 4.5-13, the building will include "piers drilled at least 10 feet into the underlying bedrock." These piers will extend below the sub-basement level, but are not expected to serve as a significant obstruction to groundwater flow should groundwater be encountered.

Response to Comment ORG-4-67

The 2006 Long Range Development Plan (LRDP) Environmental Impact Report (EIR) addressed the distinction between the Lawrence Berkeley National Laboratory's (LBNL's) long range planning and

development process and the University of California at Berkeley's long range planning and development process. As described in that document, they are distinct institutions with different sites, missions, funding sources, development drivers, and management. In addition, LBNL is overall a Department of Energy facility, which does not lend it to combining planning processes with UC Berkeley, which has no such DOE connection. However, there is ongoing coordination between the planning staffs of the two institutions.

Each institution's LRDP EIR included a comprehensive analysis of cumulative impacts that considers the growth and development of the other.

In the 2006 LRDP EIR, "joint appointments" and other cross-over users of both LBNL and UC Berkeley are not only identified and analyzed, they are generally "double-counted" in the analysis to conservatively capture all potential impacts from this segment of the population. The proposed CRT facility, along with its ability to accommodate users from UC Berkeley or other non-LBNL origins, is consistent with the 2006 LRDP and EIR.

Response to Comment ORG-4-68

Mitigation measures identified in the LRDP EIR have been incorporated into the project and would continue to be part of the project, regardless of the outcome of pending litigation. The effectiveness of these mitigation measures, together with project-specific mitigation, in reducing project impacts is evaluated in the Draft EIR. Hazards associated with the project site are identified and discussed in the Draft EIR, Sections 4.5, Geology and Soils, and Section 4.6, Hazards and Hazardous Materials. Alternatives, including off-site alternatives, are discussed in Section 6.0, Alternatives. (Also see Master Response No. 1, Alternative Site – Richmond Field Station.) In general, the comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment ORG-4-69

Direct and indirect impacts of the project would occur at greater or lesser distances for different resource areas. The project's impacts were evaluated against the environmental setting as applied to each resource area. With regard to distances of nearby residential areas from LBNL boundaries, the neighborhoods to the north and west abut the Lab site, while the Panoramic Hill neighborhood is located approximately 0.25 mile to the south.

Response to Comment ORG-4-70

Noise measurement locations, noise modeling results, and distances to sensitive receptors are provided in Section 4.9, Noise on pages 4.9-4 and 4.9-5.

Response to Comment ORG-4-71

Noise levels at the source (e.g., cooling towers) were used as the basis for noise modeling. Off-site locations for which noise measurement and modeling have been performed, and the measured and projected post-project noise levels at those locations, are described in Section 4.9. The noise model takes into account cooling tower, generator, and ambient noise to provide estimates of the total noise levels and impacts on nearby sensitive receptors. For cooling towers and generators, manufacturers' data were used to estimate noise levels.

Response to Comment ORG-4-72

The proposed project includes mitigation measures to reduce noise impacts from both the construction and the operational phases of the project (see Section 4.9). However, as identified in the Draft EIR, the project would create significant, unavoidable impacts related to construction traffic because, although LBNL has committed to contribute its fair share of the costs of required improvements at affected intersections, there is not yet an adopted plan for such improvements.

Response to Comment ORG-4-73

As stated in Impact PUB-1 and Impact PUB-2, in Section 4.11, Public Services, the CRT project would not substantially increase the demand for fire protection services. Following an Automatic Aid Agreement between LBNL and the City of Berkeley, the Alameda County Fire Department (ACFD) Station 19 is the designated first responder to calls within Berkeley Lab, including the CRT project site. According to the Lab's contract with ACFD, adequate staff and equipment are provided in Station 19 to respond to lab fire and medical emergencies.

As described in Section 4.6, Hazards and Hazardous Materials, LBNL has developed a Master Emergency Program Plan that establishes policies, procedures and an organizational structure for responding to and recovering from a major disaster at LBNL. The CRT Facility Draft EIR found that the CRT project would not conflict with, impair implementation of, or physically interfere with the emergency response plan. Furthermore, in order to reduce the risk of injury during seismic events, the LBNL job hazards questionnaire recommends that new employees take a 1.5-hour earthquake/wildland fire safety course to teach employees how to take the appropriate actions to protect themselves from the harmful effects of a

major earthquake (or wildland fire) in the Bay Area. All new employees at the CRT facility would be provided training which would further reduce the potential for significant adverse impacts on those individuals from a major seismic event and the project was not found to expose people and structures to substantial adverse effects related to seismic ground shaking (CRT Impact GEO-1).

Response to Comment ORG-4-74

Comment noted. Although the area surrounding the project site experiences congestion during peak commute times, the Bancroft Way/Piedmont Avenue intersection is the only study intersection operating at an unacceptable LOS F during both AM and PM peak hours under existing conditions (Table 4.12-3 on page 4.12-9). Other study intersections are forecast to degrade to unacceptable LOS E or LOS F under Near-Term or Cumulative conditions regardless of the proposed project. As stated in the comment, the Draft EIR identifies a number of significant impacts under Cumulative Conditions. The Draft EIR also identifies potential improvements to reduce the magnitude of these impacts. These mitigation measures include specific intersection improvements such as installation of traffic signals as well as enhancement of the current Transportation Demand Management (TDM) program. The Lab is required to implement these mitigation measures and is committed to working with the City of Berkeley and UC Berkeley to implement the necessary improvements at the affected intersections.

Berkeley Lab is aggressively pursuing mitigation of its traffic burden on area streets and intersections, even where not required or where impacts are projected to be less than significant. Please see Master Response No. 5, Traffic Demand Management.

Response to Comment ORG-4-75

The Lab does not expect to use sodium bromide to treat water used in the cooling towers at the CRT building. However, sodium bromide is an ingredient of the cooling tower treatment products currently being used at LBNL, and it was included in the Air Quality impact analysis to provide a conservative estimate of its health risk. The Lab expects to use a non-chemical treatment system for cleaning the cooling towers at the CRT building. Therefore, this compound would not be included in the wastewater generated from the cooling tower.

Response to Comment ORG-4-76

CRT-Impact UTILS-2 in Section 4.13, Utilities, of the Draft EIR found that the project would maintain storm water runoff at existing levels, and would not increase the flow rate of storm water into the LBNL storm drain system or into the City storm drain system or natural drainages in the project area. Furthermore, the proposed project is required to comply with all applicable regulations to reduce

stormwater discharge, as described in Subsection 4.7.3, Regulatory Considerations. The project would comply with the LBNL Storm Water Pollution Prevention Plan, and the Lab will continue to practice Best Management Practices to reduce cumulative impacts on the City's storm drain system.

Response to Comment ORG-4-77

CRT-Impact UTILS-3 found that the project's demand for water would result in a less than significant impact and that additional water infrastructure improvements would not be necessary. Furthermore, operation of the cooling towers would result in less than significant noise and air quality impacts. For an analysis of these impacts, please refer to Section 4.3, Air Quality and Section 4.9, Noise in the Draft EIR.

Response to Comment ORG-4-78

Please refer to Response to Comment LA-1-30.

Response to Comment ORG-4-79

The environmental impacts of the proposed CRT project are fully analyzed pursuant to CEQA in the CRT Draft EIR. Although the project site is currently largely undeveloped, it is constrained between LBNL's busiest roadway and its most dense concentration of buildings and workers (Building 50 and Building 70 complexes). Biological resources are considered and analyzed in Draft EIR Section 4.3. Overall growth at LBNL for the next twenty years is identified and analyzed at a program level in the 2006 Long Range Development Plan (LRDP) and 2006 LRDP EIR.

Response to Comment ORG-4-80

The comment restates opinions expressed earlier in the comment letter. Responses on the topics mentioned are provided above.

Response to Comment ORG-4-81

The comment restates opinions expressed earlier in the comment letter. Responses on the topics mentioned are provided above.

Letter No. ORG-5

SAVE STRAWBERRY CANYON!

January 6, 2008

Jeff Philliber, Environmental Planning Group Coordinator
Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 69-201
Berkeley, CA 94720

Dear Mr. Philliber,

Enclosed please find verification of the signature page of our comments on the Computational Research and Theory Facility (CRT) Draft Environmental Impact Report (DEIR).

Yours sincerely,

Janice Thomas

For
Save Strawberry Canyon!

Closing

In general, the LBNL hill site campus has reached its capacity. Growth at this location cannot continue without causing substantial harm to the environment. Things which are precious, which we now take for granted, may well be lost, never to be recovered. Future generations have as much to gain from experiencing the natural environment as they do from learning the science of the natural environment, although one informs the other. The spectacular natural environment is California's legacy.

These are challenging times in which we must find new ways to move forward. The old ways have failed us. We must grow while not leaving a wake of destruction in our path.

It may not seem as if the Lab is overbuilt. After all there is still much land within LBNL jurisdiction which is open space. Yet the north-south corridor access and east-west corridor access are city streets in already developed areas, and biological resources are already seriously undermined.

The proposed project has three significant impacts which are unavoidable only if the proposed location is the selected location. There are other impacts as well, which remain unidentified, and thus unmitigated, in the areas of aesthetic impacts, biological resources, and cultural resources, and possibly more. 1

The Lab, and the University of California more generally, must commit itself to proactive preservation of resources in the Berkeley hills by preparing a Cultural Landscape Report, implementing a Draft Recovery Plan for the Alameda Whipsnake, and developing fire-adapted landscapes as an alternative to "aggressive vegetation management." California's precious resources are more than gold mines, silicon chips, nano-sized materials, and alternative fuel. The most precious things are what can neither be created nor bought.

In closing, the proposed construction and operation of the CRT Facility project will add a very large building to a scenic vista which is the Berkeley hills, will increase the industrial and institutional presence on an already elevated land form, will drive away what few special-status species remain, and will harm sensitive receptors with added noise and cancer risk. An alternative off-site location for the first project in LBNL's 20 year growth plan is the preferred alternative.

Thank you for considering our concerns and comments.

Yours sincerely,

Save Strawberry Canyon

Shirley Dean Lesley Emmington Jones

Sylvia McLaughlin Phila Rogers

John Shively Janice Thomas

Response to Comment Letter ORG-5

Response to Comment ORG-5-1

The comment provides the signed signature page for comment letter ORG-4, but does not include any new comments.

Letter No. ORG-6

Subject: CRT Building
Date: Fri, 04 Jan 2008 15:42:00 -0800
From: carole schemmerling <caroleschem@hotmail.com>
To: planning@lbl.gov
CC: mnichols@arb.ca.gov, director@dfg.ca.gov, edgar.bailey@cdph.ca.gov, friend@water.ca.gov, ladams@calepa.ca.gov

I am writing on behalf of the STRAWBERRY CREEK WATERSHED COUNCIL to explain why we strongly object to the siting of the proposed CRT facility.

Strawberry Canyon and Strawberry Creek which drains the canyon is already extremely, negatively, impacted by the LBNL industrial activities, past and present, on the site. There are radioactive soil plumes moving down the slopes, along with toxic solvents and heavy metals. It is located on and near earthquake faults. The slopes are subject to landslides in much of the canyon. There is at least one large grove Eucalyptus trees that is contaminated by radioactive Tritium. All of this is in a dangerous fire zone. 1 2 3

Given the deplorable conditions that already exist there. we are opposed to the grading and development of an area that is very steep, has vegetation and provides habitat for wildlife. Further degradation of this place is not warranted. There are empty facilities scattered through out LBNL area that are already degraded which could be made useful for the purposes of the CRT project. 4

The PR put out by the lab lauds the genius and inventiveness of their scientists, so it should not be too difficult for them to figure out how re-use and re-cycle their abandoned facilities and not destroy more of the natural environment than they already have blighted.

We further believe that the various State and Local regulatory agencies would be irresponsible to permit this new project at the site which they are proposing. 5

Sincerely,
Carole Schemmerling
861 Regal Rd.
Berkeley, CA, 94708
510.524-4005

--
Therese (Terry) Powell <TPowell@lbl.gov>
Community Relations Officer
Lawrence Berkeley National Laboratory
One Cyclotron Rd, MS 65, Berkeley, CA 94720
tel:510-486-4387 - fax: 510-486-6641

Response to Comment Letter ORG-6

Response to Comment ORG-6-1

The comment is noted. As noted in the Draft EIR, the principal radioactive contaminant on the LBNL site is tritium. All areas of soil contamination have been cleaned up to levels consistent with LBNL operations (designated as institutional land use) and acceptable to regulatory oversight agencies (LBNL 2007). While there is remaining groundwater contamination, it is confined within the boundary of LBNL's main hill site, and is 2,200 feet west of the project site. Radioactive materials would not be used or transported in relation to the CRT project. As shown on Figure 4.0-1, (shown at the end of Section 4.0), of this Final EIR, the project site is not located in Strawberry Canyon.

Response to Comment ORG-6-2

The Draft EIR acknowledges the fact that the site is located near an active fault (page 4.5-11) within the Hayward Fault zone. However, the site is not located on an active fault as the commenter states. A fault trace study of the project site was conducted, and no active fault traces cross the project site (page 4.5-11). The Draft EIR also acknowledges that the slopes are susceptible to landsliding. However, geotechnical recommendations have been incorporated into the project to stabilize existing landslides near the project (page 4.5-13).

Response to Comment ORG-6-3

Please see Response to Comment ORG-6-1 above.

The grove of Eucalyptus trees referred to by the commenter is not located on or adjacent to the CRT project site, and is therefore not considered in the CRT Draft EIR.

Response to Comment ORG-6-4

Hazards related to the sloping nature of the site are discussed in Section 4.4, Geology and Soils. Impacts to vegetation and wildlife are discussed in Section 4.3, Biological Resources. Alternative project locations are discussed in Section 6.0, Alternatives.

In general, the comment expressed the opinion of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment ORG-6-5

The comment expressed the opinion of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Letter No. I-1

Laurie Brown
2401 Telegraph Ave.
Berkeley, CA 94704

Jonathan Fernandez
1175 Spruce St.
Berkeley, CA 94707

LBNL
One Cyclotron Road, MS 69-201
Berkeley, CA 94720
Attention Jeff Philliber
Planning@lbl.gov

"The frog does not drink up the pond in which it lives" – Inca Proverb

Dear Sirs,

We have spent some time considering the EIR related to the planned CRT facility proposed for the Strawberry Canyon area. The description of the project includes, under section 3.3 Project Need, the following, "LBNL has a need to move the NERSC facility to the LBNL hill site in order to provide immediate access for researchers and meet power supply needs for future operation of NERSC programs." We find it ironic that a project designed for the most technologically inclined individuals in the world should believe it has a **need** for the **physical proximity** of its researchers. In an age where high technology companies, seeking cost savings of every kind, accept more "decentralization" of their offices, and make significant use of teleconferencing and desktop sharing services, it would seem that the LBNL, of all developers, would have the **least** need for physical proximity amongst its constituents.

1

Due to the fact that the LBNL should be able to develop a project that successfully meets its actual need of providing reasonable computer facilities, office spaces, and meeting spaces for its users **without** requiring absolute geographic centralization of the structures themselves, we find that LBNL should more broadly consider alternatives to the site elsewhere in West Berkeley and the East Bay in general.

We understand that the site is designated for development in the LRDP. However, the type of development should be carefully considered. Taking at face value the EIR descriptions of the project, we specifically are concerned about the following:

1. A computer storage facility is rarely located on site with its researchers. In general, computer storage facilities are located in areas that are **not earthquake prone**, **not susceptible to wild fires**, **not floodable**, **not susceptible to power interruptions due to inclement weather**, **and are not susceptible to unusual or unwanted**

2

human activities in their close proximity. Surprisingly, the hillside location of the facility within 400 feet of the fault, and in a clearly dangerous and dry area that has suffered from several known historical fire storms, nestled in the hills with unseen and unguardable approaches, complex hydrology and geological issues, the habitat for sensitive an endangered species, and being served by only a singe one lane road, fails the test of almost every possible requirement for a intelligent computer storage facility. 2

2. The "Alternate Off-Site Locations" (6.3.1) were all dismissed out of hand due to their alleged inability to supply appropriate power for a facility and, we presume more importantly, because "they would not meet the CRT project objectives to expand functionality of Lab facilities, provide for cross-disciplinary research, or foster collaborative work environments among researchers …" As we noted above, the objectives do not actually require the physical proximity of the people involved. A study should, instead, be conducted of how researchers are likely to **actually** use their facility, and what techniques, **in reality and practically** will foster a collaborative work environment. 3

3. We find it odd that the site is considered especially good in terms of the utility services and infrastructure that serves the site. The area is served by a single lane road that is vulnerable to landslides . It is at a higher elevation making water delivery more expensive. The building has huge power needs, fed from a substation vulnerable to outages due to wildfire and other weather problems. In a serious earthquake, we can be almost certain that water and electrical services will be disrupted, perhaps for very long periods of time. The proposed co-generation of power, although "sensible" on its face, depends upon a high capacity natural gas line to be constructed, which would then be vulnerable to the same problems as the electrical substation. 4

It seems apparent that re-focusing the project such that the building's social purposes are served at the site suggested while the building's "physical plant" be located at a different site makes considerably more sense. "Cooling Towers" do not serve any inter-personal goals. A hardened and secure location for a computer system with temporary power generation etc. also serves no "collaborative" goals.

4. The building when seen in conjunction with the planned Helios building and the SAHPC facility has significant cumulative impacts as noted in the revised table 5.0-4. Since "Further mitigation is not feasible", the significance of the impact is considered "Unavoidable". We find it almost impossible to believe that the three projects, either individually or in conjunction with each other, will have anything but disastrous consequences to the members of the community who use the Strawberry Canyon area. With three large construction projects and the cumulative traffic burden they produce, even the most mundane visits to the botanical garden or for transporting children to the Lawrence Hall of Science will become nearly impossible nightmares. Once the three project are completed, notwithstanding the claim that "no new parking facilities will be constructed", it is on its face impossible to believe that 100,000s of square feet of office, research, and athletic facilities will have little traffic impact. 5

We can "pretend" that a lack of additional parking will prevent intensified use, but we know that the reality of human behavior will prevail and there will be hundreds more car trips daily to the area, all of which must negotiate a handful of one lane roads for which no improvements are planned, and none are practical.

5

5. Therefore, we believe that serious attention should be given to other off-site alternatives. It is more practical, for this **particular development**, to build the project elsewhere. The fact that the area will be developed does not mean that this particular project is well suited or even logical for the area. LBNL should also take into account that there are considerable extra costs associated with construction in a hillside area with poor road access, difficult topography, extra excavation and backfill, environmental mitigations, drainage and culverting problems, and so forth. These financial resources could be used instead to purchase another more practical and feasible site in West Berkeley or the East Bay.

6

6. It is unconscionable to contemplate building a building - as big as any building in the city of Berkeley - on a defining hillside of the costal range, without attempting to minimize its visual and environmental impact. The building makes no attempt to integrate itself into its wilderness setting, nor does it attempt to negotiate which of its features can be managed at other sites versus which features are necessary for the "collaborative" environment it intends to create. It not only mars this cultural landscape it potentially puts the entire University and City at risk. How is this proposed project in accordance with Historic Preservation Goal. 2: To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value ?" (4.4-8). How is this project protective of this uniquely situated, incredible open space, and wild area surrounded by other wild areas in a heavily populated urban setting? How is it "Natural resource" or "Cultural resource" protection or stewardship to build on this wild land ?

7

7. It is internally inconsistent that these buildings that ostensibly will create future alternative energy sources to save life on this planet, will be built on a site that will impact so many rare, sensitive, threatened, or candidate species, when sites that would not endanger any rare plant or animal species are available. The buildings and great increase in human activity in the area brought on by the project will have, in our judgment, major long–term impacts on wildlife. We speak of wildlife in the broad sense- all living things that are free-living and wild. Fish and Game code my mandate this protection or that prohibition, but what is written on paper, and what actually happens to wildlife and an ecosystem as a whole when it is urbanized are two separate matters.

8

It is further surprising that a "component" of the Helios project should rely completely upon traditional energy sources from energy substations and on-site traditional power generation. We would expect that the building would be more appropriate to its broader context if it were a more responsible design, more properly

integrated into its environment. A different site would allow the massive evaporative water use and energy requirements to be handled in a non environmentally destructive manner. 8

8. We would like further analysis and description of the exhaust system (3.6.7). "Providing large air-intake surfaces? " Please quantify. Could this cause adverse affects for birds and bats feeding on insects, etc. What will be the light output at night from this proposed building and what affect will it have on nocturnal birds and raptors, and smaller song birds migrating through the canyon at night ? 9

9. The EIR states that "Coastal scrub habitat occurs approx. 25' to the south of the project." (4.3.5) The Alameda whipsnake is an indicator species for the health of coastal scrub habitat. How is 25' enough of a buffer for the whipsnake and the numerous species this habitat supports? The Alameda whipsnake is still "fully protected under the ESA" and "the subspecies may temporarily utilize-on site habitat." (4-3-8) How is a free moving, fully protected endangered species protected from human activities such as automobiles etc. with habitat "less than 25' south of the project?" 10

In conclusion, we believe that the alternatives analysis is artificially narrow in scope, due, in part, to what we believe has been an incorrect determination of the project's purpose. It is inappropriate to make the site under consideration a particular defined purpose of the project itself. The site should answer the purpose, not **be** the purpose. Furthermore, there has been no substantive analysis of the need or appropriateness of the project to the site. That we can imagine the site clumsily accommodating the proposed use does not mean that the site is actually suited to that use. Indeed, there has been an uncritical acceptance that the building itself supports the social, academic, and collaborative goals described. The 300 persons working at the building, wherever it is located, should be able to provide ample opportunities for direct collaboration and interaction. 11

The LBNL has not demonstrated that there are no less-damaging practicable alternatives at other sites.

Jonathan Fearnley

Laurie Brown

Response to Comment Letter I-1

Response to Comment I-1-1

As discussed in the CRT Draft EIR, the CRT facility would not be simply a "computer storage facility" but an "integrated and appropriately designed facility that would allow for the continued operation and future advancement of the Berkeley Lab's NERSC High Performing Computing national users facility, Computational Research Division and joint Berkeley Lab/UC Berkeley Computational Science & Engineering programs." It would integrate office and meeting space with the computing infrastructure, and put this facility in close proximity to reliable and adequate power sources and other LBNL facilities, researchers, and amenities. With regard to the need for proximity, see Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment I-1-2

As discussed in the CRT Draft EIR, the CRT facility would not be simply a "computer storage facility" but an "integrated and appropriately designed facility that would allow for the continued operation and future advancement of the Berkeley Lab's NERSC High Performing Computing national users facility, Computational Research Division and joint Berkeley Lab / UC Berkeley Computational Science & Engineering programs." It would integrate office and meeting space with the computing infrastructure, and put this facility in close proximity to reliable and adequate power sources and other LBNL facilities, researchers, and amenities.

In response to the commenters' suggestion that the project should be located elsewhere, please see Master Response No. 1, Alternative Site – Richmond Field Station.

In addition to the two-lane Cyclotron Road mentioned in the comment, the LBNL Campus, including the proposed CRT site, is also served by the Strawberry Canyon and Grizzly Peak gates that are accessed from Centennial Drive. As stated in the comment, the Draft EIR has identified impacts and proposed potential improvements to mitigate these impacts to less than significance levels or lessen the magnitude of impacts.

Response to Comment I-1-3

With regard to the need for proximity, see Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment I-1-4

Section 4.6, Hazards and Hazardous Materials identifies the emergency response plan for the CRT project. In the event of an emergency on the project site, including a wildland fire, earthquake or landslide, the Berkeley Lab would implement the Master Emergency Program Plan (MEPP), which establishes policies, procedures, and an organizational structure for responding to and recovering from a major disaster at the Berkeley. The emergency evacuation plan for the Lab includes provisions for vehicular and pedestrian evacuation, in various scenarios where vehicular access to the site may be limited (see Section 4.6, Hazards and Hazardous Materials).

The Lab is concerned with the ability of the utility infrastructure to withstand natural disasters. Water and gas lines on the project site would be subject to design review by the East Bay Municipal Utility District (EBMUD) and Pacific Gas & Electric Company (PG&E) prior to project construction, which would minimize the vulnerability of these lines to rupture in the event of an earthquake. Current building code standards generally include requirements for flexible joints and connections to reduce the risk of rupture. The Draft EIR found less than significant impacts associated with water demands and energy requirements for the proposed project and found that project-level mitigation would not be required (see Section 4.13, Utilities, Service Systems, and Energy.) In addition, the utility lines outside the Lab management boundary (such as EBMUD for water, PG&E for natural gas transport and electricity, and the City of Berkeley for sanitary sewer and storm drains) could be degraded in the event of an earthquake or other natural disaster. The Lab would obtain confirmation of the integrity of utility lines from the respective utilities in order to continue operation following a major disaster. It would be speculative to analyze provisions for these services to the project site in the event of a natural disaster, in comparison to other sites in the area. No further analysis is required.

Response to Comment I-1-5

As stated in the comment, the Draft EIR identifies the project's impacts at a number of study intersections as significant and unavoidable under Cumulative conditions (pages 5.0-30 through 5.0-34). These intersections would operate at an unacceptable LOS E or LOS F regardless of the proposed CRT project and the proposed project (by itself or combined with Helios) would increase total intersection volumes by less than five percent. Although the significance criteria for the Draft EIR require that a project increase total intersection volumes at an intersection already operating at an unacceptable LOS E or LOS F by more than five percent, this Draft EIR conservatively concluded that the project's contribution to these intersection impacts would be significant and requires the implementation of LRDP Mitigation Measures TRANS-1a through 1d (page 5.0-32). These mitigation measures require LBNL to contribute fair share of

the cost for potential improvements and to implement an enhanced Transportation Demand Management (TDM) program.

Response to Comment I-1-6

Alternative project locations are discussed in Section 6.0, Alternatives. CEQA does not require analysis or comparison of project financial feasibility. In general, the comment expressed the opinion of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment I-1-7

The setting in which the project is proposed is neither wilderness nor public open space. The site is located within the larger context of an existing federally-managed laboratory campus with limited public access. While mature stands of trees appear between structures, historically before European settlement, the hillside was covered in grasslands with tree cover only in riparian areas. Existing vegetation on site is predominantly introduced eucalyptus species. However, rather than return the hillside to pre-settlement patterns, the LBNL LRDP seeks to maintain the heavily vegetated appearance of the campus, and a one-to-one replacement of trees removed is required. With regard to the presence of a cultural landscape, please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims.

Response to Comment I-1-8

The biological impacts associated with the project's footprint were evaluated in Section 4.3, Biological Resources. As noted in the LRDP Principles and Strategies in the section, the Lab seeks to ""Preserve and enhance the environmental qualities of the site as a model of resource conservation and environmental stewardship." The project would comply with applicable Department of Fish and Game Code, in addition to all other federal, state and local regulations and policies meant to reduce potential impacts to wildlife.

As discussed in the Draft EIR (4.3-13 to 4.3-14), no special-status plant species are expected to occur on the project site. While the project site is located adjacent to existing development and is dominated by non-native plant species, there is some potential that on-site habitats could provide nesting habitat for raptors and other special-status species. The implementation of the avoidance and mitigation measures incorporated into the Draft EIR would prevent the direct loss of any special-status wildlife. Additionally, the Draft EIR (page 4.3-3) concludes that the loss of wildlife habitat (including trees and other vegetation) from project implementation would be less than significant. This conclusion is supported by the fact that the habitat types to be impacted by the project are abundant in the project region. Eucalyptus groves and

non-native grasslands are abundant on LBNL and surrounding areas, including areas that are accessible to any displaced wildlife. Therefore, given that the direct loss of special-status species would be avoided through incorporated measures and that similar habitat would still occur in abundance in surrounding and accessible areas, the project-related habitat loss does not meet any of the Significance Criteria defined in the Draft EIR (see page 4.3-21). The required replacement of all trees to be removed would further minimize the small habitat loss associated with the proposed project.

The remainder of the comment appears to address the proposed Helios project and is not a comment on the CRT Draft EIR. The CRT project is not a component of the Helios project and would not include any Helios program functions. In general, the comment expressed the opinion of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment I-1-9

The proposed CRT Facility would be constructed adjacent to existing buildings on the LBNL campus. While the larger trees on the project site do provide potential raptor nesting habitat, the potential use of these trees by raptors is already limited by the proximity of existing development and associated uses. Therefore, the construction of an additional building adjacent to existing developed uses, as well as the introduction of a new noise source would not substantially worsen an already compromised condition for raptors and other wildlife. The air intakes would be screened to prevent entry by birds and other animals. In regards to lighting, the proposed project has been designed not to include light spillage into the open space located to the south of the project site or other nearby sensitive habitats.

Response to Comment I-1-10

As discussed in the Draft EIR (4.3-6), coastal scrub habitat occurs approximately 25 feet to the south of the project site. This coastal scrub area is and would continue to be separated from the project site by a fence and steep slopes. These features prevent human entry from the project site to the area of coastal scrub habitat in question. Additionally, the area of coastal scrub habitat is currently located near developed uses, including Cyclotron Road, paved parking areas, and buildings. There are also cooling towers on a neighboring building. Therefore, the proposed project would not substantially increase the level of development (and associated noise) near the coastal scrub habitat. Following development of the project site, it would be considered highly unlikely that Alameda whipsnake would move onto the project site given the absence of suitable habitat. Further, given the degree of development and the absence of accessible coastal scrub habitat to the north, east, and west of the project site, it is not expected that Alameda whipsnake would disperse across the project site.

Response to Comment I-1-11

The Lab disagrees with the commenter's assertion that the project objectives make the site under consideration a defined purpose of the project itself. The objectives do not reference any particular site, but they do appropriately reference such factors as the importance of convenient access by researchers and access to a large and reliable source of electric power. Please see Master Response No. 1, Alternative Site – Richmond Field Station.

Letter No. I-2

Subject:CRT EIR
Date: Fri, 04 Jan 2008 18:59:40 -0500
From:nancy22delaney@aol.com
To:planning@lbl.gov

To whom it may concern:

I am troubled by way in which you circumvented the spirit of the EIR guidelines by hosting the town meeting right before the beginning of winter holidays making the deadline Jan 4, leaving no genuine time for the public to become aware and discuss and consider and comment. So, in fact the goal of CEQA was evaded by your timing and our democracy is so much the poorer. I beseech you to extend the deadline for public comment and perhaps even have a second town meeting where the public can be made aware of what is happening and give genuine input. 1

In particular from a quick perusal I have several concerns. It appears that you are planning a whole compound up in Strawberry Canyon and in several places the EIR for CRT and the revised EIR rather cavalierly dismiss "significant and unavoidable risks" created by your plans. 2

The UCB foothill student housing cancer risk of 40/million when CEQA and BAAMD standards require no more than 10/million is a health danger you are planning that will effect the students. How many students even know since you avoided their input with your timing of public comment to end Jan 4 and began when they had finals and then left for vacation? 3

You will be adding up to 1000 people into the canyon as employees and visitors yet you claim there will be no impact on emergency evacuation plans for Berkeley nor any additional dangers from the landslides that happen there regularly from earthquakes and fires that are a regualr danger. 4 You seem to think that just saying something will erase the added dangers to human life. 5

Your comparing the added electricity and natural gas needs for these megacomputers to the amount used by the state is ingenuous. Please show what the addition will be to usage compared with the City of Berkeley presently and the UC here in Berkeley. 6

Please discuss the location of the nearest aquafir which may be the Lennerd. Please indicate specific proximity and how much water will be used to cool the 9 towers and where there may be leakage into the aquafir from the radiation and chemicals and metals you will be introducing and increasing. 7

The cutting of trees will be increasing erosion as saplings do not hold the soil like full grown trees nor provide nests for the many kinds of birds who call the canyon home. 8

the elite compound and the decreased access by cars sounds like a special place for those who don't want to be bothered by democracy. The Guest House of up to 4 stories and 60 guest rooms and common places does not sound appropriate for a public institution. 9

Again, give us an extension. Nancy Delaney 2018 Channing Way Berkeley 94704 10

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Therese (Terry) Powell <TPowell@lbl.gov>
Community Relations Officer
Lawrence Berkeley National Laboratory
One Cyclotron Rd, MS 65, Berkeley, CA 94720
tel:510-486-4387 - fax: 510-486-6641

Response to Comment Letter I-2

Response to Comment I-2-1

Please refer to Response to Comment ORG-4-1 above.

Response to Comment I-2-2

The comment is a general overview of comments below. Please refer to Response to Comment I-2-3 through I-2-10 below.

Response to Comment I-2-3

The CRT Draft EIR was circulated for public review beginning November 9, 2007. UC Berkeley student final exams for Fall 2007 occurred during mid-December 2007 (December 13 to December 20, 2007). Furthermore, the Draft EIR availability was publicized in the Daily Californian (UCB student newspaper) and other newspapers, and there was advanced notice provided through the public scoping process. It is therefore not the case that the CRT Draft EIR circulation period began when students had finals and then left for vacation, or that the process was managed to avoid student input.

As discussed in Section 5.0, Cumulative Impacts, of the Draft EIR (pages 5.0-17 to 5.0-18), the 40-in-one-million cancer risk at the UCB Foothill student housing represents the cumulative cancer risk at that location. It should be noted that the maximum cancer risk associated with only the proposed project would be 3 in one million for on-site receptors, assuming a 40-year exposure period. The maximum estimated off-site risk associated with the CRT project assuming a 70-year exposure period would be 1 in one million and at the UCB Foothill student housing location specifically would be 0.3 in one million. Overall, the proposed project represents a small contribution to the background cancer risk that would exist at that location under the full buildout of LBNL and UCB under their Long-Range Development Plans and would not be considered a significant impact of the CRT project, although it would conservatively, for the purpose of a CEQA analysis, be considered a considerable contribution to a significant and unavoidable cumulative impact. Also, in evaluating risks to students, it is important to note that the conservative study parameters of the health risk assessment assume a nearly continuous 70-year exposure; this exposure period is several times greater than the time that any particular student would reside at the UCB Foothill student housing complex.

Response to Comment I-2-4

As stated in the Draft EIR (page 4.5-11), the majority of the people occupying the CRT facility would be relocated from other buildings within LBNL or on the UC Berkeley campus, and therefore the risks are no

greater for most of the building occupants. The building would only add approximately 90 people from off-site or unknown locations, not 1,000 as the commenter states. CRT Impact GEO-2 discusses the seismic safety standards and training programs that are provided by the lab that reduce seismic safety impacts to a less than significant level.

Response to Comment I-2-5

Hazards associated with the proposed project are discussed in Sections 4.4, Geology and Soils, and 4.5, Hazards and Hazardous Materials, of the Draft EIR. These sections identify specific mitigation measures that will be required of the proposed project in order to reduce risks to a less than significant level.

Response to Comment I-2-6

Total electrical power consumption in the City of Berkeley was 526,287 MWh in 2003.[3] During the most recent period for which data are available, total electrical power consumption for the main UC Berkeley campus was 191,744 MWh. Total annual consumption for the CRT project is estimated at 7,700 MWh. Figures for natural gas consumption were not available.

Response to Comment I-2-7

The Lennert aquifer is associated with the Moraga formation located over 0.25 mile north and northeast of (as well as up-gradient and stratigraphically above) the project site. As outlined in the Draft EIR, the bedrock at the project site has a low permeability and is therefore not considered a viable aquifer. As described in Section 4.13, Utilities, Service Systems, and Energy, of the Draft EIR (page 4.13-4), East Bay Municipal Utility District would provide water supply to the proposed project. EBMUD has existing water supplies and entitlements to serve the project and would not use groundwater supplies in the project vicinity. The Draft EIR (page 4.6-10) describes the hazardous substances that may be stored on the project site. Radioactive material and heavy metals would not be used or stored at the CRT site, contrary to the suggestion in the comment, and hazardous materials would be limited to generator fuel and small quantities of cleaning supplies. Storage of these materials would comply with federal, state and local regulations related to storage and handling hazardous materials. Compliance with these regulations would reduce any potential impact related to groundwater contamination to a less than significant level.

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3 Navigant Consulting, Inc. 2005. Community Choice Aggregation, Base Case Feasibility Evaluation, City of Berkeley. April 2005. http://www.cityofberkeley.info/sustainable/government/CommunityChoice/Final%20Base%20Case%20Feasibilty%20Report-Berkeley%2042105.pdf

Response to Comment I-2-8

As discussed in the Draft EIR (pages 4.3-30 to 4.3-31), the LRDP Development Principles and Design Guidelines and other best practices incorporated into the proposed project would control erosion from the project site. Among these practices are the following: revegetation of disturbed areas (not covered by active buildings or parking lots), including slope stabilization sites, using native shrubs, trees, and grasses is included as a part of all new projects to the extent feasible and in keeping with the Lab's vegetation management program. Additionally, LBNL's standard construction specifications include requirements for installation of erosion control netting and riprap to protect slopes and minimize adverse effects of runoff; protection of existing plant materials; and application and maintenance of hydroseeding (sprayed application of seed and reinforcing fiber on graded slopes). Please see Response to Comment ORG-4-30, above, for a discussion of loss of bird nesting habitat.

Response to Comment I-2-9

The proposed CRT project would neither increase or decrease automobile access to the LBNL site. The CRT facility would be located at the fence line of the LBNL site so that it is accessible to a broader population than most other buildings at LBNL. The Guest House, which will be a three-story facility on the interior of the Lab site, was analyzed pursuant to CEQA in a Negative Declaration (SCH# 2007052022) that underwent public review and comment and that was approved by the UC Regents in July 2007.

Response to Comment I-2-10

Please refer to Response to Comment ORG-4-1, above.

Letter No. I-3

Subject:CRT Comment letter
Date: Fri, 04 Jan 2008 16:07:04 -0800
From: Julie Dickinson <julieeed@msn.com>
To:planning@lbl.gov

January 4, 2008

University of California, and Lawrence Berkeley National Laboratory
Re: Computational Research & Theory Facility

Many Berkeley residents are very concerned about the proposed CRT (Computational Research & Theory Facility) building in Blackberry and Strawberry Canyons. There have not been sufficient open public forums to inform Berkeley citizens about this extreme project. 1

To clarify- The CRT is the facility that will house the NERSC, National Energy Research Scientific Computing Center. The current NERSC computer is housed in Oakland. The new Computer system is planned to be 32,000 gross sq ft. The CRT facility is slated to be 160 feet tall and 140,000 sq ft.

According to the 11/16/07 Berkeley Lab View, When the newest list of the world's Top 500 supercomputers was released Nov. 12, '07, this (NERSC) system was ranked No. 9 overall. 2
This is abuse of power, to plan to place one of the world's largest computer systems in our canyon.
In the Draft EIR- The proposed CRT facility (NERSC) will require many cooling towers to function.
The two different cooling tower configurations proposed:
Configuration 1) Nine cooling towers and two 1.5 megawatt natural-gas-fired cogeneration units
Configuration 2) Five cooling towers and one 250-kilowatt diesel emergency generator

Dimensions of the cooling towers are not given in the DEIR or in the Revision. It is not clear if the 2nd configuration with the emergency diesel generator would be built as a back-up configuration. If so, 3
*How many total cooling towers would there be?
*What are the dimensions?
* Why is diesel even being considered as a power source for the generator?
The Cogeneration unit will emit 15,358 Metric tons of carbon dioxide equivalent (CO2E). 4
*Why isn't this level of pollution being further addressed?

*In the Revised DEIR it is stated that 'a cumulative project Toxic Air Contaminant (TAC) impact would be *significant and unavoidable.*' 5
The BAAQMD CEQA guidelines recommend a threshold of 10 parts per million of TAC.
In the Revision, (Sec. 5.0-17) maximum impacts would exceed the 10 in 1 million threshold minimum in some locations. It is admitted that the TACs will reach approx 40 parts per million.
Who will be liable for the possible health risks brought about by the release of bromine into our atmosphere?

Construction of the CRT will cause destruction of at least 180 acres in Strawberry Canyon, including the removal of 64 blue gum eucalyptus, 5 coast live oaks, 2 California bays, 1 plum. Included in the Revised DEIR for CRT they say there will be *removal of 128 oak, redwood and bay trees- This is a much larger loss than is cited in the original DEIR.* 6

The revision states there will be specific impacts on wildlife. Taking these trees out will impact several birds' nesting habitats, including:
Cooper's hawk - - - Suitable nesting habitat is on and bordering the project site
Great horned owl- - Suitable nesting habitat is present on the project site
Red-tailed hawk - - Suitable nesting habitat is present on the project site
Red-shouldered hawk - - Suitable nesting habitat is present on the project site
American Kestrel- - Potentuial nesting habitat on and adjacent to project site in cavities of mature trees
Allen's hummingbird - - Trees and shrubs within and adjacent to the project site provide potential nesting habitat
*Where will they go? 7

According to plans the Planck satellite, a joint US-European project set for launch in 2008, will be sending massive amounts of data back to earth. The Planck is planned to measure residual radiation from the 'Big Bang'. It may provide the earliest possible image of the universe, including encoded signatures of the fundamental parameters of all matter.'

Also stated in the 11/16/07 Berkeley Lab View article- 'This (NERSC) computer will be used to run applications across a wide range of scientific disciplines; astrophysics, fusion, climate change prediction, combustion, energy and biology. ***This powerful system will also allow researchers to validate theories that attempt to uncover evidence that explains the origin of the universe.*** 8
It is supreme irony that the scientific community, in their quest to understand our universe and our world, are willing to sacrifice a beautiful canyon area on the very earth they are attempting to understand. These facilities need to be placed somewhere else.

Sincerely,

Julie Dickinson
1129 Carleton St.
Berkeley, CA 94702

--
Therese (Terry) Powell <TPowell@lbl.gov>
Community Relations Officer
Lawrence Berkeley National Laboratory
One Cyclotron Rd, MS 65, Berkeley, CA 94720
tel:510-486-4387 - fax: 510-486-6641

Response to Comment Letter I-3

Response to Comment I-3-1

Information on the proposed CRT project has been made available to the public during several public meetings, including a public scoping meeting on August 8, 2007. The meeting was advertised in local newspapers and notices were distributed by mail to persons who had previously expressed an interest in Lab projects. Information on the project has also been available on the Lab's web site.

LBNL has engaged the public and other community leaders in regard to the proposed CRT Facility in the following ways:

- In early August 2007, Berkeley Lab contacted the offices of city, county and state elected officials and neighborhood association representatives to alert them about the Lab's development proposals for Helios and CRT and offered to answer any questions.
- During the summer and fall of 2007, Berkeley Lab officials briefed City leaders and staff about the projects in greater detail.
- In late September 2007, Lab Director Steve Chu hosted a "Community Leaders Breakfast" for local leaders including members of the City Council, City boards and commissions, and other community and business leaders.
- In December 2007, Lab staff made a formal presentation of both projects to the Berkeley Planning Commission.
- The Office of Community Relations website posted notices, images, "Frequently Asked Questions," and other public information.

In addition, under the California Environmental Quality Act (CEQA) process, LBNL provided the public, community groups, and public agencies with a Notice of Preparation and Initial Study preliminarily analyzing the project, and LBNL hosted a public scoping meeting on August 8, 2007. Public comments, ideas, and suggestions were solicited during the 30-day scoping period, and all comments received were taken into consideration in the preparation of the Draft EIR.

When it became available, the Draft EIR was circulated for review to the same public, community group, and public agency audience. Notices of the availability of the Draft EIR were made through the State Clearinghouse; they were also posted in local newspapers and in addition to direct mailings to the public. Furthermore, the Draft EIR was also made available through the Berkeley public library and on-line at the Lab's community relations website. A CRT Draft EIR public hearing was held on December 10, 2007, where all interested members of the public were invited to attend and provide comment.

Response to Comment I-3-2

Please refer to Section 2.0, Changes to the Project Description, for clarification of the project description. As described on page 3.0-1 in Section 3.0, Project Description, the proposed CRT Facility would accommodate the National Energy Research Scientific Computing (NERSC) Center, the associated High Performance Computing (HPC) center, and researchers and students from the Berkeley Lab's Computational Research Division and the joint UC Berkeley/Berkeley Lab Computational Science and Engineering program. Please see Figure 4.0-1, (shown at the end of Section 4.0), for a depiction of the project site's location relative to Strawberry Canyon.

Response to Comment I-3-3

See Response to Comment ORG-4-7, regarding the number and dimensions of the cooling towers.

Response to Comment I-3-4

Diesel fuel is considered for the fuel source for the emergency generator because diesel engines can be fueled by an independent fuel supply in the event of a natural gas outage (e.g., during an earthquake). Furthermore, diesel engines achieve their full rated power output faster than gas-fired emergency engines. If, based on further evaluation or BAAQMD permit requirements, a gas-fired (e.g., propane) engine would be selected, then the Draft EIR has evaluated the worst-case potential air quality impacts from the emergency generator.

The greenhouse gas emissions resulting from the proposed project and the significance of their impact are addressed in Section 5.0, Cumulative Impacts, of the Draft EIR. It should be noted that 15,358 metric tons of greenhouse gas emissions on a carbon dioxide equivalent basis are for all sources associated with the proposed project under the cogeneration option and not just the cogeneration facility itself.

Response to Comment I-3-5

The BAAQMD CEQA Guidelines suggest a cancer risk threshold of 10 in one million, which is the probability that an individual may contract cancer in his or her lifetime at specific levels of toxic air contaminants in the atmosphere. This is not the same as "parts per million" as stated in the comment.

Bromine emissions, which may be associated with a potential cooling water additive, do not contribute to the cumulative cancer risks described in Section 5.0 of the Draft EIR. The balance of this comment restates facts discussed in the Draft EIR. Bromine and bromium compounds have not been found to be cancer-causing chemicals. Bromine was not found to cause or contribute to significant non-cancer health impacts associated with the project-level or cumulative impacts from releases of toxic air contaminants

from operations at LBNL and UC Berkeley. Accordingly, no adverse health impacts due to potential bromine emissions are anticipated. Moreover, as indicated in Table 4.2-15 of the Draft EIR, sodium bromide is an ingredient of the cooling tower treatment products currently being used at LBNL. To provide a conservative estimate of the project's health impacts, it was assumed that the same products may be used in the CRT cooling towers. However, LBNL expects to use a non-chemical treatment system for the cooling towers at the CRT Building.

Response to Comment I-3-6

Please see Response to Comment ORG-4-30. The proposed project would remove approximately 72 trees, most of which are non-native eucalyptus. The trees to be removed include 5 oaks and 2 bays. The CRT project would not remove 128 trees as stated in the comment, and none of the trees to be removed are redwoods. The proposed project will affect an area of approximately 2.25 acres, not 180 acres as stated in the comment. The proposed project is not located within Strawberry Canyon.

Response to Comment I-3-7

Please see Response to Comment ORG-4-30.

Response to Comment I-3-8

The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Letter No. I-4

January 4, 2007

Attn: Jeff Philliber
Lawrence Berkeley National Laboratory
One Cyclotron Road. MS 90J0120
Berkeley, CA, 94720

Subject: Public Comment Period Submission fora
Computational Research and Theory Facility (CRT) Draft EIR

To Whom It May Concern:

I am concerned with the location of the proposed CRT. Concerns include safety, cost of building and environmental priorities. Questions will also reflect, in my opinion the superiority of relocating the CRT facility within the stated for the CRT project.

1.) (SAFETY PREPAREDNESS) Safety should be a first priority for building sites. Currently inaccessibility, narrow roads, and traffic congestion mar the proposed site. In a natural or other disaster, the cumulative near term building in and near LNBL campus greatly compound safety risk for LBNL, UCB, students, residents and visitors at LBNL & the northeast quadrant of UCB. Therefore, please include any references of transportation demand management studies regarding cumulative effects of the Near-Term Cumulative projects reflected in Table 5.0.-1. Please update and/or request that a cumulative report be done prior to initiating any LBNL building projects 1

2.) (SAFETY PREPAREDNESS) In a disaster, LBNL intends to transport evacuees to BART trains (though BART trains would likely not be running.) Please explain and reference any CRT disaster evacuation plans, including alternatives to BART evacuation. Would not a less congested alternative site off of the LBNL campus, on flatter terrain not in proximity to the Hayward fault, and not on relatively inaccessible hillside, be an advisable alternative and facilitate reasonable evacuation procedures? 2

3.) (INFRASTUCTURE) In Section 6.0-6 states that the Richmond Field Station, as off-site building site, "does not have adequate power supplies to meet future project needs and thus does not meet the CRT project objective of providing accessibility to a large, reliable, and economical electrical power source" that would meet the needs of LBNL's projected computing programs. Therefore, could adequate power supplies be brought &/or built at the Richmond Field station? If CRT were built at an alternative site, what would be any additional footprint at LBNL to adequately serve projected power needs for the LBNL campus? 3

4.) (COSTS) Section 3.9.1 stated that a "dormant landslide" under the proposed CRT was identified. Wouldn't it be cost effective to building in an off-site location such as the Richmond Field in which unstable soil deposits do not have to be excavated? 4

5.) (COSTS)What are the estimated cost differences between building at a relatively flat off-site location and the current proposed location that the report states as a "steep" and "unstable" slope? 5

6.) (LOCATION). An LBNL objective is to foster interdisciplinary environment. Telecommunication could achieve this goal regardless of the proximity to other lab facilities. Additionally transportation from Richmond BART or directly from LBNL campus could be facilitated by public shuttle. Please identify any related transportation study for the Richmond Field station and include travel plans to and from LBNL campus. 6

7.) (REGIONAL APPROACH) Richmond Field Station is a superior location in case of a natural or human made disaster. It is accessible for entrance and evacuation. It is safer for the CRT resource not to be clustered away from LBNL. It should be of primary important for LBNL to place the facility in a location that does not further degrade an environmentally sensitive environment and offers wildlife habitation. 7

(ADDITIONAL QUESTIONS)

8.) Please explain paragraph 3.6.2 Wastewater that "Sub-basin 17-013 is not currently constrained during peak wet weather flows. What effect does this pose to human and environmental health? 8

9.) Would you please include all received comments for the CRT's Notice of Preparation in the CRT EIR? 9

10.) Per recommendation in 2.8 (issues to be resolved/areas of controversy) please include in your report as least as a reference the report "Contaminant plumes of the Lawrence Berkeley National Laboratory and Their Interrelations to Faults, Landslides, and Streams in Strawberry Canyon, Berkeley and Oakland California, published by the Committee to Minimize Toxic West (March 2007). 10

11.) Per recommendation in 2.8 (issues to be resolved/areas of controversy) please include in your report as least as a reference data of all previous landslides that have occurred on or near the LBNL site. 11

12.) I am concerned about toxic contamination from LBNL located in a particularly sensitive area lies within our watershed adjacent to a major population center? As onsite building alternative 51A was rejected because a of previous LBNL contamination of that site's groundwater, but would fulfill the following objective of the 2006 long range objective (4/3-18) "Protect and enhance the site's natural and visual resources … by focusing future development primarily within the already developed areas of this site." Would it not be responsible to follow this 2006 LRPD Objective by clean up this site and build CRT on this already degraded site? What is the timeline and plans for toxic clean up at LBNL, including 51A? 12

13.) (PUBLIC REVIEW PERIOD) I again request that the public comment period for the CRT draft EIR be extended. The timing in the publication of and public review period for the CRT and Helios Energy Research Facility (Helios) Draft EIRs are parallel. Please restate the reasons you gave at the 12/17/08 Helios public hearing for extending the Helios Project. Would not this logic apply also to the CRT project? Is not the spirit of embodied within the California Environmental Quality Act, CEQA mandate that the public be given the same time extension in which to review the CRT? 13

Sincerely,
Gianna Ranuzzi, Berkeley Resident

Response to Comment Letter I-4

Response to Comment I-4-1

As requested by the comment, a cumulative (year 2025) conditions traffic analysis has already been completed (page 5.0-30 to 5.0-34). The cumulative conditions analysis accounts for the buildout of both LBNL and UC Berkeley LRDPs, in addition to planned and proposed projects in the City of Berkeley and surrounding communities. LBNL will implement a Transportation Demand Management (TDM) program as required by LRDP Mitigation Measure TRANS-1d. Berkeley Lab is aggressively pursuing mitigation of its traffic burden on area streets and intersections, even where not required or where impacts are projected to be less than significant. Please see Master Response No. 5, Traffic Demand Management.

Response to Comment I-4-2

The proposed evacuation plan for the CRT project is described under CRT Impact HAZ-1. Alternatives other than those described in detail in Section 6.0, Alternatives, were not analyzed in the Draft EIR for reasons described in that section.

Response to Comment I-4-3

See Master Response No. 1, Alternative Site – Richmond Field Station. If the CRT Facility were constructed at an alternative (off-site) location, there is no indication that any additional footprint at the LBNL site would be necessary to adequately serve projected power needs for the LBNL campus, beyond what is already anticipated in the Lab's 2006 Long Range Development Plan.

Response to Comment I-4-4

The area of the "dormant landslide" is small and the cost of removing the soil and replacing it with compacted fill is negligible.

Response to Comment I-4-5

The cost premium to build on a hillside is approximately $2-3 million. However, an off-site location may not necessarily have reduced costs compared to the proposed project site. For example, the Richmond Field station site, due to its bayside location, is likely to have other geotechnical problems that are not a factor at the proposed CRT site.

Response to Comment I-4-6

The interdisciplinary environment that was pioneered at, and which currently characterizes, Berkeley Lab is one in which researchers have convenient and ready access to their own laboratories, to user facilities, to support staff and resources, and to their fellow researchers and their laboratories, both on a formal and informal level. This concept was developed by the Lab's founder, E.O. Lawrence, and it drives the design of the Lab's latest projects, including the Molecular Foundry, Helios, and CRT facilities. Telecommunication is an important tool for interaction among researchers, but it tends to be limited and formal, and it does not allow for spontaneous, impromptu, and "hands-on" interactions.

Transport to and from the Richmond Field Station would take place along the often highly congested I-80 corridor. There are no traffic studies conducted specifically for travel between the Lab and Richmond Field Station for this project; this was not necessary given the failure of that alternative to meet the proposed project's basic objectives. Please refer to the Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment I-4-7

Please refer to the Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment I-4-8

As stated on page 4.13-3 of the Draft EIR, "wastewater from LBNL's western portion, including the CRT project site, generally flows into sub-basin 17-013 by way of the Hearst Monitoring Station. The sanitary sewer lines on Hearst Avenue are relatively new and in good condition, and they flow directly into the interceptor on Shattuck Avenue. Sub-basin 17-013 is not currently constrained during peak wet weather flows, and it is expected to have future wet weather capacity to meet LBNL's growth needs during the term of the 2006 LRDP (LBNL 2007)." The statement "sub-basin 17-013 is not currently constrained during peak wet weather flows" indicates that the sub-basin has sufficient capacity for sanitary sewer flows during peak wet weather flows. Please see page 4.13-3, 4.13-10 and 4.13-11 for a discussion of sewer conveyance facilities.

Response to Comment I-4-9

Pursuant to CEQA Section 15123, the CRT Draft EIR includes a summary of "areas of known controversy ... including issued raised by agencies and the public;" reproduction of individual comment letters is not required (see Section 2.8). Nevertheless, scoping comments received during preparation of the CRT Draft EIR, including the transcript of the public scoping meeting held on August 8, 2007, will be

produced on a compact disk made available with the Final EIR. This information will also be presented to the UC Regents for their review in their consideration of the CRT project and EIR.

Response to Comment I-4-10

The report referenced in the comment was included as an attachment to comment letter ORG-2. The Final EIR will include reproduction of all Draft EIR comments received during the official comment period. Because voluminous appendices and attachments were also received by various commenters, the CRT Final EIR may include an accompanying compact disk that holds these large attachments. Hard copies of the attachments as well as the accompanying compact disks will be presented along with all other relevant EIR materials to the UC Regents for their review and consideration of the CRT EIR.

Response to Comment I-4-11

Geology and seismic conditions in the area of the proposed project are fully discussed in CRT Draft EIR Section 4.5, Geology and Soils. Data for all previous landslides on or near the LBNL site are not included in this report as such additional information is not relevant to the setting and potential impacts from the proposed CRT Project. A site-specific geotechnical investigation was completed at the CRT project site by Kleinfelder in 2006 that describes landslides on and near the project site.

Response to Comment I-4-12

Groundwater contaminant plumes at LBNL are stable or attenuating and the plumes are not migrating off-site. The 51A area groundwater (Building 51/64 Groundwater Solvent Plume) is being cleaned up under the RCRA Corrective Action Program. Concentrations of groundwater contaminants have been significantly reduced; however, the time required to achieve the required cleanup levels cannot be determined at this time.

The timeline for cleanup at Building 51A is unknown. The extent of contamination cannot be determined at this time because the building is covering the soil. After demolition is completed, a soil investigation will be performed in that area. Based on results, a plan and timeline for remediation will be established. At this time the Lab is continuing with interim corrective measures to collect and treat the contaminated water so that it does not enter the stormwater system.

With regard to the reasons that use of the Building 51A site is infeasible for development of the CRT project, see Response to Comment LA-1-29.

Response to Comment I-4-13

Please refer to Response to Comment ORG-4-1, above. LBNL acknowledges that both CRT and Helios Draft EIRs were released for public review at the same time. That is one of the key reasons that LBNL extended the comment period for the Helios Draft EIR; this allowed the processes to become partially staggered so that the public could benefit from some overlap in reviews (thus allowing side-by-side comparisons and better cumulative assessments of both EIRs), yet also have time to concentrate review efforts on one document first (CRT) and the other project (Helios) later, after close of the first review period. Helios was the project selected for this extra extension (both were originally circulated for longer than the minimum required comment period) because it received far more public attention during the scoping process than did CRT.

Letter No. I-5

1

January 4, 2007

Attn: Jeff Philliber
Lawrence Berkeley National Laboratory
One Cyclotron Road. MS 90J0120
Berkeley, CA, 94720

Subject: Public Comment Period Submission for
Computational Research and Theory Facility (CRT) Draft EIR

To Whom It May Concern:

When I attended the December 17th public hearing for the Helios Energy Research Facility (Helios), I noticed that people unanimously asked that the cumulative projects of the LBNL proposed building be reviewed cumulatively instead of a stand-alone basis. For the record I believe that not having a EIR for the Molecular Foundry and submitting stand-alone EIR for individual LBNL building proposals stands as a basis for invalidating the CEQA process. 1

Because I also noticed that people gave testimony about the CRT at the Helios hearing, I am including below public comments, which five speakers gave at the December 17th hearing. I transcribed these comments from a recorded video. You may compare the authenticity of this record with the record you have from this meeting. Please correct any misspellings of the names of the speakers.

Sincerely,
Gianna Ranuzzi,
Berkeley Resident

I'm **John Shively.** I'm a registered professional engineer and a retiree from the University of California. My University work experience gave me a special insight into the problems of sighting the proposed project like the Helios Energy Research Facility, In the 60's I was a development engineer at the Lawrence Berkeley Lab working on nuclear accelerator design problems, except for 2 years I spent on leave at the Swiss Institute of Technology in Zurich. In the early 70's I worked on the campus as principle engineer in what was then known as the campus' Office of Architects and Engineers. I had design oversight responsibilities for the engineering construction projects on and off the Berkeley campus. Finally in the late 70's until I retired in the early 80's I was the manager of the Richmond Field Station, which is the large off campus 100-acre site that hosts about 10 different engineering laboratories. In my opinion sighting the Helios Project as well as the companion CRT facility in the Berkeley Lab would be a major mistake because of the serious transportation access problems. As it is now LBNL has an existing problem transporting employees, visitors, and materials in and out of the lab. The major construction phase for the proposed complex buildings, utilities, roads and materials on such a difficult site followed by a significant increase in the employees of subsequent operation would create a major and ongoing transportations access problem. Access to LNBL is restricted primarily to Hearst Avenue and Cyclotron Road which are already now at or exceeding capacity. I strongly recommend that before the Draft EIRs are approved that a draft transportation study should be conducted by a licensed transportation engineer of the transportation problems these projects will create. The campus institute office of

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transportation studies could recommend such an engineer from the faculty or outside it by an outside engineer, 4

The rejection of the large Richmond Field station for these facilities based on the argument that there is insufficient electrical power available there is patently false. The Field station is located to the north of Berkeley just off of Interstate 580 in an area adjacent to the San Francisco Bay with ample electrical capacity from the major P.G.&.E. 5
Substation nearby. I'm Sure P.G.&E. can confirm this.

Rapid transit between the field station is good. Transportation between the campus and field station is about 15 m minutes. The University bus between LBNL and the campus takes about 10 minutes. Not a significant difference. 6 Finally I hearby request that the public hearings on both the draft EIRS be continued at least until February of 2008 to give all the affected parties an adequate opportunity to comment on the proposed projects in compliance with the intended spirit of the California Environmental Quality Act, CEQA. 7 In my opinion, it was no accident that these public hearings on these draft EIRs were scheduled in December when the campus community, the lab community and the Citizens of Berkeley, all of whom would be seriously impacted by these projects would be seriously distracted by the end of the academic semester or the pending holidays or would be out of town. In my opinion it was not accidental. Thank-you.

Good evening, my name is **Sylvia McLaughlin**, and I want to thank you for extending the written comment period to February 1st. This should give those interested time to review the draft EIR and provide written comments. Since I have not heretofore had time to read the Helios project building EIR, my remarks will be general and as with the CRT facility be mainly concerned with the proposed location. As with the CRT building, I believe that with construction of the eight story Helios building in Strawberry Canyon is totally inappropriate for the following reasons, 8 (1) This is a high risk fire area. 9 (2) There is a water problem with various springs, aquifers and tributary streams flowing into Strawberry Creek. Flooding has occurred and can occur in the future. 10 3. This area has unstable soil which has been known to slide. 11 4. The proximity to the Hayward Fault. 12 5. The traffic down from the rad-lab is already at capacity as we've heard and the traffic along the Galey-Piedmont Derby-Warring corridor is frequently congested now and will be more congested with UCB's planned new construction including the about 800 car garage under Maxwell Field. 13 Alternatives more appropriate locations do exist especially along the recently designated "Green Corridor" by East Bay Cities. 14 I recommend that the University ecological study area be extended to include this Strawberry Canyon study area. 15 There could be some detrimental effects of unknown consequences from the GMO research affluent getting into Strawberry Creek and going on down through the City of Berkeley. 16 Although BP intends to study the socio-economic effects of their research, I recommend they also study the environmental effects of heir research. Thank you every much.

Thank you every body. My name is **Phila Rogers**. I am a retiree of the Lawrence Berkeley Lab where I worked for 20 years, part of the time as a science writer. I know the Lab intimately and I know the Canyon intimately because during the time that I worked at the Lab I wrote a column for the Lab newspaper on nature and environmental issues. I also gave a class there. That was in a kinder gentler time, I'm afraid.

I think in a way we have an opportunity to take a fresh look at Strawberry Canyon as a precious resource it is. The University was built where it was because Strawberry Canyon and the Creek provided a substantial water source. In the last few years I've been involved with the Audubon Society. I lead bird trips. Yesterday, interestingly enough, was the Christmas bird watch in which 53 species were found in the Canyon including the Golden Eagle, I think that the only truly green building for this site is no building at all. I certainly have much respect for what the Lab has

done and considerable affection for it .I think this building is misguided, both because of its size and primarily because of its placement and I suggest that serious consideration be given to other sites. 17

I have a list here that was published on the front page of the Chronicle about three weeks ago about 50 Bay area bird species placed on the national watch list. Of that list six of them use the slope where the proposed Helios building is for both their breeding and/or their nesting sites.So I suggests that we extend the ecological study area which was a wonderful concept in the 1970s but its been largely ignored since that time. and that we reconsider this incredible riparian resource that can enrich our lives and those creatures that choose to live there. Thank-you 18

I'm **Nancy Schimmel**. I have been walking the fire trail in Strawberry canyon since I came to Berkeley as a freshman in 1952. The big mistake building the Stadium there had already happened but in my time in Berkeley I've seen the other buildings grow up the canyon. This latest building I feel is not going to do enough good in the world to offset the damage it will do to our canyon. I feel that climate change, which is a real and terrible problem, is being grabbed as an excuse by people who are promoting nuclear power or by people who are promoting genetic engineering and in this case by big oil. I think we need to find smaller more local better ways to address this problem than yet building another building in an environmentally sensitive area near an earthquake fault. Thank-you 19

Hello. My name is **Juliet Lamont.** I am an environmental consultant by profession. I am the Outgoing chair of the Bay Chapter of the Sierra club but for all reporters in the room I am not speaking on the behalf of the Sierra Club tonight. I am also a UC Alumni and am a past LBNL employee having worked in building 90 for a full summer on Transportation issues. So I'm familiar with and I'm a Berkeley Resident so you can pick which hat you want but under any of those hats I'm going to say that my familiarity with environmental consulting and sighting is that the first thing you do in good ecologically sensitive design is (that) you look at the site and say, "Does this make sense" And if we are doing to design something on a site you design, as UC Berkeley preaches in it's own departments, You're supposed to design with nature, not against it. Global climate change issues that have come up in the last 20,25 years that we are now so painfully aware of make this imperative even more critical. The buildings that were put in the canyon in the first place for Lawrence Berkeley Lab despite all the good things that you do up there and I was spending a summer there doing what I thought was pretty good research on transportation and public transit. They were put in a bad place to begin with. Just as the Memorial Stadium was put in a bad place, just as the things that were crammed up in that sector of our foot hills which are the most inaccessible places, the places closest to our seismic areas. Those were all bad siteing decisions at the start. We made a mistake. Why, why, with all of the intelligence that we have now, with all of the knowledge, ecological and physical and with all of the scientists we have right there at LBNL, why are we continuing that mistake? Why make that mistake again? And I challenge all of you at LBNL. I agree that there are very good things that can be done in terms of research and at university institutions but there is no way even if we were doing research on creek restoration which I happen to love and that was the supposed rationale for t his building I wouldn't say it's ok and go ahead to put that building there. That doesn't make it ok. That's the wrong approach.What we should be doing is going in and truly walking the walk, not just talking the talk and that means making the difficult decisions of siteing things in places where they make sense. In making sure that we do account for all of the environmental impacts, cumulative and otherwise and that we don't leave our decisions to a final comment of I'm afraid that these impacts are unavoidable. …(END OF TRANSCRIPTION 20

Response to Comment Letter I-5

Response to Comment I-5-1

The Molecular Foundry is a completed project, and it was subject to review under both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The Lab disagrees with the comment that preparing a stand-alone EIR for this project is invalid under CEQA. The Lab is conducting CEQA reviews for its plans and projects in compliance with CEQA. The LRDP EIR included substantial disclosure regarding the CRT project. With this Draft EIR, the Lab is now preparing a follow-up EIR with more detailed disclosure on the project.

Response to Comments I-5-2 through I-5-20

These comments were all made at the public hearing on the Helios project. Responses to these comments will be provided in the Helios Final EIR. Also, these comments generally raise similar issues to those which were raised in other comments on the CRT project and the CRT EIR, and those issues have all been addressed in response to the comments received on this EIR.

Letter No. I-6

COMMENTS ON THE COMPUTER RESEARCH AND THEORY FACILITY DRAFT ENVIRONMENTAL IMPACT REPORT -

SOME OF WHICH WILL ALSO APPLY TO THE HELIOS PROJECT.

SUBMITTED BY
BARBARA ROBBEN
1964 EL DORADO
BERKELEY CA 94707
510-524-2383
JANUARY 4, 2008

AS AN ORDINARY CITIZEN OF BERKELEY, NOT VISITING THE LBNL, I CAN ONLY GUESS WHAT'S GOING ON UP THERE – BUT THAT'S PART OF THE PROBLEM: NEIGHBORS, RESIDENTS OF BERKELEY, TAX-PAYERS – WE'RE ALL ACTUALLY CONNECTED TO WHAT HAPPENS BEHIND THAT FENCED AREA NEXT DOOR. MY GUESS IS THAT THE LBNL HILL AREA IS CONTAMINATED IN SOME WAYS; THAT IT IS A STEEP AREA SEEMS OBVIOUS, SUBJECT TO LANDSLIDES, FAULT RUPTURE, AND FAULTLINE CREEP ... ESPECIALLY DANGEROUS CONSIDERING THE NATURE OF THE EXPERIMENTS BEING CARRIED OUT THERE.

I BELIEVE THAT THE AREA IS SERIOUSLY OVER-BUILT ALREADY. I'M CONCERNED ABOUT LACK OF PUBLIC OVERSIGHT ABOUT WHAT'S GOING ON. THE DANGER OF WILDFIRE ALREADY HAS BEEN PROVEN AGAIN AND AGAIN. I'M WORRIED ABOUT ANY DEMOLITION THAT MIGHT BE DONE ON EXISTING FACILITIES, AND HOW IT WOULD BE HANDLED, AND HOW IT WOULD AFFECT COMMUNITY HEALTH. I WONDER HOW OUR LOCAL AIR QUALITY, SURFACE WATER AND GROUND WATER ARE BEING AFFECTED BY ACTIVITIES AT THE LAB. INCREASED CONGESTION BOTH OF PEOPLE AND OF MOTOR TRAFFIC ARE ISSUES OF CONCERN, BOTH FOR NORMAL OPERATIONS AND IN EVENT OF EMERGENCY. IN SHORT, I THINK YOU SHOULD BUILD SOMEWHERE ELSE if at all.

1

ON THE FOLLOWING PAGES ARE SOME SPECIFIC QUESTIONS.

I DONT BELIEVE THAT YOUR DRAFT EIR IS ADEQUATE INASMUCH AS IT STATES OBVIOUSLY SERIOUS PROBLEMS BUT THEN GOES ON TO CLAIM "NO SIGNIFICANT IMPACT" OR "MITIGATED IMPACT." 2

MY MOST SERIOUS OBJECTIONS TO LBNL'S BUILDING PLANS CONCERN THE GEOLOGY AND HYDROLOGY OF THE HILL AREA - WHICH TO ME MEAN "NO PROJECT", OR "PROJECT ELSEWHERE." I WOULD LIKE TO SEE THE EIR ADDRESS THE SCENARIO NOT ONLY OF A LANDSLIDE THAT WOULD BURY A PARKING LOT, BUT OF A LAND-SLIDE OR EARTHQUAKE THAT WOULD RELEASE HARMFUL SUBSTANCES FROM A SHATTERED BUILDING, OR FROM MANY SHATTERED BUILDINGS. 3

WHAT IS THE COST DIFFERENCE BETWEEN BUILDING ON A STEEP HILLSIDE USING ADVANCED ENGINEERING TECHNIQUES IN COMPARISION WITH BUILDING IN A MORE SUITABLE LOCATION? PLEASE ADD A COST COMPARISON TO THE EIR. 4

IN CASE OF DISASTER, WHO WOULD PAY FOR A RE-BUILD IF NECESSARY? WE, THE PUBLIC, MAY BE PAYING FOR LBNL'S ENTHUSIASTIC BUILDING ENTERPRISES AGAINST OUR WILL THE FIRST TIME: WHAT IS U.C.'S EQUIVALENT OF HOMEOWNER'S EARTHQUAKE INSURANCE? PLEASE ANSWER THIS. 5

I WOULD LIKE TO SEE THE ACTUAL RESULTS OF YOUR GROUNDWATER AND SURFACE WATER TESTING - RATHER THAN TO ONLY BE ASSURED THAT YOU DO IT. 6

CONSIDERING THE FREQUENCY OF LOCAL HILL WILDFIRES, IT'S HELPFUL TO RECALL THE OAKLAND HILLS FIRE OF 1991. REMOVAL OF LBNL EUCALYPTUS WONT STOP A CONFLAGRATION 7

OF THAT MAGNITUDE, AND THE NATURE OF THE CANYON WOULD DRAW FLAMES UPWARD FROM A FIRE ORIGINATING BELOW: THE CHIMNEY EFFECT. THE DRAFT EIR MOSTLY ADDRESSES EMPLOYEE SAFETY AND EVACUATION IN CASE OF FIRE, BUT NOT THE WELL-BEING OF THE AREA AS A WHOLE IN CASE OF AN INFERNO AND TOXICS ESCAPE. 7

IN CONNECTION WITH THE 584 TRUCK LOADS OF FILL, OR DEMOLITION REMOVAL FROM OTHER LBNL PROJECTS, WHAT PLANS HAVE YOU FOR HEARST TO ALLOW FREE-FLOW OF TRAFFIC ON THAT STREET? WHAT PLANS ARE THERE FOR RETURNING THE LANE OF TRAFFIC AND/OR LANE OF PARKING ALREADY APPROPRIATED BY U.C. LONG-TERM FOR ITS CAMPUS CONSTRUCTION PROJECTS? IN THE ORAL COMMENTS I WAS FIRM IN SAYING THAT ANY CONSTRUCTION TRAFFIC FROM THE U.C. HILL AREA SHOULD PLAN TO MOVE THRU THE U.C. CAMPUS RATHER THAN THRU CITY STREETS WHERE POSSIBLE, SINCE, IF THE MATERIALS ARE BENIGN, IT WOULD BE NO HARDSHIP FOR U.C. TO ARRANGE FOR THEIR OWN POLICE FORCE TO ENSURE PEDESTRIAN SAFETY - BUT! - IF THERE IS SOME PROBLEM WITH DUST EXPOSURE OR TOXICITY, THEN NEIGHBORS SHOULD NOT BE SACRIFICED BY USING PUBLIC STREETS. PLEASE SPECIFICALLY ADDRESS THIS ALTERNATIVE IN YOUR EIR. 8 9

CLUSTERING BUILDINGS FOR THE CONVENIENCE OF USERS WOULD BE DESIRABLE EXCEPT FOR THE RISK OF PUTTING THE CLUSTER IN SUCH AN UNSAFE LOCATION: CONSIDER PLACING YOUR CLUSTER ELSEWHERE. PLEASE ADDRESS THE DIS-ADVANTAGES OF STARTING A 'CONVENIENCE CLUSTER', AND WHERE THAT IDEA MIGHT LEAD, ESPECIALLY CONSIDERING THE SAFETY CONCERNS AND DENSITY ON THE HILL. 10

FURTHER MATTERS WHICH I WOULD LIKE YOU TO ADDRESS:

WHY IS THERE LITTLE APPARENT OBJECTION TO LBNL'S BUILDING PLANS FROM LAB EMPLOYEES AND U.C. FACULTY? I LISTEN TO THOUGHTFUL LECTURES BY THEM AND READ PUBLISHED REPORTS BY U.C. SCHOLARS — REPORTS THAT RUN COUNTER TO YOUR DRAFT EIR CONCLUSIONS. ARE PEOPLE BEING MUZZLED IN SOMEWAY? PLEASE EXPLAIN THE OPPORTUNITIES FOR OPEN DEBATE AVAILABLE TO THOSE WHO DRAW SALARIES FROM U.C. ARE THERE ANY CONSEQUENCES FOR HOLDING AN OPINION CONTRARY TO ONES PROMOTED BY THE LAB OR THE ADMINISTRATION? I DO KNOW WHY ALUMNI DON'T OBJECT, AS I RECEIVE PUBLICATIONS DIRECTED TO ALUMNI, WHERE CONTROVERSIAL MATTERS ARE QUITE NICELY HIDDEN BENEATH SUGAR COATING. 11

CONCERNING THE OBSOLESCENCE OF COMPUTERS (3 YRS.): PLEASE ADDRESS THE ENVIRONMENTAL IMPACTS ON BOTH THE MANUFACTURING OF NEW EQUIPMENT AND THE DISPOSAL OF DISCARDED EQUIPMENT. 12

AND FINALLY, HOW DOES LBNL JUSTIFY CERTIFYING ITS OWN EIR? 13

I NOTED SOME ERRORS AND OMISSIONS IN THE DRAFT EIR:

Section 6.0-11 ALTERNATIVE 2 IS CALLED ALTERNATIVE 3 IN SOME PARTS. 14

MAPS HAVE A SCALE ON THEM, USUALLY IN FEET, BUT THE CONTOUR INTERVAL IS MISSING ON ALL. THIS APPLIES TO MAPS 3.0-4 3.0-5 3.0-6 4.5-1 4.7-1 4.8-1 AND FIGURE 3. 15

p.77 MANDATORY FINDINGS OF SIGNIFICANCE: IT SEEMS TO HAVE NO TITLE, AND IS ADDED ONTO THE PREVIOUS SECTION IN AN UN-EXPLAINED FASHION. 16

fig. 3.0-1S SIMILAR TO fig. 1., WHICH IS HIDDEN AWAY BETWEEN p. 12 AND p. 16 IN AN APPENDIX -THOUGH THE C.R.T. AREAS DO NOT MATCH. THE SAME IS TRUE FOR fig 3.0-2 AND fig. 2. 17

ACRONYMS AND ABBREVIATIONS: COULD YOU PUT THIS SOMEWHERE LOGICAL, SUCH AS AT THE BEGINNING? ONE REALLY NEEDS IT AT THE OUTSET, AS EVEN YOUR FRONT COVER CONTAINS AN ABBREVIATION, AND THE TABLE OF CONTENTS DOES, AS WELL.
ALSO, QUITE A FEW ABBREVIATIONS DO NOT APPEAR IN THE 10 PAGES: COPC, SCAQMD, HPC, RMW, etc, AND A SCATTERING OF OTHERS SUCH AS PS, LTS, NI, HAZ, VIS, MM etc. 18

OBSERVATIONS: THIS REPORT IS QUITE DIFFICULT TO FIGURE OUT. FOR INSTANCE, GEOLOGY AND SOILS WILL BE FOUND IN SEC. 4.5 THRU 4.5-15 AND AGAIN IN SEC. 2.8 BUT THIS SECOND REVIEW IS NOT TO BE FOUND IN THE TABLE OF CONTENTS – NOR ARE FURTHER APPEARANCES OF THE SUBJECT IN SEC. 2.0-10, 5.5-22, AND ALSO ON PAGE 37 AT THE REAR OF THE REPORT, PLUS PAGE 12 OF THE APPENDIX AND PAGE 37 OF THE APPENDIX. 19

SIMILARLY, WATER ISSUES APPEAR IN SECTION 3.6-2, 3.6-3, 4.7-1 THRU 4.7-18 AND IN FIG. 3.0-15, BUT ALSO IN SOME AREAS NOT IN THE TABLE OF CONTENTS, SUCH AS 2.0-11, 4.13-2, 4.13-3, 4.13-11, 5.5.7, AND ADDITIONALLY ON p. 45 AT THE REAR, AND ON p. 20 IN MITIGATIONS APPENDIX. 20

CUMMULATIVE IMPACTS ARE NOT SUB-DIVIDED AT ALL IN THE TABLE OF CONTENTS – AND THESE CUMMULATIVE IMPACTS ARE REALLY THE MOST IMPORTANT ONES TO TRY TO UNDERSTAND. 21

TWO DIFFERENT SECTIONS AT THE BACK OF THE REPORT USE CHRONOLOGIC ARABIC NUMBERING SYSTEMS, BUT THEY ARE UNRELATED. 22

THIS COMMENT REGARDS MY PERSONAL EXPERIENCES AND OPINIONS ABOUT THE DIFFICULTY OF OBTAINING DOCUMENTS AND OF MAKING COMMENTS, EITHER ORALLY OR WRITTEN. IT REFLECTS ON LBNL's GENUINE REGARD FOR THE COMMUNITY'S CONCERNS.

I HAVE NO PERSONAL QUARREL WITH LBNL, AS WHEN I REQUESTED COPIES OF THE DOCUMENTS, THEY WERE PROMPTLY DELIVERED IN PERSON TO MY HOME, AND FOR THAT I THANK YOU.

I MUST SAY, HOWEVER, THAT I HAD PREVIOUSLY GONE TO CONSIDERABLE EFFORT TO FIND OUT ABOUT THE PROPOSED PROJECT, AND NOT EVERYONE WOULD BE KNOWLEDGABLE ENOUGH TO FIND THE TELEPHONE NUMBER TO REQUEST THE COPIES.

WE WHOSE JOB NOW IS TO COMMENT ON THE DRAFT EIR NEED TO HAVE THE DOCUMENT IN HAND. AT 1½ INCHES THICK, IT IS NOT QUICK READING. I CARRIED MINE AROUND WITH ME TO GET THRU IT, INDEXED IT WITH POST-IT NOTES, AND BROUGHT IT WITH ME TO THE PUBLIC COMMENT PERIOD. THIS WOULD NOT BE POSSIBLE WITH A LIBRARY COPY. AT THE PUBLIC COMMENT PERIODS, PEOPLE STARED AT MY COPY WITH ENVY. AS A RESULT, I REQUESTED THAT LBNL HAVE PAPER COPIES OF THE DRAFT EIR AT THE PUBLIC COMMENT PERIODS. I WAS TOLD THAT THEY WERE: TOO EXPENSIVE, AND THAT ONLY A CERTAIN NUMBER OF COPIES WERE INCLUDED WITH THE *Impact Sciences Report*, AND THAT IT CONSUMED TOO MUCH PAPER.

23

I WAS TOLD THAT CDs WERE AVAILABLE, BUT I MYSELF DON'T HAVE THE EQUIPMENT OR KNOWLEDGE TO ACCESS INFORMATION IN THAT FORM. I DID ASK THE COST OF CD's, AND WAS TOLD IT WAS 50¢, SO I DID ASK FOR CD's TO BE AVAILABLE TO CITIZENS AT THE PUBLIC COMMENT PERIODS, BUT THIS DID NOT HAPPEN. 23

QUESTION: HOW MANY PAPER COPIES OF THE DRAFT EIR REPORTS WEREORDERED, AND HOW MANY COPIES OF THE FINAL EIR WILL BE AVAILABLE?

QUESTION: HOW MUCH DID LBNL PAY THE CONSULTANT WHO CREATED THE REPORTS? WHAT IS THE COST PER COPY FOR ADDITIONAL COPIES? 24

THEREFORE, I REQUEST THAT THE PUBLIC COMMENT PERIOD FOR THE C.R.T. BE EXTENDED.
WHEN CITIZENS REQUESTED EXTENSIONS OF COMMENT PERIODS FOR BOTH THE C.R.T. AND THE HELIOS PROJECTS, THE HELIOS EXTENSION WAS GRANTED, BUT THE C.R.T. EXTENSION WAS DENIED. 25

QUESTION: WHO MAKES THESE DECISIONS? AND ON WHAT BASIS?

PUBLIC INPUT AND COMMENT PERIODS:

I PERSONALLY APPEARED AT THE AUGUST SCOPING SESSION FOR THE COMBINED C.R.T. AND HELIOS PROJECTS. IT WAS HELD WHEN Cal WAS NOT IN SESSION.

QUESTION: WHO DETERMINES WHEN THESE PUBLIC HEARINGS WILL BE HELD, AND HOW IS IT DETERMINED?

AN EVEN MORE FLAGRANT EXAMPLE OF THE STEATH INVOLVED IN CHOOSING DATES FOR PUBLIC INPUT OCCURRED THIS DECEMBER, WHEN THE COMMENT PERIODS TOOK PLACE DURING FINALS WEEK AND THE WINTER HOLIDAYS. ALL THE DATES OFFERED FOR COMMENT CONFLICT WITH THE AVAILABILITY OF THE Cal CAMPUS TO MAKE THEIR OPINIONS KNOWN. NOT ONLY IS THE CAMPUS COMMUNITY OUT-OF-TOWN OVER THE WINTER BREAK, BUT THE DAILY Cal DOES NOT PUBLISH AT ALL!

26

PLEASE JUSTIFY YOUR CHOICE OF DATES, OR BETTER, GRANT EXTENSIONS TO THE COMMENT PERIODS, AND PUBLICIZE THE EXTENSIONS, AND MAKE THE NECESSARY DOCUMENTS AVAILABLE TO THE PUBLIC IN SUFFICIENT QUANITY.

THIS IS HARD ENOUGH, WITHOUT HAVING OUR HANDS TIED. I PERSONALLY THINK THOSE OF US WHO GET THRU THIS SHOULD BE CONSIDERED FOR HONORARY DEGREES.

Response to Comment Letter I-6

Response to Comment I-6-1

This comment is an introduction to comments that follow. The topics raised are addressed in the responses to subsequent comments.

Response to Comment I-6-2

The comment does not specifically address areas where, in the commenter's opinion, the Draft EIR is inadequate. The Draft EIR addressed all of the environmental topics required under CEQA. For most areas where project impacts were found to be significant, mitigation was identified to reduce impacts to a less than significant level. The Draft EIR also identified impacts that could not be reduced to a less than significant level. Furthermore, the CRT Facility Draft EIR incorporates all mitigation measures adopted as part of the 2006 LRDP, which would reduce some project-level impacts to a less than significant level, and includes additional project-specific mitigation measures.

LBNL reports such results routinely in several ways. Each year it prepares a site environmental report that both summarizes sampling results and lists individual results. Reports going back to the mid-1990s are available online at http://www.lbl.gov/ehs/esg/tableforreports/tableforreports.htm. LBNL's Environmental Restoration Program also publishes reports under a program regulated by the state of California. Quarterly reports and other documents specific to this program are available online at http://www.lbl.gov/ehs/erp/html/documents.shtml. Printed copies of site environmental reports and Environmental Restoration Program documents are also available at the Berkeley Public Library.

Response to Comment I-6-3

Hydrologic and geologic conditions of the site, including seismicity and potential for landslides, are analyzed in CRT Draft EIR Section 4.5, Geology and Soils and Section 4.7, Hydrology and Water Quality. LBNL's detailed slope stability mapping (LBNL, 1999) did not identify potential slope instability above the proposed small CRT parking area. The scenario of a "shattered building" releasing harmful substances following an earthquake is extremely unlikely, as the proposed building would be built to current codes for seismic safety. Furthermore, as noted on page 4.6.-10 in the Draft EIR, compliance with federal, state and local rules and regulations and LRDP Mitigation Measures HAZ-3a through HAZ-3f would reduce potential impacts to the public and the environment associated with accidental release of hazardous materials. Therefore, a scenario in which harmful substances would be released into the environment in the event of a natural disaster is not reasonably foreseeable.

Response to Comment I-6-4

The cost premium to build on a hillside as compared to a relatively flat site is approximately $2-3 million. However, significant additional costs could be associated with an alternate site. See Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment I-6-5

In the unforeseeable event of destruction of the building, the University of California would pay to rebuild the building. In any event, CEQA does not require that economic effects of a project be analyzed in an EIR, except to the extent that these economic effects may be used to determine the significance of physical effects on the environment (State CEQA Guidelines, Section 15131). Here, no physical effect was identified, and thus social and economic concerns are not evaluated.

Response to Comment I-6-6

LBNL reports such results routinely in several ways. Each year it prepares a site environmental report that both summarizes sampling results and lists individual results. Reports going back to the mid-1990s are available online at http://www.lbl.gov/ehs/esg/tableforreports/tableforreports.htm. LBNL's Environmental Restoration Program also publishes reports under a program regulated by the state of California. Quarterly reports and other documents specific to this program are available online at http://www.lbl.gov/ehs/erp/html/documents.shtml. Printed copies of site environmental reports and Environmental Restoration Program documents are also available at the Berkeley Public Library.

The EIR includes, by reference, several of the latest surface and groundwater monitoring reports completed by LBNL (LBNL 2007a, 2007b, 2006b, 2005). These documents are available at http://www.lbl.gov/ehs/erp/html/documents.shtml.

Response to Comment I-6-7

The Lab is concerned with the potential threat of risk of fire hazards to the entire Lab site. The Draft EIR's impact analysis of wildland fires is contained in Section 4.6, Hazards and Hazardous Materials, and addresses the following threshold:

Would the project "Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?" Wildland fires are discussed on pages 4.6-13, 4.6-14, 5.0-23, and 5.0-24 of the Draft EIR. Cumulative impacts associated with potential wildland fires in the project vicinity are considered in Section 5.0, Cumulative Impacts. The Lab's vegetation management plan would reduce fire

risk. Please refer to Response to Comment I-6-3, above for a discussion of the potential for accidental releases of hazardous materials into the environment.

Response to Comment I-6-8

The project team has met, and will continue to meet, with the City of Berkeley to discuss traffic. The Lab and City staff have discussed signal timing and other options for traffic control.

As required by LRDP Best Practices 6a through 6c, a Construction Traffic Management Plan (CTMP) would be prepared and implemented to lessen the impacts of construction on transportation and parking (page 4.12-37). The CTMP would propose truck routes and limit truck traffic during peak commute times to lessen potential interruptions to traffic flow on City streets, including Hearst Avenue.

The portion of eastbound Hearst Avenue between Euclid Avenue and LeRoy Avenue is currently closed to through traffic and parking to provide staging space for UC Berkeley's CITRIS Project. This portion of Hearst Avenue would be returned to public use after the completion of the CITRIS project expected in January 2009.

Response to Comment I-6-9

The use of internal UC Berkeley roadways by construction trucks or other vehicles traveling to and from LBNL is currently not feasible due to the layout of the campus and its internal roadways. The internal UC Berkeley campus roadways are not designed to accommodate construction trucks traveling through the campus. In addition, construction trucks would conflict with heavy pedestrian and bicycle traffic inside the campus.

Air quality impacts related to construction traffic are addressed in Section 4.2, Air Quality, of the Draft EIR.

Response to Comment I-6-10

Potentially feasible location options were explored at the start of the project. The current location was found to best meet the requirements and program goals of the project.

As discussed in Section 4.4, Geology and Soils, of the Draft EIR, the building is designed for the site and seismic zone.

Response to Comment I-6-11

The University of California does not prohibit or discourage its employees from exercising their right to comment - either positively or negatively - on the merits of the Environmental Impact Reports prepared for its proposed projects. In fact, LBNL staff have been encouraged to participate in the CEQA process as evidenced by widespread in-house advertisement of the CRT scoping process, scoping meeting, and EIR public hearing, and of availability of the scoping and Draft EIR documents. One of the more vocal participants at the CRT scoping, public hearing, and Berkeley planning commission meetings, who also has provided written comments, is an LBNL employee. Notably, many LBNL staff and U.C. faculty have likewise been vocal in their enthusiasm and excitement about CRT and other recently proposed projects at Berkeley Lab.

Response to Comment I-6-12

Major systems at NERSC are operated for about 6 years, which is about the extent of their usefulness in cutting-edge research. When decommissioned, the system is offered for surplus to other government users. If there are no users, the system is disposed of and recycled by contract with a vendor licensed to properly dispose of and recycle components.

Response to Comment I-6-13

The decision to certify the CRT EIR will be undertaken by the UC Regents, not LBNL. The EIR has been prepared by an independent consulting firm, and certain specific issues have been addressed by additional technical consultants with expertise in these areas.

Response to Comment I-6-14

The comment is noted. The errors are corrected in Section 3.0, Revisions to the Draft EIR, in this document.

Response to Comment I-6-15

The comment is noted. Figure 3.0-4, Site Plan with Mechanical Equipment Locations, Figure 3.0-5, Conceptual South Elevation, Figure 3.0-6, Conceptual Utility Relocation Plan, Figure 4.5-1, Seismic Hazard Zone Map, Figure 4.7-1, Storm Drainage Facilities and Sampling Location Near Project Site, and Figure 4.8-1, 2006 LRDP Land Use Diagram in the Draft EIR, and Figure 3, Conceptual CRT Site Plan, in the CRT Facility Notice Preparation (NOP), include an approximate scale. Figures 3.0-4, 3.0-6, and 3.0-8 show 2-foot and 10-foot contour intervals and key elevations. Figures 4.5-1 and 4.7-1 show 20-foot and 100-foot contours.

Response to Comment I-6-16

The comment is referring to page 77 of the CRT Facility Notice of Preparation (NOP) included as Appendix 1.0 to the Draft EIR. Pursuant to the State CEQA Guidelines, a lead agency can find that a project may have a significant effect on the environment and therefore require an EIR to be prepared for the project based on the potential for the project to result in significant environmental impacts (Section 15065). The checklist for Mandatory Findings of Significance is included in Appendix G of the State CEQA Guidelines, which includes a checklist of environmental factors to be considered by the lead agency.

Response to Comment I-6-17

The comment is noted. Figure 1, Project Regional Location and Figure 2, Approximate Project Site in the CRT Facility NOP depicts the approximate boundary of the project site. Subsequent to the scoping period for the proposed project, the project design was refined to include the area shown in Figure 3.0-2, Approximate Project Site. The Draft EIR analyzed this larger project footprint. As indicated by the figure title, this revised boundary is approximate and therefore it could be revised in the process of completing the project design. Expansions of the environmental footprint beyond the boundary shown would be subject to further environmental analysis under CEQA.

Response to Comment I-6-18

The comment is noted. Revisions are included in Section 3.0 of this Final EIR document.

Response to Comment I-6-19

Section 1.6, Report Organization in Section 1.0, Introduction of the Draft EIR describes the organization of the Draft EIR document. Additionally, Section 4.0, Environmental Setting, Impacts and Mitigation Measures provides an approach to the impact analysis, levels of significance and a key to the impact analysis. The comment is noted.

Response to Comment I-6-20

Please refer to Response to Comment I-6-19, above.

Response to Comment I-6-21

Revisions to the Table of Contents for the Draft EIR are included in Section 3.0 in this Final EIR document. The comment is noted.

Response to Comment I-6-22

Appendix 1.0, Notice of Preparation and Initial Study, which follows Section 9.0 (the final section of the Draft EIR), reproduces the original Arabic page numbering of the NOP and Initial Study. The Initial Study itself includes an appendix (Appendix A) with a separate Arabic page numbering system.

Response to Comment I-6-23

LBNL has not charged any fee for compact disk versions of this or any other CEQA or NEPA document. In fact, in an effort to conserve energy and paper and to minimize costs, LBNL strongly encourages the public to accept compact disks, on-line versions of documents, and the public library hard-copies of the Lab's CEQA and NEPA documents.

The CRT EIR is expensive and resource-intensive to produce, and storage space at LBNL is at a premium. Furthermore, CEQA does not require that hard copies of EIRs be provided to anyone who might request them, particularly when these documents are made available to the public in so many other forms. Finally, LBNL generally provides hard copies to anyone who asks for them so long as such copies are available. It is for these reasons that it is not practical for LBNL to produce and store large quantities of extra EIRs so that they might be available for people who have not requested them in advance.

Response to Comment I-6-24

The total amount to be paid to LBNL's environmental consultants is not yet known, as the work will include preparation of this Final EIR as well as possible additional CEQA work. The University has committed to provide funds sufficient to support the substantial analysis that is included in the EIR and in supporting studies, including risk assessment, traffic, biological, hydrology, and other supporting studies and analyses.

Additional copies of the CRT Draft EIR, which is 630 pages long and includes binding, covers, color prints, and mailing and handling, cost approximately $60 each. The CRT Final EIR, which will be a substantially longer document given the additional sections and comment letters, would cost more than that if it were to include a reprinting of the Draft EIR.

Response to Comment I-6-25

Please refer to Response to Comment I-4-13, above. The decisions regarding the public comment periods were made by Laboratory management in consultation with Laboratory environmental staff. The decision whether to certify the EIR will be made by the Regents.

Response to Comment I-6-26

Please see Response to Comment ORG-4-1, above. The schedule was based upon the time needed to develop the design and gather data to prepare the Draft EIR. The schedule was originally created to meet the January 2008 UC Regents meeting and was not determined by when UC Berkeley was in session.

Letter No. I-7

Jeff Philliber, Environmental PlannerPl
Lawrence Berkeley National Laboratory

January 2, 2008

I am submitting these documents to become part of the comment on the draft EIR for the Computational Research and Theory (CRT) Facility.

It is inappropriate to consider locating the CRT Facility on the proposed hillside site which is part of the Strawberry Creek Watershed. Please note that the following documents show LBNL to be within the watershed. Offsite alternatives should be seriously considered. 1

Sincerely,

Phila Rogers

Phila Rogers

List of Documents

1. Strawberry Creek Management Plan. Prepared by Robert B. Charbaonneau, Office of Environmental Health and Safety, University of California at Berkeley. December 1987

2. An Environmental Analysis of Potential Development Sites in the East Hill Area (Strawberry Canyon) of Berkeley, California. Terence O'Hare

3. Management Plan for Strawberry and Claremont Canyons. !979. Prepared by: Joe McBride, Chairman, committee on Conservation and Environmental Quality (1978)

4. An Ecosystem Analysis – Strawberry Canyon - Hal E. Flemming

5. Strawberry Canyon University of California. A land use and vegetative study. By Garrett Eckbo & Associates for the Office of Architects and Engineers. June 1976

Response to Comment Letter I-7

Response to Comment I-7-1

The comment correctly notes that the proposed project site is located within the Strawberry Creek watershed, as described in Section 4.7, Hydrology and Water Quality, of the Draft EIR. However, the project site is not located within Strawberry Canyon (see Figure 4.0-1, at the end of Section 4.0). The attachments included as part of the comment letter will be included as part of the record for this project. The letter does not make any comments on the Draft EIR based on these enclosures. With respect to the general issues identified in these enclosures, LBNL notes in response the following:

- The first enclosure is the 1987 Strawberry Creek Management Plan. The Draft EIR evaluates impacts on water quality, including runoff to Strawberry Creek, in Section 4.7, and that analysis is based in part on a more recent 2005 working version of the Strawberry Creek Management Plan. The EIR concluded that, after imposition of mitigation measures, impacts to water quality would be less than significant.

- The remaining documents are papers and plans prepared between the mid-1970s and 1982 regarding Strawberry Canyon and potential development sites in Strawberry Canyon. As noted in Master Response No. 3, Strawberry Canyon Cultural Landscape Claims, the CRT project site is not located within what is commonly known as Strawberry Canyon. One of these attachments, the 1976 Eckbo study, includes a map which delineates Strawberry Canyon for the purposes of that study, and that delineation of Strawberry Canyon does not include the CRT site.

Generally, however, these older documents evaluate the same types of issues as were evaluated in the Draft EIR.

The comment expresses the opinion of the commenter that the CRT facility should not be located on a hillside site which is part of the Strawberry Creek watershed. The Draft EIR evaluated two alternatives which would avoid development on this site, the "no project" alternative and the "alternate LBNL location" alternatives. The comment will be included as part of the record and will be available to the decision makers as they consider their decision on the proposed project.

Letter No. I-8

January 2, 2008

Jeff Philliber , Environmental Planner
Lawrence Berkeley National Laboratory (LBNL)
One Cyclotron Road, MS 69-201
Berkeley, CA 94720

Re: Computational Research and Theory (CRT) Facility;
Draft Environmental Impact Report (DEIR)

Dear Mr. Philliber:

This is written in response to the call for written public comment on the subject project DEIR, due before 5 p.m. on Friday, January 4, 2008, and in compliance with the requirements of the California Environmental Quality Act (CEQA).

I hereby demand that the required public and written comment periods for this project be postponed at least two months and be rescheduled for the following reason. I believe the scheduling of these comment periods in December and early January was no accident; it was intentional. This is the time when the campus community would be preoccupied by the end of the semester activities, the town citizenry would be distracted by the holidays, and many would be out of town. The project managers must have known that this was the time for minimal public awareness, and thus minimal public opposition. 1

This CRT project and the companion Helios project, are both proposed to be sited up at LBNL. The CRT project would be accessed primarily via Cyclotron Road, up from Hearst Avenue, the narrow two-lane street that is the primary access to the lab. The combination of these two projects is expected to bring an estimated 800 additional new employees to the lab and with them an absolutely predictable negative consequence for the automotive traffic load on Berkeley's already congested streets. These projects will certainly exacerbate the existing traffic problem on Hearst Avenue. The combined traffic expected by these two projects should be studied and reported on by the UC Berkeley Institute of Transportation Studies - before any DEIR approval is granted. 2

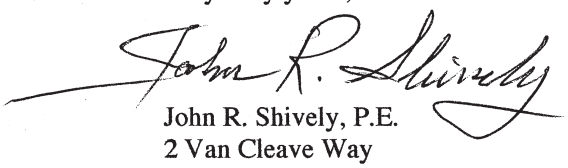
The nearby Richmond Field Station (RFS) on the Bay is an excellent alternative site, for both the CRT and the Helios projects. However it has received short shrift in both DEIRs, through errors of fact and in misrepresentation. The alleged inadequacy of electricity at RFS is false. It is in an industrial area with a major PG&E power substation nearby. The allegation that the station has an unacceptable level of toxicity is also false. It was used for munitions manufacturing during WWII. However the residues are low, and insufficient to render it unacceptable. Finally there seems to be confusion between the RFS site and the adjacent former Stauffer Chemical company site that produced toxic chemicals for the Vietnam War. Stauffer was frequently cited for it's clean up failures. Curiously the Stauffer plant and offices have since been completely eradicated. 3

Page 1

It appears that LBNL and the university president's office want the CRT project, as well as the companion Helios project, to be *built up inside the lab*. And they want the related DEIR's rushed through with minimal opportunity for public review. Projects of this size and with these significant potential environmental impacts demand an honest opportunity for the public to know about the actual environmental impacts. They must have a bona fide opportunity for the public to comment critically on them. As it stands now the spirit, as well as the intent of CEQA, has been denied by the university, by the holiday timing of the existing DEIR schedule. 4

Please immediately extend the schedules for the DEIR public and written comment periods for both projects as requested.

Very truly yours,



John R. Shively, P.E.
2 Van Cleave Way
Oakland, CA 94619-2340
Tel: 510-531-1355
jrshively@gmail.com

cc: LBNL Director, Dr. Steven Chu
UC President, Dr. Robert Dynes
The Berkeley City Council
UCB Institute of Transportation Studies

Response to Comment Letter I-8

Response to Comment I-8-1

Please refer to Response to Comment I-4-13, above.

Response to Comment I-8-2

Although the area surrounding the project site experiences congestion during peak commute times, the Bancroft Way/Piedmont Avenue intersection is the only study intersection currently operating at unacceptable LOS F during both AM and PM peak hours (Table 4.12-3 on page 4.12-9 of the Draft EIR). Other study intersections are forecast to degrade to unacceptable LOS E or LOS F under Near-Term or Cumulative conditions regardless of the proposed project. The Draft EIR identifies a number of significant and potential improvements to reduce the magnitude of these impacts.

See Response to Comment I-5-2, regarding review of the Draft EIR by UC Berkeley ITS.

Response to Comment I-8-3

Please refer to Master Response No. 1, Alternative Site – Richmond Field Station. The Richmond Field Station was rejected primarily for reasons of accessibility and power supply, and not due to contamination concerns as stated in the comment.

Response to Comment I-8-4

The construction and operation of the CRT facility is fully examined pursuant to CEQA in the CRT Draft EIR. For discussion on timing and length of public comment periods, please refer to Response to Comment I-4-13, above.

Letter No. I-9

1/4/08

Attention Mr. Philliber

Please find enclosed a disk documenting further aesthetic impacts from multiple locations in the Bay Area of proposed CRT building in Strawberry Canyon. 1

sincerely,

Stewart Jones

Response to Comment Letter I-9

Response to Comment I-9-1

The comment letter includes a CD containing a compilation of photographs taken of the project site and other views from various locations in the vicinity of the City of Berkeley. The comment letter states that these photos are intended to document aesthetic impacts of the proposed project, but the photographs generally show views of parts of the Berkeley Hills from various perspectives, and they do not include any simulation of or comparison to the proposed project. Most of the photographs are taken from vantage points from which the CRT facility would not be visible. As noted in the Draft EIR, the visual simulations in the Draft EIR were taken from the locations with the most direct view of the site changes. As noted in this Final EIR, the CRT project as revised is even less visible from these viewpoints with a direct view. The photographs in this packet either are of another part of the Berkeley Hills, or do not show the hills at all, or are from a distant location, and they do not demonstrate any visual or aesthetic impact that is not already evaluated in this EIR.

FINAL

PUBLIC HEARING

FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE COMPUTATIONAL RESEARCH AND THEORY FACILITY (CRT), LAWRENCE BERKELEY NATIONAL LABORATORY

FINAL TRANSCRIPT

Monday, December 10, 2007

North Berkeley Senior Center

1901 Hearst Avenue

Berkeley

6:30 - 8:30 p.m.

REPORTER'S TRANSCRIPT OF PROCEEDINGS
BY: JUDY LARRABEE, SHORTHAND REPORTER

CLARK REPORTING AND VIDEOCONFERENCING

2161 SHATTUCK AVENUE, SUITE 201

BERKELEY, CALIFORNIA 94704

(510) 486-0700

PROCEEDINGS

MR. MEDLEY: Good evening, everyone. Thank you for coming tonight. My name is Don Medley. I'm the manager of Government and Community Relations at Lawrence Berkeley National Laboratory.

We're here tonight for the public hearing on the Draft EIR of the proposed Computational Research and Theory Facility at Berkeley Laboratory.

Just a few logistical points of information. The bathrooms are out the door and to the left. The meeting tonight is going to be for up to two hours from 6:30 -- it's about 6:33 now -- until 8:30.

As you came in, there's the welcome table. There's a couple pieces of information and documents that you may be interested in. There's a fact sheet. There's also two cards. One is blue, this card. If you'd like to speak, please fill out one of these and bring them up here to the table. Please print clearly and put all your contact information so we'll be able to follow up with you with responses to your comments.

The salmon-colored cards which Terry Powell

is holding are for you to submit comments. You can either leave those with us tonight or you can mail them to us.

We have a court reporter here tonight sitting here to my right. She will be recording the proceedings of the hearing and it will be the official laboratory record of the hearing. we will be taking a five- to ten-minute break if necessary for the court reporter because as you can imagine it's a tough job.

So if you are speaking tonight, again, please make sure you fill out the blue card. When you speak, please state your full name for the record, and also in order that everyone can have time to speak, you will be given three minutes. And we have a timekeeper at the end of the table who will give you a 30-second warning when you have 30 seconds left.

Please come to the microphone that's located here to make your comments. It is important that you're facing the court reporter.

If anyone in the audience can't hear a question or can't hear a statement, please let us know so it can be repeated.

Now, additional information. Once everyone

has had time to speak, we will allow for additional comments. Responses to your comments will not be given tonight. The purpose of the public hearing is to listen to you and then we'll take that information and prepare responses to your comments. If you have questions on procedural issues, we will be happy to answer those.

Please feel free to write your comments on the comments card provided and, like I said, hand them in tonight or send them directly to the lab by regular mail or e-mail them to Planning, planning@lbl.gov.

If you'd like to receive future notices of environmental reviews at Berkeley lab, please fill out the requested information on the sign-in sheet which is at the table as you came in the door.

The environmental documents for this project are and will be available on the Lab's Web site at www.lbl.gov/community. They are also available at the Berkeley Public Library, Central library, at the second floor reference desk.

The agenda for tonight's meeting includes the following: welcome and introduction, which I'm doing now, project overview for around 15 minutes, and then comments from the public.

The project overview will be divided into two sections. The first is on a description of the facility. That will be provided by Henry Martinez, the Lab's project manager. And then the Environment Impact Report process will be covered by Jeff Philliber, the Lab's environmental planner.

So now we are ready for Henry.

MR. MARTINEZ: Hello. I'm going to talk a little bit about the project.

The project site for CRT is basically here. This is Cyclotron Road and then Blackberry Gate is right here. So it's just inside the gate.

The building information, the occupancy is about 300 people. We have House NERSC, which is the National Energy Scientific Computing Center, the Computational Research Division; a UC Berkeley and Lawrence Berkeley Lab's joint program in Computational Science & Engineering; and, the Visualization Lab. It's currently 140,000 gross square feet and the building access is primarily pedestrian or shuttle bus. There's going to be four ADA spots and there's no additional parking.

This is the original view that was in the EIR, the building from the southwest perspective. This is the revised southwest view. We've

responded to comments from the Regents and from the City of Berkeley. It's basically lowered. We've removed a floor on the building. We've moved it up the hill. In effect it's come down 24 feet from the EIR. The basic footprint is the same and the square footage is the same.

It's basically -- again, we've removed the top floor, lowered the profile and moved it up the hill a bit. So it's not as close to the road and it's again 24 feet lower.

This is an aerial view of the project. And we still have a bridge, but it's coming into the roof and landing on a plaza here. And the lab buildings and computational research buildings are surrounding it.

Concerning sustainability, the minimum goal is a LEED Silver. We're trying to leverage the Berkeley climate to where we're using outside air as much as possible, water site economizers. We're trying to make this as energy-efficient as possible with flexible, air-based and water-based systems for cooling computers.

It's scalable. We can accommodate different types of systems for the computers that are going to be housed in the building. And we have an open

office plan. We've reduced the chilling capacity of the building again by using outside air. We've oriented the building so that it maximizes the solar gain, and we are roughing it in for solar panels on the roof.

So I'm going to turn it over to Jeff.

MR. PHILLIBER: I'm Jeff Philliber. I'm the Lab's environmental planner. I'm going to talk about the Environmental Impact Report and the overall CEQA process for the CRT project.

As far as the schedule, so far in the process, we started with a Notice of Preparation back in July and a 30-day comment period. Many of you were probably here for that Notice of Preparation meeting, which was held jointly with the Helios Project.

The Draft EIR is currently in circulation right now, and of course tonight we're holding the public comment meeting. There will be a Planning Commission Hearing on December 19th. The Final EIR is expected to be completed in February of 2008. And we expect to go to the Regents for certification of the EIR, and project approval, in March of 2008.

The EIR is a stand-alone EIR that covers the

following sections. We have a project description which of course describes the project. We have an impacts and mitigation analytical section that looks at the following areas you can see up here. There's a cumulative impacts analysis, and we also do an alternatives analysis in the Draft EIR.

There are two significant unavoidable impacts that are identified through the analysis in the Draft EIR. One of them is a construction noise impact. It's a temporary impact, of course.

The Berkeley Noise Ordinance limitation is about 60 decibels. It's possible that some of the nearby receptors might receive as much as 65 or 70 decibels. Just about every large construction project in Berkeley has this same impact. Ours is probably a little reduced because we are actually further away from most receptors. But nonetheless it's significant and unavoidable because the equipment just has a certain amount of noise it puts out when you do construction.

We have a cumulative traffic impact. The project itself would not create a significant impact with traffic. There is very little traffic expected with this project because we have very few parking spaces we're offering for this. I believe

it's six handicapped spaces. Everyone else is going to be expected -- several of the people who will be working in the building of course already work at the Lab or UC Berkeley. Other folks will be required to find alternate means, public transportation, that sort of thing, to get to the site. Since we are a controlled-access site, you can't just drive up and park. You'd have to find public transportation.

So there's no significant impact for traffic for this project by itself. But cumulatively, when we look at other projects in the area -- including the Helios Project which the Lab is doing -- the Lab's 2006 Long Range Development Plan program, UC Berkeley's SCIP Project, and UC Berkeley's 2020 Long Range Development Plan Program, when you put all those together, we had to make a tough call. We didn't think we had a cumulatively considerable contribution to impacts on a couple of intersections near our site, but to be conservative, since it was a gray area, we called those significant and unavoidable.

Alternatives under CEQA need to be designed to address significant unavoidable impacts. So we've designed the impacts that are carried forward

in the study to look at the noise and the traffic impacts.

Of course, we have a No Project Alternative which is a standard requirement of CEQA. We have a Low Profile Design Alternative which we'll look at in a second, which reduces the size of the building. And we have an alternate LBNL on-site location which puts the project in a site that's more central to the Lab. We also looked at several other on- and off-site alternatives, but those weren't carried forward in the analysis because they didn't meet the project objectives.

The Final EIR process will go as follows: We'll record and review all comments, including all comments that are made tonight, and, of course, any written comments that we receive during the comment period. We will prepare written response to all of those comments. We'll address the substantive issues in Project Description Changes or in the EIR analysis. We'll get back to that in a second.

We'll prepare a Mitigation Monitoring Reporting Program and we will make available the Final EIR prior to it going to the Regents.

On this point here, I just want to elaborate a little more on what Henry was talking about.

After the EIR came out, we'd already been receiving some feedback on this project. And most notably we've heard from the City of Berkeley and we've heard from some citizens.

The City of Berkeley looked at the design of the project and was concerned about views and asked us if there wasn't a way to redesign this a little bit such that the views weren't so prominent from off site downhill locations in Berkeley.

And so what we're doing -- and we're not committed to this -- but we're trying very hard to do this. We're looking at redesigns of the project that would still largely be the same project but would be less visible from the city and would have a lower height, reduced sheer faces and an overall reduced volume. But again, it would be less noticeable from the city.

What we're looking at right now and what Henry showed you comports really well with our analysis right now. So if we were to go forward with that as the project and the final, there would not be a need under CEQA to recirculate the document. Again, we're just pulling the project back a little bit. And that's what we're looking at right now. So we're going to do our best to --

AUDIENCE MEMBER: I'm sorry, I missed that. Could you say that again?

MR. PHILLIBER: Sure. If we have a project to change that doesn't result in a new significant impact nor does it introduce a mitigation measure that's meant to address a significant unavoidable impact, then under CEQA no circulation is required. In other words, the CEQA process wants us to do this. It wants us to look at how can we listen to the public and make changes to the project, to the final. And that's what we're trying to do here.

I'm just going to quickly just go through these. You probably can't see them very well but you can certainly see them better in the EIRs that you have.

This is the current project that you'll see in the EIR. I'm going to stand back so you can see. You can see from a couple of key viewpoints. These are probably the most representative viewpoints. This is from Seminary Hill here. You can see this is from Hearst and Gayley.

We also have the Low Profile Alternative. That's here. Again, this compares the project with this Low Profile Alternative. The Low Profile

Alternative is probably a little more similar to what we're working on right now with this alteration to the project.

I also should mention, to be conservative, we also looked at -- there was an errata sheet that went out that has a significant and unavoidable air quality impact in the document that you should also know. if you haven't received that, please get it off of our Web site or ask us and we'll send that to you.

AUDIENCE MEMBER: What is that again?

MR. PHILLIBER: We made a determination after the EIR went out that there was a significant unavoidable impact in the air quality area. That went out in the errata sheet. That can be accessed off of our Web site or you can receive a copy if you e-mail us. You can get our contact information over there.

So we'll take comments now.

MR. MEDLEY: Before we start the comments, just a reminder. And for those people who came in late after I did welcome everyone, thank you for being here tonight.

We will begin with comments in just a second. To make comments, please fill out one of the blue

cards. Those are available over at the table. We plan to go until 8:30 if there are enough comments to fill that time. Because of the number of folks here, it looks like we probably will be able to do a second round.

But in order to speak in the second round, please do fill out another card. We're keeping them in the order in which we're receiving them.

If there are any procedural questions? Yes.

AUDIENCE MEMBER: How many minutes per speaker?

MR. MEDLEY: Each speaker has three minutes. And we have a timekeeper here on the end and she'll give you a 30-second warning.

Any other procedural questions?

AUDIENCE MEMBER: Yeah. Maybe I'm incorrect, but I think it said in the paper that the Planning Commission meeting was on the 12th originally to the city, the joint meeting.

MR. MEDLEY: It's going to be on the 19th. I think it was originally scheduled for the 12th, but it was moved. I think they chose another date a week and a half or two weeks ago, actually. So it's going to be on the 19th.

Our first speaker/commenter is Barbara

Robben.

MS. ROBBEN: May I ask a procedural question first?

MR. MEDLEY: Sure.

MS. ROBBEN: It's about Alternative No. 2. In that alternative, it speaks several times about Alternative No. 3. Is that a mistake or are you really talking about Alternate No. 3 in this section on Alternative No. 2? 1

MR. PHILLIBER: Can we talk during the break and you can show me in the document where that is. I need to see it specifically.

MR. MEDLEY: When I meant procedural, it's procedural in terms of the actual event tonight. So for your comments, will you please come to the podium, and when you begin, the clock will start ticking and you have three minutes.

AUDIENCE MEMBER: My name is Barbara Robben. I'm a graduate of the University of California with a degree in geology and soil science. And that's what I want to address first is the geology of the area because we know that the Hayward Fault is close by. And I also know that it's an area that's prone to landslides, and the subsoil will be a clay layer which is very 2

slippery. I know in the past there's been problems with the soil with landslides and so forth like that. And that's not talking about the buildings that are there. In my opinion it's seriously overbuilt as it is. And so to add extra buildings I think would be a big mistake with the amount of engineering that you'd have to put in to make a building on that hillside safe, according to whatever is the accepted engineering standards nowadays. I think if you took that amount of money you'd have enough to buy a site elsewhere because I know that the big attraction for you is the fact that you own that property. That's the only reason I could see for building up there.

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So my second point is about the groundwater and the surface runoff which increases every time you put in buildings or parking lots or a parkscape of any sort. So that water that would normally be soaking in to the groundwater, to the water table, would be draining off to Strawberry Creek, I believe.

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So that brings me to the point about the sewers, the storm sewers and the sanitary sewers because when they're both coming down off the hill, they're obviously going to be running by gravity

down to the Bay and they're going to be crossing the Hayward Fault. So I know that when they go through the fault zone there's a yearly creep of about a tenth of an inch. So if you add that up in a decade, it's going to be an inch. Two decades it's going to be two inches. And those waters can comingle.

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Now over here in some of your own pamphlets, it says in the year 2000, it says about the movement of the fault. And it also says be sure to wear rubber gloves and rubber boots if you're going to be dealing with water in Strawberry Creek. So it seems to me this is a problem that you want to address before you do anything else.

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Then my third point is about the way that you're going to be removing the material or taking the construction material up. I notice that on your pages that address that, section 5 -- on your diagram that shows all the routes that you're going to be taking and the traffic amounts and the mitigations or lack of them, whatever, but it doesn't show any trucks going through the University of California. You have your own property that you could use to transmit those materials, and you also have your police force. So

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if there was any danger to pedestrians along the way, you could certainly put monitors out there or change the hours if anything like that's a -- that's an important point. 5

I am also concerned about the timing of the meetings that you have scheduled during finals, during the holiday season. 6

MR. MEDLEY: Thank you very much. The next speaker is Amy Beaton.

MS. BEATON: BP Bears. So it says here that the purpose of the project is to provide an infrastructure for the future of computing power at the Lab. And I'm just wondering are our corporate BP friends going to having access to the computer structure at the Lab? And if they're not, then where's their computer building going to be? Because -- Go Corporate. Go Cal. 7

So the population estimates say they're 3800 employees at the Lab. It says 56 percent -- these are FTEs -- how many part-time employees are there and how many contract employees are there? There was like one painter at the Lab left. So if you're going to build a million square feet of new buildings, maybe you're going to have to hire some more janitors too. Or maybe we're not counting 8

them because they're all contracted out and actually don't work for the Lab. So in fact are all the deliveries and everything as you build out the Lab in a massive build-out of the hill.

Now visual impacts? None of them include perspectives where you can actually see the building site. So if you go south, like on Telegraph, and you see the most massive building on the hill, Building 50, it's dwarfed by the new project, even taking off one top layer.

So I want to know how many of the employees at the Lab currently are under the RCRA Program. You say scientific and technical employees. How many are actually in the business of cleaning up the toxic waste site at the Lab, which qualifies as a Superfund site?

In Hydrology and Water Quality 4717 it says that the LBL will also comply with the NPDES by implementing appropriate construction and post-construction control measures and BMPs required by project-specific SWPPPS. We want to see that now because that's the only way we know if the people who are going to work at the Lab and the people who live downstream of the Lab are going to be protected from the toxic waste that you've

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already created up there.

So we want to implement the appropriate controls. There are a lot of things in here that sort of indicate we'll do it properly; when we're going to do it we're going to have a plan. And this is the first of a huge addition, and because it adds the infrastructure to the Lab it is growth inducing. It's the first step.

You have a lawsuit on the Long Range Development Plan. You cannot amend or make this a stand-alone document by simply adding a footnote saying that it's a stand-alone document. You cannot get all the foundation that you need to look at this project without also looking at the Helios EIR. The two would require that you amend either the existing plan or be out of compliance in beginning a huge buildout of the Lab without a long range plan, which would be illegal. Thank you.

MR. MEDLEY: Thank you very much. The next commenter is Zachary Running Wolf.

MR. RUNNING WOLF: Hi. I come from the native community. And I'm involved with the current tree sit which is in its 373rd day.

Number one, we don't ever talk about like smaller footprint on Mother Earth like my people

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did. Why doesn't that ever come across with the University? It's all about selling you more energy, doing more. Why don't we do less? Why doesn't that ever come across in your higher education? Why don't we not do it? Yeah. Why don't we stop abusing Mother Earth? Not creating something more that you can sell that British Petroleum can whack down the tropical rainforest of Central and South America, which is insanity.

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I come from the tree sit where you have three lawsuits against you. The entire community is against you. The native community -- you're talking about putting a sports facility on top of my ancestors. And you say trust you?

You put a nuclear reactor on campus. Trust you? You built a nano technology without anybody knowing it. Trust you? It's hard to trust you. You're out of control. You need to be stopped. No, I'm serious. It's no joke.

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Professor Chapela, one of your best professors, is completely in agreement. You are totally out of control, trying to change Mother Nature, trying to perfect it. That's insanity. You need to be stopped. Honestly. Why don't you go back to a more native way? Why don't you come

to my people? We'll give you the information for free. We won't charge you $8,000 per semester. 15

It's amazing gall to come here and ask us to trust you when you propose to cut down 23,000 eucalyptus trees with no replacement plan during global warming. That's shocking. 16

You're trying to push this -- Barbara was right. You're trying to push this through during the vacation hours, just giving us one -- maybe possibly two times -- to come up here and comment, and then you're just going to run over the community like you're trying to run over my tree sitters who are up there. And we have to get food and water to them because your university will not allow it. Trust you? I don't think so. 17

MR. MEDLEY: Thank you. The next commenter is Sylvia McLaughlin.

MS. McLAUGHLIN: Good evening. My name is Sylvia McLaughlin. I have not read the Draft EIR, and I believe it is totally unreasonable to expect interested members of the public to read two volumes each approximately two and a half inches thick during the Christmas holiday season and expect comments by January 4th. 18

My remarks are concerning the location of the 19

CRT Building in Strawberry Canyon. The proposed location, Strawberry Canyon, is inappropriate for the following reasons: One. This is a high-risk fire area. Two. There is a water problem with various springs, aquifers, and tributary streams flowing into Strawberry Creek. Flooding has occurred and can occur in the future. Three. This area has unstable soil which has been known to slide. Four. The proximity of the Hayward Fault. Five. The traffic that occurs from the Lab is already at capacity, and the traffic on the Gayley Piedmont, Derby, Warren corridor is frequently congested now, and will be more congested with U.C. Berkeley's plan, new construction, including a 900-car garage under Maxwell Field.

Alternative, more appropriate locations exist, especially along the recently designated green corridor of the East Bay cities. I would suggest that all the rest of the area of the Strawberry Canyon be included in the University's ecological study area. Thank you very much.

MR. MEDLEY: Thank you. The next speaker/commenter -- and I hope I pronounce this right -- is Gianna Ranuzzi.

MS. RANUZZI: My name is Gianna Ranuzzi.

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Sylvia, you said it all. What I've heard from a lot of people is that it's ridiculous to have such a short comment period within the Christmas time. They've said, "Why aren't you reaching out to the students?"

You're building a project for one of the six energy and defense places in the nation and you have to do it the right way. You don't want to be set up for criticism -- and you will be criticized -- if you're not trying to get an open process and an educational process for the people. 26

Let's face it. This project is going to go through. It's a beautiful project. But reading this, it's scary where you're putting it.

What you've decided to do -- and I thought this happened in Third World countries or in China when they rearranged the mountain -- you've decided from the first Lab building that you'd take out the soil, which is ready for landslides, which is unstable, and then you get thousands and thousands of pounds of dirt -- I don't know the figure -- and then you're going to try to reach bedrock and you're going to get pilings and you're going to secure this one building or other buildings. But that is not part of the whole mountainside. And 27

this changes the groundwater and it changes aquifers, other things like that, and it makes the whole mountainside more unstable. I feel very, very insecure that this is in our watershed area.

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You talk about maintaining the level of the environment. Well, when I do a Google search, I have to admit I don't have the same scientific research that you do. The layout is brown. There's a brown spot. The areas around it are green. I would move this gorgeous building and put it in the Richmond Field Station because this is flat. You're not going to spend all this money to try to make this structure stable in an unstable place.

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One of the reasons for not building there you said was that it's not accessible for other scholars and scientists in your industrial park to be. There's such a thing as telecommuting, which is in the Berkeley General Plan. You'd save a lot of money building it down there. We need a regional approach to the needs that we're talking about: homeland security, scientific technology, other things like that. Build it there.

The other reason for not building at an alternative site was not to build on campus because

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you said, oh, it's not in the 2020 Long Range Project. Well it wasn't because you didn't know about this before. So you could get it in the 2020 Project or you could build the electrical infrastructure at the Richmond Field Station and it would be much better. And I agree. Try to restore this ecosystem. We need that water. We need the aquifer. We need that for the future. Thank you. 31

MR. MEDLEY: Thank you. The next commenter will be Marilee Mitchell.

MS. MITCHELL: Can somebody else go before me?

MR. MEDLEY: Sure. No problem.

The last speaker that's filled out a card is Ayr.

AYR: All right. Evening. So I'm not a scientist so I'm not going to talk about science. I'm not a sociologist so I'm not going to talk about that. I'm a dreamer so I'm going to ask everybody just to close your eyes for a minute and imagine what this land was like 100 or 150 or 200 years ago. We can't go back to that place, no doubt. We can only be where we're at and we can only move forward in time. 32

I think though if we think about how things

were that long ago, we see the landscape here has been totally transformed and changed. We need to acknowledge that's happened, and we need to think about how we want to move forward.

And for me, looking at all that's happened, it's time to have a moratorium on destroying any more nature, on building new buildings on sites other than parking lots or existing building sites. I think we have plenty enough parking lots and existing building sites to work with, and if people want to build new buildings, that's questionable in itself just with all the problems we're having on the earth. 32

But I'm not saying we should necessarily never build a new building, but they definitely should only be built on places we've already destroyed. We cannot afford to, nor is it a good idea to -- it's just insanity to keep destroying little bits of places of nature we haven't destroyed yet.

I like to walk a lot in Strawberry Creek Canyon. I do pray that the salmon are going to come back there some day, that the creek can be daylighted all the way from the hills to the Bay one day again. And it will be. But whether I want

it to or not, between the water and the rock, the water will always win. It's just a matter of time.

So someday the creek's going to be flowing free again and the salmon are going to return, and the tritium, you're not going to find traces of it. But we need to start moving in the right direction now and not make the problems worse.

Really it's not about these people. They have the power only to the extent that we give it to them. So I'm just going to close by thanking everybody who came out to share your concerns and your heartfelt sentiments, and I really appreciate you all. You all are an inspiration.

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You guys look in your hearts too, you know. What kind of process do you want to be a part of? Can you do it in a place where there's already an existing building or a parking lot?

They just bought a huge computer place out in Emeryville, like thousands and thousands of square feet. Can we work with that? Do we have to just keep expanding and expanding?

Unlimited growth is the mentality of the cancer cell and will eat itself to death. So it's time to check ourselves and check each other.

MR. MEDLEY: Thank you. Merilee.

MS. MITCHELL: I want to say that we're in an emergency right now, and I understand that the United Nations said that we have about five years to get our act together. People in this country are polluting the world more than any other, as you know, as far as carbon dioxide but all kinds of other horrible things. We need to be responsible. 33

What I understand and what I've learned from going to Lawrence Berkeley Lab is that our country is going to be the least affected even though we're affecting the world so much. Believe it or not, Berkeley will be the least affected of all. That might be one reason why these guys are coming here, the Department of Energy is putting money here because it's going to be a cool place.

And up in the canyon we should be stopping all the things like the biodiesel and all that stuff. It's going to create more people in buses and everything like that so you don't have to go up in the canyon to get away from the rising seas. 34

That might sound ridiculous, but why are you going up in a canyon where we're learning from the Lawrence Berkeley Laboratory people that because of the earth heating up that all of the earthquakes 35

are going to be more intensified, all the storms and the winds and everything. We're already seeing it. It's going to get worse and worse. So why would you want to be up in a place like that? 35

I wanted to say that the original mission of the Lab was supposed to be energy conservation, and you do a wonderful job on that. And that's what you ought to be doing at a place that's populated here, like Berkeley, and cleaning up your act. And so I want to give a couple of examples of cleaning up and sort of biology stuff, cleaning up your act of whatever you have now in the canyon that still needs to be cleaned up. 36

I understand that out in the Pacific Ocean there's this thing called a gyre and it's full of plastic. It's mostly from our country. That's something that the Lab should figure a way to go clean it up. It's twice the size of Texas. The idea is -- I read that there's some little chemical -- I'm very nervous and tired tonight and I can't tell you the name of the chemical -- but it's a simple chemical that breaks down plastics.

So you collect it all, you break down the plastic. I'm afraid to say that maybe it's a good thing. This (referring to her jacket) is made out

of plastic. We've got these warm things that we need. And so we can make good things out of it. And that's what you should be doing in a populated area and for the world, not making new things that genetically modified things that are going to destroy and we're going to have more weeds and terrible things. And nano tech that is so small you can't filter it, and we don't know like all the horrible things that we did in this country. The Native Americans aren't making these things.

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I'd like to have 30 seconds more just to give a couple of examples. Up in Strawberry Canyon, there's some examples -- there's one in Africa; I don't know if I can tell both of them. But Strawberry Canyon, there's a western fence lizard. It's there now. It's not going to be there after you finish denuding everything. But what happens is we get very little lime disease because the little deer tick, when it feeds on the western fence lizard then it carries a kind of immunity so when we get bitten by a tick we won't get the lime disease. It's an amazing thing.

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When I lived on Long Island in New York they didn't have much of these. They didn't have the fence lizard or anything like that. These natural

things that in a natural area are really amazing. Here you guys are going to create new things but they're destroying the planet. They're destroying the atmosphere. And you got to get it together. 37 38

MR. MEDLEY: You're welcome to fill out another card.

MS. MITCHELL: Okay. But I just want to say that my grandson told me that there's two things that are going to happen, what he learns in school. The planet's going to burn up. But there's a new planet and we're going to get to go to that. And just think about how awful that would be. 38

MR. MEDLEY: Thank you. The next speaker is Leslye Emmington-Jones.

MS. EMMINGTON-JONES: Thank you. I also have not read the volume. And so I'm hoping that the question posed to you to extend the comment period will be heard and complied with. I think there's a question of extending for another public hearing and extending the comment period. 39

The other point I'd like to make about process is that this is a project proposed in-house and under CEQA. It should be certified by an outside body and it's being certified by the 40

Regents, an in-house certification. So it's hard for the public to have the room to have an open discussion for a body that would really come with serious review of what's in the documents. 40

I had the privilege today of hearing Al Gore speak in Sweden and he was right in line with Running Wolf and Ayr. Really. Like we have to refocus where we're going. I hope everybody in the world hears what he said today.

We don't have to rush this along. We don't have to have it approved. In fact, the Regents are meeting in L.A. in March, and it seems to me it would be great to have a real discussion with them in May when they meet in San Francisco to discuss this project. 41

Al Gore reminded us we've got to look at things differently. We only have a little bit of time and we need to look at things differently. And one way is because we're trying to protect the earth, aren't we, in every movement we make if we drive or walk or whatever. And that hillside, as Barbara started out, that is an incredible hillside. And the slide you had with the building, but it also showed all those gradations and the steepness of that place, which is a little 42

top-heavy for the community, whether it's water coming down, whether it's earth coming down, whether it's traffic coming up and down. 42

There's an alternative. There must be. And yet if we're going to listen to Al Gore, do we really need this project at all? Is it healthy to have an alternative?

But if we're going to have an alternative, a question to you is why don't you have a fourth alternative which is off site from LBNL? And you do not have an off-site alternative. There is the Richmond Field Station, and as Ayr brought up, let's use the parcels of land that have already been detrimentally used. Thank you. 43

MR. MEDLEY: Thank you. The next commenter is Janice Thomas.

MS. THOMAS: Good evening. This project really saddens me because it's clear that people want to save trees. Trees are just a symbol of something that's living and it's beautiful and they care about it and it feeds them and nurtures them. 44

This project, being the computer infrastructure for what's ahead, enables all that follows. And this project was done as a stand-alone. But what that means is it's somewhat 45

arrogantly pushing ahead of a lawsuit which in fact we could prevail upon and win.

Plus that lawsuit alleges -- which is consistent with the City of Berkeley's complaint as well -- that that Long Range Development Plan was done separate and apart from U.C. Berkeley's Long Range Development Plan, that the cumulative aspects in SCIP, for example, were not -- all the cumulative impacts are kind of confused and skewed because there hasn't been coherence between what you all are doing and what U.C. Berkeley's doing. Yet it's really clear to all of us that these are not as much two separate campuses as it used to be. And this was in the good old days, so to speak.

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So the Regents aren't who they used to be either. They are investors in corporations and they are approving this project. And all of this is blind to the public. We really don't know what they're invested in anymore, but yet they're representing this public mission.

So with thoughts like that, I want to know too in this computer infrastructure is this going to be used for the Livermore facility? You know, they'll be testing nuks in the laser ignition facility. Maybe you all will argue that you don't

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need to say specifically how it will be used. But I would argue you would need to disclose that because there could be traffic implications. And I know you've acknowledged cumulative impacts and traffic. But still I think that on some forum you should disclose what these things are used for. 46 47

I would like a copy of this risk assessment where you admit that there are air quality cumulative impacts and that there's an increased cancer risk. And I believe you had a volume of one million people, ten million people, I can't recall.

But I would like to see a risk assessment on the inhabitants of Berkeley, a hundred thousand people. How many more Berkeleyans will get cancer as a result of the cumulative air quality impacts from this project? I hope you will disclose that. But this is to request a copy of that risk assessment. 48

I'm running out of time, so I will finish in the next round.

MR. MEDLEY: Thank you. If you would like to make further comments, please fill out a blue card and bring that up to the table. And if you've filled out a blue card with your address just put your name down.

While you're filling out your card, we will take a break for the court reporter. Five-minute break.

(Break in proceedings.)

MR. MEDLEY: Okay. We're ready to resume the comment period. Next on the list is Janice Thomas.

MS. THOMAS: Just a few things to follow up or finish, really.

In that cumulative air quality impact, you mentioned that the cause was mostly diesel particulate. I would like to know what is left over, what besides the diesel particulate is responsible for the cumulative air quality. 49

Also since I went through a very bad experience when the molecular foundry went through that little bitty initial study, and the only view that was provided was from Panoramic Hill. And now it's so prominent as we're in the west walking east. 50

Likewise, I would love to see -- and I too am guilty of not having read the document yet -- I would love to see some view impacts from the south of the CRT. Not just we're looking due east and what do we see or not see, but you can see the

Cyclotron from many, many different perspectives and we really would like to try to keep the viewshed as natural as possible. So we'd like some alternative views, especially in the south. 50

And I'm wondering, too, just conceptually, do you consider the Strawberry Canyon a viewshed that is only aesthetic, or do you all consider Strawberry Canyon a cultural resource? Because if you consider Strawberry Canyon and all the open space there a cultural resource, a place of natural beauty, then you certainly don't want to change that. 51

Again, I realize that we're talking about the CRT, and that it is not quite in the interior of the canyon; that since this is an enabling condition of it seems to me much that follows, I'm still going to ask this question now: Do we really want -- we have all these buildings in Blackberry Canyon, and I just really want us to be very careful about what we introduce into the natural area that I consider a cultural landscape and not just an aesthetic impact. 52

And then also the Climate Protection Act. I don't know if that has been factored in sufficiently into this document or again into the 53

cumulative nature of this project, but I just think that should be embraced instead of being kind of -- I don't know. It seems like efforts are made to skirt around things rather than taking them as guidance. 53

And just for the public who are here tonight, under Biological Resources, there are just many, many animals that are up there that I would love to share with people what's up there in the canyon very near this project because certainly they will be threatened by the project. Thanks. 54

MR. MEDLEY: Thank you. I've been trying to go in the order that we received these, but Marilee Mitchell has requested to go next if that's okay with everyone else. Okay. Marilee.

MS. MITCHELL: All right. I wore this shirt tonight because someone painted it. And it's a picture of Berkeley. You might not be able to see it too well, but I'll tell you what it is. It's a view of Berkeley where you could see the Bay; you can see the Campanile; you can see green trees and you can see some beautiful buildings that have been there a long time.

And we're not going to have it if you do what you're doing because they're not only doing 15 of 55

these monstrosities in Strawberry Canyon, but they're planning -- I was sitting in one of their meetings in the Redwood Room about a year ago, and what it is is they want wet labs, dry labs, office buildings and housing for all these employees and they're just going to fill up West Berkeley. 55

And so that's the plan. If you think I might be exaggerating, read back to Richard Brenneman's articles when he first starting talking about this because about six, seven months he went through each building that was going to be up there, what was going to be in it, how big it would be, the huge amount of parking, et cetera, and then as far as West Berkeley, we're just getting clues -- somebody whipped me a little article in the back about Tom Bates. The plans have been going on for a long time. But they are planning to just totally change Berkeley.

So here it is. This is the way it is, and we know what it's like and you guys don't really want to do that. You're not that greedy or after Nobel prizes. What you're doing ain't that great, biodiesel and GMO and all this stuff when we've got to clean up our act. Think about it.

MR. MEDLEY: Thank you. The next

commenter is Amy Beaton.

MS. BEATON: Yeah. In your Table 5.0-1 the near-term projects, you don't list the retrofitted stadium. You kind of -- be a big job. And it's hard to look at cumulative impacts, but what I'd really like to see is a map with all of the footprints with all of the projects all at once on one map. That would be like a cumulative impact instead of...

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And your visual simulations, we want to see what it looks like with all ten buildings that are planned to be up there.

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The State Public Health building downtown is a nice alternative to retrofit.

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The Maxwell Field thing that came up tonight, the 900 parking, is that correct? Anyway, that would be on the SCIP lawsuit. That would be another lawsuit. That would be an example of where the relationship between the Lab and the campus, because of the bifurcation of the process, makes it impossible to evaluate the project.

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So the 900 parking spaces under Maxwell would presumably be where the new employees of the Lab would be parking. Except they couldn't actually walk from there, so they would actually have to be

a shuttle over to the CRT building. There is nothing about the number of shuttle runs. 59

There are no bike paths. That really bothers me. I work at the Lab and I like to ride up there, ride to work. But it's really dangerous on account of the diesel shuttles. There should be bike trails in both sides, in Strawberry with their own bike gates because the shuttles are full now. There's no room for the people's bikes on it. Then we would at least be doing something that would help people get to work without having to use more gas. 60

It's hard to imagine how you're going to accommodate 300 people walking up the hill every day with the zero parking spots. You actually need the parking spaces in the Maxwell thing which is the other lawsuit, which is why you're supposed to -- CEQA guarantees that its citizens -- we are supposed to be able to have an orchestrated development to a single ecological unit which is Strawberry Canyon. 61

So what we are doing is calling for a moratorium on developing in Strawberry Canyon and to have these lawsuits bundled and have the impacts addressed the way we are entitled to have them 62

addressed.

We need the Lennart Aquifer. I'm tired of thinking of it. The place is a toxic waste dump. If the water is not contaminated, we need to be bottling it and selling it to undergraduates on the plaza instead of DASANI from CocaCola. That is our water, the people who live in this town, and includes the people what work at the Lab. BP Bears!

MR. MEDLEY: Thank you. Our next commenter is Barbara Robben.

MS. ROBBEN: Thanks for the chance to comment again. And also thank you for providing me with this big thick volume. When I look at it, it reminds me that the whole problem could be solved with just two letters out of the 26 letters we have available in the English language, N O.

That's what I think we need to consider, no more building on that hillside and "no" would also apply to some of the other projects. I think U.C. needs to take seriously into consideration N O.

I want to go back over some of the points that I mentioned before, the landslides that could come down. In 1958 I was living in International House and a big wall of water came down and left

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sediment. I had to pull my bicycle out of the sediment.

Those things can happen because the whole hillside is unstable. We know about the fault, and I've talked about the sewers and the contamination because I believe that sewers are, both the sanitary and stormwater sewers, are on the same trench and they can comingle waters. 65

One of the really important points is like the construction routes. Because honestly I think if you don't want to take the construction materials, whether they're the new ones or the ones you're trying to get rid of, if you don't want to take it through your campus, there's something really wrong here. I understand you don't want to inconvenience the students, but really, if you can't do that, please don't put that over onto the City of Berkeley. I think you have the capability of doing that. 66

And another thing about the Lab is that -- I hate to say this -- but there is too much trickery and secretiveness going on. We have fences that we know we can't go up there and there's security and so forth like that. But basically we're actually expected to comment on something that we don't know 67

about and we can't know about. So I think next week when we get into the hearing that's next Monday that there will be more to say about that aspect. 67

And some of the things I'd like to see in your EIR are the stratigraphic cross sections that show the underlying bedrock and soil composition and so forth like that; water test results, because you say that you've tested the water and everything's fine. But instead of platitudes I'd really like to have some figure about that. 68

You could show the aquifers. You could show a lot of those things in your next report. Thank you.

MR. MEDLEY: Thank you. The next speaker is Leslye Emmington-Jones.

MS. EMMINGTON-JONES: Well, just one point. When you talked about the project, you were very proud that it was a LEED project. It was going to use the sun and whatever. And I think what we would like to know is why are you building on that site when that is not a LEED kind of thinking place to build? 69

So the question to you is what is the difference between building on a flat site like in 70

the Richmond Field Station versus building on that incredibly unbuildable site? And as I heard someone say last week, you can build anything you want as long as you're willing to pay for it. So you're doing a lot of paying or somebody is or the public is or there is a corporation or who is paying for this? Somebody is doing a lot of up-front paying for this building at this site for a green wash which is a LEED building.

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But I don't want to be lecturing you. I really think we need to know what it costs to build at this site because if you were building on a flat site, I'm sure it would a lot more carbon-credit positive. So in the new world we're supposed to ask about carbon credits. So I'd like to know how many carbon credits are used to build the building on this site?

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MR. MEDLEY: Thank you. the next speaker is Hank Gehman.

MR. GEHMAN: Thank you. I'd like to talk about a lot of things about the site, some shortcomings in the design and this and that, but what I want to focus here now is the question about respecting the process, the process of public comment.

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CEQA requires a public comment period, not just to let people blow off steam and then shove them aside, but so that other people's interests, other people's concerns other than the institution can be seriously considered. But for these ideas to be considered, we have to give them a chance to come forward.

Right now the process is -- I feel it's being manipulated. I feel that it's being rushed. We are picking a period of time when you probably thought, well, this is a great moment to do this because people are going to be too busy to pull together serious comments, and we can just blow this whole thing off and merrily off we go. And I think that's a really bad attitude and I think it's one that can come back and actually hurt the Lab because there's something about negotiating, bringing other people's interests in, another set of eyes that actually will end up approving the project.

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Maybe you're going to realize, you know, if we keep loading up development on the hill and then we have that earthquake that everyone talks about, and now all your buildings are trashed, now where are all the scientists going to go? Suddenly

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you're ten years down with a problem rebuilding because you concentrated so much building in one dangerous area.

Now maybe these kind of comments, if they're developed, would help you reimagine your project and think again how can we minimize this. How can we address people's concerns? But to do that, you have to allow people to come forward in a reasonable manner. 73

Now, you've received communication from our lawyer, Michael Lozeau, requesting a continuation of the comment period. And I've heard other people request this again, and I'm wondering are we going to hear back? When are we going to hear back from you that you will accommodate an extended period? Are you just going to continue to just slough it off, slough it off and just defy the process because it's simpler for you? I'm just wondering if we could even have a response this evening about extending this period so that we can get serious instead of having a lot of ill-considered comments perhaps, and then you guys not saying -- well... It destroys the process. 74

MR. PHILLIBER: Just to respond to that procedural question you had. We did receive Mike

Lozeau's request. And as we e-mailed last week, it's actually under consideration right now with Lab's management and we expect to have an answer back to you this week.

MR. GEHMAN: Okay. Thank you.

MR. MEDLEY: Do you have a procedural question?

MS. BEATON: Yeah, I do. My question is if for instance, under Hydrology, if it refers to like the RCRA report in the document, does that mean that that document, if it's referenced in here, is that whole document a part of the administrative record?

MR. MEDLEY: Yes.

MS. BEATON: Thank you.

MR. MEDLEY: The next speaker is Zachary Running Wolf.

MR. RUNNING WOLF: Once again, I'm the leader of the tree sit. And dealing with the university, there's a lot of children up there, young adults. And I'm very scared for them, because the television doesn't tell them half of the Arctic Circle is gone in the last ten years.

If you think about -- we're only increasing our carbon cycles. And this is the city of

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Berkeley. There should be mass bicyclists out there. This is what scares me. And these children are walking by the tree sit and this university has decided to put a Guantanamo-style Gulag on these peaceful protesters.

What if we were to disagree with this project? Would you do the same? Or would you be ahead of the game and you would actually install this Gulag prior, with no -- giving us one opportunity, maybe two, to put our comments on the Web site? 75

I'm asking you, do you have children? Aren't you scared for them? Because I am scared for all these people.

We need to stop this. We need to stop it worldwide and we need to start it here in Berkeley. Berkeley is known for its innovation. We got to stop this now. And this university is a major part of it.

They're proposing to cut down tropical rainforest with British Petroleum. It's never done anybody any good. This university invented the nuclear bomb which basically annihilated the Marshall Islands. You know that? So if you want to go for a-tree-for-a-tree, this university is in 76

serious debt to the world. I'm asking you that you need to look inward because you have a responsibility to your children. And the way in the native community we treat it, all the children are my children. And I'm scared for them. And we need to stop this now. Now.

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MR. MEDLEY: Thank you. The next speaker is Gianna Ranuzzi.

MS. RANUZZI: My name is Gianna Ranuzzi. And I'm honored to listen to all of you speak. Getting back to less global perspectives, it's a little insulting to have this as a stand-alone project. I've read about half of the document, though I've not studied it, and I will need to go to the library to read your Long Range Development 2020 Plan.

Because we're talking about one ecosystem up there, and we're talking about -- I don't know how many acres it is, 252 I believe, and the CRT is going to make the impermeable land about one acre. It will be impermeable. You have to look at it in the whole context, and we need to look at it in the whole context.

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So I would think for the credibility of a leading research department that you would have it

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tiered. We're not talking about one building. There's 145 buildings up there. The Nano Technology Center did not have an EIR which I think is insulting. We have to have a stand-alone for the Helios Project. So I would think that this needs to be restudied. 78

So that's about all that I have to say. I liked that the people brought up the idea of the Lennart Aquifer. We have a drought going on and we need water. And we shouldn't lose the resource of Strawberry Creek.

Lennart Aquifer had a well that went down, which I understand is now covered by one of the buildings. We need access to that aquifer. We need to know whether that water is contaminated and we need to be able to use this. For fire, we need this. 79

I think that some of the ideals for conservation up in the Lab doesn't work because for fire we're talking about getting rid of foliage. But for environmental protection, we need to get more diversity of foliage. So I would say that for the CRT to put it on a flat area.

I talked about a regional approach, putting it at the Richmond Field Station or we could put it 80

some place on campus. We could put it at the University Art Museum. I think the footprint might be similar. It would be a little bit taller than that. This would be an ideal place to keep that little area green. 80

I wish could talk more detail but we didn't have time to go through this. I hope that you will extend the period.

Thank you for being here and I hope some of it is reaching your heart.

MR. MEDLEY: Thank you. Our next speaker is Nancy Delaney.

MS. DELANEY: I've lived in Berkeley -- I went to nursery school here and I returned in 1966 and it's been my home since then. I love it. I've had some concerns about our neighbors, all the different things going on up there around the university that impact on us in different ways and how little we get heard of it.

I had a notice that there was going to be this hearing. It's the first time I've actually looked at this document here and I really would request that you would extend the period. 81

I'm seeing Hooper's Hawk, Great Horned Owl, Red Tailed Hawk, the Whipper Snake and a little bit 82

later -- those who are some of our neighbors too up there, you know. And they get less and less place to live. They are part of the ecosystem that we're part of I had seen in some other animals.

I think what would help me is if there could be a boiling down of why, to what purpose, what goals are really behind this, what services it will provide to the public? And also a boiling down of the impact for an ordinary person.

Because I know I care. And I go out of my way. I don't have a bunch of other things that I'm doing in my life right now that are pulling me away. But there's lots of people here who also care and their lives will be affected. I'd like to see a boiling down of what the impact is going to be on the different species that live there on the water in a way that an ordinary person could just read it, bullet point by bullet point: the effect on the water, the effect on the soil. And what sort of business is going to be going on there?

Those are things -- just neighbor to neighbor kind of thing. We've lost so much of that with Regents and Los Alamos, D.C., we're just a small town here, really, and maybe not everybody lives here who works here, but we are a small town. So

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I'd like to see in our small town newspaper in the Daily Planet some simple but concrete truths boiled down of the impact on the different species that live there and the water, the soil, the air, the traffic, and what's actually going to be being done there so that everybody in town gets to know. Because that's the purpose of CEQA. Thank you. 84

MR. MEDLEY: Thank you very much.

I have no more cards. So that's the end of the public hearing for tonight.

Thank you very much for coming out. We appreciate it. And we'll be back here again next week, next Monday night, a week from tonight, for the public hearing on Helios at 6:30. And we hope to see some of you again there.

Thank you very much.

(Hearing adjourned at 8:00 p.m.)

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REPORTER'S CERTIFICATE

I, JUDITH L. LARRABEE, a Hearing Shorthand Reporter in the State of California duly authorized to administer oaths, hereby certify:

That the proceedings therein were taken down in shorthand by me, a disinterested person, at the time and place therein stated, that the proceedings were thereafter reduced to typewriting, by computer, under my direction and supervision, and that the foregoing is a full, true and correct transcript of the proceedings therein to the best of my ability.

IN WITNESS WHEREOF, I have hereunto set my hand on this twenty-first day of December, 2007.

_____

Judith Larrabee, Shorthand Reporter

Response to Comments Made at the CRT Public Hearing, December 10, 2007

Response to Comment PH-1

Please see Response to Comment I-6-14. The EIR has been corrected.

Response to Comment PH-2

The Draft EIR acknowledges the fact that the site is located near the Hayward Fault (page 4.5-11). The Draft EIR also acknowledges that the slopes are susceptible to landsliding. However, geotechnical recommendations have been incorporated into the project to stabilize existing landslides near the project (see page 4.5-13 of the Draft EIR).

Response to Comment PH-3

CRT Impact HYDRO-1 (page 4.7-20 of the Draft EIR) discusses the potential effects of increases in impervious surfaces. The proposed CRT project includes the use of hydromodification vaults intended to mimic pre-project runoff conditions, and therefore the hydrologic effect of the project on flows in Strawberry Creek are considered less than significant.

The current sewer line configuration (across the Hayward Fault) outside of the project site is an existing condition. See Response to Comment I-1-4.

Response to Comment PH-4

The comment refers to pamphlets prepared by the Lab.

Response to Comment PH-5

Please see Response to Comment I-6-9, above.

Response to Comment PH-6

Please refer to Response to Comment I-2-3. UC Berkeley's Fall 2007 Final Exams were held from December 13 through December 20, 2007. Since the comment period for the CRT Facility Draft EIR started on November 9, 2007 and ended in January 4, 2008, the public review period was extended beyond the minimum 45-day comment period and beyond the Final Examination period. As discussed in Response to Comment ORG-4-1, above, delaying two months to a subsequent Regents' meeting in order to avoid a particular review period can create enormous construction escalation costs on a project.

Response to Comment PH-7

There are no discussions or plans for BP to have access to the computers or facility.

Response to Comment PH-8

A break-down of the LBNL population is provided on Draft EIR page 4.10-2 in Section 4.10, Population and Housing. Further distinctions as to part-time status and contract status of some of those employees has not been gathered for this analysis, because they have no bearing on population-related impacts. Two to three full-time janitors would be needed for the building.

Response to Comment PH-9

As discussed in Section 4.1, Aesthetics, the project site and adjacent buildings are not prominent in most views from the city of Berkeley. The comment references a view from the south, for example, from Telegraph Avenue, and expresses concern that Building 50 will be dwarfed by the project. However, as shown in visual simulations in Draft EIR Figures 4.1-3 and 4.1-4 as well as DEIR Figure 3.0-3, the top of the project would be several stories below Building 50. Photos 1 through 3 on Figure 4.0-2 (shown at the end of Section 4.0) depict three views from Telegraph Avenue. The photos demonstrate that views of the site from Telegraph Avenue are available; however, the existing laboratory buildings including Building 50 appear small on the hillside, and do not dominate the view. From many locations along Telegraph, such as Photo 3 from Ashby and Telegraph, existing buildings and vegetation would screen views of the project and of Building 50. As discussed in Section 2.0, the proposed project has been modified in such a way that the roofline elevation of the building has been reduced by approximately 30 feet.

Response to Comment PH-10

Six LBNL employees and contractors (2-3 technicians and 1-2 professionals) are currently engaged in the RCRA Corrective Action Program cleanup of LBNL.

Although EPA at one point determined, based on screening criteria, that LBNL was eligible for the National Priorities List (NPL), EPA announced in 2002 that the additional sampling LBNL had conducted at EPA's request showed that no further action was required at LBNL under CERCLA. EPA changed LBNL's status under CERCLA from "potentially eligible" for the NPL to "no further federal response."

Response to Comment PH-11

The CRT project-specific SWPPP will be based on the provisions outlined in LBNL's existing SWPPP that was prepared as part of LBNL's General Industrial NPDES Permit requirements (see page 4.7-15 of the Draft EIR).

Response to Comment PH-12

The proposed project will be required to implement the measures in the SWPPP and the mitigation measures identified in the Draft EIR. As required by CEQA, the Draft EIR includes a discussion of potential growth-inducing effects of the project (see Section 7.2, Growth-Inducing Impacts, on page 7.0-1). Because the project would not remove an obstacle to growth (for example, by extending infrastructure into previously unserved areas) or create significant employment expansion or new housing, the Draft EIR concludes that it would not have a significant growth-inducing impact.

Response to Comment PH-13

The pendency of the Jones petition and lawsuit is noted in the Draft EIR on page 1.0-4: "That case is currently pending and, unless and until the court determines otherwise, the Regents certification of [the LRDP] EIR remains in effect."

The Lab disagrees with the comment that preparing a stand-alone EIR for this project is invalid under CEQA. The Lab is conducting CEQA reviews for its plans and projects in compliance with CEQA. The LRDP EIR included substantial disclosure regarding the CRT project, as well as the Helios project. With this Draft EIR, the Lab is now preparing a follow-up EIR with more detailed disclosure on the project. The Helios project is a separate project, and is being evaluated in a separate EIR.

In any event, this Draft EIR evaluated both near-term cumulative projects (pages 5.0-2 to 5.0-7) and long-term cumulative projects (pages 5.0-7 to 5.0-9). One of the projects included as a LBNL near-term cumulative project is the Helios Energy Research Facility Project. Accordingly, the Draft EIR reviewed the Helios project as a related project in the context of cumulative impacts.

Response to Comment PH-14

The search for knowledge-based solutions to increasingly more complex scientific and technical challenges has increased the requirements for computing resources like LBNL's NERSC. The NERSC resource is fully utilized and oversubscribed. These programmatic challenges are the basis for the proposed project's objectives and needs, as stated in the CRT Draft EIR, Sections 3.2, Project Objectives,

and 3.3, Project Need. These needs and objectives are what drive the proposed project and its expansion of computing capability and access to diverse research disciplines.

Response to Comment PH-15

The commenter presents an interpretation of how various recent projects advanced by two distinct campuses of the University of California -- LBNL and UC Berkeley -- have been conducted. The commenter's assertion that these projects have not been conducted in a manner that comports with his views and values is noted.

Response to Comment PH-16

The CRT project does not propose to remove 23,000 trees. As discussed in Draft EIR Section 4.3, Biological Resources, the proposed project would remove approximately 72 trees. The majority - 64 trees - would be eucalyptus, which are an invasive, non-native species. As described in CRT Draft EIR Impact BIO-1, all trees removed would be replaced at a one-to-one ratio pursuant to LBNL construction standards and design guidelines.

Response to Comment PH-17

Please refer to Response to Comment I-4-13, above.

Response to Comment PH-18

Please refer to Response to Comment I-4-13, above.

Response to Comment PH-19

As depicted on Figure 4.0-1, (shown at the end of Section 4.0), the project site is not located within Strawberry Canyon. The environmental setting, regulatory considerations and impact analysis in Section 4.6, Hazards and Hazardous Materials, discuss the fire hazards associated with the CRT project. Cumulative fire hazards are discussed on pages 5.0-23 through 5.0-24 in Section 5.0, Cumulative Impacts. The comment is noted.

Response to Comment PH-20

As stated on page 4.7-4 in Section 4.7, Hydrology and Water Quality, in the Draft EIR, the project site does not fall within the 100-year flood zone as mapped by the Federal Emergency Management Agency (FEMA). Furthermore, CRT Impact HYDRO-2 found that the potential risk of flooding downstream due

to altered surface drainage patterns on the project site would be reduced by implementation of CRT MM Hydro-2. Please see pages 4.7-21 to 4.7-22 in the Draft EIR for this discussion.

Response to Comment PH-21

Slope stability is discussed in the environmental setting, regulatory setting and impact analysis on pages 4.5-3, 4.5-7, 4.5-10, 4.5-13 and 4.5-14 in Section 4.5, Geology and Soils, of the Draft EIR. The Draft EIR acknowledges that the slopes are susceptible to landsliding; however, geotechnical recommendations have been incorporated into the project to stabilize existing landslides near the project (page 4.5-13). CRT Impact GEO-3 found that the proposed project would not expose people and structures to substantial adverse effects associated with seismic-related landslides because it would comply with recommendations in the geotechnical investigation prepared for the project. Furthermore, CRT Impact GEO-5 found less than significant impacts associated with an unstable geologic unit because it would incorporate design features to reduce the potential for landslide hazards.

Response to Comment PH-22

The CRT project site's proximity to the Hayward fault is discussed on pages 4.5-1 through 4.5-4, and page 4.5-11 in Section 4.5, Hazards and Hazardous Materials in the Draft EIR. CRT Impact GEO-1 found that the CRT project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to rupture of the Hayward Fault because it is not located on an active fault. The Draft EIR acknowledges the fact that the site is located near the Hayward Fault zone and would likely be subject to violent to violent ground shaking during a major earthquake (page 4.5-11). CRT Impact GEO-2 discusses the seismic safety and building standards as well as training programs that are provided by the lab to reduce seismic safety impacts. Furthermore, CRT Impact GEO-2 found that compliance with required regulations, measures included as part of the project, and implementation of CRT MM GEO-2 would reduce potentially significant impacts associated with exposing people and structures to substantial adverse effects related to seismic ground shaking.

Response to Comment PH-23

As stated in the comment and documented in the Draft EIR, the area surrounding the project site experiences congestion during peak commute times. However, the Bancroft Way/Piedmont Avenue intersection is the only study intersection currently operating at unacceptable LOS F during both AM and PM peak hours (Table 4.12-3 on page 4.12-9 of the Draft EIR). Other study intersections are forecast to degrade to unacceptable LOS E or LOS F under Near-Term or Cumulative conditions regardless of the proposed project. Both Near-Term and Cumulative traffic analyses include traffic conditions generated by the proposed 900-space Maxwell Family Field Parking Structure.

Response to Comment PH-24

Please refer to Response to Comment Org-4-3.

Response to Comment PH-25

The commenter's request that the "rest of the area of the Strawberry Canyon be included in the University's Ecological Study Area" is noted. No portion of LBNL is designated as "Ecological Study Area," which is a land use designation that is not included in the Lab's 2006 Long Range Development Plan.

Response to Comment PH-26

Please refer to Response to Comment I-4-13, above. A full description of the proposed project, including its intended timing, need, and objectives, is included in CRT Draft EIR Sections 2.0, Executive Summary, and 3.0, Project Description.

Response to Comment PH-27

The comment is noted. Please refer to Response to Comment PH-20, above. As stated in Section 3.9, Construction (page 3.0-18) of Section 3.0, Project Description, the original proposed project would require approximately 2,000 cubic yards (CY) of cut and approximately 9,000 CY of fill, including approximately 7,000 CY of imported fill. The depth to bedrock at the proposed project site is generally less than 10 feet. As stated in the Draft EIR the "CRT facility has been designed to resist seismic loading" following the most stringent design standards within the California Building Standards Code (page 4.5-12). CRT Impact GEO-4, on page 4.5-14, found that impacts associated with cuts and fills on the project site would be reduced to a less than significant impact because construction-related erosion control plans would be required under the Lab's Storm Water Pollution Prevention Plan (SWPPP) and further measures would be required by LRDP Mitigation Measure GEO-3a and 3b.

Response to Comment PH-28

The bedrock underlying the project site is not considered a viable aquifer due to its generally low permeability. In addition, the Draft EIR states that "Groundwater flow paths that do exist at the site are unlikely to be affected, as the building will extend a maximum of 25 feet below the ground surface, above the level at which groundwater is typically observed near the site" (page 4.7-19).

Response to Comment PH-29

Please see Master Response No. 1, Alternative Site – Richmond Field Station. Richmond Field Station is located on relatively flat land and would afford more ease of construction. However, locating the systems and computational research staff away from the main LBNL site will not satisfy the programmatic advantages of being on the LBNL site.

Response to Comment PH-30

The proposed project is prepared to be consistent with the Berkeley Lab's 2006 Long Range Development Plan. (Development at UC Berkeley is guided by its 2020 Long Range Development Plan, which is unrelated to this project).

As discussed in CRT Draft EIR Section 6.0, Alternatives, alternative off-site locations such as the Richmond Field Station were considered but dropped from further analysis because they did not meet the project's objectives and needs.

Potential impacts to biological resource impacts are analyzed in Draft EIR Section 4.3, and potential impacts to the aquifer and nearby waters are analyzed in Section 4.7, Hydrology and Water Quality. The proposed project, which will be designed with measures such as hydromodification vaults and in-line pollution prevention devices, is expected to successfully avoid the types of downstream impacts identified by the commenter.

Response to Comment PH-31

Please see Master Response No. 1, Alternative Site – Richmond Field Station. The comment references an aquifer; there would be no adverse effect on the potential beneficial uses of the Lennert aquifer from CRT project construction or operations. The proposed project's potential for impacts to groundwater are discussed in Section 4.7, Hydrology and Water Quality, of the Draft EIR (see page 4.7-19). Please see Response to Comment ORG-3-8, regarding the effect of the project on the Lennert aquifer.

Response to Comment PH-32

With regard to an alternative location for the proposed project, other potentially feasible location options were explored at the start of the project. The current location was found to meet the requirements and program goals of the project, and other locations are infeasible or less desirable for reasons discussed in Section 6.0, Alternatives, of the Draft EIR.

The remainder of the comment raises economic, social, or political issues. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. It should be noted that cumulative impacts are addressed in Section 5.0 of the Draft EIR.

Response to Comment PH-33

The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment PH-34

The comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment PH-35

The site is a good location to maximize the benefits of the Berkeley climate, which lowers the energy consumption of the building.

Response to Comment PH-36

The comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment PH-37

As noted on page 4.3-4 in Section 4.3, Biological Resources of the Draft EIR, grasslands in the project area provide habitat for reptiles and amphibians, such as the western fence lizard. Impacts associated with removal of grasslands are discussed in CRT-Impact BIO-1 on page 4.3-29 of the Draft EIR.

Response to Comment PH-38

The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. It should be noted that greenhouse gases and global climate change are addressed in Section 5.5.2 of the Draft EIR.

Response to Comment PH-39

Please refer to Response to Comment I-4-13, above.

Response to Comment PH-40

As stated in the Draft EIR on page 1.0-1, the University of California is the "lead agency" for the project evaluated in the Draft EIR, and The Board of Regents of the University of California (The Regents) has the principal responsibility for approving the project. State CEQA Guidelines Section 15084(a) provides that a Draft EIR shall be prepared by or under control to the lead agency. State CEQA Guidelines Section 15090 requires the lead agency to certify the Final EIR before approving the project. The University of California, through The Regents, is therefore the agency responsible for certification of the Draft EIR and approval of the project. State CEQA Guidelines Section 15090 further requires that this certification "reflects the lead agency's independent judgment and analysis."

The Lab does not agree with the implication in the comment that the public cannot have an open discussion regarding the project that is under review. The University has a history of taking comments on its projects seriously, as reflected by the fact that the Lab's Long Range Development Plan was substantially revised, and reduced in scope, in response to comments received, in particular comments received from the City of Berkeley.

Response to Comment PH-41

As requested by the commenter, the CRT project is now scheduled to go to the May 2008 Regents meeting. The May 2008 meeting is scheduled to be held at the University of California, Los Angeles campus, however.

Response to Comment PH-42

The building is designed to work with the hillside so it will not increase storm water flow, and is designed for the site and seismic zone. Traffic will be accommodated by the availability of parking, restricting parking permits, use of the shuttle or alternate modes of travel.

Response to Comment PH-43

As discussed on page 6.0-1 of Section 6.0, Alternatives, in the Draft EIR, "An EIR need not consider every conceivable alternative to a project, but rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation (State CEQA Guidelines Section 15126.6(a))." Please refer to Master Response No. 1, Alternative Site – Richmond Field Station for reasons why the off-site alternative sites were not selected for detailed evaluation.

Response to Comment PH-44

The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. It should be noted that impacts associated with tree removal from the project site are addressed in CRT Impact VIS-2 and CRT Impact BIO-2 of the Draft EIR.

Response to Comment PH-45

The cumulative analysis has considered other related projects, including the SCIP. For responses to comments regarding cumulative impacts and the relationship between this project and UC Berkeley's Long Range Development Plan, see Responses to Comment PH-13 and PH-31.

The Regents take seriously and understand their obligations under CEQA to ensure that their review and certification of the EIR reflects their independent judgment and analysis.

Response to Comment PH-46

NERSC is an unclassified national facility that supports open scientific research. The NERSC mission is to accelerate the pace of scientific discovery in the DOE Office of Science community by providing high-performance computing, information, data, and communications services. Computing is a tool as vital as experimentation and theory in solving the scientific challenges of the twenty-first century. Fundamental to the mission of NERSC is enabling computational science of scale, in which large, interdisciplinary teams of scientists attack fundamental problems in science and engineering that require massive calculations and have broad scientific and economic impacts. In particular NERSC supports simulations that help the nation to develop a better understanding of climate change, improve energy efficiency, and develop new sources of energy. Examples of these problems include computer simulations to predict the impacts of climate change (NERSC computers were used in past IPCC simulations); identification of possible extreme climate events such change in sea level that could dramatically impact the Bay Area; evaluation of alternative energy sources; understanding the mechanics of combustion, which is essential to the design of efficient engines; and a better understanding of the origins of the universe, fundamentals of biology, and the design of new materials.

Response to Comment PH-47

The comment is correct in that the Draft EIR discloses cumulative and traffic impacts of the proposed project. This comment will be included in the record for the decision makers to consider.

Response to Comment PH-48

The cancer risk evaluated as part of the human health risk assessment does not represent the cancer burden on the adjacent population, where the cancer burden is a prediction of the number of potential cancer cases that could be caused. This term is distinguished from the cancer risk, which is the probability of contracting cancer at the levels of toxic air contaminants in question. It should be noted that the cancer risks shown in the Table 4.2-12 and 4.2-13 represent the cancer risk assuming a continuous 70-year exposure (off-site receptors) or 40-year exposure (on-site receptors) to concentrations at the point of the maximally exposed individuals (MEI). Most Berkeley residents would not be continuously exposed to the maximum concentrations of toxic air contaminants (i.e., those found at the MEI) for that period of time as a result of the proposed project. Furthermore, the exposure estimates in the human health risk assessment is one of many factors that determine whether an individual would contract cancer (e.g., heredity, lifestyle, exposure to other carcinogens). Therefore, it is not anticipated that the proposed project would cause any Berkeley residents or workers to contract cancer as a result of its operation.

Response to Comment PH-49

Diesel particulate matter was evaluated for the emergency generator that would be diesel-fueled. The proposed cogeneration engines would be natural gas-fired. Therefore, emissions of 1,3-butadiene, formaldehyde, and acrolein, which are toxic air contaminants associated with natural gas combustion, were evaluated in the health risk assessment for the cogeneration option. As noted in Response to Comment I-3-5, bromine compounds associated with cooling water treatment were also evaluated. These are the sources of toxic air contaminants associated with the proposed project. In addition, various laboratory chemicals and other sources at LBNL and UC Berkeley would contribute to the cumulative health impacts.

Response to Comment PH-50

Figure 4.0-2, (shown at the end of Section 4.0), in this Final EIR includes views from the south of the site, including three from locations along Telegraph Avenue. Photo 1, taken from the corner of Haste and Telegraph, shows a view that includes portions of Building 50 and the LBNL campus. However, from this location the laboratory buildings appear small and do not dominate the view. (See also Response to Comment PH-9). As shown in Photo 2 from Telegraph Avenue at Oregon Street, some views of the project site are also available further south on Telegraph where the street widens. The LBNL campus buildings appear even smaller in relationship to the entire view. In other locations, such as at Ashby and Telegraph Avenues, existing buildings and vegetation screen views toward the site.

Response to Comment PH-51

Please see Master Response No. 3, Strawberry Canyon Cultural Landscape Claims. The Draft EIR evaluated the project's potential impacts on viewsheds and other visual resources on pages 4.1-1 to 4.1-20. The Draft EIR determined that with mitigation, all potential significant impacts to visual resources would be less than significant.

Response to Comment PH-52

Regarding the overall aesthetic impact of new buildings in Blackberry Canyon, the overall impact of these buildings is addressed in the LBNL 2006 LRDP EIR.

Response to Comment PH-53

The regulatory and scientific nature of greenhouse gases and global climate change are discussed in detail in the Section 4.2, Air Quality. The cumulative effects of greenhouse gases are discussed in Section 5.2.2. At the time of this analysis, no official guidance for analyzing greenhouse gas emissions and subsequent global climate change has been published. Therefore, the project's consistency with the goals of the California Global Warming Solutions Act of 2006 (AB 32) and the Governor's Executive Order S-3-05 were used as criteria for determining cumulative significance. As discussed in CRT Cumulative Impact AIR-2, the project includes many design features that are consistent with the goals of AB 32 and Executive Order S-3-05.

Response to Comment PH-54

Please refer to Section 4.3, Biological Resources for a discussion of project impacts associated with biological impacts.

Response to Comment PH-55

The commenter is concerned about the impact of the 15 hypothetical buildings in the Illustrative Development Scenario that was used in the LRDP EIR as a conceptual portrayal of potential development in order to provide a more complete disclosure of the potential impacts of overall lab development, as well as buildings including labs, offices, and housing for employees in West Berkeley. The LRDP EIR includes massing study simulations and evaluations of all of the 15 hypothetical buildings on the LBNL campus.

The CRT project does not include development in West Berkeley. According to the LRDP, the laboratory leases space in West Berkeley, Oakland and other areas. However, no change in this amount of off-site

use is expected (LBNL LRDP EIR, III-21). Also, the proposed LRDP is not expected to induce substantial population growth in the City of Berkeley (LBNL LRDP EIR, II-41).

Response to Comment PH-56

A figure has been provided that shows both Lab and UC Berkeley projects included in the cumulative analysis (see Figure 4.0-4, Location of Cumulative Projects, shown at the end of Section 4.0).

Response to Comment PH-57

The commenter requests a simulation showing all "10" of the proposed LBNL buildings. Massing study simulations of all of the 15 hypothetical buildings portrayed in the LNL 2006 LRDP EIR's Illustrative Development Scenario from eight public vantage points are provided in LBNL LRDP EIR Section 4. A variety of vantage points were chosen as the buildings are not all visible from a single viewpoint. As specific designs are developed for each building, visual simulations showing more detailed architecture will be developed.

Response to Comment PH-58

The alternate sites that have been considered are listed in Section 6.0 of the Draft EIR and other options are not being considered.

Response to Comment PH-59

Lab employees would not be granted LBNL parking privileges to the UC Berkeley's proposed Maxwell Field parking lot. There is no direct relationship between the CRT project, proposed at and by LBNL, and the SCIP project, proposed at and by UC Berkeley.

Traffic generated by the proposed 900-space Maxwell Family Field Parking Structure is accounted for in the traffic analysis completed for both the Near-Term and Cumulative conditions.

Response to Comment PH-60

Similar to other existing UC Berkeley facilities, the proposed 900-space Maxwell Family Field Parking Structure would not be available to LBNL employees or visitors. The current LBNL shuttles service will be expanded to serve the proposed CRT project. As part of the Transportation Demand Management (TDM) program required by LRDP Mitigation Measure TRANS-1d, it is expected that shuttle ridership and travel times will be monitored and if necessary, shuttle service will be modified to meet the expected

demand (page 4.12-33). The number of bicycles on the shuttles can also be monitored and if necessary bicycle amenities on shuttles will be modified to accommodate more bicycles.

As stated in the comment and documented in the Draft EIR, there are currently no direct bicycle paths between LBNL campus and the City of Berkeley. However, construction of the proposed CRT project would not result in increased hazards to pedestrians or bicyclists or conflict with adopted policies, plans, or programs that promote walking or bicycling (page 4.12-34) In addition, the CRT project site plan identifies shower and locker facilities and CRT Mitigation Measure TRANS-4 requires installation of 32 bike parking spaces to further encourage bicycling to the site. Since provision of future bicycle paths or other amenities do not relate to the environmental impacts of the proposed project, they are not discussed in the Draft EIR.

Response to Comment PH-61

The "Project Trip Generation" section of the Draft EIR explains how people coming to the CRT project will be accommodated. This will be accomplished by the limited availability of parking, restricting parking permits, and use of the shuttle or alternate modes of travel.

Although no major new parking facilities will be constructed as part of the proposed CRT project, it is expected that some employees and visitors to the new CRT project would be able to drive to and from the LBNL campus and utilize current LBNL parking spaces that are not used. As required by LRDP Mitigation Measure TRANS-1c, the current TDM program would be enhanced to accommodate and encourage employees and visitors to use alternative commute modes to and from the LBNL campus.

See response to Response to Comment PH-60, regarding cumulative conditions analysis of the Maxwell Family Field Parking Structure.

Response to Comment PH-62

The Lab disagrees that a moratorium on development is appropriate. As to development within Strawberry Canyon, the CRT project site is located outside the Strawberry Canyon area (see Figure 4.0-1, shown at the end of Section 4.0). Impacts of the CRT project, including cumulative impacts, have been addressed in compliance with CEQA. With regard to “bundling” of lawsuits, there is ongoing litigation of both the LRDP EIR and the UC Berkeley Southeast Campus Integrated Projects. These are separate legal actions among different parties and regarding different issues.

Response to Comment PH-63

There will be no effect on the potential beneficial uses of the Lennert aquifer from CRT construction or operations. In addition, since the aquifer is upgradient (i.e., in a direction opposite from the groundwater flow direction) from areas of groundwater contamination at LBNL, the contamination has no effect on beneficial uses of the aquifer.

Response to Comment PH-64

The comment expresses the opinion of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment PH-65

The potential for landslides on the project site and in the project vicinity is discussed in Section 4.5, Geology and Soils and Subsection 5.5.5, Geology and Soils in the Draft EIR. Furthermore, as noted on page 4.6.-10 in the Draft EIR, compliance with federal, state and local rules and regulations and LRDP Mitigation Measures HAZ-3a through HAZ-3f would reduce potential impacts to the public and the environment associated with accidental release of hazardous materials. Therefore, that harmful substances would be released into the environment in the event of a natural disaster is not reasonably foreseeable.

The Draft EIR also acknowledges that the slopes at the project site are susceptible to landsliding (page 4.5-3). Geotechnical recommendations have been incorporated into the project to stabilize existing landslides near the project (page 4.5-13).

CRT Impact UTILS-1 and CRT Impact UTILS-2 found that development of the CRT project would not require expansion of existing sewer conveyance or stormwater facilities which could cause environmental effects. The stormwater and sanitary sewer systems are constructed to applicable Lab and City standards. If effluent from the CRT project conveyed over the Hayward Fault were to be released as the result of rupture of the fault, LBNL would suspend normal operations and minimize or cease all generation of sanitary effluent until utilities have been repaired.

In addition, the Regional Water Quality Control Board State Water Resources Control Board has issued new requirements (Order #2006-0003-DWQ) that facilities with extensive sanitary sewer infrastructure, like LBNL and UC Berkeley, need to prepare Sanitary Sewer Management Plans. These plans include measures to prevent, respond to, and mitigate breaches in the sanitary sewer system. LBNL and UC

Berkeley are currently preparing such plans, which will apply to all aspects of their operations, including the proposed wastewater handling aspect of the CRT project.

Response to Comment PH-66

See Response to Comment I-6-9, above.

Response to Comment PH-67

Lawrence Berkeley National Laboratory is a Department of Energy National Laboratory and, as such, must have perimeter security and controlled access to ensure adequate security for its occupants, equipment, and research. When arranged in advance, the public is welcome to visit LBNL for open houses, lectures, tours, and meetings, etc.

The CRT Draft EIR is prepared with maps, diagrams, photographs, visual simulations, and extensive setting descriptions in each environmental resource category such that the reader should be able to understand the issues being discussed without actually needing to physically investigate each issue empirically.

Response to Comment PH-68

Geologic cross sections and soil/bedrock properties of the project site are contained in the site-specific geotechnical report prepared by Kleinfelder in 2006. Saturated conditions were not encountered during geotechnical investigations, and therefore no water quality sampling was completed at that time. The LBNL Environmental Restoration Program manages the surface and ground-water monitoring programs for the lab. Comprehensive sampling of soil and groundwater conditions near and on the CRT project site was completed as part of the RCRA facility investigation by LBNL and Parsons in 2000. More recent monitoring results for sites near the CRT site are summarized in quarterly monitoring reports such as those referenced in the Draft EIR as LBNL 2007a, 2007b, and 2006b. These reports are available at http://www.lbl.gov/ehs/erp/html/documents.shtml.

Response to Comment PH-69

LEED looks at projects based upon sustainable practices and this site, which utilizes the Berkeley climate to reduce heating and cooling power requirements, is very energy efficient.

Response to Comment PH-70

Please see Master Response No. 1, Alternative Site – Richmond Field Station. The Richmond Field Station was evaluated and eliminated as an option because it does not meet the CRT project objectives to expand functionality of Lab facilities, provide for cross-disciplinary research, or foster collaborative work environments among researchers. The Richmond site does not provide accessibility to a large, reliable, and economical electrical power source.

The project will be funded by the University of California.

Response to Comment PH-71

No carbon credits will be obtained to offset the emissions resulting from this proposed project.

Response to Comment PH-72

Please refer to Response to Comment I-4-13, above.

Response to Comment PH-73

Please see the Response to Comment I-6-10, regarding project location.

Response to Comment PH-74

As stated in Lab Director Dr. Steven Chu's December 17, 2007 letter to Michael Lozeau, the Lab provided a three-week extension to the Helios Draft EIR comment period, allowing for a total comment period of 74 days. CRT's comment period was to remain at 56 days. As described in the letter, this would allow for further staggering of the two overlapping comment periods.

As mandated by CEQA, the time period for public review of Draft EIRs is 45 or more days.

Response to Comment PH-75

The comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment PH-76

The comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response to Comment PH-77

CRT Impact HYDRO-1 (page 4.7-20 of the Draft EIR) discusses the potential impacts of the increased impervious area. The proposed CRT project includes the use of hydromodification vaults intended to mimic pre-project runoff conditions and reduce the potential impact to a less than significant level.

CRT Cumulative Impact HYDRO-1 found that the CRT project, in conjunction with reasonably foreseeable near-term and long-term development, would not result in a significant cumulative impact on surface water resources. Design features and on-site stormwater management features required for new development on the UC Berkeley and LBNL sites would reduce impacts associated with surface water to a less than significant level. Please refer to page 5.0-25 in Section 5.0, Cumulative Impacts, for the complete analysis.

Response to Comment PH-78

A thorough Mitigated Negative Declaration was prepared for the Molecular Foundry. The Helios and CRT projects were both discussed in the LRDP EIR, and further detailed information on the CRT project is being provided in this EIR. Further detailed information on the Helios project is being provided in that project's EIR.

Response to Comment PH-79

The Shively Well #1 is located on University of California property near the south end of the Space Sciences laboratory parking lot and managed by UC. The well is not located at LBNL and is not covered over by a building.

The Lennert aquifer is associated with the Moraga formation located over 0.25 mile north and northeast of (as well as up-gradient and stratigraphically above) the project site. For this reason, the CRT project is not expected to impact the Lennert aquifer.

The Lab's long-term vegetation management program is not part of the CRT project and would not be affected by the project.

Response to Comment PH-80

Please see Master Response No. 1, Alternative Site – Richmond Field Station. The alternate sites that have been considered are listed in Section 6.0 of the Draft EIR and other options are not being considered.

Response to Comment PH-81

Please refer to Response to Comment I-4-13, above.

Response to Comment PH-82

Please refer to Response to Comment ORG-4-29. The comment is noted.

Response to Comment PH-83

The Draft EIR states on page 3.0-1 that the purpose of the proposed building would be to include new advanced computational equipment and office space to support UC Berkeley's academic programs in computational science and engineering and the needs of computer scientists, mathematicians, and theoreticians who are currently engaged in high-performance computing and high-performance production computing and computational research. The Draft EIR further states on page 3.0-2 that the Lab has a need to move the NERSC facility to the Lab's hill site in order to provide immediate access for researchers and meet power supply needs for future operation of NERSC programs.

The Draft EIR also identifies on pages 3.0-1 to 3.0-2 a bullet-list of five key objectives of the proposed project: (1) provide an integrated and appropriately designed facility that would allow for the continued operation and future advancement of the Berkeley Lab's NERSC High Performance Computing national users facility, Computational Research Division and joint Berkeley Lab/UC Berkeley Computational Science & Engineering programs; (2) provide adequate space, chilling capacity, and infrastructure to accommodate next-generation computing equipment and to allow for continual future upgrades to such equipment; (3) provide accessibility to a large, reliable, and economical electrical power source, which should be capable of serving both the immediate and potential future needs of Berkeley Lab's computing program; (4) provide researchers with convenient access to other Lab scientific facilities, programs, researchers, and services; locate the facility such that it fosters interaction and collaboration between the project and UC Berkeley programs; and (5) meet UC policies on sustainability and achieve efficiencies in energy conservation, temperature control, operational and maintenance services, and transportation (i.e., near public transportation, and without provision of large amounts of parking). The impacts of the CRT project are identified in the Draft EIR and summarized at pages 2.0-7 to 2.0-20.

Response to Comment PH-84

The commenter's suggestion that a local Berkeley newspaper summarize the CRT Draft EIR impacts is noted.

Along the lines of what the commenter suggests for a newspaper to undertake, LBNL has made available to reviewers an EIR summary section (Section 2.0, Executive Summary) that includes a Summary of Impacts Table (Table 2.0-1).

Response to Comments Made at the Helios Public Hearing, December 17, 2007

Note: Several commenters at the Helios project hearing made comments on the CRT project. Most of these comments were summarized in CRT comment letter I-5, and the responses to those comments are included in the responses to that letter. One commenter, Gianna Ranuzzi, made comments at the Helios public hearing that were not included in that letter. Responses to Ms. Ranuzzi's comments are presented below.

Response to Comment Helios PH-111

Please see Master Response No. 1, Alternative Site – Richmond Field Station.

Response to Comment Helios PH-112

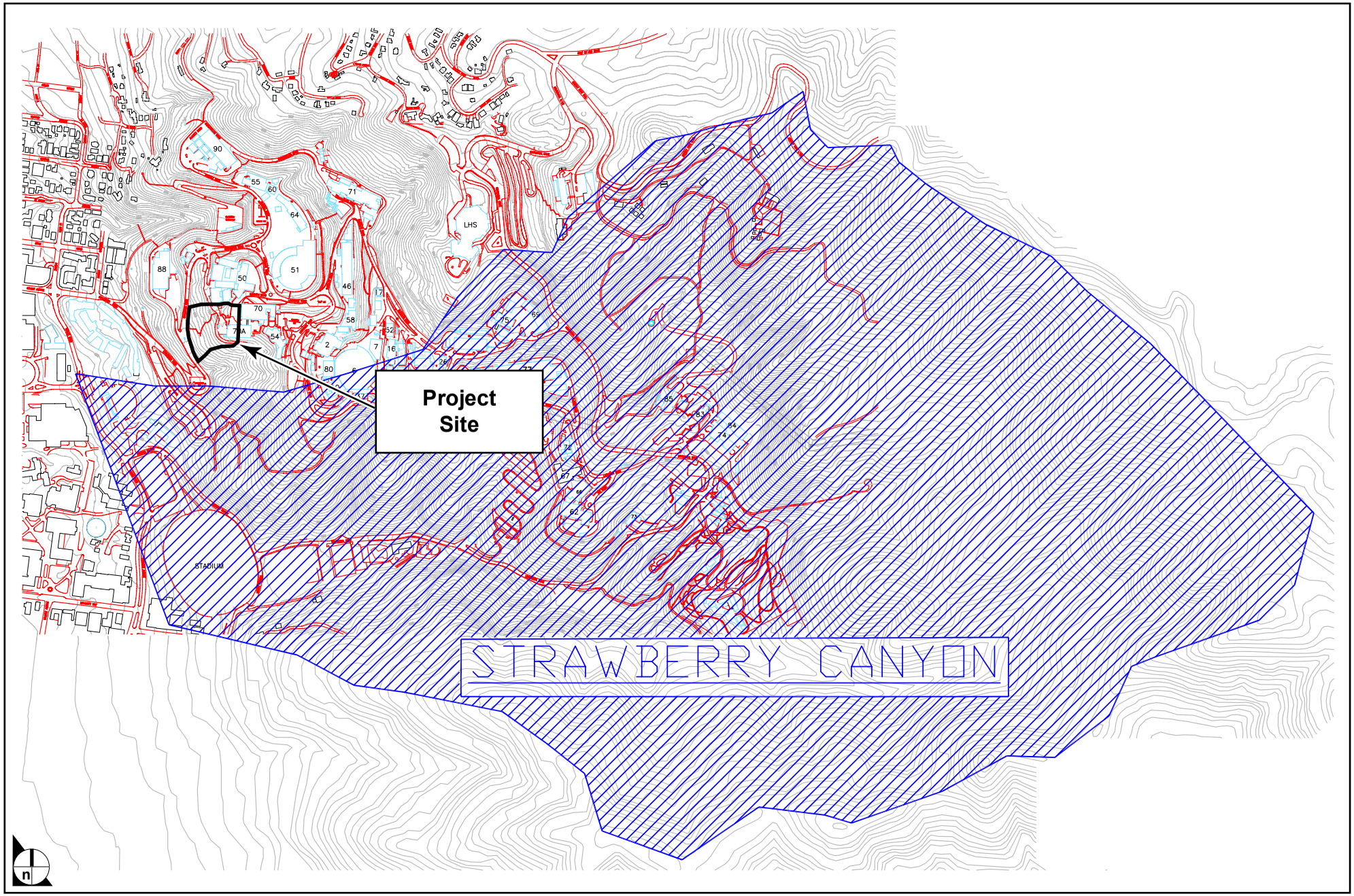
Please see the Response to Comment PH-31, above.

Response to Comment Helios PH-113

Please see the Response to Comment LA-1-26, above.

Response to Comment Helios PH-114

Please see the Response to Comment ORG-4-1, above.



SOURCE: LBNL - April 2008

FIGURE **4.0-1**

Strawberry Canyon Map

924-002•04/08

1. Telegraph Avenue at Haste Street looking north
(CRT site partially visible)

2. Telegraph Avenue near Oregon Street looking north
(CRT site partially visible)

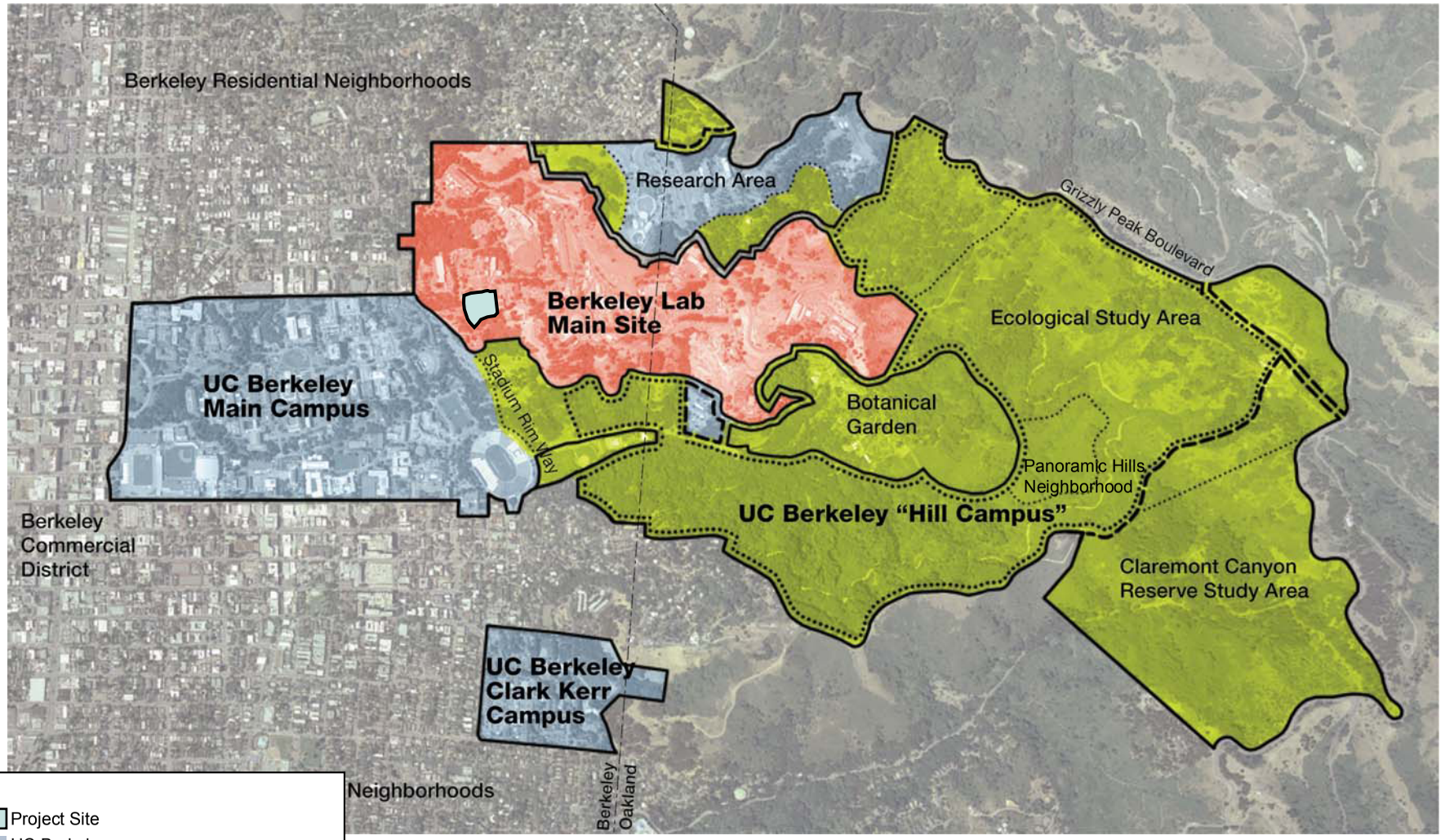
3. Telegraph Avenue near Ashby Avenue looking north
(CRT site not visible)

4. Broadway near Highway 13 in Oakland looking north
(CRT site and LBNL campus not visible)

SOURCE: Environmental Vision - February 2008

FIGURE **4.0-2**

Additional Site Photos



SOURCE: LBNL - 2006

FIGURE **4.0-3**

Surrounding Land Uses

924-002•04/08

3 Cumulative Project Location

CRT Project Location

NOT TO SCALE

SOURCE: Google Earth – November 2007

FIGURE **4.0-4**

Location of Cumulative Projects

924-002•04/08