

# **SUPPLEMENTAL COMMUNICATIONS AND REPORTS 3**

## **BERKELEY CITY COUNCIL SPECIAL MEETING**

**DATE OF MEETING: TUESDAY, JULY 20, 2021**

**TIME: 6:00 P.M.**

*The agenda packet for this meeting was distributed/posted on July 15, 2021. Communications in this supplement were received after 12pm on July 19, 2021. This communication packet was distributed/posted on July 22, 2021.*

### **Worksession**

*Each item in this supplement follows the corresponding item on the City Council Agenda for this date.*

#### **Item #2: Bayer HealthCare LLC Development Agreement Amendment**

5. Supplemental material, submitted by Councilmember Taplin
6. Supplemental material, submitted by Mayor Arreguin
7. Presentation, submitted by Bayer
8. Presentation, submitted by Planning
9. Ana Vasudeo
10. Deborah Bookstein

#### **Item #3: Measure FF and Fire Prevention**

11. Presentation, submitted by Fire



**SUPPLEMENTAL  
AGENDA MATERIAL  
For Supplemental Packet 3**

**Meeting Date:** 7/20/21

**Item Number:** 2

**Item Description:** Bayer HealthCare LLC Development Agreement Amendment

**Submitted by:** Councilmember Taplin

- Corrected error in Exhibit title
- Additional memo regarding Climate Action subsection in Community Infrastructure and Resilience Category



Work Session  
7/20/2021

Exhibit G-6-9 of the original development agreement between the City of Berkeley and Bayer details the establishment of the West Berkeley Community Programs Board to “identify and support programs for the health and welfare of community residents” and which comprised “West Berkeley business and community members and City officials”(pg 140). The original Board no longer remains. However, West Berkeley continues to face health disparities, housing precarity, substandard roads and infrastructure, traffic violence, economic blight, homelessness, and environmental injustice.

In addition to the benefits of expanding Berkeley’s competitive and viable life-science innovation ecosystem, the renewal of the agreement affords a powerful opportunity to reinvest in the community that has housed Bayer for the last 30 years. Under the Community Resiliency category, we must re-establish the West Berkeley Community Programs Board to administer a West Berkeley Fund with an emphasis on health equity, economic development and justice, housing stability, small business recovery and relief, arts and cultural programming, youth engagement, recreational equity, and care for our senior community.

A reimagined West Berkeley Community Programs Board could include among its roster the Mayor of Berkeley, City Councilmembers representing Districts 1 and 2, business leaders representing West Berkeley’s commercial districts, faith leaders, nonprofits leaders working with youth, seniors, and families, and leaders in fields of arts and health care, among others. A West Berkeley Fund could also provide seed funding to leverage other philanthropy and grants for innovative solutions for economic, health, and housing equity. Engagement with members of the ad-hoc community adversary group convened by the Mayor’s office and D2 office as well as with community members, business and neighborhood leaders has yielded a strong desire to see dedicated resources remain in the West Berkeley community most impacted by Bayer’s activity and expansion.

Under the Climate Action subsection Community Infrastructure Investments, we have a valuable opportunity to make meaningful investment towards the fulfilment of our Bike and Pedestrian Plans. Vision Zero’s Priority Equity and high-injury network fall within West and South Berkeley. Pedestrian / Bicycle safety and progress toward a fully connected bicycle boulevard network provides city-wide benefits.



Work Session  
7/20/2021

Exhibit G-9 of the original development agreement between the City of Berkeley and Bayer details the establishment of the West Berkeley Community Programs Board to “identify and support programs for the health and welfare of community residents” and which comprised “West Berkeley business and community members and City officials”(pg 140). The original Board no longer remains. However, West Berkeley continues to face health disparities, housing precarity, substandard roads and infrastructure, traffic violence, economic blight, homelessness, and environmental injustice.

In addition to the benefits of expanding Berkeley’s competitive and viable life-science innovation ecosystem, the renewal of the agreement affords a powerful opportunity to reinvest in the community that has housed Bayer for the last 30 years. Under the Community Resiliency category, we must re-establish the West Berkeley Community Programs Board to administer a West Berkeley Fund with an emphasis on health equity, economic development and justice, housing stability, small business recovery and relief, arts and cultural programming, youth engagement, recreational equity, and care for our senior community.

A reimagined West Berkeley Community Programs Board could include among its roster the Mayor of Berkeley, City Councilmembers representing Districts 1 and 2, business leaders representing West Berkeley’s commercial districts, faith leaders, nonprofits leaders working with youth, seniors, and families, and leaders in fields of arts and health care, among others. A West Berkeley Fund could also provide seed funding to leverage other philanthropy and grants for innovative solutions for economic, health, and housing equity. Engagement with members of the ad-hoc community adversary group convened by the Mayor’s office and D2 office as well as with community members, business and neighborhood leaders has yielded a strong desire to see dedicated resources remain in the West Berkeley community most impacted by Bayer’s activity and expansion.

Under the Climate Action subsection Community Infrastructure Investments, we have a valuable opportunity to make meaningful investment towards the fulfilment of our Bike and Pedestrian Plans. Vision Zero's Priority Equity and high-injury network fall within West and South Berkeley. Pedestrian / Bicycle safety and progress toward a fully connected bicycle boulevard network provides city-wide benefits.

**DEVELOPMENT AGREEMENT BY AND BETWEEN  
THE CITY OF BERKELEY AND MILES INC.  
FOR THE MILES INC. LONG RANGE DEVELOPMENT PROGRAM**

**February 25, 1992**

**RECORDING REQUESTED BY:  
CITY OF BERKELEY**

**WHEN RECORDED, RETURN TO:**

Manuela Albuquerque  
City Attorney  
City of Berkeley  
2180 Milvia Street, 5th Floor  
Berkeley, CA 94704

**DEVELOPMENT AGREEMENT BY AND BETWEEN THE  
CITY OF BERKELEY AND MILES INC.  
FOR THE MILES INC. LONG-RANGE DEVELOPMENT PROGRAM**

**RECORDING NOTE:** The property subject to this Agreement is shown on the map attached as Exhibit A and is legally described on Exhibit B attached to this Development Agreement.

## TABLE OF CONTENTS

<b>RECITALS AND FINDINGS</b>	<b>1</b>
<b>AGREEMENT</b>	<b>7</b>
<b>ARTICLE 1.    DEFINITIONS.</b>	<b>7</b>
<b>ARTICLE 2.    EXHIBITS.</b>	<b>10</b>
<b>ARTICLE 3.    DEVELOPMENT OF PROJECT SITE.</b>	<b>12</b>
Section 3.1. General.	12
Section 3.2. Applicable Ordinances.	12
Section 3.3. Reserved Discretionary Approvals and Special Conditions.	13
Section 3.4. Processing of Subsequent Approvals.	13
Section 3.5. Development and Processing Fees.	14
Section 3.6. Other Governmental Permits.	15
Section 3.7. Construction Codes.	15
Section 3.8. Health or Safety Ordinances.	15
Section 3.9. State and Federal Requirements.	16
Section 3.10. Miles' Obligations.	17
Section 3.11. Right of Way Vacation and Dedication.	18
Section 3.12. General Provisions With Respect to Financing Public Infrastructure.	18
<b>ARTICLE 4.    PERIODIC REVIEW OF AGREEMENT.</b>	<b>18</b>
<b>ARTICLE 5.    AMENDMENT OF AGREEMENT.</b>	<b>21</b>
Section 5.1. In General.	21

Section 5.2.	Major Amendments.	21
Section 5.3.	Minor Amendments.	21
Section 5.4.	Minor Modifications to Site Plan, Design Guidelines, Site Plan Standards or Phasing Plan.	22
<b>ARTICLE 6.</b>	<b>GENERAL PROVISIONS.</b>	<b>22</b>
Section 6.1.	Covenants.	22
Section 6.2.	Term.	23
Section 6.3.	Default; Remedies; Termination.	23
Section 6.4.	Enforced Delay; Extension of Time of Performance.	24
Section 6.5.	Cooperation in the Event of Third-Party Legal Challenge.	25
Section 6.6.	Effect of Termination.	25
Section 6.7.	Legal Actions; Remedies; Attorney's Fees.	26
Section 6.8.	Construction of Agreement.	27
Section 6.9.	Hold Harmless.	27
Section 6.10.	No Joint Venture, Partnership or Agency.	28
Section 6.11.	Severability.	28
Section 6.12.	Further Documents.	29
Section 6.13.	Notices.	29
Section 6.14.	Assignment.	30
Section 6.15.	Incorporation by Reference.	31
Section 6.16.	Entire Agreement.	32

	Section 6.17. Counterparts.	32
	Section 6.18. Recordation.	32
EXHIBIT A.	MAP OF THE PROJECT SITE AND SURROUNDING AREA	A-1
EXHIBIT B-1.	LEGAL DESCRIPTION OF MILES PROPERTY	B-1-1
EXHIBIT B-2.	LEGAL DESCRIPTION OF STEELCUTTER PROPERTIES	
EXHIBIT C.	SITE DEVELOPMENT PLAN	C-1
EXHIBIT D.	SITE DEVELOPMENT STANDARDS	D-1
EXHIBIT E.	PHASING PLAN FOR THE PROJECT	E-1
EXHIBIT F.	SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES	F-1
EXHIBIT G-1.	BIOTECHNOLOGY EDUCATION TRAINING PROGRAM	G-1-1
EXHIBIT G-2.	EMPLOYMENT-HIRING PROGRAM	G-2-1
EXHIBIT G-3.	AFFORDABLE HOUSING PROGRAM	G-3-1
EXHIBIT G-4.	CHILD CARE PROGRAM	G-4-1
EXHIBIT G-5.	PUBLIC INFRASTRUCTURE PLAN	G-5-1
EXHIBIT G-6.	TRANSPORTATION DEMAND MANAGEMENT PROGRAM	G-6-1
EXHIBIT G-7.	HISTORIC PRESERVATION AND PUBLIC ART	G-7-1
EXHIBIT G-8.	ENVIRONMENTAL PROTECTION	G-8-1
EXHIBIT G-9.	COMMUNITY PROGRAMS	G-9-1

EXHIBIT G-10.	ANIMAL CARE AND USAGE	G-10-1
EXHIBIT G-11.	PEACE AND JUSTICE PROGRAM	G-11-1
EXHIBIT H.	MONITORING AND REPORTING PROGRAM	H-1
EXHIBIT I.	SITE PLANNING AND ARCHITECTURAL DESIGN GUIDELINES	I-1
EXHIBIT J.	SPECIAL CONDITIONS	J-1
EXHIBIT K.	FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT	K-1
EXHIBIT L.	REPORT OF CITY'S INDEPENDENT ENGINEERING CONSULTANT ON JUSTIFICATION FOR HEIGHTS IN EXCESS OF FORTY-FIVE FEET	L-1
EXHIBIT M.	PROJECT DESCRIPTION	M-1

**DEVELOPMENT AGREEMENT BETWEEN THE  
CITY OF BERKELEY AND MILES INC.**

THIS DEVELOPMENT AGREEMENT (the "Agreement") is entered into this 25th day of February, 1992, between MILES INC. ("Miles"), and the CITY OF BERKELEY, ("City") pursuant to the authority of Sections 65864 *et seq.* of the California Government Code and City Ordinance No. 6033 - N.S., establishing Development Agreement Procedures.

**RECITALS AND FINDINGS.**

This Agreement is based on the following facts, understandings and intentions of the parties:

A. To strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the California Legislature enacted the Development Agreement Statute (Government Code, Section 65864 *et seq.*), which authorizes any city to enter into binding, long-term agreements with persons or entities having legal or equitable interests in real property, for which agreements provide for the development of the property.

B. City, by Ordinance No. 6033 - N.S., dated March 5, 1991, adopted procedures for the processing, consideration and implementation of such development agreements.

C. Pursuant to Section 3.5 of the City's Development Agreement Procedures, the City Council, on April 16, 1991, determined that a development

agreement is an appropriate form of entitlement for this Project.

D. Miles Inc. is a corporation duly organized under the laws of the State of Indiana, is in good standing thereunder, and is duly qualified to conduct business in the State of California. Miles represents that on the Effective Date it possesses a legal or equitable interest in those certain parcels of land located within the City of Berkeley, consisting of 1) approximately 23.9 acres currently owned by Miles and 2) approximately 5.6 acres owned by Steelcutter Properties, as to which Miles has entered into a purchase and sale agreement contingent on approval of this Agreement and other conditions. The Miles site and the Steelcutter Properties site are more particularly described in Exhibits A, B-1 and B-2 to this Agreement and are collectively referred to herein as the "Project Site". Miles further represents that the nature of its property interest is accurately set forth in Exhibits B-1 and B-2, and that any other persons holding legal or equitable interests in the Project Site are bound by this Agreement.

E. City and Miles have reached accord on, and desire to express herein, a Development Agreement that will permit and facilitate development of the Project Site pursuant to conditions that are in the best interests of the public and the City, and at the same time fair and economically feasible to Miles. It is the intent of the City to grant certain development rights in the Project Site to Miles and obligate Miles to provide certain public benefits in the form of environmental mitigations, community benefits, fees, property dedications, and public improvements.

F. The Preferred Land Use Concept for the West Berkeley Area Plan, approved in concept by the City Council on April 9, 1991, designates the portion of West Berkeley in which the Project Site is located as "mixed manufacturing" and "mixed use - 'green.'" The uses contemplated by the Project are compatible with those designations. The Project qualifies as a "large-site development project" under the Preferred Land Use Concept, making it an appropriate subject for a development agreement. Although the Project contains buildings which exceed the height limits identified in the Preferred Land Use Concept for the West Berkeley Area Plan, the need for these heights has been substantiated by the City's independent engineering consultant, whose findings are incorporated herein as Exhibit L to this Agreement. The parties recognize that as of the Effective Date, the West Berkeley Area Plan has not yet been finalized or adopted as a portion of the City's General Plan. However, the April 9, 1991 version of the Preferred Land Use Concept for the West Berkeley Area Plan embodies valuable planning concepts developed by City staff in cooperation with interested members of the affected community over a period of several years. For this reason, it is the intent of the parties to utilize the general concepts contained in that document in the formulation of the development plan for the Project Site, consistent with the City's General Plan.

G. The facilities contemplated by the Project are permitted uses within manufacturing zones upon compliance with the use permit procedures set forth in Zoning Ordinance Chapter 20.

H. Miles is engaged in the business of developing, manufacturing and distributing human health care products and has been conducting this business for more than 70 years at its facility located at Fourth and Parker Streets within the City. As technology progresses, the tools of genetic engineering and biotechnology are being utilized to develop products of great importance in the diagnosis, treatment, prevention and cure of disease. Miles has an active research program which is anticipated to lead to the development of products from biotechnology. Product development encompasses many stages from the discovery or initial research on a potential new pharmaceutical product, through Food and Drug Administration approval, to initial commercialization. Typically, this requires a development process with an average time frame of 10-12 years and an average investment in excess of \$200 million. As a consequence, long range planning is mandatory for business, financial and competitive reasons.

I. Many products under investigation by Miles and other companies will require the development and implementation of new manufacturing methods and facilities before they can be produced successfully in an economical fashion. Miles wishes to establish within the corporation a world-wide center for the development and implementation of such methods and facilities. Miles' current site in Berkeley is well-suited as a location for the corporation's biotechnology manufacturing center because, among other things, it has a resident staff with excellent scientific skills and a high level of biological manufacturing expertise, is located in close proximity to excellent academic and scientific institutions and

is a part of the San Francisco Bay Area biotechnology infrastructure. The broad scope of the long-range site development program contemplated by Miles, combined with the long-term planning horizon needed for the development of new pharmaceutical products, necessitates a reciprocal long-term commitment by City to provide a sufficient degree of certainty in the land use regulatory process to justify the massive financial investment associated with the Project.

J. Miles intends to apply for various land use and building approvals in connection with the development of the Project, including one or more use permits, design review approvals, building permits and certificates of occupancy as described more fully in this Agreement.

K. Development of the Project Site in a comprehensive fashion as contemplated in this Agreement will result in substantial public benefits to the City, its residents and surrounding communities. Among other public benefits, the Project will enable the preservation and enhancement of job opportunities, the continued productive use of industrial property in an area where many such properties are underutilized or vacant, the expansion of the City's property tax base, the provision of needed public infrastructure and the provision of a variety of community programs as more particularly set forth in the exhibits to this Agreement. These benefits would not be available in the foreseeable future except through the mechanism of a long-term development agreement.

L. On November 25, 1991, the City Planning Commission, the hearing body for purposes of Development Agreement review pursuant to

Government Code Section 65867 and Berkeley Ordinance No. 6033 - N.S., at a duly noticed public hearing and following appropriate environmental review, recommended certification of the Project Environmental Impact Report and approval of this Agreement. On December 10, 1991, the City Council certified the adequacy of the Project EIR pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 *et seq.*), introduced Ordinance No. 6106 and set a public hearing for the approval of this Agreement.

M. On December 17, 1991, following a duly noticed public hearing, the City Council adopted Ordinance No. 6106 - N.S., approving this Development Agreement and authorizing its execution; that Ordinance took effect on January 16, 1992.

N. The City Council hereby finds that this Development Agreement furthers the public health, safety and general welfare and is consistent with the City's current General Plan as well as the Preferred Land Use Concept for the West Berkeley Area Plan (as approved in concept by the City Council on April 9, 1991). The City Council further finds that the City has taken all necessary proceedings in accordance with the City's ordinances, rules and regulations for the approval of this Agreement.

## AGREEMENT.

The parties agree as follows:

### ARTICLE 1.        DEFINITIONS.

Section 1.1. "City" is the City of Berkeley, a municipal corporation organized and existing under the Berkeley City Charter and the laws of the State of California .

Section 1.2. "City Council" is the City Council of the City.

Section 1.3. "City Manager" is the City Manager of the City or the City staff person (s)he designates to carry out all or part of the City's responsibilities for implementing this Agreement.

Section 1.4. "Design Review Committee" is the Design Review Committee of the City.

Section 1.5. "Development Plan" is the plan for development of the Project Site, including all conditions of approval and agreements between City and Miles for the development of the Project Site. The Development Plan includes this Agreement and all exhibits thereto.

Section 1.6. "Effective Date" is the date this Agreement is executed by the City Manager pursuant to Section 6.18 hereof.

Section 1.7. "Enacting Ordinance" means City Ordinance No. 6106 - N.S., enacted by the City Council on December 17, 1991, approving this Agreement. This Agreement shall constitute a part of the Enacting Ordinance as if incorporated therein in full.

Section 1.8. "Existing Ordinances" means the Ordinances in effect as of the Effective Date of this Agreement, including the Enacting Ordinance. For the convenience of City and Miles in administering and implementing this Agreement, City has separately compiled the Existing Ordinances and intends to maintain them in an appropriate file indexed to this Agreement. Miles has reviewed said compilation and agrees thereto.

Section 1.9. "Future Ordinances" means Ordinances enacted after the Effective Date of this Agreement (including amendments which may be made to Existing Ordinances).

Section 1.10. "Miles" refers collectively to Miles Inc., a corporation organized and existing under the laws of the State of Indiana. As used in this Agreement, the term "Miles" includes any successor in interest to Miles Inc., as authorized and permitted under this Agreement.

Section 1.11. "Ordinances" means the ordinances, resolutions, codes, rules, regulations and official policies of City governing the permitted uses of land, density, design, improvement, and construction standards and specifications applicable to the use and development of the Project Site. Said Ordinances include without limitation the City's General Plan, Zoning Ordinance, and construction codes.

Section 1.12. "Planning Commission" is the Planning Commission of the City.

Section 1.13. "Phasing Plan" means a plan prepared by Miles showing the

intended build-out schedule of the Project, as shown in Exhibit E.

Section 1.14. "Project" means the development of the Project Site or a portion thereof as a research, development and manufacturing facility for health care products for use in the diagnosis, treatment, prevention and cure of illness, and the public infrastructure associated with the Project Site, in accordance with this Agreement, including Exhibit M hereto.

Section 1.15. "Project Site" means that certain real property graphically depicted on Exhibit A and legally described in Exhibits B-1 and B-2.

Section 1.16. "Reserved Discretionary Approvals" means any subsequent land use or development permits or entitlements applied for by Miles or its successors in interest with respect to development of the Project Site, which permits or entitlements require the exercise of legislative or administrative discretion on the part of any City office, board or body having jurisdiction with respect thereto. The Reserved Discretionary Approvals shall include the following as applicable to the Project:

(a) Use Permits. Use permits to be approved by the Zoning officer or Zoning Adjustments Board, as applicable, subject to appeal.

(b) Design Review. Review of the design aspects of proposed improvements by the Design Review Committee, subject to appeal to the City Council.

(c) Environmental Review. Any required additional environmental review or procedures that may be applicable to the

above-mentioned approvals.

Section 1.17. "Special Conditions" means the special conditions, findings and determinations set forth in Exhibit J to this Agreement which set forth general requirements for processing and issuance of the Reserved Discretionary Approvals.

Section 1.18. "Subsequent" means occurring after the Effective Date.

Section 1.19. "Zoning Adjustments Board" is the Zoning Adjustments Board of the City.

## ARTICLE 2.        EXHIBITS.

The following documents are referred to in this Agreement, attached hereto, and incorporated herein by this reference:

- Exhibit A.        Map of the Project Site and surrounding area.
- Exhibit B-1.     Legal description of property currently owned in fee title by Miles (Miles site), consisting of approximately 23.9 acres.
- Exhibit B-2.     Legal description of property as to which Miles has entered into a binding purchase and sale agreement.     (Steelcutter Properties site), consisting of approximately 5.6 acres.
- Exhibit C.        Site Plan.
- Exhibit D.        Site Development Standards.
- Exhibit E.        Phasing Plan for the Project.

- Exhibit F. Summary of Public Infrastructure, Community Programs and Development Fees.
- Exhibit G-1 Biotechnology Education Training Program.
- Exhibit G-2. Employment-Hiring Program.
- Exhibit G-3. Affordable Housing Program.
- Exhibit G-4. Child Care Program.
- Exhibit G-5. Public Infrastructure Plan.
- Exhibit G-6. Transportation Demand Management Program.
- Exhibit G-7. Historic Preservation and Public Art.
- Exhibit G-8. Environmental Protection Program.
- Exhibit G-9. Community Programs.
- Exhibit G-10. Animal Care and Usage Program.
- Exhibit G-11. Peace and Justice Programs.
- Exhibit H. Monitoring and Reporting Program.
- Exhibit I. Site Planning and Architectural Design Guidelines.
- Exhibit J. Special Conditions.
- Exhibit K. Findings pursuant to the California Environmental Quality Act.
- Exhibit L. Report of City's Independent Engineering Consultant on Justification for Heights in Excess of Forty-Five Feet.
- Exhibit M. Project Description.

References herein to this "Agreement" shall include all the foregoing exhibits.

**ARTICLE 3. DEVELOPMENT OF PROJECT SITE.**

Section 3.1. General. Miles shall have the vested right to develop the Project on the Project Site and City shall have the right to regulate development and use of the Project Site in accordance with the provisions of this Agreement.

Section 3.2. Applicable Ordinances. Except as otherwise provided in this Agreement, the Ordinances applicable to the Project Site shall be those in effect at the time subsequent development approvals are issued. Subject to the Reserved Discretionary Approvals and the Special Conditions, the Existing Ordinances and this Agreement shall control the permitted uses of the Project Site, the density and intensity of such uses, the maximum height and size of proposed buildings and the requirements for reservation and dedication of land for public purposes. Except as otherwise provided in this Agreement, to the extent that any Existing or Future Ordinances, whether adopted by the City Council or by initiative, purport to be applicable to the Project Site but are in conflict with this Agreement, this Agreement shall prevail, unless the parties mutually agree to amend or modify this Agreement pursuant to Article 5 hereof. To the extent that any Future Ordinances are not in conflict with this Agreement, such Future Ordinances shall be applicable to the Project Site. This Agreement shall not prevent the City from denying or conditionally approving any application for a subsequent discretionary or ministerial approval for the Project on the basis of Existing Ordinances or Future Ordinances which do not conflict with the applicable Ordinances as set forth in this Section 3.2.

Section 3.3. Reserved Discretionary Approvals and Special Conditions.

Development of the Project Site shall be subject to the Reserved Discretionary Approvals and Special Conditions specified in Exhibit J of this Agreement. In reviewing applications for use permits and other subsequent discretionary approvals, City may exercise design review authority and may attach such conditions and requirements as may be necessary or appropriate so long as they are consistent with this Agreement.

Section 3.4. Processing of Subsequent Approvals. The parties recognize that in order to implement development of the Project Site as contemplated in this Agreement, Miles must obtain subsequent land use and building approvals from City including, without limitation, use permits (including demolition approvals), design review approvals, building permits and certificates of occupancy. Provided that Miles exercises reasonable diligence, acts in good faith, pays all required processing fees and files full and complete applications in conformity with this Agreement and applicable Ordinances, City shall expeditiously review and process all applications for Subsequent Approvals required to develop the Project. City shall use its best efforts to process and act upon all such applications within the following time periods following submission of a completed application to City or as soon thereafter as is reasonably practicable:

- (a) Use Permits - 120 days.
- (b) Final Design Review - 60 days after use permit approval.
- (c) Building permits, zoning permits, grading plans, landscaping

plans, irrigation plans and other improvement plans - City shall complete initial plan checks and notify Miles of any deficiencies within 30 days following the date the plans are submitted for review and shall provide subsequent plan checks, if necessary, within 30 days from the date corrected or revised plans are submitted for review. Final action shall be taken within 120 days after completion of plan checking.

The above time periods shall be extended if necessary to achieve compliance with the California Environmental Quality Act or other applicable State or Federal laws or regulations.

Section 3.5. Development and Processing Fees. All City approvals, permits, and entitlements relating to the Project shall be subject to the processing and inspection fees of general application (as opposed to being specific to the Project alone) which are in effect at the time the approvals, permits and entitlements are issued.

All city approvals, permits and entitlements relating to the Project shall be subject only to those City development fees which are in effect at the time the Enacting Ordinance becomes effective, indexed for inflation. However, Miles shall be obligated to pay any new or increased development fees only if they are (a) of general application (as opposed to being specific to the Project Site alone) and (b) based on aspects of development for which Miles is not already specifically obligated to make payments under this Agreement, with the exception of generally applicable fees for community programs as described in Exhibit G-9

after ten years. As used in this paragraph, the term "development fees" shall mean monetary exactions which are charged by City to Miles in connection with any approval, permit or entitlement relating to the Project, for the purpose of defraying all or a portion of the cost of public facilities, programs or services related to the Project.

Section 3.6. Other Governmental Permits. At its sole expense, Miles shall apply for and obtain such other permits and approvals as may be required from other governmental or quasi-governmental agencies having jurisdiction over the Project as may be required for the development of, or provision of services to, the Project consistent with this Agreement. City shall cooperate in good faith with Miles to obtain such permits and approvals.

Section 3.7. Construction Codes. Ordinances establishing construction requirements and specifications, including without limitation the Uniform Building Code, Uniform Fire Code, Uniform Mechanical Code, and Uniform Plumbing Code, which are adopted or revised during the term of this Agreement shall apply as of the time of granting construction and building permits for development of the Project.

Section 3.8. Health or Safety Ordinances. Nothing in this Agreement shall be construed to limit the authority of City to adopt in good faith, and apply to the Project Site, Ordinances of general application (as opposed to being specific to the Project Site) which protect persons or property from conditions which create a health, safety or physical risk, provided that such Ordinances do

not preclude development of the Project Site in accordance with the permitted uses, the density and intensity of such uses, the maximum height and size of proposed buildings and the requirements for reservation and dedication of land for public purposes as set forth in the existing Ordinances, subject to the Reserved Discretionary Approvals and the Special Conditions. Examples, not by way of limitation, include measures applicable to handicapped access; life safety systems; hazardous materials storage, transportation or disposal; fire protection; air quality and transportation; water conservation and reclamation; seismic safety; and animal care and use.

Section 3.9. State and Federal Requirements. This Agreement shall not preclude the application to the development and use of the Project Site of changes in Ordinances, the terms of which are specifically mandated and required by changes in State or Federal laws or regulations as provided in Government Code section 65869.5. In the event that State or Federal laws, or regulations enacted after the effective date of this Agreement, or actions by any governmental jurisdiction other than City, prevent or preclude compliance with one or more provisions of this Agreement, or require changes in approvals issued by City, this Agreement shall be modified, extended or suspended to the extent reasonably necessary to comply with such State or Federal laws or regulations or the regulations of such other governmental jurisdiction. Such actions include without limitation the imposition of air quality or transportation measures or sanctions and actions of City or other governmental agencies as a result thereof.

Section 3.10. Miles' Obligations. Except as otherwise provided in this Agreement, the development fees, any dedications of land, construction and financing of public improvements, and other community benefits and environmental mitigations to be undertaken by Miles in connection with the development of the Project Site shall be as set forth in Exhibits F, G-1 through G-11, H and K to this Agreement. All monetary payments to be made by Miles for such fees, dedications of land, constructions and financings, benefits and environmental mitigations under this Agreement shall be adjusted for inflation or deflation. Such adjustments shall be applied as of the first business day of each new year following the Effective Date except that no adjustment shall be made at the beginning of 1992. Adjustments for inflation and deflation shall be based upon the Consumer Price Index for the Bay Area using the Effective Date as a baseline for calculations. The parties acknowledge that Miles cannot at this time predict whether Project buildout will occur to the maximum allowable levels identified in the Site Development Plan (Exhibit C). Future decisions with respect to actual Project buildout will depend upon a number of circumstances not entirely within the control of Miles, including without limitation the success of its research efforts, the development of new products, regulatory approvals and marketing considerations. Decisions with respect to the extent of future Project buildout shall be within the exercise of Miles' good judgment, so long as the Project is developed in accordance with the provisions of this Agreement. This section does not limit or modify the procedures and remedies described in Article

4.

Section 3.11. Right of Way Vacation and Dedication. The parties have discussed their various interests with regard to Seventh, Fourth and Parker Streets. The City has requested that Miles convey additional right of way along Seventh Street and along Dwight Way (between Seventh and Eighth Streets). Miles has requested that the City surrender the streets located within the Miles site. The parties agree that following approval of this agreement, they will meet to discuss this matter further with the intent to consummate such an exchange.

Section 3.12. General Provisions With Respect to Financing Public Infrastructure. Insofar as mutually determined to be appropriate and in compliance with applicable state and federal laws and City Ordinances, City and Miles agree to cooperate in good faith in exploring the use of reimbursement Agreements and/or public financing mechanisms for the provision of public infrastructure relating to the Project Site.

**ARTICLE 4. PERIODIC REVIEW OF AGREEMENT.** This Agreement shall be subject to annual review on April 1, 1993 and each April 1 thereafter during the term of this Agreement pursuant to Sections 7 and 8 of City's Development Agreement Procedures. To meet its responsibilities under Section 7.1(b) of City's Development Agreement Procedures, Miles must submit a report which includes, in addition to other information submitted by Miles or reasonably determined necessary by the City Manager, the following:

- (a) The total square footage developed for private use on the Project Site, by categories of use and location;
- (b) The public infrastructure constructed, by category and location;
- (c) The status of implementation of the provisions of Exhibits F, G-1 through G-11 and H to this Agreement;
- (d) Miles' proposed schedule for further development of the Project over the remaining Term of this Agreement.

In conjunction with each annual review, upon the request of either party, the parties shall meet in good faith to discuss and reasonably attempt to resolve any issues raised by that party as to the other party's compliance with this Agreement.

In addition and without limitation, Miles' compliance with this Agreement shall be subject to City review in conjunction with the monitoring and reporting program as specified in Exhibit H and the issuance of Reserved Discretionary Approvals.

In the tenth, fifteenth, twentieth and twenty-fifth years after the Effective Date, in conjunction with the annual review for each of those years, City will undertake a comprehensive review of this Agreement for the purpose of assessing whether the City's reasonable expectations as reflected in this Agreement for achievement of the public benefits associated with this Agreement are being met. Miles will provide the City with such information as may reasonably be determined necessary by the City Manager to assist in this comprehensive review.

The parties understand that the Site Development Plan (Exhibit C) reflects the maximum allowable buildout envisioned for the Project and that failure to achieve the maximum allowable buildout as reflected in the Site Development Plan shall not constitute failure to make reasonable progress toward buildout of the Project. If City determines in connection with such a review that Miles has not made reasonable progress toward buildout of the Project in accordance with the Phasing Plan set forth in Exhibit E, as it may be amended from time to time, and that as a result, City has been deprived of material anticipated public benefits of this Agreement including, for example, public revenues, employment opportunities, public improvements, environmental mitigations and community benefits, then City shall provide written notice to Miles of its determination, including without limitation a specific identification of the material anticipated public benefits of which it has been deprived. Before taking any action pursuant to Section 8.2 of the City's Development Agreement Procedures, the parties shall meet and confer in a good faith effort to review and attempt to resolve by mutual agreement the issues contained in the notice.

Failure of the City to conduct a periodic review shall not constitute a waiver by the City of its rights to otherwise enforce the provisions of this Agreement; nor shall Miles have or assert any defense to such enforcement by reason of such failure to conduct a periodic review.

ARTICLE 5. AMENDMENT OF AGREEMENT.

Section 5.1. In General. Except as provided in Article 4 relating to City's annual review and Sections 6.3 and 6.4 hereof, this Agreement may be canceled, modified or amended only by mutual written consent of the parties, in accordance with the provisions of Government Code Sections 65867, 65867.5 and 65868, and Sections 5.5, 5.7 and 8.1 of City's Development Agreement Procedures. Miles intends to retain ownership of, and develop, the whole of the Project Site as contemplated in this Agreement. The parties agree that the sale of a significant portion of the Project Site would materially affect the planning assumptions underlying this Agreement, requiring an amendment hereof.

Section 5.2. Major Amendments. Any amendment to this Agreement which relates to the term, permitted uses, density or intensity of use, maximum height or maximum dimensions of buildings, requirements for reservation or dedication of land for public improvements, changes in production methods pursuant to section G-8-C of this Agreement or requirements relating to Reserved Discretionary Approvals, shall require giving of notice and shall require a public hearing before the Planning Commission and City Council pursuant to the provisions of paragraph 5.1 above.

Section 5.3. Minor Amendments. Any amendment to this Agreement which does not relate to the term, permitted uses, density or intensity of use, maximum height or size of buildings, requirements for reservation or dedication of land for public improvements, or requirements relating to Reserved

Discretionary Approvals, shall require giving of notice pursuant to Government Code sections 65867 and 65868, but shall not require a public hearing before the parties may make such Amendment.

Section 5.4. Minor Modifications to Site Development Plan. The Site Development Plan, including all its components as listed in Exhibit C, may, from time to time, be modified in the following manner:

Upon the written request of Miles for minor modifications to the Site Development Plan, or any component thereof, the City Manager shall determine whether the requested revision is consistent with this Agreement and all applicable Ordinances. The determination whether such modification is minor shall refer to whether it is minor in the context of the overall Project. If the City Manager finds that the proposed revision is both minor and consistent with this Agreement and all applicable Ordinances, the City Manager may approve the proposed minor modifications after giving notice. Within ten (10) days thereafter, Miles or any interested person may appeal to the City Council the action of the City Manager for a final determination regarding such minor modifications.

## ARTICLE 6. GENERAL PROVISIONS.

Section 6.1. Covenants. The provisions of this Agreement shall constitute covenants or servitudes which shall run with the land comprising the Project Site, and the burdens and benefits hereof shall bind and inure to the benefit of all estates and interests in the Project Site and all successors in interest

to the parties hereto.

Section 6.2. Term. The Term of this Agreement shall commence upon the Effective Date and extend for a period of thirty (30) years thereafter unless sooner terminated as provided in Articles 4 or 6.3 of this Agreement.

The Term has been established by City and Miles as a reasonable estimate of the time required to carry out the Project and obtain the public benefits of the Project. In agreeing to the Term, City has determined that this Agreement incorporates sufficient provisions to permit City to monitor adequately and respond to changing circumstances and conditions in granting subsequent permits and development approvals and undertaking actions necessary to carry out the Project. Furthermore, City has determined that this Agreement incorporates sufficient provisions to permit City to enforce this Agreement and to terminate or modify this Agreement if necessary. Following the expiration of the Term, or the earlier completion of development of the Project and all of Miles' obligations in connection therewith, this Agreement shall be deemed terminated.

Section 6.3. Default; Remedies; Termination. Failure or unreasonable delay by either party to perform any obligation under this Agreement for a period of thirty (30) days after written notice thereof from the other party shall constitute a default under this Agreement, subject to extensions of time by mutual consent in writing. Said notice shall specify the nature of the alleged default and the manner in which said default may be satisfactorily cured. If the nature of the alleged default is such that it cannot reasonably be cured within such thirty (30)

day period, the commencement of the cure within such time period and the diligent prosecution to completion of the cure shall be deemed a cure within such period.

Subject to the foregoing, after notice and expiration of the thirty (30) day period without cure, the other party to this Agreement, at its option, may institute legal or arbitration proceedings pursuant to this Agreement and/or give notice of intent to terminate the Agreement pursuant to Government Code Section 65868 and the City's Development Agreement Procedures. Following such notice of intent to terminate, the matter shall be scheduled for consideration and review by the City Council within thirty (30) calendar days in the manner set forth in Government Code Sections 65865.1, 65867 and 65868. Following consideration of the evidence presented in said review before the City Council, and a determination by the City Council based thereon, the party alleging the default by the other party may give written notice of termination of this Agreement to the other party.

The waiver by either party of any default under this Agreement shall not operate as a waiver of any subsequent breach of the same or any other provision of this Agreement.

Section 6.4. Enforced Delay; Extension of Time of Performance. In addition to specific provisions of this Agreement, performance by either party hereunder shall not be deemed to be in default where delays or defaults are due to war, insurrection, strikes, walk-outs, riots, floods, earthquakes, fires,

casualties, acts of God, governmental restrictions imposed or mandated by other governmental entities, enactment of conflicting state or federal laws or regulations, judicial decisions or similar basis for excused performance which is not within the reasonable control of the party to be excused. If written notice of such delay is given to either party within thirty (30) days of the commencement of such delay, an extension of time for such cause will be granted in writing for the period of the enforced delay, or longer as may be mutually agreed upon. This section shall not be construed to extend the term of this Agreement.

Section 6.5. Cooperation in the Event of Third-Party Legal Challenge.

In the event of any legal or equitable action or proceeding instituted by a third party challenging the validity of any provision of this Agreement or the procedures leading to its adoption or the issuance of subsequent approvals for the Project, the parties hereby agree to cooperate in defending said action or proceeding. Miles agrees to diligently defend any such action or proceeding and to bear the litigation expenses of defense, including attorney's fees. City retains the option to employ independent defense counsel at its expense. Miles further agrees to hold City harmless from all claims for recovery of the third party's litigation expenses, including reasonable attorney's fees.

Section 6.6. Effect of Termination. Termination of this Agreement shall not affect Miles' obligation to comply with the standards, terms and conditions of any land use approvals issued with respect to the Project Site or any portion thereof; nor shall it affect any covenants of Miles which are specified in this

Agreement to continue after termination.

The following provisions of this Agreement shall survive and remain in effect following termination or cancellation of this Agreement for so long as necessary to give them full force and effect: (1) Section 6.5 (Cooperation in the Event of Third-Party Legal Challenge); (2) Section 6.7 (Legal Actions; Remedies; Attorney's Fees); and (3) Section 6.9 (Hold Harmless).

Section 6.7. Legal Actions; Remedies; Attorney's Fees. In addition to any other rights and remedies, either party may institute legal action to cure, correct or remedy any default, enforce any covenant or agreement herein, enjoin any threatened or attempted violation or enforce by specific performance the obligations and rights of the parties hereto. In no event shall either party or its officers, agents or employees be liable in damages for any breach or violation of this Agreement, it being expressly understood and agreed that the sole legal remedy available to either party for a breach or violation of this Agreement by the other party shall be a legal action in mandamus, specific performance, injunctive or declaratory relief to enforce the provisions of this Agreement. In any such legal action, the prevailing party shall be entitled to recover all litigation expenses, including reasonable attorney's fees and court costs. At the option of either party, any such legal action shall be submitted to non-binding arbitration before a mutually acceptable retired Superior Court or Appellate Court judge. If the parties cannot agree on the selection of a retired Superior Court or Appellate Court judge, then they shall each select a retired Superior Court or

Appellate Court judge, and the two selected judges will jointly select a third retired Superior Court or Appellate Court judge to serve as the arbitrator. The arbitrator shall issue such procedural and remedial orders as he/she may deem appropriate. The arbitrator's fees shall be shared equally between the City and Miles.

Section 6.8. Construction of Agreement. This Agreement shall be construed and enforced in accordance with the laws of the State of California and City, as they may be amended, provided that such amendments do not substantially alter the rights granted to the parties by this Agreement. Both parties and their legal counsel have reviewed this Agreement and agree that any rule that ambiguities are to be construed against the drafting party shall not apply. This Agreement, including the text and all exhibits hereto, is intended to be interpreted as an integrated whole. Where provisions appear to be in conflict, they will be harmonized if possible. In the event that an irreconcilable conflict exists between the Agreement text and one or more of the exhibits, the text shall control.

Section 6.9. Hold Harmless. Except for claims, costs and liabilities caused by the negligent or wrongful conduct of City, its elected and appointed representatives, officers, agents and employees, Miles hereby agrees to save and hold City and its elected and appointed representatives, officers, agents and employees harmless from claims, costs and liabilities for any personal injury, death or property damage which arises, directly or indirectly, from operations

performed under this Agreement by Miles or Miles' contractors, subcontractors, agents or employees, whether such operations were performed by Miles or by any of Miles' contractors, subcontractors, by any one or more persons directly or indirectly employed by, or acting as agent for, Miles or any of Miles' contractors or subcontractors. Miles shall defend City and its elected and appointed representatives, officers, agents and employees from actions for such personal injury, death or property damage which is caused, or alleged to have been caused, by reason of Miles' activities in connection with the Project.

Section 6.10. No Joint Venture, Partnership or Agency. It is specifically understood and agreed by City and Miles that the development of the Project Site according to the Development Plan is a purely private development. No partnership, joint venture, agency or other association of any kind between City and Miles is formed by this Agreement. The only relationship between City and Miles is that of a governmental entity regulating the development. City and Miles agree that nothing contained herein or in any document executed in connection herewith shall be construed as making City and Miles joint venturers, partners or agents of one another.

Section 6.11. Severability. If any term, provision, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall continue in full force and effect.

Section 6.12. Further Documents. Each party shall execute and deliver

to the other all such other further instruments and documents as may be reasonably necessary to carry out this Agreement in order to provide and secure to the other party the full and complete enjoyment of its rights and privileges hereunder.

Section 6.13. Notices. Any notice or communication required hereunder between City or Miles must be in writing, and may be given either personally or by registered or certified mail, return receipt requested. If given by registered or certified mail, the same shall be deemed to have been given and received on the first to occur of (i) actual receipt by any of the addressees designated below as the party to whom notices are to be sent, or (ii) five (5) days after a registered or certified letter containing such notice, properly addressed, with postage prepaid, is deposited in the United States mail. If personally delivered, a notice shall be deemed to have been given when delivered to the party to whom it is addressed. Any party hereto may at any time, by giving ten (10) days' written notice to the other party hereto, designate any other address in substitution of the address to which such notice or communication shall be given. Such notices or communications shall be given to the parties at their addresses set forth on the following page.

If to City:

City Manager  
2180 Milvia Street  
Berkeley, CA 94704

With copy to:

City Attorney  
2180 Milvia Street  
Berkeley, CA 94704

If to Miles:

Legal Counsel  
Miles Pharmaceutical  
400 Morgan Lane  
West Haven, CT 06516

With copies to:

Site Manager  
Miles Inc.  
4th & Parker Streets  
P. O. Box 1986  
Berkeley, CA 94701

Section 6.14. Assignment. Miles has represented to City that it possesses the experience, qualifications and financial resources to carry out the Project and develop the Project Site in the manner specified in the Development Plan. It is because of such qualifications and representations of Miles that City is entering into this Agreement. Accordingly, certain restrictions on the right of Miles to assign or transfer its interest under this Agreement are necessary in order to assure the achievement of the goals, objectives, environmental mitigations and community benefits of this Agreement. The rights and obligations of Miles

hereunder shall not be assigned or transferred, except that on thirty (30) days written notice to City, Miles may assign all or a portion of Miles' rights and obligations thereunder to any person or persons, partnership or corporation who purchases all or a portion of Miles' right, title and interest in the Project, provided such assignee or grantee assumes in writing each and every obligation of Miles hereunder yet to be performed with respect to the assigned portion of the Project, and further provided that Miles obtains the consent of City to the assignment, which consent shall not be unreasonably withheld. The notice to City shall include the identity of any such assignee and a copy of the written assumption of the assignor's obligations hereunder pertaining to the portion assigned or transferred. After such notice and the receipt of such consent, the assignor shall have no further obligations or liabilities hereunder. The City Manager shall act on behalf of City regarding any actions concerning the assignment of this Agreement. Within ten (10) days thereafter, Miles or any interested person may appeal to the City Council the action of the City Manager regarding the assignment of this Agreement. City consent to assignment shall not be required for an assignment resulting from a corporate reorganization, restructuring, merger or name change involving Miles and affiliated entities, so long as there is no substantial change in the management or control of Miles.

Section 6.15. Incorporation by Reference. The Final Environmental Impact Report for the Project, the City's current General Plan, the City's Development Agreement Procedures, all other Existing Ordinances and the

Preferred Land Use Concept for the West Berkeley Area Plan (as approved in concept by the City Council on April 9, 1991) are incorporated herein by this reference. For the convenience of City and Miles in administering and implementing this Agreement, City intends to maintain copies of the Final EIR for the Project and the April 9, 1991 version of the Preferred Land Use Concept for the West Berkeley Area Plan in the same manner as set forth in Section 1.8 of this Agreement for the Existing Ordinances.

Section 6.16. Entire Agreement. This written Agreement, including the exhibits hereto, contains all the representations and the entire agreement between the parties with respect to the subject matter hereof. Except as otherwise specified in this Agreement, any prior correspondence, drafts, memoranda, agreements, warranties or representations are superseded in total by this Agreement.

Section 6.17. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original Agreement, and all of which shall constitute one and the same Agreement.

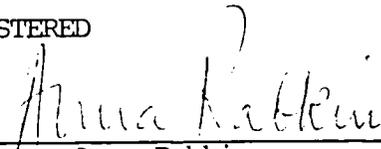
Section 6.18. Recordation. Within ten (10) days after the Enacting Ordinance takes effect, the City Manager shall execute this Agreement on behalf of City, and the City Clerk shall record this Agreement with the Alameda County Recorder. If this Agreement is terminated, modified or amended pursuant to Article 4 or 5 of this Agreement, the City Clerk shall record notice of such action with the Alameda County Recorder.

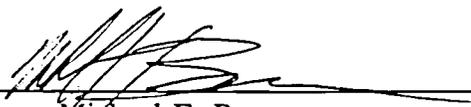
IN WITNESS WHEREOF, City and Miles have executed this

Agreement as of the date first set forth above.

REGISTERED

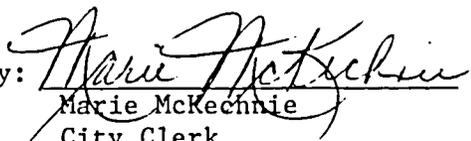
**CITY OF BERKELEY**

By:   
Anna Rabkin  
City Auditor

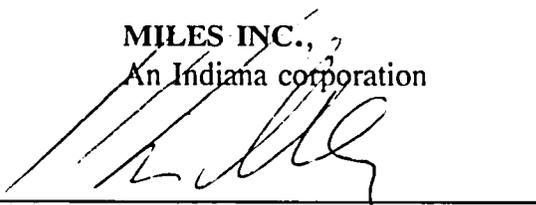
By:   
Michael F. Brown  
City Manager

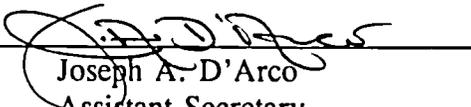
"City"

ATTEST:

By:   
Marie McKechnie  
City Clerk

**MILES INC.,**  
An Indiana corporation

By:   
Horst K. D. Wallrabe  
Executive Vice President  
President, Pharmaceutical Division

Attest:   
Joseph A. D'Arco  
Assistant Secretary

By:   
Karl H. Duchardt  
Vice President, Production and  
Engineering  
Pharmaceutical Division

"Miles"

STATE OF CALIFORNIA)

) ss

COUNTY OF *Alameda*

On 2/25/92, before me the undersigned, a notary public, personally appeared

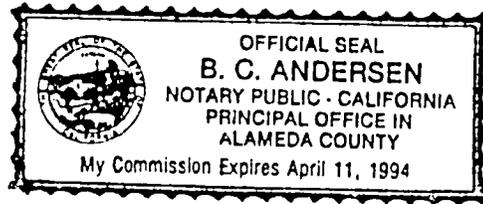
*Karl N. Duchardt*  
*Michael F. Brown*

personally known to me, or  
 proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) (~~is~~/are) subscribed to the within instrument and acknowledged to me that (~~he~~/she/they) executed the same in (~~his~~/her/their) authorized capacity(ies), and that by (~~his~~/her/their) signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature *B. C. Andersen*



STATE OF CALIFORNIA)

) ss

COUNTY OF *Alameda*

On 2/25/92, before me the undersigned, a notary public, personally appeared

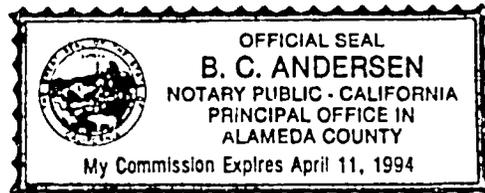
*Karl N. Duchardt*  
*Michael F. Brown*

personally known to me, or  
 proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) (~~is~~/are) subscribed to the within instrument and acknowledged to me that (~~he~~/she/they) executed the same in (~~his~~/her/their) authorized capacity(ies), and that by (~~his~~/her/their) signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature *B. C. Andersen*



**EXHIBIT A**

**MAP OF PROJECT SITE  
AND SURROUNDING AREA**



EXHIBIT A

MAP OF PROJECT SITE  
AND SURROUNDING AREA



**EXHIBIT B-1**

**LEGAL DESCRIPTION OF MILES SITE**

**EXHIBIT B-1**  
**LEGAL DESCRIPTION OF MILES SITE**

The land referred to in this exhibit is situated in the State of California, County of Alameda and is described as follows:

City of Berkeley

**Parcel 1:**

Beginning at the point of intersection of the southern line of parker street with the western line of 7th street, as said streets are shown on the map herein referred to; running thence westerly along said line of parker street, 240 feet to the eastern line of 6th street, as said street is shown on said map; thence southerly along the last named line, 230 feet to the southern boundary line of the "Hardwick Tract", as said boundary line is shown on said map; thence easterly along the last named line, 240 feet, more or less, to said western line of 7th street; thence northerly along the last named line, 215.81 feet, more or less, to the point of beginning.

Being a portion of block 156, as said block is shown on the "Map showing subdivisions of the lands of T. And E. Hardwick in Plot No. 59 of the V. and D. Peralta Ranchos, Berkeley, Oakland Township, Alameda County, Cal.", Filed November 16, 1877, in Book 6 of Maps, Page 15, in the Office of the County Recorder of Alameda County.

Assessor's parcel No. 054-1770-001-02 (Portion)

**Parcel 2:**

Portion of block Q, as said block is shown on the map of "Byron Jackson Iron Works, amended map of residence lots & factory sites," filed April 16, 1907, in Book 22 of Maps, Page 79, and as shown on the "Map of Byron Jackson Iron Works Property, Berkeley, Cal.", Filed July 14, 1909, in Book 24 of Maps, Page 84, in the Office of the County Recorder of Alameda County, described as follows:

Beginning at a point on the Western line of 7th street, distant thereon north 14° 30' west 177.815 Feet from the intersection thereof with the northern line of Carleton, as said streets are shown on said maps; running thence south 75° 30' west 111.314 feet; thence north 14° 30' west 91.68 feet to the northern line of block Q; thence along the last named line north 72° 07' 29" east 111.507 feet to the said line of 7th street; thence along the last named line south 14° 30' east 98.245 feet to the point of beginning.

Assessor's parcel No. 054-1770-001-02 (Portion)

**Parcel 3:**

Portion of block "Q", as said block is shown on that certain map of "Map of Byron Jackson Iron Works Property, Berkeley, Cal. April 1909", filed July 14, 1909, in Book 24 of Maps, Page 84, Alameda County records, describe as follows:

Commencing at the intersection of the western line of Seventh Street with the northern line of the aforesaid block "Q"; running thence south  $72^{\circ} 07' 29''$  west, along said northern line of block "Q"; 111.507 Feet, to the point of beginning of the parcel of land herein to be described; running thence south  $14^{\circ} 30'$  east, parallel with said western line of seventh street, 91.68 Feet; thence south  $75^{\circ} 29' 08''$  west, 128.685 Feet, to the western line of the aforesaid block "Q"; thence north  $14^{\circ} 30'$  west, along said western line of block "Q", 84.13 Feet to the northern line of said block "Q"; thence north  $72^{\circ} 07' 29''$  east, along said northern line of block "Q", 128.91 feet to the point of beginning.

Assessor's Parcel No. 054-1770-001-02 (Remainder)

**Parcel 4:**

Beginning at the intersection of the southern line of Parker Street with the eastern line of 3rd Street, as said streets are shown on the map hereinafter referred to; running thence easterly along said line of Parker Street, two hundred and forty six (246) feet to the western line of 4th street; thence southerly along said line of 4th Street, two hundred and seventy two (272) feet six (6) inches to the southern line of the Hardwick Tract, as shown on the map hereinafter referred to; thence westerly along said line of said tract, two hundred and forty six (246) feet, more or less, to a point on the eastern line of 3rd Street, which is distant thereon two hundred and eighty seven (287) feet and three fourths ( $3/4$ ths) inches southerly from the said southern line of Parker Street; thence northerly along said line of 3rd Street, two hundred and eighty seven (287) feet and three fourths ( $3/4$ ths) inches to the point of beginning.

Being a portion of Block No. 153, As said block is delineated and so designated on that certain map entitled, "Map showing subdivisions of the lands of T. And E. Hardwick in Plot No. 59 of the V. And D. Peralta Ranchos Berkeley, Oakland Township, Alameda Co. Cal." Filed November 16, 1877, in Liber 6 of Maps, Page 15, in the Office of the County Recorder of the said County of Alameda.

Excepting therefrom, that portion described in the deed to Southern Pacific Railroad Company, A Corporation, Recorded July 25, 1928, Book 1887, Page 303, Series No. Y52181, Official Records.

Assessor's Parcel No. 054-1770-005-01 (Portion)

**Parcel 5:**

Beginning at a point in the south line of Parker Street, where said line is intersected by the west line of Fourth Street produced southerly across Parker Street; thence south  $14^{\circ} 28'$  east along said west line of Fourth Street produced southerly, a distance of 12.14 feet to a point; thence southwesterly on the arc of a curve concave to the left, having a radius of 376.20 feet (the long chord of said curve bears south  $26^{\circ} 08'$  west a distance of 361.14 feet), an arc distance of 376.68 feet to a point in the line dividing the land of the Byron Manufacturing company from the land of the Cutter Laboratory; thence south  $72^{\circ} 09'$  west along said dividing line, a distance of 5.03 feet to a point; thence northwesterly on the arc of a curve concave to the right, having a radius of 442.38 feet (the long chord of said curve bears north  $3^{\circ} 11' 27''$  west a distance of 49.51 feet), an arc distance of 49.53 feet to a point; thence north  $0^{\circ} 01'$  east, tangent to last described curve, a distance of 7.47 feet to a point; thence northeasterly on the arc of a curve concave to the right, having a radius of 213.08 feet (the long chord of said curve bears north  $7^{\circ} 11' 40''$  east, a distance of 53.22 feet), an arc distance of 53.35 feet to a point; thence continuing northeasterly on the arc of a curve concave to the right, having a radius of 161.12 feet (the long chord of said curve bears north  $10^{\circ} 05' 03''$  east a distance of 15.55 feet), an arc distance of 15.55 feet to the point of compound curve; thence continuing northeasterly on the arc of a curve concave to the right, having a radius of 332.25 feet (the long chord of said curve bears north  $27^{\circ} 41' 06''$  east, a distance of 180.39 feet), an arc distance of 182.47 feet to a point; thence continuing northeasterly on the arc of a curve concave to the right, having a radius of 348.06 feet (the long chord of said curve bears north  $49^{\circ} 42' 17''$  east, a distance of 77.00 feet), an arc distance of 77.16 feet to a point I the said south line of Parker Street; thence north  $75^{\circ} 32'$  east along the said south line of Parker Street, a distance of 12.03 feet to the point of beginning.

Assessor's Parcel No. 054-1770-005-01 (Portion)

**Parcel 6:**

Beginning at the intersection of the southern line of Parker Street with the eastern line of 4th Street, as said streets are shown on the map hereinafter referred to; running thence easterly along said line of Parker Street, two hundred and fifty (250) feet to the western line of 5th Street; thence southerly along said

line of 5th Street, two hundred and fifty four (254) feet and three (3) inches to the southern line of the Hardwick Tract, as shown on the map hereinafter referred to; thence westerly along said southern line of said tract, two hundred and fifty (250) feet, more or less, to a point on the eastern line of 4th Street, which is distant thereon two hundred and sixty eight (268) feet eleven and one fourth (11 1/4) inches southerly from the said southern line of Parker Street; thence northerly along said line of 4th Street, two hundred and sixty eight (268) feet eleven and one fourth (11 1/4) inches to the point of beginning.

Being a portion of Block No. 154, as said block is delineated and so designated on that certain map entitled, "Map showing subdivisions of the lands of T. and E. Hardwick, in Plot No. 59 of the V. and D. Peralta Rancho Berkeley, Oakland Township. Alameda Col Cal.", filed November 16, 1877, in Liber 6 of Maps, Page 15, in the Office of the County Recorder of said County of Alameda.

Assessor's Parcel No. 054-1770-005-01 (Portion)

**Parcel 7:**

Beginning at the point of intersection of the southern line of Parker Street with the eastern line of Fourth Street in the Hardwick Tract, as shown upon the map thereof entitled, "Map showing subdivision of the land of T & E Hardwick in Plot No. 59 of the V. & D. Peralta Rancho, Berkeley, Oakland Township, Alameda County, Cal.", filed November 16, 1877, in Liber 6 of Maps, Page 15, in the Office of the County Recorder of Alameda county; thence southerly along the eastern line of Fourth Street to the southern line of the Hardwick Tract; thence westerly along the southern line of the Hardwick Tract, to the western line of Fourth Street; thence northerly along the western line of Fourth Street to the southern line of Parker Street; thence easterly in a straight line to the point of beginning.

Assessor's Parcel No. 054-1770-005-01 (Portion)

**Parcel 8:**

Beginning at the point of intersection of the southern line of Parker Street with the eastern line of Fifth Street in the Hardwick Tract, as shown upon the map thereof entitled, "Map showing subdivision of the land of T & E Hardwick in Plot No. 59 of the V & D Peralta Rancho Berkeley, Oakland Township, Alameda County, Cal.", filed November 16, 1877, in Liber 6 of Maps, Page 15, in the Office of the County Recorder of Alameda County; thence southerly along the eastern line of Fifth Street to the southern line of the Hardwick tract; thence westerly along the southern line of the Hardwick tract to the western line of Fifth

Street; thence northerly along the western line of Fifth Street to the southern line of Parker Street; thence easterly in a straight line to the point of beginning.

Excepting therefrom, that portion described in the deed to Alva B. Clute, recorded November 20, 1917, Book 2601 of Deeds, Page 346, Series No. R39785, Alameda County Records.

Also excepting therefrom, that portion described in the deed to H.C. Macauley Foundry Company, A California Corporation, Recorded July 12, 1951, Book 6485, Page 400, Series No. AF-58931, Official Records.

Assessor's Parcel No. 054-1770-005-01 (Portion)

**Parcel 9:**

That certain parcel of land designated "Byron Jackson Iron Works" as shown on the "Map of Byron Jackson Iron Works property, Berkeley, Cal., April 1909" - filed July 14, 1909, in Book 24 of Maps, at Page 84, in the Office of the County Recorder of Alameda County, described as follows:

Beginning at the intersection of the northern line of Carleton Street with the eastern line of the 100 foot right of way of the Southern Pacific Railroad Company, as said street and right of way are shown on said map; running thence along said line of Carleton Street north  $72^{\circ} 14'$  east 589.82 feet to the western line of the land conveyed by Byron Jackson Machine Works to Byron Jackson Iron Works, by deed dated April 11, 1907, and recorded in Book 1322 of Deeds, at Page 343, Alameda County records; thence along the last named line south  $72^{\circ} 11'$  west 757.07 feet to the western line of the 23.41 acre tract, described as parcel 1 in the deed from Byron Jackson Machine Works to Byron Jackson Iron Works, dated April 11, 1907 and recorded in Book 1322 of Deeds, at Page 343, Alameda County records; thence along the last named line south  $72^{\circ} 11'$  west 757.07 feet to the western line of the 23.41 acre tract, described as parcel 1 in the deed from Byron Jackson Machine Works to Byron Jackson Iron Works, dated April 11, 1907 and recorded in 1322 of Deeds, at Page 343, Alameda County records; thence along the last named line, south  $14^{\circ} 30'$  east 12 feet; thence north  $72^{\circ} 11'$  east 167.25 feet to the eastern line of said 100 foot right of way of the Southern Pacific Railroad; thence along the last named line, south  $14^{\circ} 3'$  east 263 feet to the point of beginning.

Assessor's Parcel No. 054-1770-005-01 (Remainder)

**Parcel 10:**

Beginning at the point of intersection of the center line of 6th Street, with the

southern line of Parker Street, as said streets are shown on the map hereinafter referred to; running thence westerly along said line of Parker Street 342 feet to the center line of 5th Street, as said street is shown on said map; thence at right angles southerly along said center line of 5th Street 151.25 feet to the point of intersection thereof with the direct extension westerly of the southern boundary line of lot 22 in block 155, as said lot and block are shown on said map; thence at right angles easterly along said last named line and along said southern boundary line of lot 22, 166 feet to the eastern boundary line of lot 22; thence at right angles northerly along the last named line 50 feet; thence at right angles easterly along the southern boundary line of lot 2 and the direct extension easterly thereof in block 155, 176 feet to said center line of 6th Street; thence at right angles northerly along the last named line 101.25 feet to the point of beginning.

Being lots 1, 2, 22, 23 and 24 in block 155 and portions of 5th and 6th Street, as said lots, block and streets are shown on the "Map showing subdivisions of the lands of T & E Hardwick in plot No. 59 of the V. & D. Peralta Ranchos, Berkeley, Oakland Township, Alameda County, Cal." filed November 16, 1877, in Book 6 of Maps, at Page 15, in the Office of the County Recorder of Alameda County.

Assessor's Parcel No. 054-1770-007

**Parcel 11:**

Beginning at the point of intersection of the southern line of Dwight Way with the western line of 7th Street; running thence westerly along said line of Dwight Way, two hundred and forty (240) feet to the eastern line of 6th Street, extended; thence southerly along said line of 6th Street, so extended four hundred and ninety-five and 14/100 (495.14) feet to the southern boundary line of Plot No. Sixty (60) as per map hereinafter referred to; thence easterly along said line of plot sixty (60) to the said western line of 7th Street; thence northerly along said last named line, four hundred and sixty-three and 14/100 (643.14) feet, more or less to the point of beginning.

Being a portion of Plot No. Sixty (60), as per map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County.

Excepting therefrom, that portion described in the deed to California Corrugated Culvert Co., a California Corporation, recorded May 6, 1927, Book 1609, Page 9, Series No. X-36650, Official Records.

Also excepting therefrom, that portion described in the deed to the city of Berkeley, municipal corporation, recorded July 1, 1952, Book 6768, Page 167,

Series No. AG-54162 Official Records.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 12:**

Beginning at the point of intersection of the southern line of Dwight Way with the western line of 6th Street, extended; running thence westerly along said line of Dwight Way, two hundred and seventy-two (272) feet to the eastern line of 5th Street, extended; thence southerly along said line of 5th Street so extended, two hundred and sixty (260) feet; thence easterly parallel with Dwight Way, two hundred and seventy-two (272) feet to the said western line of 6th Street, extended; thence northerly along said last named line, two hundred and sixty (260) feet to the point of beginning.

Being a portion of Plot No. Sixty (60) as per map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County.

Excepting therefrom, that portion described in the deed to California corrugated Culbert Co., A California Corporation, recorded May 6, 1927, Book 1609, Page 9, Series No. X-36650, Official Records.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 13:**

Beginning at the point of intersection of the southern line of Dwight Way with the western line of 5th Street, extended; running thence westerly along said line of Dwight Way, two hundred and fifty (250) feet to the eastern line of 4th Street, extended; thence southerly along said line of 4th Street so extended, three hundred and sixty (360) feet; thence easterly parallel with Dwight Way, two hundred and fifty (250) feet to the said western line of 5th Street, extended; thence northerly along said last named line, three hundred and sixty (360) feet to the point of beginning.

Being a portion of Plot No. Sixty (60), as per map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 14:**

Beginning at the point of intersection of the southern line of Dwight Way with the western line of 4th Street, extended; running thence westerly along said line of Dwight Way, one hundred and ninety-eight (198) feet; thence at right angles southerly, two hundred (200) feet; thence at right angles westerly forty-eight (48) feet to the eastern line of the land conveyed to Charles Crocker, by deed dated April 15 1876, recorded in Liber 123 of Deeds, Page 68; thence southerly along said line of said land so conveyed, four hundred and twenty-four and 22/100 (424.22) feet, more or less, to the southern boundary line of Plot No. Sixty (60), as per map hereinafter referred to; thence easterly along said line of plot sixty (60) two hundred and forty-eight (248) feet, more or less, to the said western line of 4th street, so extended; thence northerly along said last named line, five hundred and ninety-one and 4/10 (591.4) feet, more or less, to the point of beginning.

Being a portion of Plot No. Sixty (60), as per the map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 15:**

Beginning at a point on the southerly line of Dwight Way, distant thereon one hundred and ninety-eight (198) feet westerly from the westerly line of Fourth Street, if extended; thence westerly along said southerly line of Dwight Way, forty-eight (48) feet, more or less, to the point of intersection of said southerly line of Dwight Way with the easterly line of the right of way of the Southern Pacific Company on Third Street; thence southerly along said easterly line of said right of way, two hundred (200) feet; thence easterly and parallel with said southerly line of Dwight Way, forty-eight (48) feet, more or less, to a point one hundred and ninety-eight (198) feet westerly from the westerly line of Fourth Street, if extended; thence at a right angle northerly and parallel with said westerly line of Fourth Street, if extended, two hundred (200) feet to the southerly line of Dwight Way and the point of beginning.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 16:**

All that parcel of land bounded northerly by the southerly line of Dwight Way; easterly by the eastern line of Sixth Street, extended; southerly by the

southern boundary line of plot 60, as shown on the map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County; and westerly by the western line of said Sixth Street, so extended.

Reference to Sixth Street, extended, is to the southerly extension of Sixth Street, as said street is shown on the map of the Haft tract, filed September 12, 1891, Map Book 17 Page 78, Alameda County Records.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 17:**

All that parcel of land bounded northerly by the southerly line of Dwight Way; easterly by the eastern line of Fifth Street, extended; southerly by the southern boundary line of plot 60, as shown on the map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County; and westerly by the western line of said Fifth Street, so extended.

Reference to Fifth Street, extended, is to the southerly extension of Fifth Street, as said street is shown on the map of the Haft tract, filed September 12, 1891, Map Book 17, Page 78, Alameda County Records.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 18:**

All that parcel of land bounded northerly by the southerly line of Dwight Way; easterly by the eastern line of Fourth Street, extended; southerly by the southern boundary line of plot 60, as shown on the map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County; and westerly by the western line of said Fourth Street, so extended.

Reference to Fourth Street, extended, is to the southerly extension of Fourth Street, as said street is shown on the map of the Haft tract, filed September 12, 1891, Map Book 17, Page 78, Alameda County Records.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 19:**

Beginning at the point of intersection of the northern line of Parker Street

with the western line of 4th Street as said streets are shown on the map hereinafter referred to; and running thence westerly along said northern line of Parker Street, one hundred and one (101) feet, more or less, to the intersection thereof with the northwestern line of land conveyed by Henry E. Carleton and wife, to Thomas Hardwick, by deed dated July 18, 1860, and recorded in Liber of Deeds, Page 464; thence northeasterly along said northwestern line of said tract to a point on the western line of 4th Street, distant thereon thirteen (13) feet, four (4) inches northerly from the northern line of Parker Street; thence southerly along said line of 4th Street, thirteen (13) feet, four (4) inches to the point of beginning.

Being a portion of lot No. 12 in block No. 148, as said lot and block are delineated and so designated on that certain map entitled "Map showing subdivisions of the lands of T & E Hardwick in plot No. 59 of the V. & D. Peralta Ranchos, Berkeley, Oakland Township, Alameda County, Cal." filed November 16, 1877, in Book 6 of Maps, at Page 15, in the Office of the County Recorder of Alameda County.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 20:**

Beginning at the point of intersection of the eastern line of 3rd Street with the southern line of Parker Street, as said streets are shown on that certain map entitled, "Map showing subdivisions of the lands of T & E Hardwick in plot No. 59 of the V. & D. Peralta Ranchos, Berkeley, Oakland Township, Alameda County, Cal." filed November 16, 1877, in Book 6 of Maps, at Page 15, in the Office of the County Recorder of Alameda County; running thence northerly along the said eastern line of 3rd street, produced northerly, 40,75 feet, more or less, to the southern boundary line of plot 60, as said plot is shown on that certain map entitled, "Map of the Ranchos of Vicente and Domingo Peralta" filed January 21st, 1857, in Book 17 of Maps, Page 12, in the Office of the County Recorder of Alameda County; thence easterly along the said last mentioned line, 149 feet, more or less, to a point on the northern line of Parker Street, as said Street is shown on the map firstly herein referred to; thence easterly along the said line of Parker Street, 101 feet, more or less, to a point on the western line of 4th street; thence southerly along the direct production southerly of the western line of 4th Street, 60.00 feet to a point on the said southern line of Parker Street thence westerly along the said last mentioned line, 246.00 feet to the point of beginning.

Assessor's Parcel No. 054-1773-001-01 (Portion)

**Parcel 21:**

That portion of 4th Street, as said street is shown upon that certain map entitled "Map showing subdivisions of the lands of T & E Hardwick in plot No. 59 of the V. & D. Peralta Ranchos, Berkeley, Oakland Township, Alameda County, Cal." filed November 16, 1877, in Book 6 of Maps, at Page 15, in the Office of the County Recorder of Alameda County, which lies southerly of the northern boundary line of said tract, and northerly of the northern line of Parker Street, as said tract, line and said Parker Street are shown on said map.

Assessor's Parcel No. 054-1773-001-01 (Remainder)

**Parcel 22:**

Beginning at a point on the eastern line of 4th Street, distant thereon 229.75 feet, southerly from the southern line of Dwight Way; running thence easterly parallel with said line of Dwight Way, 251 feet; thence southerly parallel with said line of 4th Street, 372.75 feet to the northern line of Parker Street; thence westerly along said line of Parker Street, 251 feet to the eastern line of 4th Street; thence northerly along the last named line, 372.75 feet to the point of beginning.

Assessor's Parcel No. 054-1773-003-03

**Parcel 23:**

Beginning at the intersection of the southern line of Dwight Way with the western line of 8th Street; running thence westerly along said line of Dwight Way, two hundred and seventy (270) feet to the eastern line of 7th Street; thence southerly along said line of 7th Street, four hundred and fifty-five and 14/100 (455.14) feet, more or less, to the southern line of Plot No. Sixty (60), as per map hereinafter referred to; thence easterly along said line of plot sixty (60) to the said western line of 8th Street; thence northerly along said last named line, four hundred and nineteen and 14/100 (419.14) feet to the point of beginning.

Being a portion of Plot No. Sixty (60), as shown on the map of the Ranchos of Vicente and Domingo Peralta, on file in the Office of the County Recorder of Alameda County.

Excepting therefrom, that portion described in the deed to Duncan A. McLeod, recorded July 8, 1920, Book 2955 of Deeds, Page 58, Series No. S-84331, Alameda County Records.

Assessor's Parcel No. 054-1777-001

**Parcel 24:**

A non-exclusive easement for ingress, egress and railroad purposes, with incidents thereto, appurtenant to parcels 11, 12, 13, 16, 17 and 22, hereinabove described, over the following described land:

Commencing at a point on the westerly line of Seventh Street, distant thereon 229.75 feet southerly from the southerly line of Dwight Way; thence westerly parallel to said line of Dwight Way, 902 feet, more or less, to the easterly line of Fourth Street; thence southerly along said line of Fourth Street, 30 feet; thence easterly parallel of said line of Dwight Way, 902 Feet, more or less, to the westerly line of Seventh Street; and thence northerly along said line of Seventh Street, 30 feet, to the point of commencement.

Excepting therefrom, that portion lying within the lines of parcel 22, hereinabove described.

The land also contains the following:

1. Public Easement for Commerce, Navigation and Fisheries in and over any portion of the described property which is submerged or subject to the ebb and flow of the tides or, which has ever in the past been submerged or subject to the ebb and flow of tides and is now filled or unfilled.

Affects: Portion of parcels 12, 13, 14, 16, 17 and 18

2. Easement as follows as shown on the filed map of the "Map showing subdivisions of the lands of T & E Hardwick in plot No. 59 of the V & D Peralta Rancho Berkeley, Oakland Township, Alameda County, Cal." filed November 16, 1877, Map Book 6, Page 15 Alameda County Records

For: Public Street

Affects: Parcel 21 and that portion of parcel 10 lying within the lines of 6th Street, as said 6th Street is shown on said map

3. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: September 26, 1916, Book 2492 of Deeds, Page 137, Series No. Q-65422, Alameda County Records

Granted to: Anna E. McIntyre, et al.

Purpose: Railroad  
Affects: Portion of parcels 12, 13, 14, 16, 17 and 18

4. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: September 26, 1916, Book 2492 of Deeds, Page 137, Series No. Q-65422, Alameda County Records

Granted to: Anna E. McIntyre, et al.

Purpose: "Private Right of Way"

Affects: Parcels 16 and 17

5. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: December 22, 1925, Book 1110, Page 478, Series No. U-104906, Official Records

Granted to: East Bay Water Company, A California Corporation

Purpose: Water Pipe Lines

Affects: Westerly Portion of Parcel 9

6. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: December 22, 1925, Book 1166, Page 186, Series No. U-104910, Official Records

Granted to: East Bay Water Company, A California Corporation

Purpose: Water Pipe Lines

Affects: Westerly portion of parcel 4

7. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: March 22, 1927, Book 1547, Page 400, Series No. X-22938, Official Records

Granted to: City of Berkeley, a Municipal corporation

Purpose: Public Street  
Affects: Parcel 18

8. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: May 6, 1927, Book 1545, Page 379, Series No. X-36655,  
Official Records

Granted to: Southern Pacific Railroad Company, A Corporation

Purpose: Railroad

Affects: Portions of Parcels 11, 12, 13, 14, 16, 17 and 18

9. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: May 6, 1927, Book 1609, Page 16, Series No. X-36657,  
Official Records

Granted to: Southern Pacific Railroad Company, A Corporation

Purpose: Railroad

Affects: Northerly portion of parcel 22

10. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: May 6, 1927, Book 1547, Page 382, Series No. X-36659,  
Official Records

Granted to: California Corrugated Culvert Col, a California Corporation

Purpose: Ingress, Egress and Railroad

Affects: Southerly 30 feet of parcels 11, 12, 13, 16 and 17, "known and designated as Calco Way"

11.

Agreement for: Permitted Uses of Calco way

Dated: May 2, 1927

Executed By: California Corrugated Culvert Co., a California Corporation  
And Between: The Cutter Laboratory, a California Corporation  
Upon the terms, provisions, covenants and conditions contained therein,  
Recorded: May 6, 1927, Book 1545, Page 382, Series No. X-36659,  
Official Records  
(Affects Parcels 11, 12, 13, 16, 17, 22 and 24)

12.

Agreement for: Construction and maintenance of private roadways  
Dated: May 2, 1927  
Executed By: Southern Pacific Railroad Company, A Corporation, et al.  
And Between: The Cutter Laboratory, a California Corporation, et al.  
Upon the terms, provisions, covenants and conditions contained therein,  
Recorded: July 20, 1927, Book 1681, Page 5, Series No. X-56598,  
Official Records  
(Affects parcels 11, 12, 13, 16, 17, 22 and 24)

13. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: August 20, 1936, Book 3348, Page 312, Series No. GG-43724,  
Official Records  
Granted to: California Corrugated Culvert Co., a California Corporation  
Purpose: Encroachment of buildings or other improvements  
Affects: Parcel 24

14. Easement, upon the terms, covenants and conditions thereof, for the purposes stated herein and incidental purposes created in that certain instrument

Recorded: February 1, 1941, Book 3998, Page 402, Series No. OO-5624,  
Official Records  
Granted to: City of Berkeley, A Municipal Corporation  
Purpose: Sanitary Sever and Storm Drainage

ASSESSOR'S MAP 54

Map of the Ranchos of V. J. D. Ferrata (Relievers) For Plot 59 (ex. 12)

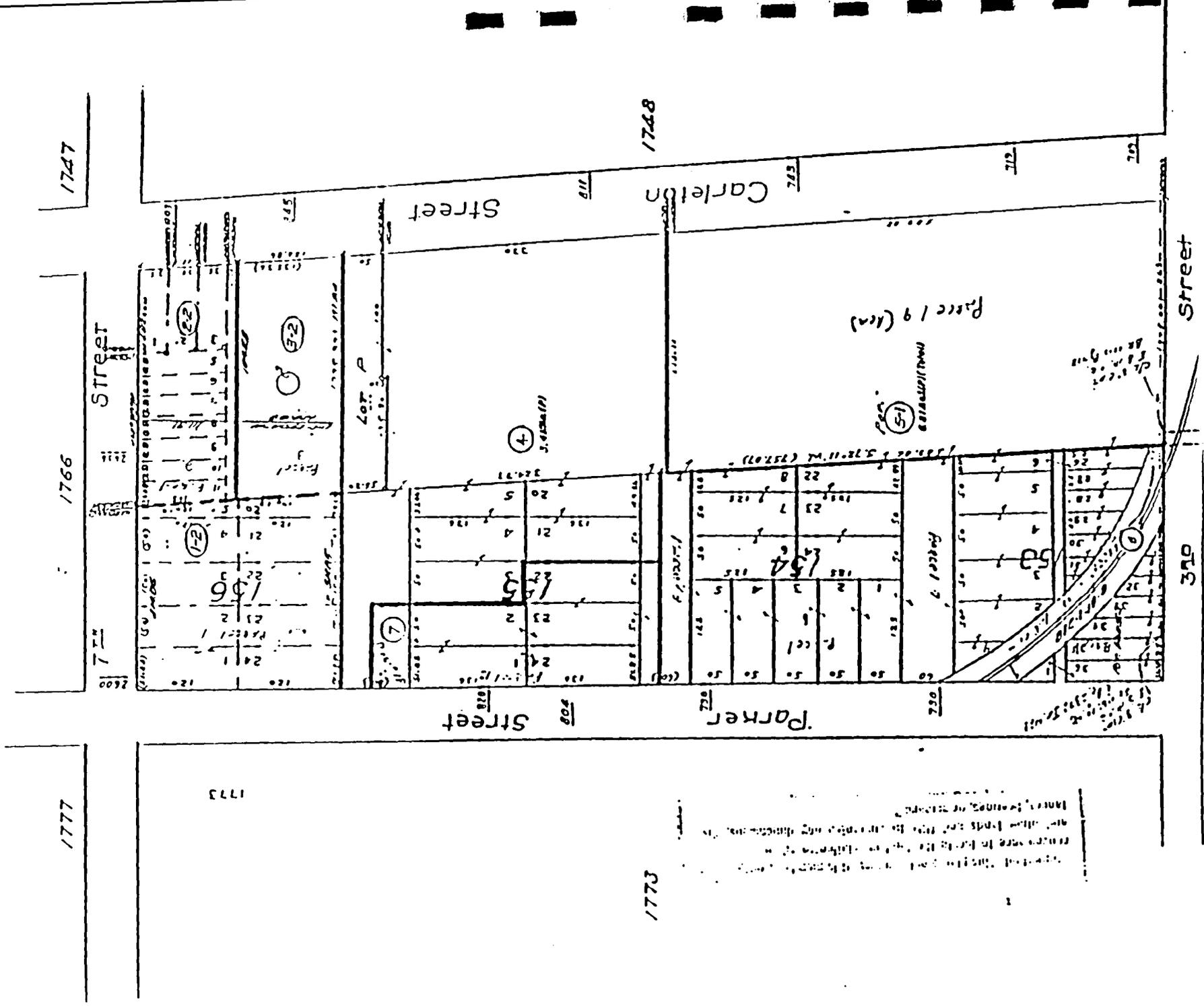
Map showing subdivisions of the Lands of T. J. E. Horwicz, ex. 6 & 19

Byron Jackson Iron Works, Amended Map of Residence Lots & Factory Sites (ex. 21)

Map of Byron Jackson Iron Works Property (ex. 24 & 25)

Scale: 1" = 100'

Code Area No. 13-000

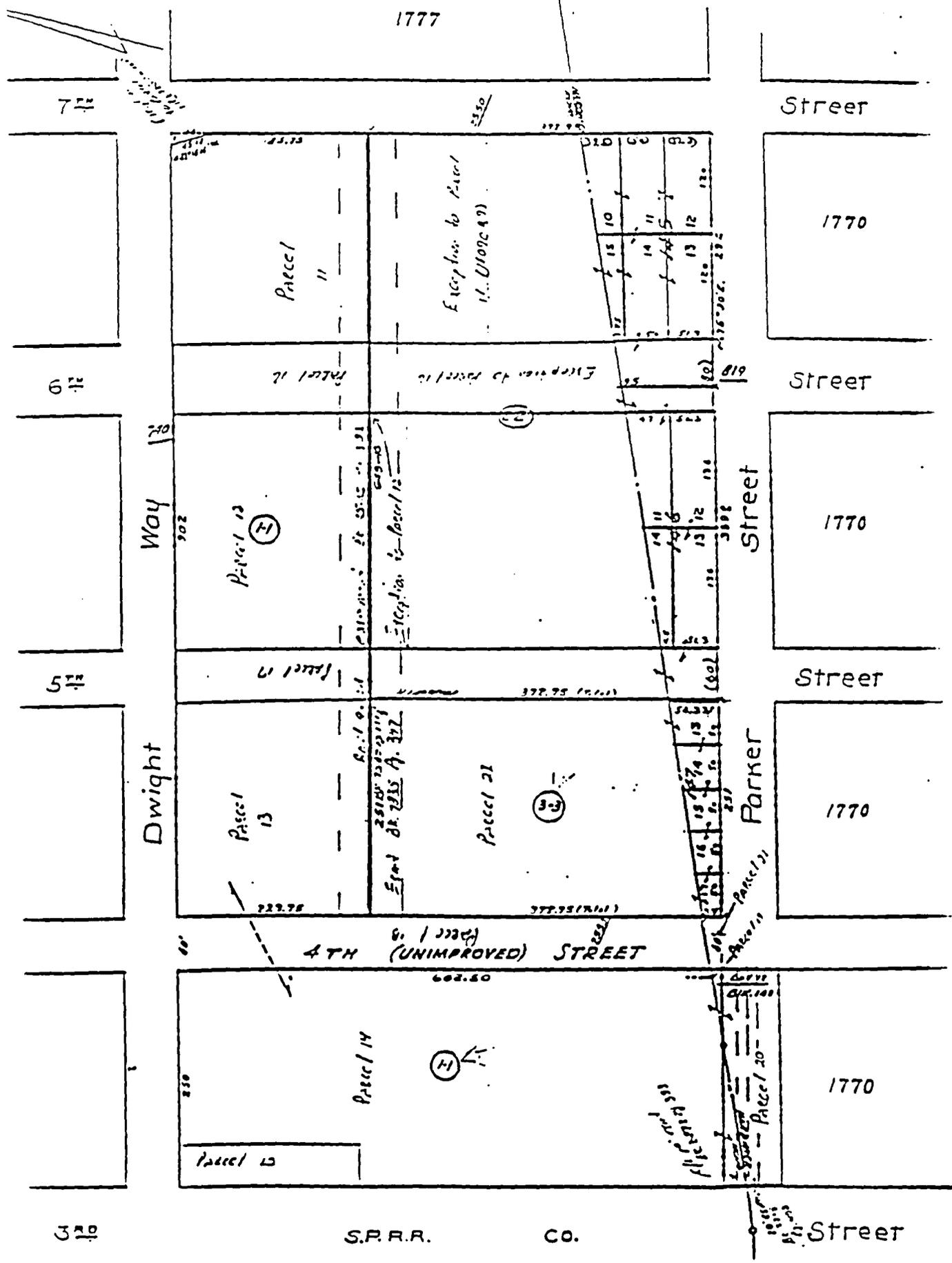


# ASSESSOR'S MAP 54

Map of the Ranchos of Vicente <sup>Don</sup> Domingo Peratta: Plot 60 (24.17 P. 12)

Map showing subdivision of the Lands of T. E. PARADWICK (24.6-P. 15)

Scale 1 1/4" = 100 ft.



Important: This map is not a contract. It is merely intended as a convenience to the landowner in relation to adjoining streets and other lands and not to guarantee any dimension, dis-

**EXHIBIT B-2**

**LEGAL DESCRIPTION OF  
STEELCUTTER PROPERTIES**

**EXHIBIT B-2**  
**LEGAL DESCRIPTION OF STEELCUTTER PROPERTIES**

The land referred to in this exhibit is situated in the State of California, County of Alameda and is described as follows:

City of Berkeley

**Parcel 1:**

Beginning at a point on the Northern Line of Parker Street, distant thereon North 75 degrees 30' East, 251 feet from the Eastern line of 4th Street, said point being also the Southeastern corner of the parcel of land described as Parcel 1 in the deed from Armco Drainage & Metal Products, Inc., a Corporation, to L.S. Durrell, dated October 21, 1955, recorded November 3, 1955, in Book 7835 of Official Records of Alameda County page 345 (AK-120069); running thence along the Eastern line of the parcel of land described as Parcel 1 in said deed, North 14 degrees 30' West, 372.75 feet to a point on a line parallel with Dwight Way and distant 229.75 feet Southerly therefrom; thence along said parallel line North 75 degrees 30' East, 329.40 feet, more or less, to the Western line of the parcel of land firstly described in the deed from Armco-Drainage & Metal Products Inc., to Ducommun Metals & Supply Col, dated February 3, 1955, recorded March 4, 1955 in Book 7588 of Official Records of Alameda County, Page 167 (AK-24112) ; thence along said last mentioned line, as follows: South 14 degrees 30' East, 130 feet; North 75 degrees 30' East, 29.60 feet, and South 14 degrees 30' East, 242.95 feet to said Northern line of Parker Street; and thence along said last mentioned line, South 75 degrees 30' West, 359 feet more or less, to the point of beginning.

**Parcel 2:**

An easement and right of way for railroad purposes and for ingress and egress appurtenant to Parcel 1 above, over the Northern 30 feet of the parcel of land described as Parcel 1 the deed from Armco Drainage & Metal Products, Inc. to L.S. Durrell, dated October 21, 1955, recorded November 3, 1955, in Book 7635, of Official Records of Alameda County, Page 345 (AK-120069).

**Parcel 3:**

A non-exclusive easement and right of way for railroad purposes and for purposes of ingress and egress, as such non-exclusive easement and right of way was granted by the Cutter Laboratory, a Corporation, to California Corrugated Culvert co., a Corporation and its successors in interest, by deed dated May 2, 1927, recorded May 6, 1927, in Book 1545 of Official Records of Alameda

County, at Page 382, over a strip of land described as follows:

Beginning at a point on the Eastern line of 4th Street, distant thereon Southerly, 199.75 feet from the point of intersection thereof, with the Southern line of Dwight Way; running thence along said line of 4th Street, Southerly 30 feet; thence parallel with said line of Dwight Way, Westerly 902 feet to the point of beginning.

**Parcel 4:**

Beginning at the intersection of the Western line of Seventh Street with the Northern line of Parker Street; running thence along said Western line of Seventh Street North 14 degrees 30' West 372.95 feet to a point distant South 14 degrees 30' East 229.75 feet from the Southern line of Dwight Way; thence South 75 degrees 30' West 321.60 feet; thence South 14 degrees 30' East 130 feet; thence North 75 degrees 30' East 29.60 feet; thence 14 degrees 30' East 242.95 feet to the Northern line of Parker Street; and thence along the last named line North 75 degrees 30' East 292 feet to the point of beginning.





**EXHIBIT C**  
**SITE DEVELOPMENT PLAN**

## EXHIBIT C SITE DEVELOPMENT PLAN

A. The Site Development Plan for the project site includes the following components:

1. Definitions of Permitted Uses
2. Permitted Uses, Heights and Floor Area Chart
3. Site Development Plan Drawing
4. Projected Disposition of Existing Site Buildings Drawing
5. Site Development Standards (Exhibit D)
6. Phasing Plan for the Project (Exhibit E)
7. Site Planning and Architectural Design Guidelines (Exhibit I) Exhibit I includes an Urban Design Framework and Illustrative Master Plan.

B. The Site Development Plan allows for construction of up to 1,167,000 square feet of new gross floor area, retention of up to 163,000 square feet of gross floor area in existing buildings and parking for 850 cars in surface parking lots or parking structure(s). The Plan contemplates phased construction of the new buildings and phased demolition of the existing buildings on the site. Permitted uses and locations for future buildings are identified on the Site Plan and the Permitted Uses, Heights and Floor Area Table. Buildings to be demolished are shown on the Projected Disposition of Existing Site Buildings Drawing.

C. The process for securing permits for new construction, demolition and change of use is described in Exhibit J.

D. The Plan includes specific site development standards which are included in Exhibit D. These standards shall govern the physical development of the site and supersede the City of Berkeley Zoning Ordinance. However, where these standards are silent with regard to any standard or definition, the standards and definitions set forth in the City of Berkeley 1991 Zoning Ordinance (appended to the Development Agreement) shall apply.

E. Site Planning and Architectural Design Guidelines are included in Exhibit I. These guidelines and the Site Development Standards are to be used to guide the design and siting of all future buildings and site improvements. The application of the guidelines are intended to result in a cohesive site plan and cohesive architectural character for the entire development. The Illustrative Master Plan included in the guidelines shows one possible way to implement the guidelines but is not the only configuration of buildings which can result from the

application of the guidelines and site standards. The Urban Design Concept Plan graphically represents the most significant areas of community interest in the site design of the project. The design guidelines will also be used by the City's Design Review Committee to review the design of future buildings.

## DEFINITIONS OF PERMITTED USES

A. Administration. Administration buildings provide: offices for management and support functions, conference rooms, computer rooms, fitness/health facilities, site security stations, training rooms, a library and a cafeteria. In addition, offices for plant management are placed in buildings throughout the site according to function and discipline.

B. Laboratories. Laboratories provide areas in which research into production and manufacturing technologies can be accomplished. These areas also provide quality assurance examination and testing of therapeutic pharmaceuticals produced on site. Laboratory related offices and utilities are permitted in these areas.

C. Maintenance. Maintenance provides areas to conduct necessary repair, replacement and preventive maintenance activities in support of site operations. Generally, these activities require work shops and maintenance bays. Maintenance related offices parking, and utilities are permitted in these areas.

D. Parking. Parking areas are covered or uncovered parking for vehicles.

E. Production. Production uses may include pilot plants, production facilities and fill and finishing facilities. Pilot plants are used to develop and scale up processes and to support new drug applications to the Food and Drug Administration. Production facilities are comprised of various processing areas with support offices. The interior spaces are among the most complex in the industry, with numerous data, safety, storage, air-handling, and testing systems technologies equipping the buildings. Fill and finishing areas involve processing the product into transportable containers and final packaging. Production related laboratories, offices and utilities are permitted in these areas.

F. Utility. Utility buildings are used to house monitored water distillation operations, refrigeration equipment electrical equipment, and steam generation equipment. Additional functions may include a water retention basin. Utilities which support specific buildings may be located adjacent or in close proximity to those buildings which they support.

G. Warehouse. The warehouse area is used to hold products for distribution on-site and off-site. Warehouse related offices, utilities and parking are permitted in these areas.

**PERMITTED USES, HEIGHTS AND FLOOR AREA CHART**

Block	Permitted Land Uses <sup>1</sup>	Maximum Permitted Building Height <sup>2</sup>	Maximum Allowable Floor Area per Block <sup>3</sup>
I	Production, Warehouse	80 ft 45 ft	500,000 sq. ft.
II	Administration, Utility	25 ft	30,000 sq. ft.
III	Production, Warehouse, Laboratories, Maintenance	65 ft 45 ft 45 ft	260,000 sq. ft.
IV	Production, Laboratories, Utility, Maintenance	45 ft 45 ft	225,000 sq. ft.
V	Production, Warehouse, Maintenance, Utility	80 ft 45 ft 45 ft	250,000 sq. ft.
VI <sup>4</sup>	Warehouse, Maintenance, Parking	45 ft	82,000 sq. ft.
VII <sup>4</sup>	Administration, Laboratory	45 ft	75,000 sq. ft.
VIII <sup>5</sup>	Administration, Parking	25 ft	30,000 sq. ft.

<sup>1</sup>All blocks may include associated utilities and associated integral offices. Uses are defined in Exhibit C.

<sup>2</sup>The City will allow building heights greater than 45 feet only for production buildings and only as necessitated by constraints in the production process.

<sup>3</sup>Total floor area of new construction, at buildout, may not exceed 1,167,000 sq. ft. This figure includes both occupied floor area and support space but does not include covered or uncovered parking. The sum of the figures in this column exceeds the maximum development permitted for the site, in order to allow flexibility in locating future buildings. Permitted total floor areas (sq. ft.) of new construction for each use are: Administration - 75,000; Laboratories - 160,000; Maintenance - 32,000; Production - 760,000; Utilities - 90,000; and Warehouse - 50,000. The total floor area of existing buildings to remain at buildout is 163,000 sq. ft.

<sup>4</sup>Major structures shall have heights of at least 25 feet in Blocks VI and VII.

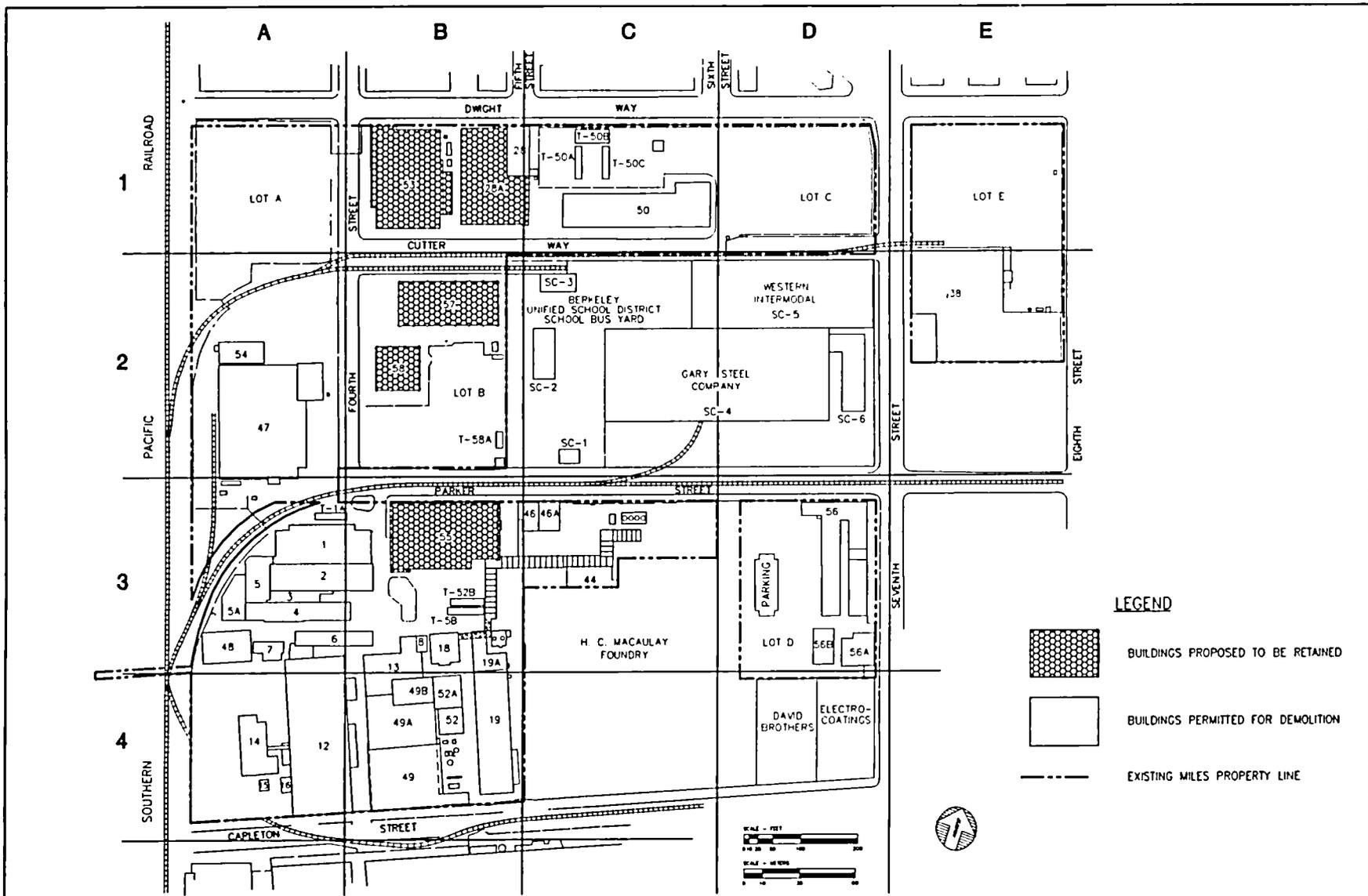
<sup>5</sup>Surface and structured parking is permitted in Block VIII. Administrative land uses in this block should be located along Dwight Way.



## EXISTING BUILDINGS AND USE

<u>BLDG</u>	<u>USE</u>	<u>BLDG</u>	<u>USE</u>
1	FINISHING	47	SHIPPING/RECEIVING/WAREHOUSE/OFFICES
2	MAINTENANCE/STORAGE	48	OFFICES
3	STORAGE	49	PRODUCTION
4	OFFICES/ DISPENSARY/ LABORATORY	49A	STERILE FILLING
5	STORAGE	49B	STORAGE
5A	PILOT PLANT	50	QUALITY ASSURANCE LABORATORY/OFFICES
6	OFFICES, LABORATORY	52	PRODUCTION
7	OFFICES	52A	PRODUCTION
8	PAINT SHOP	53	QUALITY ASSURANCE
12	STORAGE/MAINTENANCE/UTILITIES	54	-30°C WAREHOUSE
13	MAINTENANCE/CAFETERIA	55	PRODUCTION
14	OFFICES	56	OFFICES--DEL MONTE COMPLEX
15	TELEPHONE EQUIPMENT	56A	OFFICES--DEL MONTE COMPLEX
16	TRANSFORMER VAULT	56B	OFFICES--DEL MONTE COMPLEX
18	BOILER HOUSE	57	RESEARCH AND DEVELOPMENT
19,19A	PRODUCTION/LABORATORY	58	LIBRARY/AUDITORIUM/OFFICES
28	LABORATORY	SC-1	STEELCUTTER BUILDING #1
28A	LABORATORY	SC-2	STEELCUTTER BUILDING #2
38	STORAGE	SC-3	STEELCUTTER BUILDING #3
44	UTILITIES	SC-4	STEELCUTTER BUILDING #4
46	BIOLOGICAL PRODUCTION	SC-5	STEELCUTTER BUILDING #5
46A	BIOLOGICAL QUALITY ASSURANCE	SC-6	STEELCUTTER BUILDING #6

Numbers refer to the "PROJECTED DISPOSITION OF EXISTING SITE BUILDINGS" drawing dated 12/4/91. The total floor area of all proposed buildings to be demolished is approximately 475,000 square feet.



REVISIONS			
NO.	DATE	DESCRIPTION	BY
0	10-7-78	ISSUED FOR APPROVAL	CP
1	12-4-78	ADDED STEEL CUTTER BLDGS	CP
2	1-6-79	UPGRADED MILE LAYOUT	CP

**MILES INC.**  
Berkeley, Ca

PROJECT NO. \_\_\_\_\_  
DATE \_\_\_\_\_  
SCALE \_\_\_\_\_

**PROJECTED DISPOSITION OF EXISTING SITE BUILDINGS**

DATE: 12-1-78  
BY: BE-T-Y-156-E

2

**EXHIBIT D**

**SITE DEVELOPMENT STANDARDS**

**EXHIBIT D**  
**SITE DEVELOPMENT STANDARDS**

The following Site Development Standards shall govern the physical development of the site and supersede the City of Berkeley Zoning Ordinance. Where these standards or the Design Guidelines are silent with regard to any standard or definition, the standards and definitions set forth in the City of Berkeley Zoning Ordinance shall apply. A set of detailed site planning and architectural guidelines have been developed for the site and provide guidance to yield a cohesive site plan and architectural character for the project. These standards are to be used in conjunction with the Site Plan, and the Permitted Uses, Heights and Floor Area Chart. Miles will comply with the following standards:

A. Zero Height Zones. The following zero (0 foot) height zones are established where no buildings will be constructed:

1. West end of Parker Street from the existing railroad spur north to the 25 foot setback on the north side of the existing Parker Street right-of-way (ROW), from the west property line to the western side of the existing Fourth Street ROW. This area can be used for the water retention basin and one-story accessory buildings can be constructed, if required, for operation of the retention basin.

2. Parker Street, from Seventh Street to Fourth Street, 90 foot wide corridor, from building wall to building wall. This includes a 60 foot Parker Street ROW plus a 30 foot setback measured from the existing ROW lines (25 foot setback on the north side of Parker Street, 5 foot on the south side of Parker Street) for a total width of 90 feet. The pipe rack can be constructed in the 25 foot setback if necessary.

3. Fourth Street, from Parker Street to Dwight Way 60 foot wide corridor from building wall to building wall.

4. The visual extension of Sixth Street, 80 feet in width, from Dwight Way to 200 feet south of the Dwight Way property line.

5. Block VIII will be a zero height zone for ten years following approval of the Development Agreement.

6. Additional zero height zones are described in the Building Setback section of these Standards.

7. Two guard stations may be located in the zero height zones. These stations will not exceed twelve feet in height.

B. Building Heights. Buildings are permitted to a maximum height of 45 feet except as follows:

1. Buildings greater than 45 feet in height may be constructed in the specified blocks so identified on the Site Plan and where the following conditions have been met:

(a) Building heights greater than 45 feet are allowed only for production buildings and only as necessitated by constraints in the production process. The presence of offices, labs or storerooms in these buildings shall not be cause for the buildings to exceed 45 feet in height.

(b) The highest point of the building roof line shall not exceed the maximum height shown on the Site Development Plan Drawing for that block.

(c) Additional requirements for buildings over 45 feet are described in the Building Bulk and Massing section of these Standards.

2. On Block VIII, the maximum permitted height shall be 25 feet except as noted in paragraph C.3.(b) of this Exhibit.

C. Building Bulk and Massing. The following setbacks and stepbacks are presumed to be adequate. During future review of individual buildings the City may require increases only in accordance with the provisions set forth in II.B.6. of Exhibit J.

1. Building Setbacks. Setbacks are defined as the distance from the existing property line or, in the case of Parker and Fourth Streets, from the existing ROW line to the building wall. The required setbacks are:

(a) 40 feet from the west side of the existing Seventh Street ROW as it exists at the time this Development Agreement is approved.

(b) 20 feet from the east side of Seventh Street.

(c) 60 feet from Dwight Way, from Sixth Street to Eighth Street (Portions of the buildings can encroach into this setback so as to create special architectural features).

(d) 25 feet from the north side of the existing Parker Street ROW. (The pipe rack can be located in this setback if such location is necessary).

(e) 33 feet from Dwight Way for building volumes over 45 feet, with buildings 45 feet tall and under allowed in the setback to within 5 feet of the property line, such that buildings 45 feet tall and under cover not more than 40% of the length of the Dwight Way facade.

(f) 33 feet from the western property line.

(g) 20 feet from Dwight Way for buildings 45 feet and under, from Fourth Street to Sixth Street.

(h) 5 feet from Eighth Street, Carleton Street, all internal private roads, and from the south side of the existing Parker Street ROW.

(i) Setbacks are not required for buildings along Fourth Street (other than the 60 foot visual corridor).

2. Building Stepbacks. Building stepbacks are defined as the horizontal distance where the building walls above specified heights are setback a given distance from the building wall below.

(a) Adjacent to Seventh Street, building walls above 35 feet will be stepped back 25 feet. On Block VII, the northeast corner of the building is not required to be stepped back 25 feet, for a distance of 60 feet from the corner of Block VII south along Seventh Street, if the height is used to accomplish special architectural features.

(b) Adjacent to Parker Street, Carleton Street, Fourth Street and along the western property edge building walls above 45 feet will be stepped back 25 feet.

(c) For all buildings above 45 feet, the top floor will be stepped back 15 feet from the building wall below and the combined footprint of all portions of the top floor will not exceed 50% of the total footprint of that building.

3. Special Features.

(a) Portions of buildings above 45 feet in height will not measure more than 250 feet in length along any facade and not more than 350 feet

on any diagonal within the building footprint.

(b) On Block VIII the northwest corner of the building is permitted to rise to 45 feet, if the height is used to accomplish special architectural features.

D. On-site Roads.

1. Fourth Street from Dwight Way to Parker Street will be a minimum of 24 feet in width.

2. Parker Street will be a minimum of 24 feet in width and will be designed to be wide enough to provide adequate access to the parking structure and the warehouse.

3. Fourth and Parker streets will be constructed to meet fire safety standards. Parking is not allowed along these streets without constructing a roadway wider than 24 feet, so as to meet fire safety standards.

4. Other streets on-site can be located and sized to meet Miles' circulation needs and specifications, such that fire safety standards are met.

E. Access, Parking and Loading.

1. Curb cuts, other than those listed below, will be allowed only when approved by the City's Traffic Engineer:

(a) Curb cuts along Dwight Way at the western perimeter road, Fourth Street (existing) and Sixth Street.

(b) Curb cuts along Carleton Street at the western perimeter road and at two internal roads east of the western property edge.

(c) Curb cut on Eighth Street at the existing curb cut.

(d) Curb cuts on Seventh Street at Parker (existing) and other locations required for emergency access to the site.

2. Adequate parking will be provided at any time during the project build-out for all uses on-site. If existing on-site parking or an increased demand for parking occurs as a result of the construction of a new building or the displacement of existing surface parking, new parking (built, leased or relocated)

must be provided per the following parking standards: Manufacturing assembly and production @ 1 space per 1,000 square feet of floor area, Warehouse @ 1 space per 5,000 square feet, Laboratories @ 1.5 spaces per 1,000 square feet, Offices @ 2 spaces per 1,000 square feet. Unoccupied interstitial space is not counted as floor area when figuring required number of parking spaces. These standards can be adjusted in cases when the specific number of employees for that building can be verified. As provided in section G-9-2 paragraph III. C., up to 65 spaces on Block VIII may be dedicated to off-site users. These spaces shall not be counted towards the spaces required by Miles.

3. Bicycle parking for employees will be provided as per the following standard: Manufacturing and Warehouse @ 1 space per 5,000 square feet of floor area, Offices @ 1 space per 2,000 square feet of floor area. Unoccupied interstitial space is not counted as floor area when figuring required number of bicycle spaces. These standards can be adjusted in cases when the specific number of employees for that building can be verified.

4. Off-street loading docks for individual buildings will not be required provided that delivery and shipping of materials to and from the site occurs from a central warehouse(s) only, and the size and number of loading docks at the warehouse(s) will be adequate for the volume and traffic at the warehouse(s), as approved by the City's Traffic Engineer.

F. Landscape Treatment. Landscape and site improvements associated with, or adjacent to, a proposed building will be installed at the time of construction of that building. This may include, but is not limited to: plant materials, street trees, automatic irrigation, sidewalks, internal roads and open space plazas.

G. Other Site Features.

1. All development on the site will comply with Exhibit I of the Development Agreement.

2. The existing railroad tracks on-site can be removed provided the tracks are no longer needed by other users along the track.

3. The utility pipe rack will be located so that it crosses Parker Street no more than twice, and Fourth Street no more than once (between Dwight Way and Parker Street). The crossing of Fourth Street will occur no further north than 200 feet south of the Dwight Way property line. The Parker Street crossings will occur no further east than 400 feet west of the existing Seventh Street property line. The height to the bottom of the horizontal portion of the

pipe rack will be no more than is required for truck and/or railroad clearance.

4. Temporary surface parking lots and temporary structures (10 years or less) can be located anywhere on-site, other than in the zero height zones. Such uses will comply with the landscape guidelines in the site development guidelines.

5. The existing surface parking lots located on Blocks VII and VIII will be upgraded as per the site development guidelines, within 5 years of adoption of the Development Agreement.

Where these standards or the Site Development Guidelines are silent with regard to any standard or definition, the standards and definitions set forth in the City of Berkeley Zoning Ordinance shall apply.

**EXHIBIT E**

**PHASING PLAN  
FOR THE PROJECT**

**EXHIBIT E**  
**PHASING PLAN FOR THE PROJECT**

Phase I - (Year 1 - 10)

A1 Production Block  
E1 Surface Parking Lot  
C2 Production Block  
Central Utility Plant

Approximately 700 employees at the end of Phase I

Phase II - (Year 5 - 20)

Warehouse  
C1 Production/Laboratory Block  
A2 Production Block  
B3 Production Block  
A3 Production Block  
Parking Structure

Approximately 800 employees at the end of Phase II

Phase III - (Year 10 - 30)

Administration  
A4 Production  
Maintenance  
B4 Production

Approximately 980 employees at the end of Phase III

**EXHIBIT F**

**SUMMARY OF INFRASTRUCTURE,  
COMMUNITY PROGRAMS AND  
DEVELOPMENT FEES**

**EXHIBIT F**  
**SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES**

The following table presents a summary of the obligations of the parties in the areas of environmental mitigations, public infrastructure and community programs and benefits. All dollar amounts are stated in terms of 1991 dollars. Dollars to be paid in years two through thirty of the Agreement shall be indexed for inflation to the San Francisco Bay Area full Consumer Price Index (CPI), using as a basis the CPI published January 1991.

Some amounts represent fixed or capped obligations on the part of Miles; these are indicated by a "(c)" next to the cost figure. Other amounts represent an estimate of the cost to Miles of performing certain future obligations generally described in Exhibits G-1 through G-10 and are not capped. These are indicated by an "(e)."

Some obligations, including payments to the City or others, occur with the signing of the Agreement, either as anticipated community benefits or as required environmental programs and mitigations. These are generally noted in the summary as annual, periodic or future one-time obligations, and are further indicated by an "(a)" next to the cost figure. Other obligations occur only in relation to the actual development of the site. These are generally noted in the summary as becoming due in conjunction with construction of a particular building or building phase, and are further indicated by a "(b)" next to the cost figure.

Annual costs do not reflect the first year costs, only subsequent years.

**EXHIBIT F  
SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES**

PROGRAM/DEVELOPMENT FEES	RESPONSIBLE	MONITOR	TIMING/ FREQUENCY	COSTS		30-YEAR COST
				INITIAL/ ONE TIME	ANNUAL	
<b>Employment and Training</b>						
Fund the first year expenses of the Program Director	Miles	City, Planning Department	Upon approval of the Development Agreement	\$100K	N/A	\$100K (c)(a)
Biotech Academy within the Berkeley High School	Miles	City, Planning Department	At the first Annual Review and distributed over the next four years <sup>1</sup>	\$560K	N/A	\$560K (c)(a)
Biotech Career Institute in conjunction with Community College system	Miles	City, Planning Department	At the first Annual Review and distributed over the next four years <sup>1</sup>	\$440K	N/A	\$440K (c)(a)
Provide matching funds for Biotech Academy/Institute	Miles	City, Planning Department	At years six through nine of the Development Agreement <sup>1</sup>	N/A	\$25K-\$75K	\$100K-\$300K (c)(a)
Fund a Biotech Academy/Institute student summer hire program	Miles	City, Planning Department	Upon approval of the Development Agreement and every year thereafter	\$10K	\$10K	\$300K (c)(a)
Fund Kindergarten through 8th grade projects	Miles	City, Planning Department	Upon approval of the Development Agreement and every year thereafter	\$10K	\$10K	\$300K (c)(a)
Fund three year grantwriter position for nonprofit job training agencies	Miles	City, Community Development Department	At the first Annual Review and the next two years thereafter	\$50K	\$50K	\$150K (c)(a)
Employ construction hires through the City's First Source Program	Miles	City, Community Development Department	As required but not more than 700 hires	\$350K	N/A	\$350K (c)(b)
<b>Housing and Child Care</b>						
Contribute to the City's Housing Trust Fund to create affordable housing	Miles	City, Community Development Department	At the first Annual Review and then ten years thereafter	\$155K	\$46K	\$615K (c)(a)

<sup>1</sup> Planning years are illustrative only and might change based on outside funding.

**EXHIBIT F  
SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES**

PROGRAM/DEVELOPMENT FEES	RESPONSIBLE	MONITOR	TIMING/ FREQUENCY	COSTS		30-YEAR COST
				INITIAL/ ONE TIME	ANNUAL	
Establish Capital Facilities Fund to convert preschool slots to infant care slots	Miles	City, Community Development Department	At the first Annual Review and then ten years thereafter	\$22K	\$6K	\$78K (c)(a)
Establish Operations Fund for vendor-voucher program for affordable child care slots	Miles	City, Community Development Department	At the first Annual Review and then ten years thereafter	\$57K	\$14K	\$201K (c)(a)
Subsidize existing sick care providers	Miles	City, Community Development Department	Annual payments	\$10K	\$10K	\$300K (c)(a)
Subsidize Berkeley providers in CPR, First Aid, and hygiene	Miles	Resource & Referral Agency	Annual as required	N/A	\$9.5K	\$285K (c)(a)
<b>Infrastructure</b>						
Construct the following street improvements:						
Dwight Way cul-de-sac	Miles	City, Public Works Department	During construction of Block A1	\$75K	N/A	\$75K (e)(b)
Dwight Way sidewalks	Miles	City, Public Works Department	During construction of Block D1 or Department of Public Works schedule	\$40K	N/A	\$40K (e)(b)
Seventh Street	Miles	City, Public Works Department	During construction of Block D2 or Department of Public Works schedule	\$63K	N/A	\$63K (e)(b)
Carleton Street reconstruction/sidewalk repair/landscaping (partial)	Miles	City, Public Works Department	During construction of Block A4 or Department of Public Works schedule	\$69K	N/A	\$69K (e)(b)
Eighth Street sidewalk repair	Miles	City, Public Works Department	During upgrade of surface parking lot or Department of Public Works schedule	\$7K	N/A	\$7K (e)(b)

**EXHIBIT F  
SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES**

PROGRAM/DEVELOPMENT FEES	RESPONSIBLE	MONITOR	TIMING/ FREQUENCY	COSTS		30-YEAR COST
				INITIAL/ ONE TIME	ANNUAL	
Sixth Street repaving	Miles	City, Public Works Department	During construction of the main gate or Department of Public Works schedule	\$20K	N/A	\$20K (c)(b)
Construct the following traffic improvements:						
Install signal at Seventh and Parker (50% contribution)	Miles	City, Public Works Department	During construction of the parking structure	\$50K	N/A	\$50K (c)(b)
Modify signal at Seventh and Dwight	Miles	City, Public Works Department	During upgrade of surface parking lot	\$50K	N/A	\$50K (c)(b)
Install signal at Seventh and Heinz	Miles	City, Public Works Department	During construction of Block B4	\$50K	N/A	\$50K (c)(b)
Move parking on Seventh and re-stripe to create three lanes	Miles	City, Public Works Department	During construction of the first building on Seventh Street	\$20K	N/A	\$20K (c)(b)
Close Seventh street roadway north of Dwight Way	Miles	City, Public Works Department	During upgrade of surface parking lot	\$20K	N/A	\$20K (c)(b)
Contribute to improvements designed to mitigate cumulative impacts and provide area wide improvements to the traffic system	Miles	City, Public Works Department	Per Department of Public Works schedule	\$1,500K	N/A	\$1,500K (c)(a)
Conduct engineering analysis of sewer system	Miles	City, Public Works Department	Nine months after approval of Development Agreement	\$50K	N/A	\$50K (c)(a)
Contribute to improvements designed to mitigate cumulative impacts and provide area wide improvements to the sanitary sewer system	Miles	City, Public Works Department	As required	\$600K	N/A	\$600K (c)
Improve storm drains under 4th Street and Dwight Way	Miles	City, Public Works Department	During construction of Block A2 and C1, respectively	\$600K	N/A	\$600K (c)(b)

**EXHIBIT F  
SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES**

PROGRAM/DEVELOPMENT FEES	RESPONSIBLE	MONITOR	TIMING/ FREQUENCY	COSTS		30-YEAR COST
				INITIAL/ ONE TIME	ANNUAL	
Disconnect site from Parker Street storm sewer system and install new Miles storm sewer system	Miles	City, Public Works Department	During construction of Block A3	\$200K	N/A	\$200K (c)(b)
Contribute to improvements at Aquatic Park	Miles	City, Public Works Department	24 months after approval of Development Agreement	\$250K	N/A	\$ 250K (c)(a)
Perform water quality study in Aquatic Park	Miles	City, Environmental Health	Twelve months after approval of the Development Agreement	\$50K	N/A	\$50K (c)(a)
<b>Transportation</b>						
Implement a Trip Reduction Program	Miles	City, Planning Department	In conjunction with the first Annual Review	\$30K	\$30K	\$900K (c)(a)
Provide a BART Shuttle for employees	Miles	City, Planning Department	Upon approval of Development Agreement	\$5K	\$5K	\$150K (c)(a)
Conduct neighborhood parking impact survey	Miles	City, Planning Department	Ten years following approval of the Development Agreement and then every five years thereafter	\$1K	\$1K	\$5K (c)(a)
Provide two bus shelters at 7th Street and Dwight Way	Miles	City, Planning Department	During upgrade of surface parking lot	\$15K	N/A	\$15K (c)(b)
Fund and implement a bike route plan	Miles	City, Planning Department	Six months after approval of Development Agreement	\$50K	N/A	\$50K (c)(a)
<b>Historic Preservation and Public Art</b>						
Assemble and display a historical exhibit	Miles	City, Planning Department	1997	\$150K	N/A	\$150K (c)(a)

**EXHIBIT F  
SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES**

PROGRAM/DEVELOPMENT FEES	RESPONSIBLE	MONITOR	TIMING/ FREQUENCY	COSTS		30-YEAR COST
				INITIAL/ ONE TIME	ANNUAL	
Commission public art (1% of Administration building construction costs)	Miles	City, Planning Department	During construction of Administration Building	\$112K	N/A	\$112K (c)(b)
<b>Environmental Protection</b>						
Hazardous Operations Studies and Off-Site Consequence Analysis	Miles	City, Environmental Protection	As required during construction of utility and production buildings	\$61K	N/A	\$61K (c)(b)
Bio-safety Review Program	Miles	City, Environmental Protection	Six months after approval of Development Agreement	\$16K	\$1K	\$45K (c)(a)
Emergency Preparedness Program:	Miles	City, Environmental Protection	Six months after approval of Development Agreement			
Emergency Response/Business Plan	Miles	City, Environmental Protection	Annual costs every year	\$7K	\$1K	\$36K (c)(a)
On-site training of City Staff	Miles	City, Environmental Protection	Annual costs every year	\$16K	\$6K	\$190K (c)(a)
Emergency Response Exercises	Miles	City, Environmental Protection	Annual costs every year	\$33K	\$9.5K	\$308.5K (c)(a)
Bulk Hazard Materials Truck Routes	Miles	City, Environmental Protection	Annual costs every year	\$2K	N/A	\$2K (c)(a)
Risk Communication Program	Miles	City, Environmental Protection	Six months after approval of Development Agreement.	\$31.5K	\$11.5K	\$365K (c)(a)
Energy Conservation Program	Miles	City, Environmental Protection	Twelve months after approval of Development Agreement	\$58K	\$8K	\$290K (c)(a)
Water Conservation Program	Miles	City, Environmental Protection	Twelve months after approval of Development Agreement	\$59.5K	\$9.5K	\$335K (c)(a)
Ammonia refrigeration Risk Management Prevention Program	Miles	City, Environmental Protection	Prior to operation of the system	\$100K	N/A	\$100K (c)(b)

**EXHIBIT F  
SUMMARY OF PUBLIC INFRASTRUCTURE, COMMUNITY PROGRAMS AND DEVELOPMENT FEES**

<b>PROGRAM/DEVELOPMENT FEES</b>	<b>RESPONSIBLE</b>	<b>MONITOR</b>	<b>TIMING/ FREQUENCY</b>	<b>INITIAL/ ONE TIME</b>	<b>COSTS ANNUAL</b>	<b>30-YEAR COST</b>
Waste Reduction Program	Miles	City, Environmental Protection	Nine months after approval of Development Agreement	\$33K	\$13K	\$410K (c)(a)
Dust Suppression Program	Miles	City, Environmental Protection	Prior to first demolition/ construction	\$3K	\$1K	\$32K (c)(b)
Noise Reduction Program	Miles	City, Environmental Protection	Prior to first demolition/ construction	\$3K	\$1K	\$32K (c)(b)
Surface Water Run-off Program	Miles	City, Environmental Protection	Six months after approval of Development Agreement	\$23K	\$8K	\$255K (c)(a)
<b>Community Programs</b>						
Hire a consultant to assist with the establishment of a Community Service Program and Board		City, Planning Department	12 months after approval of Development Agreement	\$30K	N/A	\$30K (c)(a)
Establish and fund a Community Service Program	Miles/ City	City Planning Department/Miles	At the first Annual Review and every year thereafter. NOTE: at year six, annual required contributions will decrease from \$100K to \$20K	\$100K	\$100K/\$20K	\$1,000K (c)(a)
<b>Animal Care and Use</b>						
Fund outside research into alternatives to animal use	Miles	City, Environmental Department	At the first Annual Review and every year for the next four years	\$25K	\$25K	\$125K (c)(a)

**EXHIBIT G-1**

**BIOTECHNOLOGY EDUCATION TRAINING  
PROGRAM**

**EXHIBIT G-1**  
**BIOTECHNOLOGY EDUCATION TRAINING PROGRAM**

I. Biotechnology Academy and Career Institute

A. Miles will develop and implement a comprehensive biotechnology education program aimed at Berkeley students, grades 9 through college, and unemployed/underemployed adults. The education program is designed to achieve the highest feasible graduation rate of trained skilled technical workers for the positions that will become available at Miles, at other biotechnology companies, and in the health care field. The program includes two years of a Biotech Academy at Berkeley High School and two years at a Career Institute within a local community college, in a 2 + 2 format. Miles commits to an initial four year program during which slots for fifteen students will be made available every year in the Academy and, after the second year of the Biotechnology Training Program, in the Institute. These students, a total of sixty over the four years, will be supported through graduation. The Academy and the Career Institute are envisioned as "schools within schools" where special attention by faculty, support from Miles' staff, special funding, field trips, familiarization with the industry, peer support and other incentives will encourage completion of the program and thus the possibility for real career and science education options. In particular, the purpose of the Academy is to acquaint young people with a profession and a field that would eventually lead students to continue in the Career Institute or to seek immediate employment in biotech, or other industries, at less skilled levels. Miles envisions that its support for this program will continue beyond its nine year commitment. The continued support, and its level, will be at the sole discretion of Miles and depends upon such factors, among others, as the success of the program and financial support from other civic, commercial and non-profit organizations as well as the program's assimilation into the public school and community college systems.

B. Miles will guarantee \$1,100,000 to the initial development and implementation of this education program to be paid as follows:

Year 1	Program Director and start-up costs	\$100,000
Year 2	Development and implementation	\$400,000
Year 3	Development and implementation	\$350,000
Year 4	Implementation	\$125,000
Year 5	Implementation	\$125,000

Additionally, Miles will guarantee a minimum annual funding of \$25,000 for years six through nine of the Program with a commitment to match funds, received by the Program from outside sources, during this period up to a

maximum of \$75,000 per year. Total funding over this nine year period will range from \$1,200,000 to \$1,400,000. Program expenses to be paid from this funding include instruction, curriculum development and related materials. In addition to the amount listed above, a certain amount of in-kind donation of instruction would be provided by Miles' staff.

C. The objectives of the Biotechnology Training Program are: (1) to increase the number of Berkeley residents qualified to obtain employment in the biotech field, and more specifically at Miles; (2) to train young people and adults throughout Berkeley to better understand the role of biotechnology and the skills necessary to achieve employment in this field; (3) to ensure participation of existing union employees in the proposed training programs; and (4) to address the particular needs of job training agencies in Berkeley as they seek funds to help underskilled adults.

D. In addition to the funding provided in B. above, Miles will fund the hiring and first year expenses for a Program Director to direct, administer, coordinate and execute the funding of this education program. The Director will have overall responsibility for the program and the formation of a Program Advisory Committee and a tax exempt foundation which will oversee the program execution. The goal of the parties is that the Institute is to provide graduates with certification or State of California accreditation, through the Community College System, in a specific field which could be applied towards ongoing higher education. A curriculum developer will be hired to develop the curriculums for both the Academy and the Institute. While the sciences will form the basis for the structured coursework, attention to other fields will not be ignored, as the importance of understanding the work and appreciating the products and value of the work will also be necessary to achieve success in this field. The curriculum developer and director of the program will provide for the entry of persons who will not require the complete program (i.e. who have science backgrounds). Every effort will be made to develop a program that can train participants in an accelerated manner. In particular, the Career Institute may begin accepting students before the third year of the Development Agreement if determined appropriate by the Program Advisory Committee.

E. The program director shall actively seek additional funding partners including governments, foundations and corporations. These funds will be added to Miles' contribution referenced in paragraph B. and shall not decrease Miles' total allocation to this program. If outside funding by such additional funding partners is contingent upon expenditures being made within a given fiscal year, Miles agrees to place its contribution for that year into a fund in order that it may be available in the out years. There is no requirement that Miles' contributions be spent within any given year. At a mature stage (beginning in

years six through nine), the Program would be expected to be assimilated into the public school and community college systems. At this point funding from outside sources is expected to continue but at a lower level than initially required.

F. Recruitment for both the high school and community college program will include extensive outreach throughout Berkeley, with special emphasis on West and South Berkeley families, youth and those with some college education. Recruitment will also be made through First Source. Every effort will be made to ensure that the composition of the program will be as representative as possible of the ethnic diversity of South and West Berkeley, and will also include Miles' pre-existing Affirmative Action goals. The population to be served by this program includes high school students (at the Academy) and Berkeley Academy graduates. Additionally, since entry into the Career Institute is not contingent on completion of the Academy program, any openings in the Institute not filled by Academy graduates would first be filled by unemployed and underemployed adults, as well as out of school youth who are Berkeley residents, at least up to the total of 15 slots. Additional slots may be provided at Miles' discretion. All recruits will be screened and assessed as to their qualifications for program participation. All programs will be open to current employees of Miles, in addition to Berkeley residents. Berkeley residents and employees of Miles who are Berkeley residents, and who are qualified high school graduates, will be given priority when selecting non-graduates of the Academy for admission to the Career Institute.

G. All of the above procedures, programs, and goals will be reviewed annually by the City, Miles and the International Longshoremen and Warehousemen Union (ILWU) Local 6. After the third year of the Development Agreement, the annual reviews will include updated, mutually agreed upon estimates of how many people will need to enter the training programs to assure that enough successfully graduate to fill the 80% of Miles' jobs that are to be filled from the outside by hiring training program graduates, but Miles need not commit to an expansion of the Institute to more than 15 Berkeley resident slots per class year. Goals for graduation rates shall be mutually agreed upon prior to commencement of the Academy and the Institute, respectively. Upon mutual consent by the City, Miles and the Program Director, procedures and programs will be revised in order to meet the agreed upon goals.

H. In addition to the education program previously described and in recognition of the extra needs of the underemployed and unemployed adults who may not fit the program guidelines above, Miles will fund a three year position for a grantwriter to function with both the nonprofit job training agencies and the City of Berkeley. The grantwriter's job will be to develop multi-year proposals involving collaborations between agencies, private industry and the public sector.

Miles will fund \$150,000 over a three year period beginning one year after the Development Agreement approval. The funds will be provided directly to the "Jobs for the Homeless Coalition," as long as the Coalition's membership continues to include the Center for Independent Living (CIL) and Berkeley/Oakland Support Services (BOSS). Should the Coalition no longer exist in this form, funds for this same purpose would be directed to BOSS, which would administer the program. Administration of this position, and review of grantmaking progress will be handled by a team representing the City Community Development Department, Miles and Jobs for the Homeless Coalition.

II. Miles will provide additional support to Berkeley educational institutions for the duration of the Development Agreement. Specifically, the company will:

A. Provide laboratory resources and library materials of a scientific nature to the Berkeley school systems.

B. Continue or initiate, as the case may be, mentorship, tutoring and summer job programs. Miles will fund \$10,000 per year, throughout the Development Agreement, for these programs for a total of \$300,000.

C. Participate in the sponsorship of the local science fair.

D. Sponsor an annual "Career Day at Miles" to familiarize high school and college students with the types of positions typically available in the pharmaceutical and biotechnology industries.

E. Provide hands-on training to science teachers in areas where Miles' specific expertise would be of benefit.

F. Funding for kindergarten through 8th grade projects (through the Berkeley Public Education Foundation or its successor) to encourage basic education in areas related to biotechnology. Miles will contribute \$10,000 per year, throughout the Development Agreement, to these projects for a total of \$300,000.

## Educational Program Overview

### A. Program Features:

1. A summer training institute for teachers, with stipends for training of those teachers who will staff the programs at the high school and community college levels (institute to be open for other teachers by application).
2. A Biotech Academy within Berkeley High School.
3. A Biotech Career Institute for community college students.
4. Expansion of high school and community college laboratory resources and library materials related to the biotech field.
5. Funding for kindergarten through 8th grade projects (through the Berkeley Public Education Foundation) to encourage "biotech basics".
6. A commitment to encourage participation by other biotech companies in the East Bay area.
7. Mentorships, tutoring, career days at Miles, summer jobs for program participants.
8. Stipends for community college students on a sliding scale basis - appropriate to need - to cover housing and child care assistance, as determined.
9. Co-op jobs for community college level participants.
10. Teachers specially trained to teach the skills necessary for jobs in biotech (and ongoing training to keep staff current, through paid summer positions in the field).
11. Supplemental funds to cover smaller classes at the high school and community college to ensure proper training and attention to each student.
12. Hands-on training for certain skills at Miles' facilities.

B. Proposed Recruitment Criteria:

1. The following will be required for entry into the Biotech Career Institute:

- (a) High School graduation or GED.
- (b) Minimum reading and math qualifications will be determined.
- (c) Punctual attendance at all assessment sessions.
- (d) At least 15 slots must be filled first by Academy graduates and then by Berkeley residents.

2. The following will be priorities for entry into the Career Institute Program:

- (a) Academy graduates.
- (b) Berkeley residents to fill up to 15 slots.
- (c) Existing employees of Miles.
- (d) Minorities under-represented in biotech field.
- (e) Unemployed or underemployed.
- (f) Some college level work or good employment history with references.
- (g) Low income.
- (h) References who report good motivation and attendance.
- (i) Demonstrated interest in health or science fields.

C. The Career Institute will have an orientation and assessment component.

D. Upon completion of the program (Academy and Career Institute), graduates will be referred to the City of Berkeley's First Source program, from which Miles will continue to draw applicants to fill positions.

E. Participants in the training program will receive assistance in finding employment in the biotech field and/or health field.

F. Program Evaluation. Since this program will be a model for other corporate-sponsored, corporate-initiated training programs, an evaluation would be a valuable tool to determine the impact of the program on participants. The evaluation could be carried out by graduate students from the School of Public Policy at UC Berkeley. As part of this program, students spend one full semester

devoted to a research project. This is an appropriate project and can be arranged with UC Berkeley. Under the direction of the Program Director, this evaluation will take place prior to commencement of the first graduation from the Academy and from the Institute. This evaluation will be used to provide data for measuring the program's success in overall job placement and the pursuance of further education.

**EXHIBIT G-2**

**EMPLOYMENT - HIRING PROGRAM**

**EXHIBIT G-2**  
**EMPLOYMENT-HIRING PROGRAM**

A. The objectives of the Employment Program are: (1) to ensure that Berkeley residents are given preference in hiring for non-technical and technical positions at Miles through the City of Berkeley's First Source Program; (2) to obtain employment for Berkeley residents during the construction phase of the proposed expansion; and (3) of all hires from the outside for laboratory and production technicians, Miles agrees that a goal of 80% will be graduates of the Biotech Career Institute.

B. Construction Employment. Miles and their construction contractors will first recruit new employees, as needed for construction, through the construction section of the City of Berkeley's First Source Employment Program. The First Source Program will refer only Berkeley residents who are qualified crafts/trades workers and laborers to the contractor for employment in accordance with union policy and procedures. Miles establishes a goal of hiring one out of every five workers, up to a maximum of 700 workers, through the First Source Program into new positions, for the duration of the particular task for which the employees are assigned. Additionally, Miles will follow the same First Source procedures for 100% of turnover employment and ensure that the contractors make every effort to assure that the ethnicity of the workforce will be representative of the West Berkeley community. Miles will state this requirement in all construction-related bid packets in accordance with Miles' First Source Agreement. Miles will make a contribution to the First Source Construction Employment Program fund to assist new construction workers with job start-up expenses. Miles will pay \$500 per First Source construction hire into a fund administered by the City or its designee to assist in the placement and monitoring of First Source hiring. These funds will be used for workers who are projected to be on the job for more than one week.

C. Miles establishes a goal of 100% for hiring of First Source, Berkeley residents into non-technical positions for all regular openings and long-term, temporary openings not filled from within Miles or through ILWU Local 6 by persons trained or licensed in a particular Local 6 craft, trade or skill, or by an ILWU Local 6 person with full or partial seniority at Miles. Miles will continue to periodically review and consider re-writing the job requirements as needed for non-technical jobs in order to increase the numbers of people who may qualify for these positions. These jobs may include, but not be limited to: Finishing Operator, Research Helper, Washroom Operator, General Worker, Janitor, Filling Operator and Equipment Washer. Additionally, the following arrangements between Miles and First Source will be implemented:

1) All regular openings and long term temporary openings not filled from within Miles or through ILWU Local 6 by persons trained or licensed in a particular Local 6 craft, trade or skill, or by ILWU Local 6 persons with full or partial seniority at Miles, will be referred to First Source.

2) First Source will send notices of all of the openings to their associated job training and/or employment agencies. Hiring preference will be given to Berkeley residents by Miles in accordance with the First Source agreement. If Miles determines that Berkeley resident candidates are not qualified for openings, First Source will immediately refer non-Berkeley resident candidates to Miles.

3) First Source will refer clerical candidates for long-term temporary openings to a testing service.

4) Miles and First Source staff will continue to inform all of the associated job training and/or employment agencies of these procedures.

5) Miles will maintain a separate Berkeley Residents Resume File and give it special attention when trying to fill these positions.

6) Miles and City agree to fulfill the obligations set forth in the attached Miles/City First Source Agreement which is incorporated into the Development Agreement.

D. Of all hires from the outside for laboratory and production technicians, Miles agrees that a goal of 80% will be graduates of the Biotech Career Institute, but Miles need not commit to an expansion of the Institute to more than 15 Berkeley resident slots per class. The expected number of new technician positions available to graduates of the Biotech Institute by phase is as follows: Phase I - 19, Phase II - 17, and Phase III - 46. In addition, a certain number of positions will be available to graduates of the Institute as a result of normal turnover. Although this number can not be stated with certainty at this time, the following numbers would be a reasonable estimate: Phase I - 20, Phase II - 27, and Phase III - 134. Miles will make a good faith effort to retain these employees once hired. The retention rate of these employees will be reviewed annually.

E. All of the above procedures, programs and goals will be reviewed annually by City, Miles and union staff. Procedures and programs contained above will be revised upon mutual consent by City and Miles in an effort to meet the agreed-upon goals.

NOTE: The City recognizes and respects Miles' obligations to its pre-existing labor agreement with ILWU Local 6 and the company's other regulations and responsibilities to satisfy state and federal Equal Employment Opportunity requirements, in addition to obligations through First Source.

FIRST-SOURCE AGREEMENT  
BETWEEN  
MILES INC. AND THE CITY OF BERKELEY

The Agreement, made and entered into this 17th day of January, 1992, by and between the City of Berkeley, a municipal corporation represented by the City Manager (hereinafter referred to as the CITY) and Miles Inc. (hereinafter referred to as the DEVELOPER).

Under this First-Source Agreement, the DEVELOPER will use the CITY as its First-Source for recruitment, screening, referral and placement in "covered positions."

WITNESSETH:

WHEREAS, the CITY wishes to assure non-discrimination in employment, training and promotion opportunities for minority, women, economically disadvantaged, disabled and other Berkeley residents by employers located within the City of Berkeley; and

WHEREAS, the CITY will provide employment recruitment, screening, referral and placement services to the Developer, construction contractors and tenants to assist them in their non-discrimination with the Equal Opportunity Program and in meeting their affirmative action, training and employment commitments subject to the limitations set forth in this agreement; and

WHEREAS, the parties to this Agreement intend to work together in the fulfillment of those noble intentions by ensuring that this project will be an economic asset to the community at large;

WHEREAS, the DEVELOPER intends to construct multiple facilities to be used for manufacturing, research, administration and other related uses; and

NOW THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties hereto agree to the following:

SECTION I. GENERAL TERMS

- A. The DEVELOPER and CITY, or such other agent as the CITY may designate, may mutually agree to modify this Agreement in order to improve the working relationship described herein.
  
- B. If this Agreement conflicts with any Federal, State or local laws or regulations, the laws or regulations shall prevail.

- C. The DEVELOPER will provide the CITY with written documentation that the DEVELOPER has provided the representative of any involved collective bargaining unit, if applicable, with a copy of this Agreement and has requested comments; the DEVELOPER will provide these comments to the CITY.

## SECTION II. CONSTRUCTION EMPLOYMENT

It is agreed that the DEVELOPER, and the CITY will carry out the following responsibilities in the implementation of the construction employment program:

### A. DEVELOPER RESPONSIBILITIES

1. DEVELOPER is committed to being an Equal Opportunity Employer. This means that the EMPLOYER will not discriminate on the basis of race, sex, national origin, religion, sexual orientation, marital status or disability and will make every effort to widely recruit and fairly evaluate all applicants for employment. The DEVELOPER will require that its General Contractor commit to being an Equal Opportunity Employer to this end. The DEVELOPER, through the General Contractor, is responsible for the performance of all SUBCONTRACTORS as Equal Opportunity Employers.
2. DEVELOPER will submit or cause to be submitted a copy of CONTRACTOR payroll records to the CITY for each pay period within five (5) working days of the end of the payroll period.

City of Berkeley  
City Manager's Office  
Office of Economic Development  
2180 Milvia Street  
Berkeley, CA 94704
3. DEVELOPER agrees to formally notify all applicable labor unions of the existence of the Agreement with the CITY, and of the company's commitment to be an Equal Opportunity Employer. DEVELOPER agrees to request labor unions' cooperation in implementing this Agreement.

4. DEVELOPER agrees to promptly notify the CITY when the unions' referral processes have impeded efforts to be an Equal Opportunity Employer, specifying name of union, union contact person, date of worker request and reason given by the union for failure to refer person meeting requested worker characteristics.
  
5. DEVELOPER will include in his contract with the General Contractor that all CONTRACTORS must act affirmatively and demonstrate good faith effort to be an Equal Opportunity Employer as described under item no. 1 of the DEVELOPER'S responsibilities, including but not limited to:
  - a) outreach, recruitment and hiring carried out affirmatively and calculated to attract applicants who are women, minorities, disabled and Berkeley residents.
  - b) notification to the CITY'S First Source Construction Employment program of workforce needs before others are notified.
  - c) gaining the cooperation of local labor unions and apprenticeship programs in meeting the CITY'S Equal Employment Opportunity commitments.
  - d) prompt notification to the DEVELOPER when unions fail to refer minorities, Berkeley residents or women when requested to do so or when the union referral process has impeded efforts at equal opportunity.
  - e) providing the CITY with complete information on procedures for applying for employment.
  - f) assurance that minorities, Berkeley residents and women who are employed are treated in a manner that is equal to all other employees with comparable employment status with respect to wages, hours of employment, working conditions, disciplinary action and in all other respects.

B. CITY OF BERKELEY RESPONSIBILITIES

It will be the responsibility of the CITY to:

1. recruit applicants in accordance with job requirements.
2. thoroughly screen applicants' experience/qualifications for construction jobs.
3. refer for employment only those applicants who are suitable for construction jobs at the worksite.
4. follow up on outcomes of applicants referred.
5. provide necessary support services for applicants/employees.
6. monitor performance of the DEVELOPER, GENERAL CONTRACTOR and SUBCONTRACTORS as Equal Opportunity Employers.
7. notify the DEVELOPER of unacceptable performance, monitor corrective action implementation by the DEVELOPER, GENERAL CONTRACTOR and SUBCONTRACTORS.
8. monitor CITY employment/training agencies' delivery system for applicant referral; encourage agencies to implement corrective action, if needed, in the delivery of suitable applicants for construction jobs.
9. maintain liaison with local labor unions and follow up when the union referral process has impeded DEVELOPER or CONTRACTOR efforts to be an Equal Opportunity Employer.

C. GOOD FAITH EFFORT

Good faith effort exists when CONTRACTORS:

1. make every good faith effort to ensure that job specifications/requirements accurately reflect job functions.

2. ensure that job specifications/qualifications do not constitute intentional or inadvertent discrimination against minorities, Berkeley residents, the disabled or women.
3. notify the CITY of available employment opportunities.
4. fully document the reason(s) for not hiring persons referred by the CITY when such persons:
  - a) were not referred by the union hiring hall for employment by the CONTRACTOR.
  - b) were referred to the union hiring hall by the CONTRACTOR and such persons were approved by the union for employment but were not employed by the CONTRACTOR.
5. promptly notify the CITY when:
  - a) the CONTRACTOR has reason to believe that the Equal Opportunity provisions of this Agreement will not be met on a craft-by-craft basis.
  - b) unions have not referred to the CONTRACTOR requested workers who are minorities, Berkeley residents or women.
  - c) the union referral process has impeded the CONTRACTOR's efforts to meet the employment goals of this Agreement.

### SECTION III PERMANENT EMPLOYMENT

- A. 1. The CITY and DEVELOPER agree that for purposes of this Agreement, "covered positions" include EMPLOYER'S job openings at all non-technical and non-managerial levels, created as a result of internal promotions, terminations and expansion of their workforce.
2. Covered EMPLOYER for purposes of this Section refers to the DEVELOPER, management or maintenance company and all tenants of five (5) full time equivalent

(FTE) or more employees, and the successors of each.

3. If this Agreement conflicts with a collective bargaining agreement to which the EMPLOYER is a party, the bargaining agreement shall prevail.

B. DEVELOPER RESPONSIBILITIES

1. During each phase of the Project, a qualified representative of the DEVELOPER will be designated as the responsible party for implementation and compliance with goals, objectives and responsibilities specified in this Agreement.

2. Transfers

If, during the term of this Agreement, the DEVELOPER, building management or maintenance company, or any tenant or successor of any of these, should transfer possession or ownership of all or a portion of its business concerns affected by this Agreement or the Project or any part thereof, to any other party by lease, sale, assignment or otherwise, such transferer shall:

- a) Advise the CITY within seven (7) days after the signing of the lease, deed or other documentation of the transfer. This advice will include the name of the party taking possession, and/or ownership, and the name and telephone number of that party's representative.
- b) Notify tenants and prospective tenants of the existence of the DEVELOPER'S First Source Agreement and of support of CITY policies encouraging businesses located in Berkeley to make special effort to employ the target population.
- c) Advise the party taking possession including tenants and owners of five (5) FTE or more employees that they will be solicited by the

CITY for a similar agreement.

- d) Include the following lease language in all leases with its tenants of five (5) FTE or more employees:

"Tenant supports the Equal Employment Opportunity Program set forth in the First Source Agreement with the City of Berkeley (CITY) regarding employment of CITY residents, minorities, disabled residents and women and will pursue such goals in their employment practices. Tenant agrees to enter into a First-Source Employer Agreement, substantially similar to the sample agreement attached hereto as Exhibit "A," with the CITY and to make use of the CITY employment/training program as the First-Source for job applicants.

C. EMPLOYER RESPONSIBILITIES

EMPLOYER responsibilities cover the DEVELOPER, and the management and/or maintenance company.

1. The EMPLOYER agrees to notify the CITY of new or open positions.
2. Within ten (10) working days of signing a lease for space in the Project building, the EMPLOYER will provide the CITY with written position descriptions for all existing and anticipated employment positions. The description shall include, when possible, criteria and minimum qualifications, rates of pay, hours of work, duration of employment, work to be performed, job skills and length of training required for the positions.
3. Except in the event of an emergency hiring need, the EMPLOYER will notify the CITY of other new open positions at least seven (7) working days before it seeks

applicants from other sources. However, if a position is a refill position, the EMPLOYER shall notify the CITY five (5) working days before it seeks applicants from other sources.

4. In both cases the EMPLOYER will interview applicants referred by the CITY after notifying the CITY of the opening and before interviewing others, so long as consistent with applicable local, state and federal fair hiring laws.
5. The EMPLOYER will make all decisions on hiring new employees and will reasonably consider employees for covered positions from the qualified persons referred by the CITY.
6. The EMPLOYER will not discriminate against any applicant for employment because of race, religion, age, handicap, color, sex, national origin, citizenship or political affiliation.
7. In the event the CITY cannot refer the total number of qualified personnel requested, the EMPLOYER will still be required to make good faith efforts to carry out outreach and recruitment of targeted groups.
8. EMPLOYER shall provide to the CITY, upon request, verbal information on employment status of First Source placements, and reason for separation if employee is terminated.

D. CITY RESPONSIBILITIES

1. The CITY will provide adequate staffing for the Employment Coordination Office on a regular basis and, in the event such office is no longer funded by the CITY and no other CITY office or designee is designated to provide such referrals, and the EMPLOYER gives written notice to the City Manager, and the City Manager has not responded in writing within thirty (30) days, stating that the program is still in existence and stating the department or individual responsible to carry out the CITY's obligations under the program, this Agreement, and the obligations contained

herein, shall automatically terminate, with no further action required by either the CITY or the EMPLOYER.

2. The CITY will received EMPLOYER job notification and job orders and immediately initiate recruitment and pre-screening activities.
3. The CITY will screen and refer applicants according to qualification and specific selection criteria submitted by the EMPLOYER.
4. The CITY will provide funding for CITY-provided employment/training activities and funding for employment coordination activities.
5. The CITY will follow up with EMPLOYERS on outcome of applicants referred for employment and will initiate corrective actions necessary for an effective employment/training delivery system.
6. The CITY Employment Coordinator will act in cooperation with the EMPLOYER to coordinate with the CITY employment/training agencies to determine the eligibility of CITY-referred trainees hired by the EMPLOYER for Federal Target Jobs Tax Credits as appropriate.
7. The City Manager or his/her designee will be responsible to monitor and, where necessary, enforce compliance with this Agreement. This will be accomplished through periodic reviews, investigations of grievances, and dispute resolution through administrative hearings. Pending conclusion of the hearings, EMPLOYER can continue normal operations and hiring.
8. The City Manager or his/her designee will review all reports: the CITY will determine whether the EMPLOYER has maintained good faith efforts to recruit and provide opportunities for employment and advancement of minorities, women, disabled, economically disadvantaged persons and Berkeley residents.
9. The CITY will recruit targeted populations to generate a pool of applicants who match EMPLOYER job

specifications and to the extent appropriate, train applicants for jobs which will become available in the First-Source Program.

10. The CITY will coordinate with CITY employment/training agencies to ensure delivery of applicants and training in accordance with CITY commitments.
11. The CITY will screen applicants for job readiness and match to EMPLOYER needs.
12. The CITY, through CITY employment/training agencies, will contract with out-of-school youth who do not have a high school diploma or GED to return to school as a condition of employment, and will follow up with such youth to promote the youths' completion of high school.

**EXHIBIT G-3**

**AFFORDABLE HOUSING PROGRAM**

**EXHIBIT G-3**  
**AFFORDABLE HOUSING PROGRAM**

A. The program objective is to increase the supply of permanently affordable housing, in the City of Berkeley, by 21 units with an average size of two-bedrooms. Miles will deposit funds into the City's Housing Trust Fund. Through this program, grants, deferred loans or amortized loans will be made to non-profits to develop or substantially rehabilitate apartment units and provide for long-term affordability via deed restrictions. The funds could be targeted to West Berkeley projects exclusively, but at least 50% of the funds shall be used for projects in West Berkeley, with emphasis on the area from University Avenue south. Possible projects may include, but not be limited to: new construction (including second units), substantial renovation of apartment units and identifying vacant residential structures in West Berkeley and targeting them for renovation. These West Berkeley homes/units would then also require a deed restriction for permanent affordability. Additional funds for housing, particularly for West Berkeley homeowners for rehabilitation and second units, are included in the Community Programs section of this Agreement (Exhibit G-9).

B. Miles will provide an initial funding of \$154,122 within one year of the Development Agreement approval. Miles will then make subsequent payments of approximately \$46,129 over the next ten years. The total payments made by Miles will not exceed \$615,413.

**EXHIBIT G-4**  
**CHILD CARE PROGRAM**

**EXHIBIT G-4  
CHILD CARE PROGRAM**

A. The objective of this program is to implement innovative methods of offsetting the demand for child care created by the Miles project. The program provides the following:

1. Infant Care.

(a) Miles will provide funds into a Capital Fund for the conversion of not less than forty existing preschool slots to infant care slots. The fund would be held and managed by the state funded Resource and Referral Agency, designated to serve Berkeley (RRA) and distributed to qualified Berkeley applicants for retrofit projects. Funds will be distributed as grants, deferred loans or amortized loans based upon income and operational qualifications and determined by a committee established by RRA which would include input from BALDCO and a designated City staff person. Thorough notice will be given to existing Berkeley providers of the availability of these funds. Any funds remaining within this Capital Fund after the 40 infant care slots have been created may be applied towards other child care measures in the Development Agreement. Funds may be applied to other activities identified herein if it is determined that increasing child care slots is no longer necessary, subject to the review discussed below.

(b) To help keep abreast of changing demographic shifts and ensure that appropriate demographic and market needs are being met, the use of these funds will be reviewed every three years beginning three years after the first Annual Review. The funds should, however, remain targeted towards increasing the supply of child care space, in West Berkeley, by addressing capital/facility projects with 40 slots of some type as the minimum amount.

(c) Miles will provide an initial funding of \$22,000 within one year of the Development Agreement approval. Miles will then make subsequent payments of approximately \$5,676 over the next ten years. The total payments made by Miles will not exceed \$78,763.

2. Affordability.

(a) Miles will provide funds into an Operating Fund for not less than 14 affordable child care slots to assist low-income working households on a sliding-scale basis. The fund would be held and managed RRA and distributed through a vendor-voucher program which would be made available to qualified Miles employees and qualified Berkeley residents and employees. Thorough notice will be given to existing Berkeley households and providers of

the availability of these funds. Notice will be provided through the RRA newsletter and through Miles' internal distribution at least twice per year.

(b) Miles will provide an initial funding of \$56,527 within one year of the Development Agreement approval. Miles will then make subsequent payments of approximately \$14,398 over the next ten years. The total payments made by Miles will not exceed \$200,505. Additionally funds may be raised through a joint City and Miles "fund drive" that solicits contributions and participation of other Berkeley firms.

3. Sick Care. Miles will provide annual funding to subsidize the staff at a local sick care provider such as the Sick Care Program in West Berkeley. Miles will begin to provide annual funding of \$10,000 within one year of the Development Agreement approval and continued through the life of the Agreement. Additionally, Miles may fund a study to examine this issue and gather information on models, pilot programs and other research to determine if viable solutions and funding sources exist. Miles' participation in any resulting programs would be re-negotiated.

4. Health Care Training. Miles will provide annual funding to subsidize the health care training of local child care providers. Miles will begin to provide annual funding of \$9,500 within one year of the Development Agreement approval. Monitoring of this training would be conducted by the City in consultation with RRA and BALDCO.

**PUBLIC INFRASTRUCTURE PLAN**

**EXHIBIT G-5**

**EXHIBIT G-5  
PUBLIC INFRASTRUCTURE PLAN**

A. Miles will implement the following street improvements:

1. Miles will complete the following improvements of Dwight Way west of Seventh Street during the construction of Blocks A1, C1, and D1 or in conjunction with City public works improvement schedules, whichever occurs first:

- (a) Repave street at a cost of \$50K.
- (b) Replace sidewalk, repair curb and gutter at a cost of \$40K.
- (c) Construct a cul-de-sac at the terminus of Dwight Way at a cost of \$25K.

2. Miles will complete the following improvements of Seventh Street between Carleton and Dwight Way during construction of Block D2 or in conjunction with City public works improvement schedules, whichever occurs first:

- (a) Construct a 2" overlay at a cost of \$50K.
- (b) Replace sidewalk and repair curb and gutter at a cost of \$6K.
- (c) Landscape along the street at a cost of \$7K.

3. Miles will complete the following improvements of Carleton Street west of Seventh Street during construction of Block A4 or in conjunction with City public works improvement schedules, whichever occurs first:

- (a) Reconstruct public right-of-way at a cost of \$50K.
- (b) Replace sidewalk and repair curb and gutter at a cost of \$15K.
- (c) Landscape along the street at a cost of \$4K.

4. Miles will replace and repair the sidewalk on Eighth Street between Dwight Way and Parker Street, at a cost of \$7K, during the surface parking lot upgrade in Block E1 or in conjunction with City public works improvement schedules, whichever occurs first.

5. Miles will repave Sixth Street between Dwight Crescent and Dwight Way, at a cost of \$20K, during construction of a main gate or in conjunction with City public works improvement schedules, whichever occurs first.

B. Miles will implement the following traffic improvements:

1. Miles will contribute 50% of the cost to install a signal at the intersection of Seventh Street and Parker Street at a cost of \$50K. This will occur during construction of Block D3 or in conjunction with City public works improvement schedules.

2. Miles will fund the modification of the signal at Seventh Street and Dwight Way and create 6th Street/Dwight Way route for southbound/eastbound "Left Turn" onto eastbound Dwight Way at a cost of \$50K. This improvement will occur during the surface parking lot upgrade in Block E1.

3. Miles will contribute 50% of the cost to install a signal at Seventh Street and Heinz Street at a cost of \$50K. This improvement will occur during construction of Block B4 or in conjunction with City public works improvement schedules.

4. Miles will fund the removal of parking along Seventh Street and the re-striping to create three lanes at a cost of \$20K. This will occur during construction of the first building along this street.

5. Miles will fund the closure of Seventh Street north of Dwight Way at a cost of \$20K. The City will contribute funds to move utilities effected by this project. This will occur in conjunction with the surface parking lot upgrade in block E1.

6. Miles will contribute to traffic improvements designed to mitigate cumulative impacts and provide areawide improvements. Miles will contribute 50% of these costs, up to a maximum of \$1.5 million.

C. Miles will implement a Sanitary and Storm Sewer Improvement Program that may include but not be limited to the following:

1. Miles will conduct engineering analyses to determine existing sewer conditions, system capacity, and projected impacts on the systems from the site development. These analyses will be used to repair, replace, or construct appropriate sections of the sewer systems on and off the site. Analyses will be shared with the City and all plans regarding improvements to the sewers will be approved by the City. The estimated cost of these analyses is \$50,000.

2. Sanitary Sewer System.

(a) Miles will improve on-site sewers to fulfill infiltration/inflow reduction standards.

(b) Miles will insure all wastewater discharges to the sanitary sewer meet Federal, State and local regulatory requirements.

(c) The cost of improvements and increases in the sanitary sewer system capacity within the project area will be borne by Miles. The cost of off-site improvements to sanitary sewer mains and trunks and increases in capacity of these mains and trunks as a result of the project shall be apportioned in accordance with the flow contribution to the system. However, the City will not contribute a proportional share to off-site sewer projects that are not scheduled and funded for execution by the City at the time such upgrades/improvements are required as a result of the Miles' project. In a case where the main's and trunk's capacity is needed by Miles before it is scheduled for execution by the City, Miles may be required by the City to upsize the capacity. The capacity upsizing will be completed provided the City and Miles come to an agreement as to how the incremental costs will be borne. Miles will not be required to fund more than \$100,000 toward these cumulative impacts in the first ten years of the Agreement.

3. Storm Sewer System.

(a) Miles will replace existing surface drainage along Dwight Way and Fourth Street with a subsurface pipe system.

(b) Miles will dedicate space on the property for construction of a retention basin if required.

(c) Miles will disconnect from the City line under Parker Street if requested by the City but will not be required to do so within the first ten years.

D. Miles will fund a water quality study in Aquatic Park to determine appropriate methods of developing the water uses shown in the Aquatic Park Master Plan and preserving and improving water quality at a cost of \$50K. Additionally, Miles will contribute \$250K toward improvements at Aquatic Park. These improvements shall be in accordance with the Aquatic Park Master Plan and may include but not be limited to:

1. Construction of new tide gates.
2. If feasible, construction of a railroad crossing, either overpass or underground tunnel.
3. Construction of children and/or tot play equipment and a play area.
4. Construction of two unisex restrooms at the north and south entrances to the park.
5. Provide landscape improvements to the park entrance.
6. Repair or replace the existing Par Course.
7. Construction of docks and/or platforms for fishing.
8. Construction of a fenced dog park.
9. Construction of a fence along the railroad right-of-way.

**EXHIBIT G-6**

**TRANSPORTATION DEMAND  
MANAGEMENT PROGRAM**

**EXHIBIT G-6**  
**TRANSPORTATION DEMAND MANAGEMENT PROGRAM**

A. Miles will develop and implement a trip reduction program to reduce the use of single-occupant cars by Miles employees. This program will have the following components:

1. Miles will be obligated to increase the morning peak (6-10 A.M.) Average Vehicle Riders (AVR) to 1.3 by 1997 and 1.5 by 1999. Achievement of these goals would result in Miles not being subjected to further requirements for trip reduction (excepting those mandated by future laws or ordinances enacted by the State or Regional government, or ordinances enacted by the City which apply equally to all employers of Miles' size and nature). To the extent that Miles fails to achieve these AVR goals, it will be required to implement more rigorous strategies which may include financial or other incentives/disincentives in order to achieve these objectives.

2. Miles will appoint a travel coordinator to be responsible for the trip reduction program. The coordinator will be a trained transportation professional or some other Miles employee who attends RIDES' training program for commute coordinators or an equivalent training program. Although the coordinator need not work on trip reduction full-time, Miles will allow adequate staff time to effectively administer the program.

3. Miles will continue to provide on-site eating facilities for employees as part of the trip reduction program and will explore the mid-day use of a shuttle for trips to local restaurants and destinations for other errands.

4. Miles will submit this program to the City for review and approval in conjunction with the First Annual Review. Thereafter, Miles will submit an annual plan outlining the coming year's trip reduction strategies to the City for approval. At year's end, Miles will submit a report summarizing the results of the program. The report will include the results of an annual survey of employee travel conducted with a survey instrument approved by the City. The estimated cost of implementing this plan is \$30,000 per year.

B. Miles will continue to operate an employee shuttle to BART running on a regular schedule at the A.M. and P.M. peaks. The cost of operating the shuttle can be shared with other Berkeley employers and is estimated at \$5,000 per year.

C. At year ten and every five years thereafter, Miles will reimburse the City for the cost of conducting a survey of on-street parking occupancy, in a four block radius from plant entrances, using a methodology approved by the

City of Berkeley. The intent of this survey is to monitor the use of on-street parking by Miles employees, visitors, and vendors to reduce Miles' contribution to overall parking growth in the Seventh Street corridor. The results of the survey will be submitted to the City. Should the survey indicate that Miles employees are using the public streets for parking, Miles will reimburse the City for the reasonable cost of protecting the neighborhood from parking spill-over or, with the City's approval, design some other program to prevent the use of on-street parking. The estimated cost of the surveys is \$1,000 per survey.

D. Miles will provide two bus shelters at the intersection of Seventh Street and Dwight Way. The shelters will be designed with the concurrence of AC Transit and the City. The estimated cost of each shelter is \$7,500.

E. Miles will encourage the use of bicycles in West Berkeley by funding \$40,000 toward the development of a bike route plan. Miles will help to implement the plan by contributing \$10,000 to the cost of signs and striping for up to ten block faces.

\* AVR will be calculated by dividing the number of employees traveling to the site by the number of automobiles traveling to the site. Should the Bay Area Air Quality Management District (BAAQMD) adopt a different calculation, the BAAQMD formula will be used.

**EXHIBIT G-7**

**HISTORIC PRESERVATION AND  
PUBLIC ART**

**EXHIBIT G-7**  
**HISTORIC PRESERVATION AND PUBLIC ART**

A. In order to preserve a record of the Miles site and its role in the West Berkeley manufacturing area and to commemorate the social history of West Berkeley, Miles will assemble an historical exhibit which will be displayed in one or more public buildings on the Miles site. This exhibit will incorporate photographs of the site and the people who worked there, objects utilized in the manufacture of products, samples of products manufactured at the location, and a narrative history - perhaps on video tape.

B. Part of the exhibit will focus on the important architectural features of the buildings on the site and in the immediate vicinity of the site.

C. In addition to being a historical record, the display will also address the long term Development Agreement and the activities to be performed on the site in the future, thereby clearly linking the past and future elements of the site and its relationship to the Berkeley community.

D. This project will utilize internal Miles resources as well as the Berkeley Architectural Heritage Association, the Berkeley Historical Society, the University of California and other appropriate groups. The preparation of the exhibit will be timed such that it will be introduced in 1997 - Cutter's centennial year. Initially, the exhibit will be placed in one of the existing buildings on the site. Upon construction of a new Administration Building, an area of not less than 500 square feet but not greater than 1000 square feet will be dedicated in the building for permanent display of the exhibit. The exhibit will be designed so that it could be loaned out for use as a temporary exhibit by the City or interested historical groups.

E. In the design and construction of the Administration building, Miles will attempt to reuse or recreate architectural elements or features from the existing Building 12 on the site.

F. Miles will fund the project and will commit to investing at least \$50,000, but not more than \$75,000, in the construction of the exhibit. The estimated cost to Miles to construct the space in the new Administration Building is approximately \$75,000.

G. With the construction of the Administration Building, 1% (one percent) of the construction cost of that building shall be allocated to public art. The art shall be located on-site so that it is visually accessible to the public. The art shall not include: standard architectural elements of the building, landscaping, signage, sidewalks, standard development improvements and performance art. Miles shall be responsible for maintenance of the art work.

**EXHIBIT G-8**

**ENVIRONMENTAL PROTECTION**

**EXHIBIT G-8**  
**ENVIRONMENTAL PROTECTION**

A. Miles will comply with all Federal, State and local environmental regulations and Corporate environmental policies, as well as those programs and measures identified in this Development Agreement. Miles will comply with the more stringent provision if there is a conflict between this agreement or any governmental regulations. It is the intent of both parties that the programs outlined below will result in an environmental package which meets, and in some cases exceeds, current regulatory requirements. In those instances where Miles is not subject to specific Federal, State or local requirements or standards and agrees to establish programs, the parties acknowledge and agree that such programs will be designed and implemented so as to achieve environmentally meaningful results. The Miles Manager of Safety and Environment is responsible for the design, submittal, operation and reporting of all environmental protection mitigation programs. The City Manager, or his/her designee, is responsible for reviewing and monitoring the environmental mitigation programs. Miles will pay reasonable expenses of City staff and consultant time to review and monitor programs included in this Agreement. To the extent possible, Miles will continue to conduct self-audits in order to reduce the use of consultants and City staff.

B. Miles will prepare a Hazard Operability (HAZOP) Study for the existing phosphoric acid and caustic storage tanks and for the Pilot Plant phosphoric acid tanks. Miles will also conduct a HAZOP Study and an Off-site Consequence Analysis for the 100,000 gallon fuel storage tank or any future fuel storage tanks of 10,000 gallons or more. Miles will utilize state-of-the-art safety measures for the construction and operation of all fuel storage tanks. In addition, if Miles wishes to install a fuel tank larger than 25,000 gallons, Miles will provide the City with a report of its investigation into the feasibility of obtaining an uninterrupted fuel supply, including an explanation of why the tank is needed if that should be the case. Miles will consult with the City as to the location of this tank, and the siting of the tank shall be subject to the approval of the City Manager or his designee. Moreover, the location of this tank will be no closer than 200 feet from Dwight Way, Seventh Street and Carleton Street and shall be readily accessible to emergency response vehicles. HAZOP studies will also be conducted for all subsequent facilities containing bulk hazardous chemical storage. Summaries of all HAZOP studies will be provided to the City.

Cost Estimates: Miles will incur the cost of these studies.

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$19,000	N/A	N/A	\$61,000*

\* Includes HAZOP studies for six additional production buildings at \$7,000 each.

C. Except for temporary continuation of the production and testing of plague vaccine, which is to be discontinued in 1994, Miles will limit organisms used on-site to Bio-safety Classes 1 and 2. The use of Bio-safety Class 4 and 5 organisms at the Berkeley site are prohibited. Should Miles propose to use Class 3 organisms or produce cells other than those of mammalian origin or if Miles proposes to adopt substantially new technology which poses the potential for new risks or adverse impacts on the community or the environment, Miles will propose a Major Amendment to the Development Agreement, and Miles will provide for a City consultant to assist the City in its evaluation of biosafety issues related to the proposed change and the need for environmental review under CEQA. This consultant will have expertise in the bio-hazards associated with pharmaceutical research and production. The consultant's efforts will be directed at reviewing the bio-safety engineering and administrative controls of the proposed organisms and compliance with established guidelines and regulations. In all such issues of bio-safety, Miles will follow the guidelines established by the Centers for Disease Control, the National Institutes of Health, and the Recombinant DNA Advisory Committee of the National Institutes of Health in accordance with FDA requirements. Miles will issue annual statements to demonstrate continued compliance with these guidelines. With regard to its processes for inactivation of cells and cell cultures discharged into the sanitary sewer system, Miles will utilize methods which are recognized by the scientific community as appropriate and effective. Such processes shall be designed to effect 100% kill of the particular cell being disposed of.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
N/A	N/A	\$1,500*	\$45,000

\* Monitoring costs are based on an estimate of two days per year for consultant review.

D. Miles will implement an Emergency Preparedness Program consisting of the following elements:

1. Miles will prepare an Emergency Response/Business Plan for existing operations which goes beyond current requirements for business plans, including, but not limited to, identification of classes of organisms used in each building on the site.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$6,400	\$700	\$300	\$36,400

2. Miles will conduct emergency preparedness training for on-site emergency response teams. Additionally, Miles will revise its existing Emergency Procedures Manual. Miles will at all times maintain on-site fire suppression capabilities, as a supplement or back-up to the City system. Miles and the City Fire Department will jointly assess on-site fire suppression capabilities within 12 months of approval of the Agreement. Should this assessment identify the need for additional on-site fire suppression capability, Miles will employ measures to meet that capability. These measures may include on-site fire water retention vaults and distribution systems; generators, pumps, and hoses to draw water from Aquatic Park; and chemical suppression systems.

3. Miles will conduct annual on-site training of the City's emergency responders. The training would consist of familiarization with the procedures of the on-site emergency response team; delivery, distribution, and storage of hazardous materials (including radioactive, chemical and bio-hazards); and the site layout. The training will consist of an initial session and annual updates.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$10,000	\$6,000*	N/A	\$190,000

\* Initial and annual training (15 staff x 1 day @ \$50/hr).

4. Miles will supply appropriate medical assistance in case of accidental release of viruses.

5. Miles will inform suppliers of bulk hazardous materials that carriers must use truck routes that are approved by the City. Bulk hazardous materials carriers are limited to use of the Ashby Avenue exit from I-80 and the use of 7th street to the Miles site.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$2,000	N/A	N/A	\$2,000

6. Through coordination with City staff, Miles will conduct annual Emergency Response Exercises. These Exercises will include participation by City emergency responders, local medical treatment facilities and community members.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$2,300	\$8,000	\$1,500	\$308,500

Prior to implementation, a detailed outline of the Emergency Preparedness Program will be submitted to the City six months after approval of the Development Agreement.

E. Miles will implement a Risk Communication Program, including, but not limited to, the following elements:

1. Miles will design and implement a program of on-going communication with the local community on aspects its operations that could have off-site impacts. These potential impacts may include, but not be limited to, the effects of biohazards, hazardous materials, noise and air quality. The Program will insure communication with local clinics and hospitals to identify hazards from chemicals, bio-hazards and radionuclides.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$20,000	\$10,000	\$1,500	\$365,000

2. A member of the Health Advisory Commission will be selected as a member of the Miles Institutional Bio-safety Committee to

communicate with the public on issues of bio-safety. Prior to implementation, a detailed outline of the Program will be submitted to the City six months after approval of the Development Agreement.

F. Miles will implement an Energy Conservation Program designed to continue and expand Miles efforts in the area of energy conservation. Miles will conduct an audit of existing operations and facilities with the assistance of conservation specialists from Pacific Gas and Electric. Miles will comply with all energy conservation requirements for all new buildings and will implement energy saving measures which Miles judges to be technologically feasible and economically reasonable for the long-term. Prior to implementation, a detailed outline of the Program will be submitted to the City 12 months after approval of the Development Agreement. Miles will update the program annually and provide summaries of these updates to the City.

Cost Estimates (not including capital costs associated with implementation of energy conservation measures):

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$50,000	\$6,500	\$1,500	\$290,000

G. Miles will implement a Water Conservation Program. Miles will conduct an audit of existing operations and will evaluate options for water conservation and reclamation including recommendations from East Bay Municipal Utility District (EBMUD). Miles will implement those measures which are judged to be feasible over the long term and will accomplish measurable reduction in water usage. Prior to implementation, a detailed outline of the Program will be submitted to the City 12 months after approval of the Development Agreement. Miles will update the program annually and provide summaries of these updates to the City. Miles will also conduct a preliminary feasibility study of water reclamation options within 12 months of approval of the Development Agreement and a detailed feasibility study prior to Phase II. Miles will implement options judged to be feasible over the remaining term of the Development Agreement.

Cost Estimates (not including capital costs associated with implementation of water conservation measures):

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$50,000	\$6,500	\$3,000	\$335,000

H. Miles will prepare a Risk Management Prevention Program (RMPP) for the proposed ammonia refrigeration system. This RMPP, specifically the HAZOP portion, will assess the system design and operations management programs to ensure proper engineering and operational controls are installed. Miles will notify the City's emergency responders of schedules for HAZOP studies and will invite participation in these studies. The RMPP will also assess the risk to the community. Miles will utilize state-of-the-art safety features which will include a secondary containment facility, deluge sprinkler system and ammonia sensing equipment or their technological equivalents at the time. Prior to implementation, a detailed outline of the Program will be submitted to the City six months after approval of the Development Agreement.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$100,000	N/A	N/A	\$100,000

Costs include \$60,000 for an RMPP consultant, \$20,000 for Miles staff, and \$20,000 for City staff and consultants.

I. Miles will implement a Waste Reduction Program. The Program will analyze the current waste streams and determine appropriate measures to reduce the generation of solid, infectious, and hazardous wastes on the site. Appropriate measures will include, but not be limited to, source reduction, recycling and composting. As part of this program, Miles and the City agree to confer and establish an appropriate radioactive waste reduction standard.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$20,000	\$10,000	\$3,000	\$410,000

Prior to implementation, a detailed outline of the Program will be submitted to the City nine months after approval of the Development Agreement.

J. Miles will develop and implement a Good Neighbor Program for construction period activities, in conjunction with the Dust Suppression and Noise Reduction Programs described below. The good Neighbor Program shall include notification to neighbors of commencement of each major construction project, designation of a Miles employee as a point for community contact for each construction project, and shall include a requirement to write Good Neighbor policies into all construction contracts for such things as truck routes, noise and

dust control and hours of operation. The City shall also designate an employee to serve as a point for community contact for these activities. Prior to implementation, a detailed outline of the Program will be submitted to the City. The program will be implemented prior to the first demolition or construction after approval of the Development Agreement.

K. Miles will implement a Construction/Demolition Dust Suppression Program. The Program may incorporate, but not be limited to, appropriate measures such as watering loose dirt, covering stockpiles of sand and soil, and paving and planting as soon as possible. The Program will provide for intermittent sampling of air quality during demolition and construction activities by an independent qualified consultant.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$3,200	N/A	\$1,000	\$102,000*

\* Includes generation of a customized program at \$2,000 for each of 33 buildings to be demolished.

Prior to implementation, a detailed outline of the Program will be submitted to the City. The program will be implemented prior to the first demolition or construction after approval of the Development Agreement.

L. Miles will implement a Noise Reduction Program. The Program will comply with the existing City Noise Ordinance. The Program may incorporate, but not be limited to, appropriate measures such as limiting the hours of construction activities which generate significant amounts of noise, use of state-of-the-art noise control equipment, and construction of safety barriers.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$3,200	N/A	\$1,000	\$102,200*

\* Includes generation of a customized program at \$2,000 for each of 33 buildings to be demolished.

Prior to implementation, a detailed outline of the Program will be submitted to the City. The program will be implemented prior to the first demolition or construction after approval of the Development Agreement.

M. Miles will expand its existing Surface Water Run-off Program for periodic monitoring of discharges from the Miles site into the storm drain system and into Aquatic Park. As a part of this program, Miles will take steps as required to assure that its process wastes are not discharged into the storm drain system. Miles will utilize Best Management Practices in accordance with the Federal National Pollution Discharge Elimination System (NPDES) guidelines to reduce contamination of surface waters. If required, Miles will conduct an analysis of the feasibility/desirability and requirement for storm water retention. Additionally, Miles will conduct quarterly sampling of surface water discharge prior to entering the City storm drain system. This quarterly sampling will demonstrate Miles compliance with NPDES guidelines and will also demonstrate that Miles is not contributing to the degradation of Aquatic Park.

Cost Estimates:

<u>Initial</u>	<u>Annual</u>	<u>Monitoring</u>	<u>30-year cost</u>
\$15,000	\$7,500	\$1,000	\$270,000

Prior to implementation, a detailed outline of the Program will be submitted to the City nine months after approval of the Development Agreement.

N. Miles will implement a seismic safety program. To reduce the potential for damage to structures from ground shaking, Miles will comply with the following:

- 1) New structures will be designed to withstand the effects of ground shaking. This includes compliance with the seismic requirements of the most current Uniform Building Code, incorporation of the best current knowledge about earthquake-resistant design and incorporation of engineering recommendations by a qualified geotechnical engineer.
- 2) All building foundations will be constructed on strong native soil areas, or properly engineered fill as approved by a geotechnical engineer.
- 3) All proper engineering procedures are undertaken to reduce the potential for structural damage to the site and foundation preparation from an earthquake during construction.
- 4) Potentially hazardous chemical and industrial processes will be designed with redundant and back-up safety systems.
- 5) A qualified structural engineer will evaluate all existing occupied buildings. A copy of the structural engineer's report shall be filed with

the City. Any occupied building that requires seismic safety modification will be corrected as recommended by the structural engineer.

Miles and the City shall perform another review of the geotechnical and seismic safety concerns about the Project, as expressed in the EIR and public hearings, and conduct a public discussion on these matters. Geotechnical and seismic safety concerns may also include such items as disaster response procedures affecting the Project and its surrounding residential and commercial populations. The results of this process shall be reviewed by the Planning Commission and the City Council, which shall incorporate any newly recommended seismic safety measures into the Development Agreement prior to any action by the Zoning Adjustments Board on the first Use Permit application by Miles. In any case, this process will be completed within six months of Development Agreement approval.

O. Miles will implement a soil and groundwater monitoring program. Miles will continue to monitor, and remediate if necessary, any soil and groundwater contamination from excavated tank areas on site in accordance with on-going directives, guidance, and schedules provided by the Regional Water Quality Control Board.

**EXHIBIT G-9**

**COMMUNITY PROGRAMS**

**EXHIBIT G-9**  
**COMMUNITY PROGRAMS**

I. Miles will continue to contribute to worthwhile community projects through the Miles Foundation throughout the duration of the Development Agreement. While the level of contribution from year to year is to Miles' discretion, the level of commitment during 1990 and 1991 has been \$32,750 and \$36,250 respectively. Expected contributions for 1992 are \$35,000.

II. To solidify its standing as a long-term resident and neighbor in West Berkeley, Miles will take steps designed to improve the quality of life in the community. Miles and the City will organize the establishment of a West Berkeley Community Programs Board, that will identify and support programs for the health and welfare of community residents. The Board will be composed of West Berkeley business and community members and City officials. The principal function of the Board will be to identify and contribute to, in time and money: community needs, programs and community service non-profit organizations. Immediate targets will be at-risk youth, the elderly and disadvantaged residents. The Board will also seek to expand the number of businesses and employers which contribute annually to the Program.

A. To accomplish the initial organizing action, Miles and the City will retain a consultant on community needs to assist in establishing an organizing task force to define the exact make-up, charter and operation of the Board. This is expected to be complete within twelve months of the Development Agreement approval. The costs will be borne by Miles, which commits up to \$30,000 for the consultant.

B. To provide meaningful financial resources for the Program, Miles will provide \$100,000 per year for the first ten years for a total contribution of \$1,000,000. During this ten year period Miles shall be exempt from any generally applicable development fees for community programs, such as those described here. After ten years, Miles shall no longer be exempt. It is anticipated that the Board will be successful in securing funds and contributions from sources other than Miles after year five.

C. Although the programs and allocations are left to the Board to determine, certain needs and activities are known now to be of importance to the community and are suggested as a focus for the first five years. Miles and the City support the goal of retaining the Columbus School as a core segment of the neighborhood. Depending on a study by the Save The Columbus School Coalition of its needs, the Program will provide funding that may include rehabilitation, ongoing use of the school, programs at the school or any

combination of these. It is estimated that this will entail a minimum allocation of \$100,000 from the Program within the first five years. Other uses of the first five year fund which should be considered by the Board may include, but are not limited to, revolving loan funds for rehabilitation of owner-occupied homes and creation of second units, mentorship programs, after school youth programs, youth counseling, a breakfast program for school-age children and programs aimed at reducing drug use and drug-related crime.

D. Should Miles construct a parking structure on Block VIII (permitted after year 10), the northern most portion of the structure facing Dwight Way shall include classroom/training facilities and other administrative facilities which can be made available for use by the community.

III. As the largest West Berkeley manufacturer, Miles will assist the City in its effort to promote, retain and support business, industry and manufacturing jobs in West Berkeley.

A. In recognition of the importance of promoting businesses and manufacturing jobs in West Berkeley, Miles agrees to participate in a forum to be convened by the City, which may include such groups as the Chamber of Commerce, Labor Unions, and the Plant Closures Project, and other labor and business organizations. The forum would be designed to promote, maintain, develop and attract businesses and jobs. Miles will match any funds for this effort with an equivalent dollar amount of in-kind services to support the objectives of the forum.

B. In an effort to retain the approximately 35 existing manufacturing jobs at Gary Steel on the Steelcutter property, Miles will make all reasonable efforts to avoid displacing the Gary Steel operation for a period of ten years. These efforts shall include continuation of the lease of the property as described below and, where feasible and practical, making adjustments in the project site plan and alterations to the Gary plant and adjoining buildings. Miles will continue the lease of the Steelcutter property to Gary Steel for a minimum period of five years, beginning January 1, 1992. After this initial lease period, Miles intends to continue the lease subject to providing a two year notice of termination. Miles will provide a copy of any notice of termination to the City at the same time it is provided to the lessee. After the initial period of the lease, Miles will terminate the lease and displace Gary Steel only if the site is needed, at termination, for construction of a permanent structure contemplated by the Site Development Plan.

C. To assist the City in supporting business in the area, Miles will continue to lease, at the current rate (adjusted for inflation and reduced lease

area) for at least five years, approximately 65 parking spaces on Block VIII to neighboring businesses. Additionally, Miles will participate with the City and other local businesses in determining a long term solution to the parking problem in the area. The City agrees to begin investigating alternative solutions within 24 months of approval of the Development Agreement with the intent of defining and adopting a solution within the initial five year lease period. Provided that a long term solution is recommended, and adopted by the City, within the first five years of the Development Agreement, Miles would extend the lease of parking spaces beyond the initial five years but not for more than an additional five years in order to permit neighboring businesses to maintain parking until the long term solution is implemented. Additionally, Miles will encourage and cooperate with neighboring businesses in developing Trip Reduction Programs.

**EXHIBIT G-10**

**ANIMAL CARE AND USAGE**

**EXHIBIT G-10**  
**ANIMAL CARE AND USAGE**

A. The first objective is to establish good faith, open communications between Miles and the community to enhance the level of understanding of the facts, issues and concerns that surround the subject of animal care and usage. This kind of dialogue can contribute to constructive solutions and serve as an example to other institutions and facilities in the City of Berkeley.

1. Community membership on Miles Animal Care and Use Committee - the principal function of the committee is to review and approve or reject on-site research protocols regarding the use of animals. Qualifications of the community member shall include the abilities to 1) assess animal care, treatment and practices in experimental research, and 2) to represent society's concerns regarding the welfare of animal subjects. The community member shall not be affiliated with Miles or be a family member of anyone affiliated with Miles. The community member is intended to represent general community interests in the care and treatment of animals.

(a) Selection process - Miles will select a community member from three (3) nominations made by the Humane Commission, which will include qualifications, background and organizational affiliations. The selection is for a three year term, renewable if mutually agreed. If Miles makes no selection within thirty days of receiving the Humane Commission's nominations, the Commission will provide another slate of three nominations and, if no selection is made by Miles within thirty days of receiving those nominations, the matter will be referred to binding arbitration for the purpose of selecting a community member with the arbitration service and method to be selected by the Humane Commission. In any arbitration under this section Miles will bear the burden of proof to show that Humane Commission nominees are not qualified, and Miles will be responsible for arbitration-related costs. During the pendency of any arbitration, the Chair of the Humane Commission shall serve as the community member.

(b) Non-Disclosure and Expenses - This community member will execute Miles' standard non-disclosure agreement regarding proprietary information and will be reimbursed for costs and expenses related to participation on the committee.

(c) This community membership process will remain in effect for a period of six (6) years, to enable the community and Miles the opportunity to assess its usefulness and effectiveness. Within 60 days of the end of said six year period, authorized representatives of the Humane Commission

and Miles will meet to consider any needed revisions to the community membership process. The original process will remain in place unless the parties mutually agree to change it or one of the parties calls for binding arbitration, with the Humane Commission to select the arbitration service and method. Miles will be responsible for any arbitration-related costs.

2. Reports to the Berkeley Citizens Humane Commission.

(a) Miles will provide to the Humane Commission on an annual basis, all United States Department of Agriculture (USDA) inspection reports and California Department of Fish and Game reports, along with commentary on the reports.

(b) Miles will provide an annual report to the Humane Commission, which may be accompanied by comments from the Community member described above, and which will include: Miles' programs and efforts to refine, reduce and replace the use of animals (including application of alternatives and lower-species testing for primates); non-proprietary information on the types and numbers of animals and related research objective or product testing; post-use disposition of animals by species; summary report of protocols involving animal research and alternatives considered and an explanation of any annual increases in the numbers of animals employed.

(c) Miles will provide to the Humane Commission, within 60 days of the receipt, accreditation letter received from the American Association for the Accreditation of Laboratory Animal Care (AAALAC) along with Miles responses to the inspection report on which the accreditation letter is based. If Miles undergoes any inspection after which it receives provisional AAALAC accreditation, or does not receive AAALAC accreditation, Miles will provide the Humane Commission with the entire body of the AAALAC inspection report which resulted in provisional or no accreditation, together with Miles' commentary on the report.

3. Miles will make appropriate research and animal care staff available to the Citizens Humane Commission to provide information and background, and to answer questions on the subject of animal care and use.

4. The Commission is encouraged to contact and communicate with Miles on any subjects of interest and concern in the area of animal care and use.

5. Miles agrees it will not retaliate or discriminate against employees who contact authorities regarding violations of laws, regulations or

standards pertaining to animal care at Miles animal facilities.

B. The second objective is to employ alternatives to animal research, whenever alternatives exist, and promote development of alternatives to animal research.

1. Miles will provide \$25,000 annually for five years, beginning in the first year of the Development Agreement, for research into alternatives to the use of animals in research and testing. Funds will be given to an outside qualified organization that is recognized for developing alternatives to animal research, with recipients to be selected by the Humane Commission in consultation with Miles. Miles shall disperse the specified funds no later than July 1 of each year, or within thirty days of the Humane Commission's award of the funds, whichever comes later. Results of research will be reported to the Humane Commission and be made available to the public.

2. The Humane Commission will consider proposals to help fund, or provide seed money to, local organizations doing research into alternatives to the use of animals.

C. The third objective is to provide for the social, psychological and physical exercise needs of animals, including but not limited to primates and dogs.

1. Miles will submit its USDA approved environmental enrichment plans for primates and dogs to the Humane Commission and discuss, in good faith, any needed improvements to living conditions for primates, dogs and other animals.

2. Miles will employ alternatives to use of primates, whenever they exist, in the course of its interest and intent in reducing the use of primates and other animals.

3. In terms of animal cage sizes, Miles will continue to follow its policy of meeting or surpassing the greater of the federal standards (USDA or the National Institutes of Health (NIH)).

4. Miles will continue to monitor and study developments in primate group housing and will adopt procedures it believes to be superior and in the best interests of the primates.

D. The final objective is to educate employees and students on animal use and care.

1. Organize and host, within each three year period of the Development Agreement, an in-house workshop on animal use and care, including alternatives and quality of life considerations. The workshop is primarily for Miles employees but may include those normally attending Miles symposia and the Berkeley Humane Commission. The Commission is also invited to provide comments and to select one of the speaker/participants in each workshop.

2. Curriculum in the Berkeley schools that emanates from Miles biotechnology training and education programs, and that includes the care or use of animals in research or testing, shall also include ethical considerations related to use of animals in research and information about alternatives to animal usage. The curriculum will also reference the value of biotechnology as a science that can contribute to development of alternatives. Nothing herein is intended to imply that the care and use of animals shall be included in such training and education, nor that it shall be adopted or applied contrary to applicable education laws or regulations.

E. Nothing in this agreement shall exempt Miles from operation of any local, state or federal law or regulation (as enacted or amended from time to time) regarding use and care of animals in research.

**EXHIBIT G-11**

**PEACE AND JUSTICE PROGRAM**

**EXHIBIT G-11**  
**PEACE AND JUSTICE PROGRAM**

A. Miles shares and is bound by a corporate-wide policy barring the research and production of chemical and biological weapons. Miles is prohibited by this Agreement from doing research, development and/or production of chemical and biological weapons at this site. Any compound or substance which is used in the diagnosis, cure or prevention of disease, including plague vaccine, is not considered to be a weapon.

B. Miles specifically and publicly confirms its opposition to apartheid in South Africa. The Peace and Justice Commission will provide Miles with the status of apartheid in South Africa on an annual basis. Miles will attest its opposition to apartheid annually.

C. Miles fully subscribes to a policy of equal employment opportunity and reaffirms its commitment to maintain and conduct its employment activities in a manner that is in accordance with that policy and with the Berkeley Human Rights Ordinance, the UN Charter and the U.S. and California Constitutions. This policy applies to recruiting, hiring, promotions, upgradings, layoffs, compensation, benefits, termination and all other privileges, terms and conditions of employment. Miles' policy prohibits harassment of one employee by another, including sexual harassment which can include unwelcome sexual advances, request for sexual favors and other forms of conditioning employment benefits upon submission to sexual advances. Miles pledges itself to a program of affirmative action aimed at assuring true equality of employment and a work environment without discrimination. This policy will be affirmed annually.

D. Miles will comply with the existing Berkeley Human Rights Ordinance and will incorporate, but not be limited to, appropriate measures in compliance with the UN Charter, U.S. Constitution and California Constitution.

1

2

3

4

5

6

7

8

**EXHIBIT H**  
**MONITORING AND REPORTING**  
**PROGRAM**

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<u>LAND USE AND RECREATION</u>				
Floor area: The combined size of the existing buildings and new construction would increase the building space presently on the site by 55%. This could be a significant impact depending on how the buildings are sited and designed. 5B-14 <sup>1</sup>	Miles will site and design buildings to reduce impacts of increased building space in accordance with the Site Development Plan. Additionally, Miles will attempt to acquire additional land to provide more land area.	Miles	City, Zoning Staff	Use Permit Application and Review
Height: Buildings constructed during Phase I would have a maximum building height of 80 feet, increasing building intensity in an area of primarily low-rise buildings. This would be a significant impact of the Project. 5B-19	Miles will locate tall structures in clusters some distance from property edges in accordance with the Site Development Plan. However, this will not reduce impacts to a level of insignificance. A statement of overriding consideration must be provided.	Miles	City, Zoning Staff	Use Permit Application and Review
Height: The Pilot Plant would have a height of 68-80 feet, exceeding the height of most of the low-rise buildings in the area. The building would be set back 33 feet from Dwight Way. 5B-20	The Pilot Plant will not exceed 65 feet. Additionally, the building will have special architectural features along Dwight Way in accordance with the Site Development Plan. However, this will not reduce impacts to a level of insignificance. A statement of overriding consideration must be prepared.	Miles	City, Zoning Staff	Use Permit Application and Review
<b>PHASE II: OVERALL IMPACTS</b>				
Floor Area: Total new floor area added in Phase II will more than double the amount of developed space that is presently on the site. 5B-20	Miles will site and design buildings to reduce impacts of increased building space in accordance with the Site Development Plan Agreement. Additionally, Miles will attempt to acquire additional land to provide more land area.	Miles	City, Zoning Staff	Use Permit Application and Review
Height: The Project would have a maximum building height of 100 feet. This would be substantially higher than most of the buildings in the area. 5B-21	Miles will not construct buildings higher than 80 feet in height. Special Architectural features as defined in the Site Development Plan will further reduce the impact of these heights.	Miles	City, Zoning Staff	Use Permit Application and Review

<sup>1</sup>Page numbers are from the Draft Environmental Impact Report dated June 1991, State Clearing House Number 90030029. Page numbers in the Seismic Safety Section refer to the Final Environmental Impact Report dated October 1991, State Clearing House Number 90030029.

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<b>PHASE III</b>				
Floor Area: The Project as a whole would substantially increase the amount of building floor area on the site. 5B-22	Miles will site and design buildings to reduce impacts of increased building space in accordance with the Site Development Plan. Additionally, Miles will attempt to acquire additional land to provide more land area.	Miles	City, Zoning Staff	Use Permit Application and Review
Height: At build-out, the Project would result in two high-rise structures on Seventh Street, more than twice the height of most buildings in the area. 5B-23	All structures along Seventh Street will not exceed 45 feet. Additionally, Miles will implement special architectural measures along Seventh Street in accordance with the Site Development Plan.	Miles	City, Zoning Staff	Use Permit Application and Review
<b>CUMULATIVE LAND USE IMPACTS</b>				
Cumulative Development: From a land-use perspective, the project would not cause a significant impact. However, the intensity of the proposed use as indicated by height and floor area ratio (FAR) would be a significant contribution to cumulative development impacts. 5B-23	Miles will site and design buildings to reduce intensity from height and FAR in accordance with the Site Development Plan. However, this will not reduce impacts to a level of insignificance. A statement of overriding consideration must be prepared.	Miles	City, Zoning Staff	Use Permit Application and Review
<b>RECREATION IMPACTS</b>				
With the anticipated increase in employees, the Project could result in increased use of Aquatic Park and increased need for park maintenance. 5B-23-24	Miles will contribute to park improvements.	Miles	City, Public Works Department	Within 24 months of Development Agreement approval
It would be hazardous for employees from the site to walk across the railroad tracks to reach the park. 5B-24	Miles will ensure current site safety guidelines address railroad crossing safety. Miles and the City will continue to examine the feasibility of a pedestrian crossing at the terminus of Dwight Way.	Miles	City, Public Works Department	Ongoing
<b>CUMULATIVE RECREATION IMPACTS</b>				
Unless future industrial and commercial developments provide on-site recreational amenities, increased use of Aquatic Park will require increased park maintenance. 5B-24	Miles will contribute to park improvements.	Miles	City, Public Works Department	Within 24 months of Development Agreement approval

**VISUAL QUALITY**

**PHASE I ENVIRONMENTAL IMPACTS**

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<p>Appearance from East Side of Aquatic Park: Construction proposed for Phase I would place up to three large buildings on two blocks along the waterfront side of the site. Assuming heights of 80 feet, the buildings would be visible from the pedestrian path on the east side of the park. 5C-5</p>	<p>As proposed in the Site Development Plan, Miles will incorporate special architectural measures along the western boundary which include open spaces between buildings, windrows and stepbacks.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>View from Aquatic Park Picnic Areas: Although partially screened by trees, the Pilot Plant would be visible, appearing as a boxy industrial building as seen from the park's picnic areas. 5C-8</p>	<p>Miles will shape building silhouettes by stepping back upper floors along building edges in accordance with the Site Development Plan.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>Appearance from West Side of Aquatic Park: The Fill and Finish Building and the Pilot Plant proposed for the western property line would be visible from the west side of Aquatic Park. 5C-10</p>	<p>As proposed in the Site Development Plan, Miles will incorporate special architectural measures along the western boundary which include open spaces between building, windrows and stepbacks.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>Glare: If glass were used on the western facades of the production buildings, there is the potential for annoying glare. 5C-14.</p>	<p>Miles will not use highly reflective glass in the construction of buildings in accordance with the Design Guidelines.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>Appearance from Dwight Way near Fourth Street: The proposed 80-foot Pilot Plant would dominate the streetscape, detracting from the visual quality of the environment. 5C-14</p>	<p>The Pilot Plant will not exceed 65 feet in height. As proposed in the Site Development Plan, Miles will incorporate special architectural measures, into the design of the building, which include articulations and modulations.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>Mid-range Views (Ground Level): Phase I buildings would not be prominent from the ground at mid-range locations around the site because of flat topography and intervening buildings, but the pipe bridge--as much as 30 feet in height--would obstruct the view corridor down Parker Street. 5C-16</p>	<p>As proposed in the Design Guidelines, windrows proposed for the western property edge will obscure a significant portion of the pipe bridge.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>Mid-range Upper Story Views: From the upper floors of the Fantasy Record building and others, the proposed 80-foot-tall production building blocks would obstruct views of the Bay. 5C-16</p>	<p>Miles will cluster tall buildings and stepback the structures from public view corridors in accordance with the Site Plan, Site Standards and Design Guidelines.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>Distant View: As seen from the Berkeley Hills near Dwight and Panoramic Way, the Pilot Plant, Production Building B4.5 and the Fill and Finish Building on block A5 would be visible, interrupting views of the water. These tall buildings along the waterfront would contribute to the cumulative reduction in waterfront views already occurring in Berkeley and Emeryville. 5C-19</p>	<p>The Pilot Plant height has been reduced to 65 feet. Additionally, Miles will cluster tall buildings and stepback the structures from public view corridors in accordance with the Site Development Plan. Guidelines.</p>	Miles	City, Zoning Staff	Use Permit Application and Review

**EXHIBIT H  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<b>PHASE II ENVIRONMENTAL IMPACTS</b>				
Appearance from East Side of Aquatic Park: In Phase II, the production building on block A4, with maximum height of 80 feet, would substantially change the backdrop to Aquatic Park. 5C-19	As proposed in the Site Development Plan, Miles will incorporate special architectural measures along the western boundary which include open spaces between buildings, windrows and stepbacks.	Miles	City, Zoning Staff	Use Permit Application and Review
Appearance from West Side of Aquatic Park: New buildings completed in Phase II would decisively change the appearance of this area from a green space to an urbanized section of Berkeley and would partially obstruct distant views of the Berkeley Hills. 5C-22	As proposed in the Site Development Plan, Miles will incorporate special architectural measures along the western boundary which include open spaces between buildings, windrows and stepbacks.	Miles	City, Zoning Staff	Use Permit Application and Review
Glare: If glass were used on the western facades of the production building, the glare could be hazardous to motorists on I-80 and annoying to park users. 5C-22	Miles will not use highly reflective glass in the construction of buildings in accordance with the Design Guidelines.	Miles	City, Zoning Staff	Use Permit Application and Review
View from Dwight Way and Fourth Street looking South: Only production block A4 would be a prominent feature from this viewpoint. 5C-22	As proposed in the Site Plan, Site Standards and Design Guidelines, Miles will incorporate special architectural measures into the design of the building which include articulations and modulations.	Miles	City, Zoning Staff	Use Permit Application and Review
Appearance from Dwight near Seventh Street: The empty lots on this corner would be built up, and connecting them would be the pedestrian bridge at an estimated height of 20 feet above the street. Even with its deep Seventh Street setback, the administration building would be out of scale with the surrounding blocks, which have 1-3-story buildings, and the garage would be visually incompatible with the residential uses on the north side of Dwight. 5C-22 and 5C-28	Miles will build only 45 foot buildings on the southwest section and only 25 foot buildings on the southeast section of the Dwight/Seventh Street corner. As proposed in the Site Plan, Site Standards and Design Guidelines, Miles will incorporate special architectural measures into the design of these buildings to bring them into scale with the surrounding blocks.	Miles	City, Zoning Staff	Use Permit Application and Review for Administration Building
Garage and Bridge: The bridge would reduce the skyline and cast shadows on Seventh Street. Its support columns would obstruct the sidewalks and inhibit expansion of the Seventh Street right-of-way that might be needed in future. The visual impact of the garage would be especially pronounced as seen from the residences on the north side of Dwight, less so from the small businesses to the east. 5C-29	Miles will not construct the pedestrian bridge.	N/A	N/A	N/A
View from Dwight near Eighth Looking West: The garage would dominate the view from this vantage point, presenting a massive facade. 5C-30	Miles will not construct a four-story Parking Structure on the corner of Dwight Way and Eighth Street.	N/A	N/A	N/A

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<p>Appearance from Seventh and Parker Streets: The proposed warehouse would represent a substantial increase in height and bulk over the other buildings near the site, resulting in significant impacts on Seventh Street. 5C-30</p>	<p>Miles will not construct any building along Seventh Street higher than 45 feet.</p>	N/A	N/A	N/A
<p>Distant Views: Three buildings as much as 80-100 feet tall would be added to the skyline in addition to the three Phase I buildings that would be 68-80 feet tall, adding to cumulative viewshed impacts along the waterfront. 5C-34</p>	<p>Miles will not construct any buildings higher than 80 feet. Miles will locate tall structures in clusters some distance from property edges in accordance with the Site Development Plan.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<b>PHASE III ENVIRONMENTAL IMPACTS</b>				
<p>Appearance from the West Side of Aquatic Park: At build-out, various buildings would obstruct the view of the ridgeline of the Berkeley Hills, reducing much of the skyplane, and form a prominent backdrop to the park. 5C-36</p>	<p>As proposed in the Site Development Plan, Miles will incorporate special architectural measures along the western boundary which include open spaces between building, windrows and setbacks.</p>	Miles	City, Zoning Staff	Use Permit Application and Review
<p>Appearance from Dwight Way: The C1 production/laboratory block proposed for Dwight Way, up to 80 feet in height, would have a significant impact. 5C-39</p>	<p>Miles will not construct a building higher than 45 feet on this block.</p>	N/A	N/A	N/A
<p>Appearance from Dwight near Eighth: The production/laboratory facilities on block C1 would combine with Phase II additions to have a significant visual impact. The project would dramatically intensify development along these streets and would block the skyplane, tending to darken the streetscape. 5C-39</p>	<p>Miles will not construct a building higher than 45 feet on this block.</p>	N/A	N/A	N/A
<p>Cumulative Height Impacts: At build-out, there would be seven or more midrise-to-highrise buildings on seven blocks with a height of 65-80 feet, and two highrise buildings with heights of 80-100 feet. This constitutes a substantial increase in tall buildings in West Berkeley which could set a precedent for others to seek exemption from the 45-foot height limit. 5C-44</p>	<p>At build-out Miles could build several 65- to 80-foot structures on four blocks in accordance with the Site Development Plan. However, this will not reduce impacts to a level of insignificance. A statement of overriding consideration must be prepared.</p>	Miles	City, Zoning Staff	Use Permit Application and Review

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Cumulative Viewshed Impacts: At build-out, the Project would be a prominent component of the viewshed as seen from distant locations. 5C-49	Miles will locate tall structures in clusters some distance from property edges in accordance with the Site Development Plan.	Miles	City, Zoning Staff	Use Permit Application and Review
Entrance to the Site: Plans include no architectural treatment to announce the Project's entrance, establishing its identity and relationship to the community. 5C-51	As proposed in the Site Development Plan, Miles will create a prominent Main Entrance with special architectural measures to establish its identity and relationship to the community.	Miles	City, Zoning Staff	Use Permit Application and Review for Administration Building
Articulation: Since the Project has not been designed architecturally, there is the potential for boxy buildings with unarticulated facades that turn their backs on surrounding streets while showing no human activity. 5C-51	Miles will architecturally design buildings in accordance with the Site Development Plan. The Design Guidelines provide for articulated facades.	Miles	City, Zoning Staff	Use Permit Application and Review
View Corridors: The pipe bridge has the potential to directly impair the view corridors around the site. Other buildings, if not set back from the street and stepped back in height, could indirectly obstruct the view corridors. 5C-52	As proposed in the Site Development Plan, Miles will preserve the view corridors along Dwight Way and Carleton by providing setbacks and setbacks. Additionally, Miles will create a view corridor on Parker.	Miles	City, Zoning Staff	Use Permit Application and Review
Fuel Storage Tank: Miles is proposing to construct an above-ground storage tank located along Parker Street toward the center of the site. 5C-55	Miles will maintain the tank site such that it is not visible from public streets.	Miles	City, Zoning Staff	Use Permit Application and Review

HISTORIC RESOURCES

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Building 12: The proposed project would involve the demolition of Building 12, originally part of the Byron Jackson Iron Works, designated by the Berkeley Landmarks Preservation Commission as a Structure of Merit. 5D-7	Miles will attempt to reuse and/or recreate architectural elements or features from Building 12.	Miles	City, Zoning Staff	Use Permit Application and Review for Administration Building
Cumulative Impact: Although demolition of Building 12 would not set a precedent, it would contribute to a trend of demolishing buildings that reflect Berkeley's past. 5D-8	Miles will assemble an historical exhibit which will be displayed in one or more public buildings on the Miles site.	Miles	City, Zoning Staff	1997
<u>TRANSPORTATION (TRAFFIC)</u>				
The intersection of Seventh and Dwight (Level of Service (LOS) E) would experience a 2% increase in traffic. Traffic impacts at this intersection would be significant. 5E-25	Miles will fund the modification of the signal at the intersection of Dwight and Seventh and create a 6th Street/Dwight Way route for southbound/eastbound "Left Turn" onto eastbound Dwight Way.	City, Public Works Department	City, Public Works Department	During the surface parking lot upgrade in Block E1 or in accordance with the Department of Public Works schedule
At two unsignalized intersections, Potter/Seventh St. and Heinz/Seventh St., traffic would increase 1-2%. Existing conditions at both are already very poor. 5E-25	City will signalize the intersection of Heinz and Seventh Street.	City, Public Works Department	City, Public Works Department	Phase II
Phase I: Traffic at the Parker/Seventh St. intersection, which already meets Caltrans warrants for signalization, would increase by more than 3% in Phase I. 5E-26	City will signalize the intersection of Parker and Seventh Street.	City, Public Works Department	City, Public Works Department	Upon construction of the first parking structure or in accordance with the Department of Public Works schedule
Phase II: Traffic at the Parker/Seventh St. intersection would decrease under Phase II conditions due to reorientation of the project entrance from Parker to Cutter Way. The intersection of Cutter Way and Seventh would then meet Caltrans signal warrants. 5E-26	Miles will locate the garage entrances on Seventh and Eighth Streets in accordance with guidance from the City Traffic Engineer.	Miles	City, Zoning Staff	Phase II
Alternative Garage Entrance: Should the garage entrance be located at an alternative location to Seventh and Cutter, traffic and pedestrian impacts could change and would need to be reevaluated. 5E-26	Miles will locate garage exits on Seventh and Eighth Streets in accordance with guidance from the City Traffic Engineer.	Miles	City, Zoning Staff	Phase II

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Truck and Loading Impacts: Miles' current and anticipated truck and loading impacts are small. Changes to the anticipated truck and loading operations could have a significant impact. 5E-27	Miles will continue to maintain truck and loading operations off public roads.	Miles	City, Planning Department	Use Permit Application and Review
Additional Parking Space Requirements: Without provision for additional parking spaces, an estimated 200 construction workers would compete with local residents for on-street parking. 5E-29	Miles will provide off-street parking for all project phases.	Miles	City, Zoning Staff	Use Permit Application and Review
Pedestrian Impact: Miles employees would be parking in a garage at Seventh and Dwight and crossing Seventh Street to get to work. Although the site plan calls for a pedestrian bridge at the third level of the garage, most employees would cross at street level. Special traffic controls would be needed. 5E-30	Miles will locate some parking on the western side of Seventh Street to reduce pedestrian traffic. The traffic signal at Seventh/Dwight will be modified to allow pedestrian crossings.	Miles	City, Zoning Staff	Parking Structure west of Seventh Street in Phase II. Modification to traffic signal during upgrade of Block E1 surface parking lot
Air Quality: Vehicle trips generated by the project would contribute to air pollution. 5E-30	Miles will implement a Trip Reduction Program to increase average vehicle riders (AVR) and reduce vehicular miles.	Miles	City, Planning Department	Program to be developed within first 12 months of approval of Development Agreement
<b>CUMULATIVE TRAFFIC IMPACTS</b>				
While the traffic and air quality impacts of each development project taken individually are small, the cumulative impact would be significant. 5E-31	Miles will implement a Trip Reduction Program to increase AVR and reduce vehicular miles.	Miles	City, Planning Department	Program to be developed within first 12 months of approval of Development Agreement
Truck Traffic during Construction: Much truck traffic would occur during construction and could have significant impact. 5E-35	Miles will restrict truck traffic to established routes.	Miles	City, Environmental Protection	As required
<b><u>AIR QUALITY</u></b>				
Asbestos: Demolition of 34 buildings--11 in each of Phases I and II, 13 in Phase III--could cause asbestos to be released into the atmosphere, potentially endangering workers. 5F-6	Miles will comply with Federal regulations governing asbestos removal.	Miles	City, Environmental Protection	Use Permit/Building Permit Application and Review
Building Contamination: When buildings 46 and 46A, used to manufacture plague vaccine, are demolished in Phase I, any vestige of plague not eradicated could cause health impact to those in the immediate vicinity on-site. 5F-6	Prior to demolition, Miles will decontaminate buildings 46 and 46A in accordance with Federal, State and local regulations and standards.	Miles	City, Environmental Protection	Prior to demolition

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Fumigation: Fumigation of contaminated buildings could cause air quality impacts, depending upon the chemicals used. The use of formaldehyde in fumigating the plague building could have significant impacts. 5F-6	Miles will conduct fumigation operations in accordance with Federal and State health and safety regulations.	Miles	City, Environmental Protection	As required
Construction Dust: Construction on each block would emit approximately 1 ton of dust per month for one to two months. If dust suppression measures were not carried out, this would be a significant impact. 5F-7	Miles will carry out dust suppression measures per Construction/Demolition Dust Suppression Program.	Miles	City, Environmental Protection	As required during Construction
Construction Vehicles: Construction vehicles/equipment emitting exhaust at construction sites have the potential of significant air quality impact. 5F-8	Miles will comply with existing City ordinances and constraints imposed by use permits to reduce exhausts emitted from construction vehicles/equipment.	Miles	City, Environmental Protection	As required during Construction
Overall Phase I Impacts: Construction would occur in four blocks over a period of five years. During those years, there would be 4-8 months in which approximately 1 ton of dust per month would be stirred up. 5F-8	Miles will carry out dust suppression measures per Construction/Demolition Dust Suppression Program.	Miles	City, Environmental Protection	As required during Construction
Pilot Plant: There would be a period of one to two months during which approximately one ton of dust per month would be emitted. 5F-8	Miles will carry out dust suppression measures per Construction/Demolition Dust Suppression Program.	Miles	City, Environmental Protection	As required during Construction
Phase II: During Phase II, over five years, there would be six to twelve months during which approximately one ton of dust per month would be emitted. 5F-9	Miles will carry out dust suppression measures per Construction/Demolition Dust Suppression Program.	Miles	City, Environmental Protection	As required during Construction
Phase III: During Phase III, over 20 years, there would be four to eight months during which approximately one ton of dust per month would be emitted. 5F-9	Miles will carry out dust suppression measures per Construction/Demolition Dust Suppression Program.	Miles	City, Environmental Protection	As required during Construction
<b>OPERATIONAL IMPACTS</b>				
Nitrogen Oxide: Natural gas consumption would double by the end of Phase II and increase to 3,400,000 therms per year by the end of Phase III, assuming natural gas is used to fuel boilers. Without measures to control emissions, this would be a significant impact. 5F-9	Miles will comply with Federal regulations governing nitrogen oxide emissions from natural gas fueled boilers.	Miles	City, Environmental Protection	As required by Federal regulations

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Fuel Oil Combustion: Fuel oil will be used only in the event of natural gas curtailment. A five-day supply would be stored which, if burned, would result in emissions which would be a significant impact. 5F-10	Miles will comply with Federal regulations governing emissions from fuel oil used to operate boilers.	Miles	City, Environmental Protection	As required by Federal regulations
<b>CUMULATIVE IMPACTS - TRAFFIC AIR QUALITY</b>				
Cumulative development would increase vehicular emission of reactive organic compounds (ROG) by approximately 0.12 tons/day (240 pounds) and emissions of NO <sub>x</sub> by about 0.42 tons/day (838 pounds). This would be a significant impact. 4.4-3	Miles will implement a Trip Reduction Program to increase AVR and thus reduce vehicle miles. Additionally, employment of Berkeley residents and an overall low employee headcount per floor area reduce impacts of vehicular emissions. However, this will not reduce impacts to a level of insignificance. A statement of overriding consideration must be prepared.	Miles	City, Planning Department	In conjunction with the first Annual Review
<b><u>NOISE</u></b>				
Operational Noise: Compressors, boilers and cooling-tower fans in utility buildings could increase noise levels on the Project site, possibly significantly in Aquatic Park and along Dwight Way. 5G-3	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during normal operations
Nighttime Traffic Noise: By Phase III, swing shift would have 250 workers and graveyard 80, compared to the present 50 and 10, respectively. The increase in nighttime employees, along with the relocation of parking to a parking garage, would increase nighttime noise, especially to residents near the garage. 5G-3	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during swing and graveyard shift
Overall Construction Noise: Without noise control, construction and demolition noise would range from 78-91 dBA, intermittently, over the 30-year construction period, which could cause significant impacts. 5G-5	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during construction
<b>PHASE I CONSTRUCTION IMPACTS</b>				
North of the site: In Phase I, construction of the two Pilot Plants on the NW corner of the site would generate noise exceeding the Berkeley Community Noise Standards which would be heard in offices along Dwight Way between the Southern Pacific tracks and Fifth St. 5G-6	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during construction

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
West of the Site - Demolition: Demolition of buildings 2, 3, 4, 6, 7, 12, 14 and 16 would exceed background noise heard in picnic areas of Aquatic Park by 3 dBA or more for one to two months. 5G-7	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during demolition
West of the Site - Construction: Construction of the Pilot Plant buildings on the NW corner and the production building on the SW corner of the site would generate noise which would be heard in Aquatic Park for two to three months for each block, with peak construction noise exceeding background noise levels by 3 dBA or more. 5G-7	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during construction
<b>PILOT PLANT</b>				
North of the Site: In Phase I, construction of the Pilot Plant on the NW corner of the site would generate noise exceeding the Berkeley Community Noise Standards which would be heard in offices along Dwight Way between the Southern Pacific tracks and Fifth Street. 5G-7	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during construction
West of the Site - Construction: Construction of the Pilot Plant on the NW corner of the site would generate noise heard along the Aquatic Park for two to three months, with peak construction noise exceeding background noise levels by 3 dBA or more. 5G-7-8	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during construction
<b>PHASE II: CONSTRUCTION IMPACTS</b>				
North of the Site: In Phase II, noise from the demolition of Building 38 and the construction of the parking garage would impact residences along Dwight Way between Sixth and Eighth Streets for one to one and a half months during demolition and two to three months during construction, with levels exceeding the maximums set by the Berkeley Noise Ordinance and perceived as doubling background noise levels. 5G-8	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during demolition and construction
West of the Site - Demolition: The impacts of the demolition of buildings 1, 5, 47 and 54 on noise levels in Aquatic Park would be similar to the impacts described for Phase I. 5G-8	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during demolition

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
West of the Site - Construction: The impacts of construction on noise levels in Aquatic Park would be similar to the impacts described for Phase I. 5G-9	Miles will comply with City of Berkeley Noise Ordinances and, if required, carry out noise suppression measures per the Noise Suppression Program.	Miles	City, Environmental Protection	As required during construction
<u>BIO-SAFETY</u>				
Accidental Exposure to EBV: Spills involving EBV are possible, such as spills of EBV-infected cell cultures in incubators or possibly the overturning of fermenters in a catastrophe such as a severe earthquake. Should such an event occur, there could be health impact to emergency responders. 5H-16	Miles will implement an Emergency Preparedness Program.	Miles	City, Environmental Protection	Within six months of Development Agreement approval
On-site Exposure to Plasma and Fractionation Products: Human plasma fractions used have been found negative for antibodies to HIV and negative for hepatitis B surface antigen. Should a contaminated sample exist, it would not impact facility personnel because standard operating procedures provide ample protection. However, in a catastrophic event, exposure to an adventitious virus is remotely possible. 5H-24	None required beyond existing procedures and controls.	N/A	N/A	N/A
Off-site Exposure to Plasma and Fractionation Products: Plasma fractions used are first found negative for HIV and hepatitis B. Not only are they unlikely to be contaminated, but the plasma would arrive and be stored as a frozen paste. There is no likely scenario in which people would be exposed to adventitious viruses. 5H-32	None required beyond measures included in the project or recommended previously in this EIR.	N/A	N/A	N/A
Exposure to Plague Bacilli during Shipment: There is no potential for exposure during shipment because no further shipments would be undertaken. The vaccine product poses no risk. Infectious waste materials that have come in contact with the bacilli would be autoclaved before being collected and destroyed. 5H-32 and (cont.) 5H-38	None required beyond measure included as part of the project.	N/A	N/A	N/A

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<p>On-Site Exposure to Plague Bacilli: Plague vaccine production would continue until 1992-93 under National Institutes of Health (NIH) Biosafety Level 3 (BL3) containment requirements. Under normal operating conditions, in-place mitigation measures would be adequate. In the event of a catastrophe resulting in a release of bacilli, on-site workers, who are and would be vaccinated, would not be at risk, but emergency responders entering the site might be exposed to the organism. 5H-38</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	<p>Miles</p>	<p>City, Environmental Protection</p>	<p>Within six months of Development Agreement approval</p>
<p>Off-site Exposure to Plague Bacilli due to Accidental Release: Catastrophic events such as earthquakes of magnitude 6.5 or higher could result in a failure in the integrity of the plague building containment system and cause the release of the plague bacilli. In aerosol form (as particles on dust), the bacilli could be inhaled and cause pneumonic plague. Emergency responders and off-site populations could be exposed in this way if plague organisms were released as a result of catastrophic events. 5H-39</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	<p>Miles</p>	<p>City, Environmental Protection</p>	<p>Within six months of Development Agreement approval</p>
<p>Exposure to Class 1 and 2 Microorganisms during Research and Development Activities and during Quality Assurance Activities: Class 1 organisms are not known to cause disease in healthy adult humans, so accidental exposure would not impact laboratory handlers. Class 2 viruses, such as measles and polio, which are used in virus-inactivation studies, are handled using safety equipment and procedures that minimize risk of exposure. However, if all precautions fail, in the event of catastrophe, individuals both on and off-site could be exposed to diseases, some of which have no known antidotes. 5H-40 and (cont.) 5H-49</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	<p>Miles</p>	<p>City, Environmental Protection</p>	<p>Within six months of Development Agreement approval</p>
<p>Escaped Animals: If animals used for testing purposes were to escape, there would be no risk of infection because the animals are not inoculated with anything greater than Class 1 bacteria. There could be a slight exposure to radiation, but at a level insignificant relative to mutation in genetic material. 5H-50</p>	<p>None required beyond standard operating procedures for animal containment and control.</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<p>Release of Infectious Materials Due to Future Demolition: As operations using infectious materials such as plague, EBV, polio, and hepatitis are discontinued, Miles/Cutter plans to demolish the buildings housing these uses after first decontaminating the buildings. It is unlikely that building disinfection would leave residual organisms posing a biohazard. 5H-51</p>	<p>Miles will furnish verification that these buildings have been disinfected in accordance with applicable regulations, at the time of demolition.</p>	Miles	<p>City, Zoning Staff and Environmental Protection</p>	Use Permit Application and Review
<p>Exposure to Contaminated Pharmaceutical Products: In accordance with FDA requirements and as part of quality assurance for product purity, each product lot of pharmaceuticals for human use is tested on-site for purity, potency and safety prior to distribution. 5H-52</p>	<p>None required beyond existing practices and regulations.</p>	N/A	N/A	N/A
<u>CHEMICAL HAZARDS</u>				
<p>Chemical Inventory Reporting: Materials stored in the laboratories would continue to be in small quantities and small containers. However, the City requires more information for emergency-response planning than is given in the current reporting forms for inventories. 5I-25</p>	<p>Miles will provide a detailed inventory of all chemicals on site.</p>	Miles	<p>City, Environmental Protection</p>	Provided annually
<p>Laboratory Chemical or Radionuclide Release during Delivery: If an upset resulting in a chemical release occurred during delivery at the warehouse or distribution to the laboratory buildings, there would be a potential hazard to workers and/or emergency responders in the immediate vicinity. 5I-25</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	Miles	<p>City, Environmental Protection</p>	<p>Within six months of Development Agreement approval</p>
<p>Upset in the Laboratory: A release of chemicals or radionuclides in the laboratory during storage or use would have no impact on the public or the environment but would have a potential impact on workers and emergency responders. 5I-26</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	Miles	<p>City, Environmental Protection</p>	<p>Within six months of Development Agreement approval</p>
<p>Upset During Preparation of Lab Packs for Disposal: If an accident resulted in release during handling of hazardous chemical waste, the impact to workers and emergency responders would be potentially significant. 5I-27</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	Miles	<p>City, Environmental Protection</p>	<p>Within six months of Development Agreement approval</p>

**EXHIBIT H  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Upset During Preparation of Radioactive Waste for Disposal: In a situation causing an upset in the radioactive waste storage area, a release of radioactive waste materials might occur with potentially significant impact to workers and emergency responders. 5I-27	Miles will implement an Emergency Preparedness Program.	Miles	City, Environmental Protection	Within six months of Development Agreement approval
<b>PRODUCTION OPERATIONS</b>				
Delivery and Storage of Caustic: Should a release of caustic occur during unloading or storage, containment and neutralization procedures are in place. However, the possibility of skin contact with this material exists, with hazard to workers and emergency responders. 5I-28	Miles will prepare a Hazard Operability Study.	Miles	City, Environmental Protection	Prior to system operation
Delivery and Storage of Compressed or Liquefied Gas: These gases are not toxic, but a release from compressed or liquefied gas containers would impact workers and emergency responders by exposing them to freezing temperatures from the liquefied gas or physical harm from the compressed (pressurized) gases. 5I-29	Miles will continue to train employees in the safe handling of compressed and liquefied gasses. Additionally, Miles will implement an on-site training program for City emergency responders.	Miles	City, Environmental Protection	As required
Acid Storage and Delivery: A potentially significant impact to workers and emergency responders would be present in the event of skin contact with phosphoric acid released in an accident. 5I-29	Miles will prepare a Hazard Operability Study.	Miles	City, Environmental Protection	Prior to system operation
Accidental Mixing of Acid and Caustic: Mixing large quantities of acid and caustic either by accidental hookup to the wrong fitting during delivery or by simultaneous piping failures could result in an explosion and produce an acid or caustic mist impacting workers, emergency responders, and the public by inhalation and skin contact. 5I-30	Miles will prepare a Hazard Operability Study and an Off-site Consequence Analysis.	Miles	City, Environmental Protection	Prior to system operation
Temporary Tanks: When properly designed and maintained, the temporary tanks would not pose a significant safety risk during storage. 5I-30	Miles will properly design and maintain temporary tanks.	Miles	City, Environmental Protection	Prior to filling of temporary tanks
Fuel Delivery: Although emergency fuel would be delivered infrequently, a risk of release during delivery would exist with potentially significant impact on workers and emergency responders. 5I-30	Miles will prepare a Hazard Operability Study.	Miles	City, Environmental Protection	Prior to initial fuel delivery

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<p>Fuel Delivery Route: The route travelled by bulk tanker trucks delivering fuel might cross residential areas, with potentially significant impact. 5I-31</p>	<p>Miles will inform suppliers of bulk hazardous materials that carriers must use truck routes approved by the City.</p>	Miles	City, Environmental Protection	One month after approval of DA
<b>PHASES II AND III</b>				
<b>LABORATORY OPERATIONS</b>				
<p>Increase in Laboratory Area: During Phase III, laboratory area would increase by 7% and chemical usage would presumably increase by a similar percent--with no additional significant impact. 5I-32</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	Miles	City, Environmental Protection	Within six months of Development Agreement approval
<p>Increase in Production Area: Occupied area would increase during Phases II and III to four and one-half times the present level, and the quantity of chemicals in use would increase proportionately. 5I-32</p>	<p>Miles will implement an Emergency Preparedness Program.</p>	Miles	City, Environmental Protection	Within six months of Development Agreement approval
<p>Storage of 100,000 Gallons of Diesel Fuel: Storage in a single large tank would increase the consequences of a failure and release. 5I-32</p>	<p>Miles will conduct a HAZOP Study and an Off-site Consequence Analysis for the 100,000 gallon fuel storage tank. If Miles installs a fuel tank larger than 25,000 gallons, Miles will provide the City with a report of its investigation into the feasibility of obtaining an uninterrupted fuel supply.</p>	Miles	City, Environmental Protection	Prior to initial fuel delivery
<p>Permanent Tank Location: The tentatively-proposed location of the permanent tank is in a narrow area of the site within 50 feet of Parker Street to the north and the H. C. McCaully foundry to the south. In the event of a fire or release of fuel, this would be a potentially significant impact. 5I-33</p>	<p>Miles will consult with the City as to the location of this tank, and the siting of the tank shall be subject to the approval of the City Manager or his designee. Moreover, the location of this tank will be no closer than 200 feet from any public right-of-way and readily accessible to emergency response vehicles.</p>	Miles	City, Environmental Protection	Prior to initial fuel delivery
<p>Use of Ammonia: In lieu of increased use of CFCs, a new refrigeration system using ammonia is proposed. While CFCs pose a cumulative risk to the environment through destruction of the ozone layer, in the event of a release, ammonia would pose a greater acute hazard to workers, emergency responders, and the public, and would also pose a hazard to the environment. 5I-33</p>	<p>Miles will obtain a certified Risk Management Prevention Program for the Ammonia Refrigeration System.</p>	Miles	City, Environmental Protection	Prior to operation of the system
<p>Release of Ammonia: A risk of releasing ammonia during delivery and operation would exist. Workers and emergency responders could be exposed to hazardous conditions, and the environment and the public could be exposed to a cloud of ammonia vapor. 5I-34</p>	<p>Miles will obtain a certified Risk Management Prevention Program for the Ammonia Refrigeration System.</p>	Miles	City, Environmental Protection	Prior to operation of the system

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<u>SOCIOECONOMICS</u>				
ENVIRONMENTAL IMPACTS - EMPLOYMENT				
Job Training: Of the 380 jobs created over the 30-year project period, an estimated 58% would require some college education and another 17% require completion of high school. Even with continuation of the First Source Employment agreement between the City and Miles/Cutter, many applicants referred by the City would not be qualified for the new positions. SJ-4	Miles will design and implement a Biotech Academy at Berkeley High School and a Biotech Career Institute at a local community college.	Miles	City, Community Development Department	Academy to begin first academic year after approval of Development Agreement. Institute will begin two years thereafter.
Construction Jobs: The approximately 200 temporary construction jobs would not necessarily be filled by Berkeley residents. SJ-4	Miles has agreed that all recruitment for new and replacement construction employees will first be sought via the Construction section of the City's First Source Employment Program, in accordance with union policy and procedures. Miles will establish a goal of hiring one (1) out of every five (5) workers in the total construction workforce from First Source throughout the life of the Development Agreement.	Miles	City, Community Development Department	Paid in advance at Building Permit based on estimate
Construction Job Training: To fill the temporary construction jobs, some Berkeley residents would need training. SJ-4 and SJ-5	Miles will make a contribution to the First Source Construction Employment Program fund to assist new construction workers with job start-up expenses.	Miles	City, Community Development Department	Paid per First Source construction hire
ENVIRONMENTAL IMPACTS - HOUSING				
The proposed project is expected to increase total demand for housing in Berkeley by 80 units. SJ-7	The demand for market rate housing will not be addressed.	N/A	N/A	N/A
Of the total new housing demand, an estimated 21 households would need affordable housing. SJ-7	Miles will provide funds to the City's Housing Trust Fund for 21 units of low- and very low-income housing.	Miles	City, Community Development Department	Initial payment within 12 months of Development Agreement approval and then annual payments for the next ten years.
Pilot Plant: Five affordable housing units will be needed by the end of Phase I, including one unit of low-income and one unit of very low-income housing needed by new employees of the Pilot Plant. SJ-8	Miles will provide funds to the City's Housing Trust Fund for 21 units of low- and very low-income housing.	Miles	City, Community Development Department	Initial payment within 12 months of Development Agreement approval and then annual payments for the next ten years.

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<b>CUMULATIVE IMPACTS</b>				
Total housing demand and affordable housing needs will be further increased by 25 other projects for expanded and new businesses in West Berkeley. 5J-9	Miles will mitigate its share of the cumulative impacts by performing the three mitigations listed above.	Miles	City, Community Development Department	See Above
<b>ENVIRONMENTAL IMPACTS - CHILD CARE</b>				
The approximately 380 new employees added over a 30-year period would create an estimated demand for 40 new child care slots, 13 of which would need to be subsidized. 5J-10	Miles will provide funds into a Capital Fund for the conversion of 40 preschool slots to infant care slots. Additionally, Miles will provide funds into an Operating Fund for 14 affordable child care slots to assist low-income households.	Miles	City, Community Development Department	Initial payment within 12 months of Development Agreement approval and then annual payments for the next ten years.
Phase I Overall: The Project would create a need for 11 child care slots in Phase I. 5J-11	Miles will provide funds into a Capital Fund for the conversion of 40 preschool slots to infant care slots. Additionally, Miles will provide funds into an Operating Fund for 14 affordable child care slots to assist low-income households.	Miles	City, Community Development Department	Initial payment within 12 months of Development Agreement approval and then annual payments for the next ten years.
Pilot Plant: The Pilot Plant would create a need for child care for four children. 5J-12	Miles will provide funds into a Capital Fund for the conversion of 40 preschool slots to infant care slots. Additionally, Miles will provide funds into an Operating Fund for 14 affordable child care slots to assist low-income households.	Miles	City, Community Development Department	Initial payment within 12 months of Development Agreement approval and then annual payments for the next ten years.
Phase II: The project would create a need for child care for nine children in Phase II. 5J-12	Miles will provide funds into a Capital Fund for the conversion of 40 preschool slots to infant care slots. Additionally, Miles will provide funds into an Operating Fund for 14 affordable child care slots to assist low-income households.	Miles	City, Community Development Department	Initial payment within 12 months of Development Agreement approval and then annual payments for the next ten years.
Phase III: The project would create a need for child care for 20 children in this Phase. 5J-13	Miles will provide funds into a Capital Fund for the conversion of 40 preschool slots to infant care slots. Additionally, Miles will provide funds into an Operating Fund for 14 affordable child care slots to assist low-income households.	Miles	City, Community Development Department	Initial payment within 12 months of Development Agreement approval and then annual payments for the next ten years.
<b>CUMULATIVE IMPACTS</b>				
The approximately 25 new projects proposed or approved for West Berkeley would create the need for additional child care. 5J-13	Miles will mitigate its share of the cumulative impacts by performing the five mitigations listed above.	Miles	City, Community Development Department	See Above

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<u>PUBLIC SERVICES AND FACILITIES</u>				
ENVIRONMENTAL IMPACTS - SECURITY				
Police: The Berkeley Police Department does not anticipate more employees, equipment or costs due to the proposed project provided that Miles/Cutter takes proper security precautions recommended by the Department. 5K-1	Miles will take proper security precautions recommended by the City Police Department	Miles	City, Police Department	Use Permit Application and Review
ENVIRONMENTAL IMPACTS - EMERGENCY SERVICES				
The Berkeley Fire Department has stated that, if the Project complies with all applicable provisions of the Fire Code, they would not need additional manpower or equipment as a result of the Project. 5K-2	Miles will comply with all applicable provisions of the Fire Code.	Miles	City, Fire Department	Use Permit Application and Review
Fire flow requirements must be determined by the Project sponsor and both hydrants and adequate water supply provided if necessary. 5K-3	Miles will determine fire flow requirements and provide adequate hydrants and water supplies. Miles will at all times maintain on-site fire suppression capabilities, as a supplement or back-up to the City system.	Miles	City, Fire Department	Use Permit Application and Review
Pilot Plant: The Project sponsor must determine fire flow requirements and provide needed hydrants and water supply. 5K-4	Miles will determine fire flow requirements for the Pilot Plant and provide adequate hydrants and water supplies. Miles will at all times maintain on-site fire suppression capabilities, as a supplement or back-up to the City system.	Miles	City, Fire Department	Use Permit Application and Review
Above-Ground Tanks: Installation of the tanks would not result in an increased need for Fire Department manpower or equipment if the tanks comply with all applicable fire and safety regulations. 5K-4	Miles will install above ground tanks in accordance with all applicable fire and safety regulations.	Miles	City, Fire Department	Use Permit Application and Review
ENVIRONMENTAL IMPACTS - WATER				
Phase I Overall: With the proposed project, water consumption at the site is expected to increase by 10% or 10,000 gallons per day over existing levels. 5K-7	Miles will prepare and implement a water conservation program in conjunction with East Bay Municipal Utility District (EBMUD), including evaluation of the Project's demand on the public water delivery system.	Miles	City, Environmental Protection	Prior to occupancy permit for Pilot Plant

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Pilot Plant: When the proposed Pilot Plant begins operation, it would increase water consumption at the site by a maximum of 10% or 10,000 gallons per day. Actual water consumption is expected to be less than this because other water-using operations will be phased out. 5K-10	Miles will submit a preliminary feasibility study for water reclamation.	Miles	City, Environmental Protection	Prior to occupancy permit for Pilot Plant
Pilot Plant: Water requirements for the Pilot Plant including fire flow could exceed the capacity of existing feeder lines. 5K-11	Miles will upgrade water delivery lines as needed to preserve adequate fire flow.	Miles	City, Zoning Staff and Fire Department	Prior to occupancy permit for Pilot Plant
Phase II: Miles/Cutter's water demand would increase by about 0.05 million gallons per day (MGD) in Phase II. 5K-11	Miles will submit feasibility study for water reclamation system and will implement measures which are feasible over the term of the Development Agreement.	Miles	City, Zoning Staff	Prior to occupancy permit for Pilot Plant
Phase III: Water demand will further increase by about 0.2 MGD between 1990 and 2020. 5K-11	Miles will submit feasibility study for water reclamation system and will implement measures which are feasible over the term of the Development Agreement.	Miles	City, Zoning Staff	Study will be completed prior to the Use permit for any Phase II building; implementation monitored by Annual Review
Water requirements for the project, including fire flow, could exceed the capacity of existing feeder lines. 5K-11	Miles will upgrade water delivery lines as needed to preserve adequate fire flow.	Miles	City, Zoning Staff and Fire Department	Prior to occupancy permit for each building
<b>CUMULATIVE WATER IMPACTS</b>				
While Miles/Cutter's water demand would be limited, it would contribute to the growing demand for water in the Bay Area. 5K-12	Miles will implement a water conservation and reclamation program as described above.	Miles	City, Zoning Staff	See Above
<b><u>HYDROLOGY &amp; DRAINAGE, WASTEWATER &amp; GROUNDWATER</u></b>				
Capacity: The planned layout of the Project would necessitate improvements to the storm-drain system at the intersection of Fourth and Parker Streets in order to alleviate any flooding there. 5L-3	Miles will improve the storm drains under 4th Street and Dwight Way.	Miles	City Public Works Department	During construction of Blocks A2 and C1
Runoff Water Quality: The Project would be expected to contribute pollutants to downstream receiving waters, pollutants to include heavy metals, suspended solids, nutrients and floatables. 5L-4	Miles will implement a Best Management Practices to meet Federal regulations of the National Pollution Discharge Elimination System.	Miles	City, Environmental Protection	Within six months of Development Agreement approval

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Spill Hazard: Accidental spills and chronic leaking of hazardous and/or toxic materials can contribute additional pollutants to storm-water runoff if materials are stored outside. Future production would increase the volume of materials needing to be stored. 5L-5	Miles will implement a Best Management Practices to meet Federal regulations of the National Pollution Discharge Elimination System.	Miles	City, Environmental Protection	Within six months of Development Agreement approval
<b>ENVIRONMENTAL IMPACTS - WASTEWATER</b>				
Trunk Sewer 100 (15-2 Project): The Project would impact the recently upgraded trunk sewer 100, which extends north from Basin 15-103. Sewage flows from the Project, added to the current ground water infiltration and rainfall inflow (I/I) contribution, would further aggravate capacity problems. 5L-8	Miles will evaluate capacity of trunk sewers and local collection systems serving its site and upgrade them as needed to accommodate the construction program.	Miles	City, Public Works Department	Analysis will be done within 12 months of Development Agreement approval.
Pilot Plant: The Pilot Plant would discharge a maximum of 10,000 gallons per day to the sewer, further aggravating capacity problems. 5L-8	Miles will evaluate capacity of trunk sewers and local collection systems serving its site and upgrade them as needed to accommodate the construction program.	Miles	City, Public Works Department	Analysis will be done within 12 months of Development Agreement approval.
Pilot Plant: The Proposed Pilot plant would result in increased sewage flows to local collection lines within Basin 15-103. Most of these older lines are subject to high inflow and infiltration. The proposed project would provide a new local collection system for the Project site, generally following existing and proposed roads. Some on-site collectors would need upgrading to City standards. 5L-9 and 5L-10	Miles will evaluate capacity of trunk sewers and local collection systems serving its site and upgrade them as needed to accommodate the construction program.	Miles	City, Public Works Department	Analysis will be done within 12 months of Development Agreement approval.
RR Collector: Additional sewage flows from the site would impact the facilities in Basin 17 including the RR collector located along the railroad tracks at the western boundary of the site and the smaller local collection lines. The RR collector flows south to the larger Potter Street line, which has a history of capacity problems. 5L-10	Miles will evaluate capacity of trunk sewers and local collection systems serving its site and upgrade them as needed to accommodate the construction program.	Miles	City, Public Works Department	Analysis will be done within 12 months of Development Agreement approval.

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Potter Street Line: Increased sewage flows from the proposed project would further impact bottleneck sections of the Potter Street line. 5L-10	Miles will evaluate capacity of trunk sewers, to include the Potter Street Line, and local collection systems serving its site and upgrade them as needed to accommodate the construction program.	Miles	City, Public Works Department	Analysis will be done within 12 months of Development Agreement approval.
Wastewater Constituents: The Project would generate wastewater containing chemical and biological oxygen demand (COD, BOD) sugars, chemicals used in Research & Development, and amino acids. These could impact the wastewater treatment plant operated by East Bay Municipal Utility District (EBMUD) as well as the ultimate receiving waters in San Francisco Bay. 5L-11	Miles will continue to obtain proper permits for discharges to the EBMUD sanitary sewer system.	Miles	City, Environmental Protection	As required
Local Collection System: The project would increase sewage flows to local collection lines within Basins 15-103 and 17-101. However, it would provide a new local collection system for the project site which would follow the existing and proposed roads at site. 5L-11	Miles will evaluate capacity of trunk sewers and local collection systems serving its site and upgrade them as needed to accommodate the construction program.	Miles	City, Public Works Department	Analysis will be done within 12 months of Development Agreement approval.
<b>ENVIRONMENTAL IMPACTS - GROUNDWATER</b>				
The seepage of groundwater into Aquatic Park has the potential to be impacted by any contaminated soil or groundwater at the site. Although infiltration at the site is slow, contamination in the soil will eventually enter the groundwater. 5L-16 and 5L-17	In conjunction with Best Management Practices, Miles will conduct quarterly monitoring of surface water discharge.	Miles	City, Environmental Protection	Quarterly
Cumulative Water Quality Impacts: The project's potential impacts on storm water runoff pollution will require numerous measures in cooperation with the City and County. 5L-17	Miles will implement a Best Management Practice to meet Federal regulations of the National Pollution Discharge Elimination System.	Miles	City, Environmental Protection	As required
<b>ENERGY AND WASTE</b>				
At Project completion, electrical energy consumption would increase an estimated 400% over present levels, to 76,000,000 kWh per year. This would not significantly impact Pacific Gas & Electric's ability to deliver power, but it would contribute to depletion of fossil fuels and use of nuclear power, which creates hazardous waste disposal impacts. 5M-2	Miles will implement an Energy Conservation Program.	Miles	City, Environmental Protection	Twelve months after approval of Development Agreement.

**EXHIBIT II  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
Natural Gas Consumption: In Phase II, natural gas consumption at the site is expected to double, from 845,000 therms to 1,700,000, and at completion of Phase III, to rise approximately 400% over current levels. This increase could contribute to cumulative depletion of fossil fuels. 5M-3	Miles will implement an Energy Conservation Program.	Miles	City, Environmental Protection	Twelve months after approval of Development Agreement.
Generation of Non-toxic Solid Wastes: The volume of non-toxic solid waste generated on the site is expected to triple by the end of phase 3. In cubic yards per month, uncompacted waste is expected to increase from 138 to about 410, and compacted wastes from the present 190 to about 570 at project completion. 5M-4	Miles will implement a Waste Reduction Program.	Miles	City, Environmental Protection	Nine months after approval of Development Agreement or as required by ordinance.
<b>CUMULATIVE IMPACTS</b>				
The 25 new approved projects in the West Berkeley area will demand increased energy over time. 5M-5	Miles will implement an Energy Conservation Program.	Miles	City, Environmental Protection	Twelve months after approval of Development Agreement.
The 25 approved projects in West Berkeley will generate an increase in waste by an unknown amount. 5M-5	Miles will implement a Waste Reduction Program.	Miles	City, Environmental Protection	Nine months after approval of Development Agreement.
<b><u>FISCAL</u></b>				
<b>COSTS</b>				
Public Service Costs: The Project will entail increased costs of providing City services in several categories. 5N-6 and 5N-7	None needed because revenues would exceed costs.	N/A	N/A	N/A
<b><u>SEISMIC SAFETY</u></b>				
There is potential for damage to structures from ground shaking. A significant impact to workers and emergency responders would be present from falling and moving objects, ground shaking during aftershocks, spilled materials, and/or loss of power and water. 4.3-20	Miles will implement a Seismic Safety Program for new structures and structures to remain.	Miles	City, Planning Department	Use Permit Application and Review

**EXHIBIT H  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
The replacement of existing buildings by new ones using state-of-the-art design will improve their performance during maximum expected earthquakes. This in turn will increase the safety of workers and emergency responders. This would be a significant beneficial impact. 4.3-21	None required.	N/A	N/A	N/A
<u>REQUIRED CEQA CONSIDERATIONS</u>				
GROWTH-INDUCING IMPACTS				
Land Use Succession: The Project involves replacing less intensive land uses with more intensive larger buildings, which will upgrade the site and increase its property value. There is the potential for significant growth-inducement but the impact could be positive if land uses are in conformance with the Berkeley General Plan. 6-1	None needed because the project's uses and intensity are consistent with the recently prepared West Berkeley Plan.	N/A	N/A	N/A
Job Growth: The Project would generate approximately 380 new permanent jobs and 200 temporary construction jobs on-site, and could in turn generate many other jobs in the region through the multiplier effect. Berkeley residents would hold some of these jobs. The impact on City and regional employment would be positive. 6-1	None needed.	N/A	N/A	N/A
Housing Need: The new primary and secondary jobs generated by the Project would lead to economic growth in Berkeley. An estimated 80 new employees would seek housing in Berkeley, increasing housing demand. 6-1	Berkeley has instituted, and Miles is bound by, a First Source Hiring Program and other related efforts to align the jobs/hiring balance in Berkeley.	N/A	N/A	N/A
Public Services: As new jobs attract new City residents, there would be increased demand for City services. 6-2	None needed, because the Project would generate revenues in excess of public costs and will contribute toward areawide public improvements and community service programs.	N/A	N/A	N/A
Public Facilities: The project would require infrastructure improvements and expansion of roads, sewer and water lines. It could induce excess capacity, which would accommodate additional growth in the future. The impact cannot be determined at this time. 6-2	Contributions by Miles toward infrastructure improvements and expansions will be in accordance with improvements envisioned by the West Berkeley Plan.	N/A	N/A	N/A

**EXHIBIT H  
MONITORING AND REPORTING PROGRAM**

IMPACT	MITIGATION/PROGRAM	RESPONSIBILITY	MONITOR	TIMING/FREQUENCY
<b>UNAVOIDABLE ADVERSE IMPACTS</b>				
While most Project impacts could be mitigated, these appear to be unavoidable adverse impacts:				
Land Use: The proposed building heights are unavoidable adverse impacts of the Project. Project sponsors maintain that, as dictated by modern manufacturing and commercial standards, the Project cannot be implemented if a variance from the 45-foot height limit is not approved. 6-2	None, other than those listed under "Land Use" above. A statement of overriding consideration is required.	N/A	N/A	N/A
Visual Quality and Urban Design: The Project would obstruct views of the ridgeline of the Berkeley Hills from Aquatic Park, significantly changing the views from the park and adding tall buildings to the shoreline where height is not considered desirable. 6-3	None, other than those listed under "Visual Quality" above. A statement of overriding consideration is required.	N/A	N/A	N/A
Water Consumption: As long as the drought continues and water storage is below acceptable levels, the water consumed during the production process is an unavoidable adverse impact of the Project. 6-3	None, other than those listed under "Water" above. A statement of overriding consideration is required.	N/A	N/A	N/A

**EXHIBIT I**

**SITE PLANNING AND ARCHITECTURAL  
DESIGN GUIDELINES**

EXHIBIT I

SITE PLANNING AND  
ARCHITECTURAL DESIGN GUIDELINES

Contents

PREFACE	I-ii
I. INTRODUCTION	I-1
II. URBAN DESIGN FRAMEWORK	I-2
III. CHARACTERISTIC BUILDING SPACE TYPES	I-4
IV. CHARACTERISTIC OUTDOOR SPACE TYPES	I-18
V. SITE SPECIFIC CONDITIONS AND INSTRUCTIONS	I-24
VI. ILLUSTRATIVE MASTER PLAN	I-70
APPENDIX A	I-73

## PREFACE

The following Site Planning and Architectural Design Guidelines are meant to be used as a tool for both Miles and the City of Berkeley to effectively develop the site over a thirty year period. The Guidelines are included as Exhibit I of the Development Agreement By and Between the City of Berkeley and Miles Inc. for the Miles Inc. Long Range Development Program. They are an important part of the Site Development Plan contained in the Development Agreement, which includes:

1. Site Plan (Exhibit C);
2. Permitted Uses, Height and Floor Area Table (Exhibit C);
3. Phasing Plan (Exhibit E);
4. Building Demolition/Retention Plan (Exhibit C);
5. Use Definitions (Exhibit C);
6. Site Development Standards (Exhibit D);
7. Urban Design Concepts Plan (Exhibit I);
8. Illustrative Master Plan (Exhibit I);
9. Site Planning and Architectural Design Guidelines (Exhibit I).

In order for the Guidelines to be valuable over the thirty year development period, the master plan documents must remain updated and current. To this end, they must be reviewed and updated at regular intervals. This will occur a minimum of every five years, and will include an informal workshop with the City of Berkeley Design Review Committee. At these points, the campus shall be re-evaluated in terms of the intentions and instructions contained in the guidelines. It should be made clear, however, that the criteria established in Exhibits C, D and E will not be modified without going through the process outlined in Article 5 of the Agreement.

In an effort to offer a clear overall view of the design requirements, some of the specific criteria are included in more than one section of the Development Agreement. For example, the setback and stepback requirements included in the Exhibit I - Site Specific Instructions, are also included in Exhibit D. In all cases, the building design must comply with all of the criteria established in Exhibits C, D, E and I. Many of the criteria in the Guidelines, however, are subject to interpretation by the designer and the City of Berkeley Design Review Committee.

## I. INTRODUCTION

The site planning and architectural design guidelines describe intentions for a pharmaceutical production campus that reflects Miles' commitment to products that enhance the quality of life. They illustrate an approach that is based on carefully integrating production processes and the life of the work force into the surrounding community - conceived as an organism with a distinct physical structure and a living pattern of social uses. This requires a delicacy and attentiveness to nuance that is comparable, in architectural and urban design terms, to that which is required to bring biology and technology together in the symbiotic relationship that is the foundation of Miles' products - where biological well-being sets the limits for technical invention.

To most effectively achieve these intentions, the Guidelines are divided into four parts: urban design concepts; building and landscape framework; site specific building and open space guidelines; and an interpretation through an illustrative master plan. Section I contains a brief introduction to the Guidelines. Section II explains the overall urban design framework and the intentions for the site development. It gives an overview of the most important design concepts. Section III describes the building elements by type and the ways in which they are put together. Individual buildings should respect these design criteria. Section IV describes the different open space types to be included on the site. Section V describes the existing conditions (at the time of original writing or future revision), as well as various site specific instructions, using the general criteria of Sections III and IV to describe site specific design criteria. Finally, Section VI shows, with an illustrative master plan, one way in which Sections III, IV and V could be interpreted to achieve the goals outlined in Section II. To be fully understood, the Guidelines must be read in their entirety. A designer would review general urban design principles in Section II; proceed to Section III's discussion of the specific building type; review Section IV for the various potential open space types; and determine the site specific instructions in Section V. Finally, the designer would review the project in terms of its relationship to the Illustrative Master Plan in Section VI. This Plan is intended to offer an initial study of the possibilities. While it is used throughout the Site Specific Conditions and Instructions to show possibilities, it should not imply that the locations and plans of specific buildings and open spaces are mandated.

Although the Guidelines discuss the goals for the Miles campus at the completion of its thirty year build-out, it is also important that careful attention be paid to context and phasing. Each building project shall be understood in terms of maintaining the coherence of the site during intermediate stages of campus development.

### III. CHARACTERISTIC BUILDING SPACE TYPES

The intent of this section is to establish a vocabulary of building forms that is based on the primary objectives for the site. This vocabulary provides the basis for differentiating parts of the buildings and outdoor spaces to create an appropriate environment with a range of sizes and with elements that can sustain interest.

The volumes which house the production processes themselves shall be made in simple, direct ways with occasional projecting bays and sun shaded windows that provide outlook and articulation. The areas housing mechanical services on top of these volumes shall have soft contours to diminish their impact as silhouette.

Office spaces can be lower and have more frequent windows. They are to be located where the buildings meet the surroundings, especially along Dwight Way and Aquatic Park, and along the internal pedestrian oriented streets. These lower volumes give scale and articulation to the larger ones behind. In addition, the activity inside supports and draws benefit from the adjacent pedestrian activity. These spaces should be shaped to match the scale and character of public streets and to provide visual interest to the buildings when viewed from Aquatic Park.

The design of each building should be conceived in relation to the definition and composition of the characteristic space types as distinct volumes (see Sections III-A and III-B). These volumes should be articulated to minimize the building mass and bulk (see Section III-C) and detailed with appropriate and consistent materials (see Section III-D). Building entrances should be used to reinforce the campus structure (see Section III-E), as should the building colors (see Section III-G). Finally, the scale and character of the openings should relate to the individual building elements and their location (see Section III-F) and building silhouette should be carefully studied (see Section III-H).

**A. Define characteristic space types.**

There are eleven basic space and construction types that can presently be anticipated as part of the Miles plan for development:

1. production spaces
2. service and utility spaces
3. office and reception spaces
4. gathering, conference and relaxation spaces
5. mechanical equipment spaces
6. parking structures
7. laboratory structures
8. warehouse structures
9. maintenance structures
10. utilities structures
11. utilities rack

Each of these spaces has characteristic sizes and requirements. Together they make up the elements with which Miles will build its future campus. Each of these space types has differing dimensional and relational requirements, with a different role to play in the development of an overall site plan. While all of the spaces will be subject to changing requirements in detail over the lifetime of the plan, certain fundamental relationships can be anticipated.

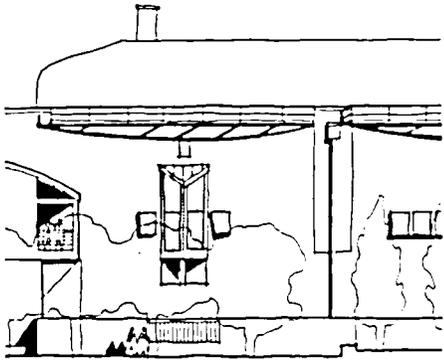


Figure 2. Production areas: large simple volumes

**B. Compose space types as distinct volumes to reduce the visual mass and bulk of the larger building elements.**

**1. production spaces**

Large simple volumes are appropriate for the *production spaces* to allow room for the equipment required in the manufacturing process, their proper arrangement and servicing. (see Figure 2) These volumes should be sufficiently ample to allow for the optimum relation between various parts of the process, to provide for flexibility and adaptation over time and to create safe working conditions for those who operate, monitor and service the equipment. Generally these inter-floor heights will range from 22 to 40 feet. As with traditional industrial spaces these volumes should provide a large, simple shell so that the complex and evolving requirements of the equipment and its servicing will not be constrained by a too-close fit to the details of present equipment. *Production spaces* will make up the largest percentage of building area within the complex. The top edges of these major volumes should be marked by elements that set a measure for the building with shadow and/or color, but are less dominant than the profile of lower volumes adjoining the city streets.

On all buildings over 45 feet in height the top floor should be inset 15 feet from the main shell, have a curved profile and cover no more than 50% of the total building footprint. (see Figure 6)

**2. service and utility spaces**

*Service and utilities spaces* should similarly be simple. Their volumes should be close to the ground for ease of access and delivery. Their ground floor walls should be of concrete, masonry, or similar impact-resistant materials. These walls should also establish a common base-level

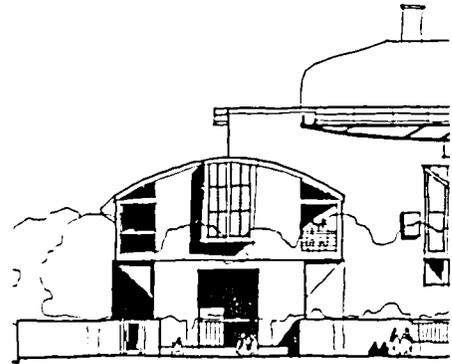
construction throughout the site. *Service and utility volumes* should have few, but large and significant openings.

### 3. office and reception spaces

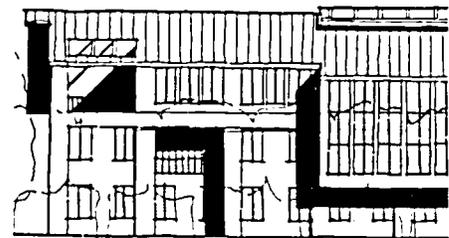
The *office spaces*, a much smaller percentage of what will be built on the site, are very important in terms of the human scale they add to the larger production volumes. Elements for the spaces that predominantly house people, such as *offices, lobbies* and *circulation areas*, should be finer scaled and independently roofed. (see *Figure 3*) These should be located in the areas around the periphery of the site and along Cutter Way and Fourth Street where the uses can have the best outlook. In addition, the presence along these edges of building entries will have the greatest positive impact on the surroundings in terms of maximizing pedestrian activity.

Articulated *office volumes* shall be no higher than 45 feet. The public face of these volumes should be modulated with rhythmic vertical subdivisions and recurring groups of openings.

Buildings which house a collection of *office and reception spaces*, such as the administration building to be located at the intersection of Sixth Street and Dwight Way (on one or both sides of the street), should be designed as the architectural cornerstone for the Miles site, offering the opportunity for a distinctive architectural treatment. On such buildings, in which volumes predominantly house office functions, the use of overhanging eaves, cornices, or equivalent shadow-casting projections to establish a horizontal subdivision within the facade at the 30 - 36 foot elevation should be incorporated. This line should make reference to the stepped profile which defines inhabited volumes on the periphery of adjacent structures. The basic pattern established by these subdivisions should be interrupted by,



*Figure 3. Office spaces:  
independently roofed elements*



*Figure 4. Office spaces: incidental  
architectural elements*

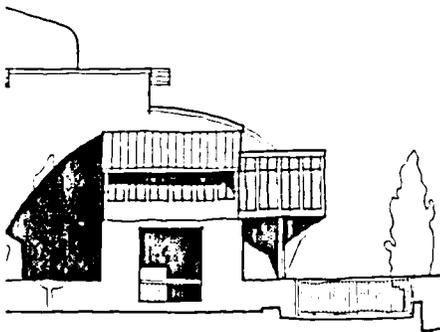


Figure 5. Gathering spaces:  
projecting outlook bays

or have superimposed upon it, incidental architectural elements such as recesses, balconies, porches, and distinctive openings or volumes. (see Figure 4) These should take advantage of entrances and internal gathering spaces to frame areas of visible activity within the building and create points of outlook.

#### 4. gathering, conference and relaxation spaces

*Gathering and relaxation spaces* offer special challenges and opportunities. They should whenever possible be placed on the periphery of the volumes, especially along the campus streets, Dwight Way, and the western edge of the site. They should be located and designed so that they give character and interest to the buildings, as well as reduce the apparent mass and bulk of the larger volumes. These should be created to take architectural advantage of controlled outside spaces (courts, balconies) and projecting outlook bays that provide special amenities to the people working inside the buildings. (see Figure 5)

#### 5. mechanical equipment spaces

*Mechanical equipment spaces* should be set back from the major building volume and treated as gently sloping curved volumes that create soft edges against the sky. (see Figure 6) These floors are related to the trussed roof forms common in the neighborhood.

Color and materials should also be used to minimize the apparent mass and bulk of this floor. There should be no light reflective surfaces.

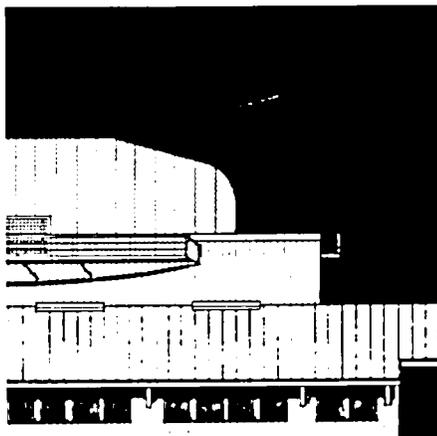
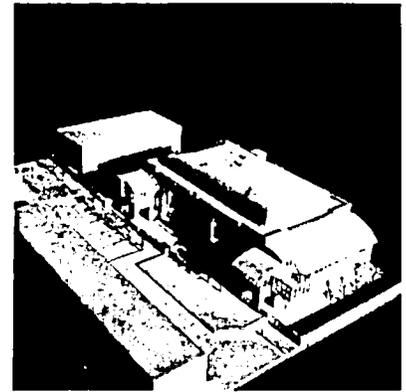
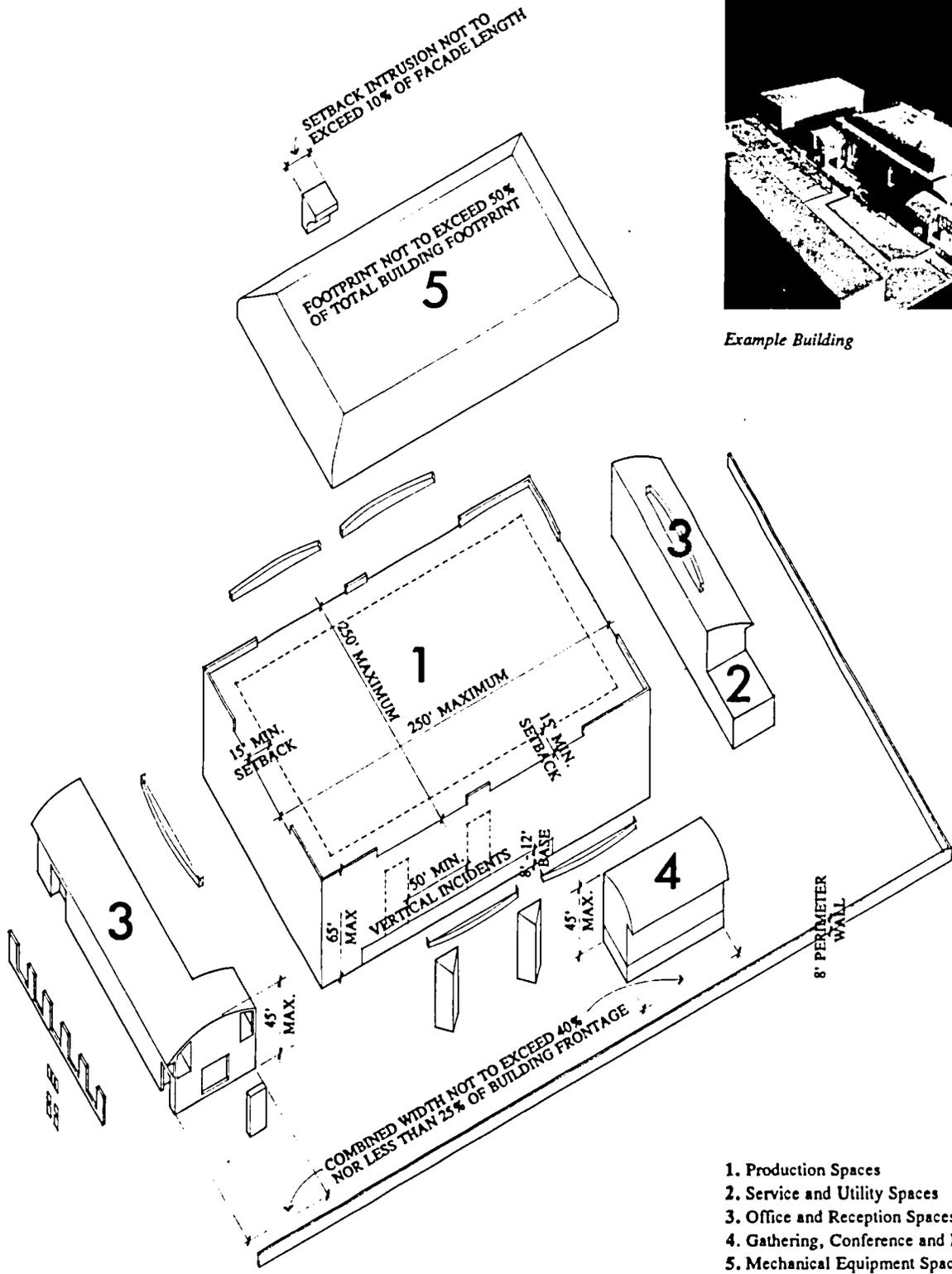


Figure 6. Mechanical equipment spaces: set back curved volumes create soft edges against the sky



Example Building

1. Production Spaces
2. Service and Utility Spaces
3. Office and Reception Spaces
4. Gathering, Conference and Relaxation Spaces
5. Mechanical Equipment Spaces

Figure 7. Production Building Elements

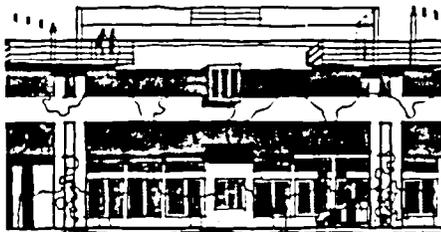
## 6. parking structures

There are two types of parking that will be used in development of the site: on grade parking and *structured parking*. Both require clear layouts and efficiently organized parking stalls to allow for ease of access and safety. Auto entries and exits from parking areas should be located so that they minimize impact on surrounding traffic flow. Parking areas, however, are also the point of arrival for a large number of the people who work in and visit the Miles campus. Therefore they must be designed in ways that are attractive, secure and provide for clear pedestrian circulation into and on the campus.

*Parking structures* must be designed to meet standards that are consistent with the architectural quality established for the campus and for the specific conditions of their siting, which may include locations along major public streets. They must be designed in keeping with the campus architectural theme, and be a visual asset along the major public streets.

These structures are inherently different building types than the production spaces. However, they may be fronted by other uses that can be used to make relationships to other buildings of the campus and the neighborhood. Safety, visibility, security, pedestrian comfort, and high quality architectural design are essential elements of a satisfactory parking structure.

The structural pattern can be used to establish a suitable rhythm and measure for the building. (see *Figure 8*) Additional elements (such as rails, screens, recessed or projecting wall sections, lighting elements, graphics, artworks and architectural ornament) should be used to establish subsidiary rhythms scaled to reflect the importance of human use of the building, create an appropriate scale relationship to the



*Figure 8. Parking structure:  
rhythm and measure*

neighboring structures, and to visually minimize the facade length.

At grade level the outer edges of the structure should be bounded by walls with large openings for visual accessibility, but secured entry (for example, with well designed wrought iron or steel grills). Above grade level, parapet walls should be solid to a height of at least three and a half feet to shield headlights. Open rails may be used in locations where headlights will not intrude upon the surrounding community.

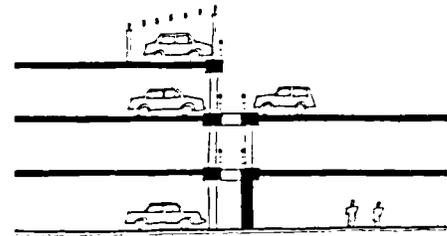
The top deck should be partially covered with light-weight elements that provide partial shade, diminish the impact of cars seen from above and at a distance, and provide surfaces that can help to shield and direct night lighting.

Ceilings within the structure should be painted a light color to reflect light. Artificial lighting must be carefully designed to provide safety for pedestrians without using excessively bright, obtrusive lights, that create glare inside and for the surrounding community.

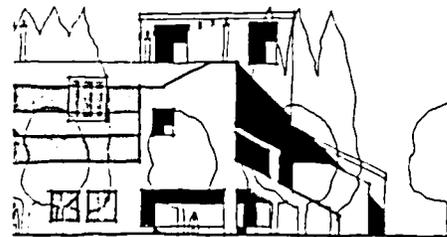
The parking decks should be penetrated vertically by substantial open areas at least every 120 feet for natural ventilation and to provide light and orientation within the interior of the structure. (see *Figure 9*)

Sloped floors should not be apparent in the building facades. In other words, the exterior should be made of horizontal and vertical building forms.

Stairs and elevators should be visually open with secured access for safety. The lobbies should be located at prominent locations such as the corner of Dwight and Seventh to make the pedestrian movement to and within the structure visible from the surrounding community. (See *Figure 10*)



*Figure 9. Parking structure: interior section showing decks penetrated vertically*



*Figure 10. Parking structure: stairs and elevators in prominent locations*



*Figure 11. Laboratory spaces: openings organized to allow flexibility*

Curbcuts and entries should be located to avoid stacking on Seventh Street and Dwight Way.

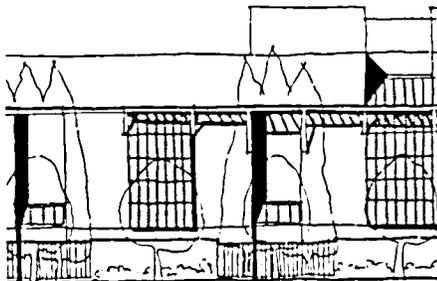
### 7. laboratory spaces

*Laboratory spaces* are intensively occupied working spaces that require a lesser level of mechanical services than production spaces and can therefore occupy lower volumes. They should have openings that allow outlook and light, but which are organized to allow flexibility in operation and work station spacing. (see *Figure 11*) There should be sun shading for windows and the sills should be high enough so that worktable apparatus is not significantly exposed to view.

### 8. warehouse structures

*Warehouse structures* are inherently large and simple volumes with few openings and little variation. This is consistent with the character of many buildings in the immediate vicinity. There will be a large loading area, however, and some offices and related spaces associated with the operations of the warehouse. These office volumes should be used to modulate the building forms.

The structural pattern can be used to establish a suitable rhythm and measure for the building. (see *Figure 12*) Additional elements (such as rails, screens, sections of walls, lighting elements, large openings that provide light for the interior, artworks and architectural ornament) should also be used to establish subsidiary rhythms scaled to reflect the importance of human use of the building, create an appropriate scale relationship to the neighboring structures, and the visually minimize the facade length.



*Figure 12. Warehouse: structural pattern*

The loading area should be accessed from Parker Street. Truck docks should be located within a courtyard which is separated from Seventh Street by a piece of the building.

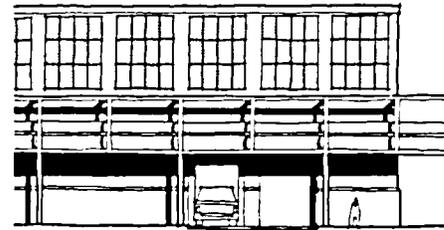
Offices and related functions should form a smaller volume with a shaped roof along Parker Street leading up to Seventh Street. This must be a volume lower than 45 feet high with windows and active uses facing Seventh and Parker.

#### 9. maintenance structures

*Maintenance structures* should be simple volumes with large openings at upper levels to let light into high bay spaces. (see *Figure 13*) Ground floor walls should be of concrete, masonry or similar impact-resistant materials of the sort used for service and utility spaces. Office spaces within these structures should be located to open onto major outdoor spaces and provide visual interest to the building's face. Large openings for delivery and smaller openings for windows and doors should be coordinated in design. These buildings should be designed as background buildings but with attention to their influence on adjoining open spaces.

#### 10. utilities structures

*Utilities structures* are essentially shells to house equipment that provides services for the whole site. They should be simple volumes, with large areas of upper window as appropriate to provide light for maintaining and servicing the units. (see *Figure 13*) Ground floors should be of concrete, masonry or similar impact resistant materials. Large openings for the installation, replacement and servicing of installations should be organized in a simple coordinated pattern. These buildings should be designed as background buildings but with attention to their influence on adjoining open spaces. Special attention should be given to the appropriate location and shielding of equipment emitting exceptional levels of noise.



*Figure 13. Maintenance and utilities: simple volumes with large openings*

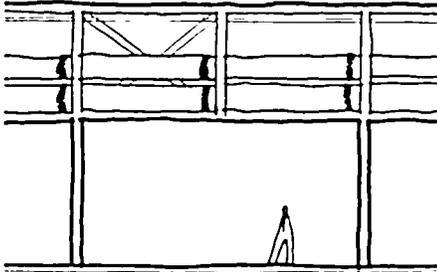


Figure 14. Utilities rack: visually ordered

#### 11. utilities rack

Particular attention should be given to the design of the *utilities rack* where it fronts the buildings along Fourth Street, Cutter Way, and/or Parker Street. In general, the space under the rack should be paved walks, decomposed granite or low ground cover, so long as the rack remains easily accessible. Low planting or small trees may occur selectively.

Its framework should be made in a visually orderly manner, with careful selection of colors for codings and visual appearance. (see *Figure 14*) It could also carry a significant amount of the site lighting.

C. Articulate building volumes with recesses and other architectural elements. This will minimize the mass and bulk, especially on building volumes over 45 feet. In particular, specific requirements for breaking down the volumes into smaller pieces will minimize the apparent volume of buildings along the public streets, campus streets, and the western edge of the site.

#### 1. production spaces

a. Volumes higher than 45 feet shall not measure more than 250 feet in length on any facade of one continuous building.

b. Volumes taller than 45 feet shall have horizontal articulation with window bays, projecting or recessed wall sections, circulation elements, decks, balconies or other three dimensional vertical incidents which are in scale with the total volume envelope but help to break up their bulk. (See *Figure 15*) These shall be located at intervals that preclude blank walls longer than 50 feet.

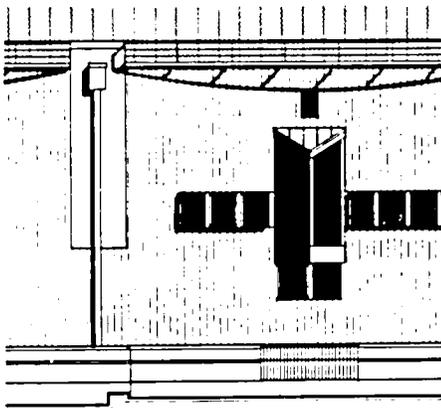


Figure 15. Production volumes: three dimensional vertical incidents

**3 & 4. office/reception spaces & gathering/conference/relaxation spaces**

- a. *Office and gathering spaces* which front Dwight Way may occupy the setbacks established in the guidelines, provided that their combined width does not exceed 40% of the length of any single facade nor be less than 25%. (See *Figure 16*)
- b. These volumes shall be articulated by human scale openings which suggest the size and configuration of occupied spaces within.

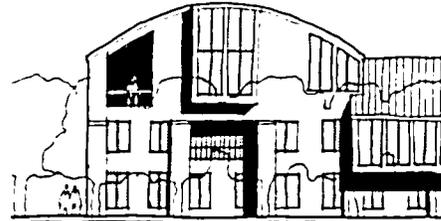
**5. mechanical equipment spaces**

On any single building greater than 45 feet in height, the combined footprint of the penthouse(s) shall not exceed 50% of the total footprint of the building, and shall be stepped back from the building volume below.

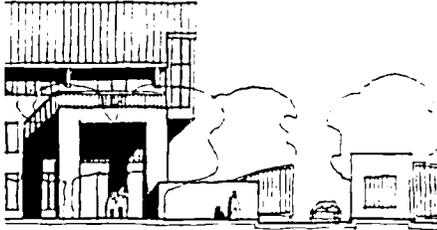
**D. Specify appropriate and consistent materials.** It is important that a coherent architectural theme and vocabulary are followed, while allowing for diversity within that established framework. This will create a visually cohesive campus even though it will be built over a period of thirty years.

1. All buildings should be made of materials that are consistent with the large scale buildings of the neighborhood, such as steel, concrete, metal siding, reinforced masonry, glass block and industrial glazing. Future buildings should relate to the materials, colors and detailing used on the Phase I buildings.

2. Highly reflective glass or other highly reflective surface materials are not allowed.



*Figure 16. Office and reception spaces: front the perimeter of the site*



*Figure 17. Entrance gateways:  
marked with recognizable features*

3. Walls that border the site should be made of a combination of masonry or concrete and open grillwork.

4. Concrete, masonry, or similar materials shall provide buildings with an 8 to 12 foot high base which protects the structures from damage and provides a common visual reference throughout the site. This material may be extended to other sections of the buildings provided that there remains a clearly demarcated base.

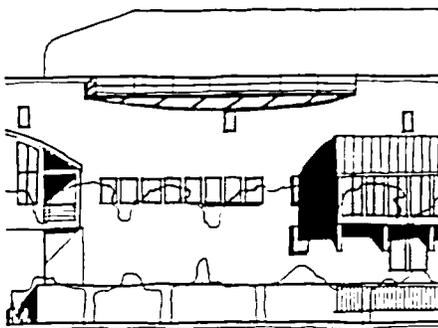
5. Paving materials should distinguish pedestrian plazas and crossings from vehicular and service areas. The distinction can be made with the use of textured and/or colored paving in areas used by pedestrians.

**E. Use entrances to reinforce campus structure.**

1. A majority of building entrances should be directly on Fourth Street and Cutter Way.

2. Entrances should be marked by free standing trellises, canopies, porches, insets or with distinct recognizable features such as balconies, lights, terraces, steps or ramps. (see *Figure 17*)

3. Entrance gateways to the site should be designed to generously accommodate pedestrians as well as vehicles. Their design should include appropriate landscape elements. (see *Figure 17*)



*Figure 18. Openings: in scale with  
the rooms they front*

**F. Relate scale and character of openings to individual building elements and their location.**

1. Window size should be in scale with rooms that they front, providing human scale elements to the facade. (see *Figure 18*) They should not be

developed into long unbroken geometric strips.

2. Windows that provide general light to large spaces should have a distinctive character.

3. External sunshades should be used on all major southern, eastern and western windows to provide sun and glare protection and to articulate the buildings.

**G. Choose colors to enhance the coherent campus identity.**

1. Building hues can be varied but should maintain a consistent range of intensity and value. Colors should have a high saturation within a middle value range.

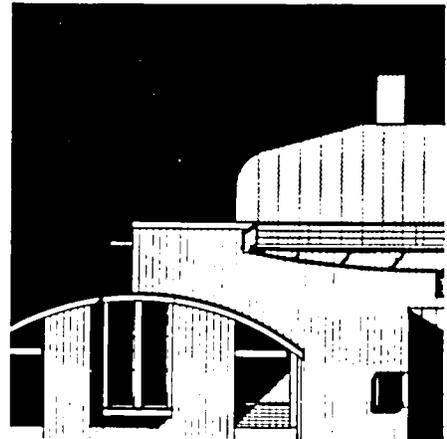
2. Roof colors should be darker but related to the main building color to minimize their visual impact.

3. Masonry or concrete and grillwork walls that border the site should be in a mid-tone with low color saturation.

**H. Pay careful attention to building silhouettes.**

1. Heights, massing and roof top equipment should be arranged so that they minimize the building bulk and compose a cohesive orderly skyline when seen from surrounding areas. (see *Figure 19*)

2. Elements of the buildings that form distinctive silhouettes against the sky or adjoining buildings should be ones that can be easily interpreted and which reinforce the intended character of the place.



*Figure 19. Massing: a cohesive, orderly skyline*

#### IV. CHARACTERISTIC OUTDOOR SPACE TYPES

The landscaping on the site should be used not only to create a system of internal open spaces for gathering, but also as an interface with the surrounding neighborhoods. It should provide emphasis at key locations such as site entries and major intersections. It will also mediate between residential and industrial areas both by providing a visual transition and by continuing elements from the neighborhood onto the site. Landscape elements that will become part of the urban design framework should be installed as early as is feasible.

There are several distinct types of outdoor space which must be understood individually. These will be used in combination to fulfill the overall site goals. Each of these spaces or elements has characteristic sizes and requirements. Each has a different role to play in the development of an overall site plan. All will be subject to changing requirements in detail over the lifetime of the plan, but certain fundamental relationships are anticipated and outlined in this section. To determine where these spaces and types of open space are located, see Section V.

Planting materials should be: compatible with the climatic and soil condition of the bay front location; consistent with the material that is successfully growing on site and in the vicinity; and in scale with the buildings and other campus features. Plants should be used to screen the buildings, block the wind, enrich the spaces and create a human scale outdoor environment. (See Appendix A for soil preparation requirements and lists of appropriate plants.)

**A. Define characteristic space types.**

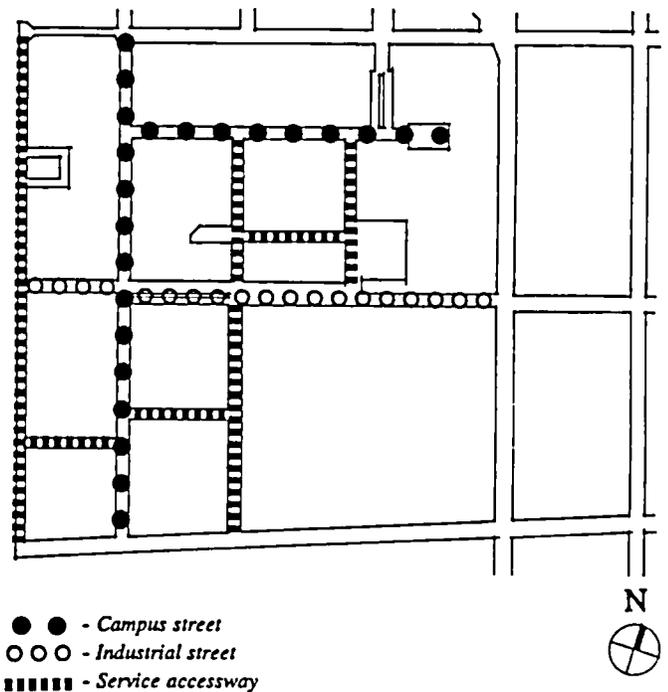
There are ten basic outdoor space and landscape types that can presently be anticipated as part of the Miles plan for development:

1. internal street corridors
2. courtyards
3. open green
4. promenade
5. linear landscape beds
6. windbreaks
7. service and delivery spaces
8. site entries and boundaries
9. surface parking lots
10. temporary building landscape

**B. Compose different outdoor space types as distinct volumes and elements.**

1. internal street corridors  
Internal street corridors are combined pedestrian and vehicular passageways. There are three general types of street corridors within the Miles campus: those primarily for pedestrians (*campus streets*), those which accommodate both pedestrians and services (the *industrial street*), and those primarily for service vehicles (*service accessways*). (see *Figure 20*)

*Campus streets*, such as Cutter Way and Fourth Street, serve as the main pedestrian routes. They should be designed and landscaped to encourage pedestrian activity and outdoor gathering, with tree canopies and attractively paved sidewalks to provide a pleasant and identifiable route for



*Figure 20. Internal street corridors*

employees. Outdoor open spaces such as *plazas* and *garden courts* should complement the building entries and office spaces along the campus streets. Sidewalks should be a minimum of 6 to 8 feet wide, with a minimum 4 foot wide planting strip adjacent to the street and the buildings.

The *industrial street*, too, accommodates pedestrians and cars. It also serves as the primary site access for trucks and as a potential location for the *utilities rack*.

*Service accessways*, generally industrial in character, should be uncluttered corridors, ranging from 20 to 30 feet wide curb to curb, with paving extending to the buildings for service access, and little or no planting along the building frontage. Service streets should accommodate pedestrians with a minimum sidewalk width of 4 feet on one side.

## 2. courtyards

*Courtyards* are open areas which are strongly defined by building walls. They are of three types, the *entry court* and the *plaza*, which are primarily paved *courtyards*, and the *garden court*.

The *entry court*, located at each main building entry, shall be a welcoming space, with special paving and plants of a variety of colors and textures in pots and planters. It may also provide seating. The maximum size will be approximately 30 x 50 feet (and the minimum, approximately 15 x 30 feet). The building walls facing onto it should be the offices and gathering spaces. (see *Figure 21*)

The *plaza* is a hard surfaced space with special paving. The minimum size is approximately 50 x 80 feet. Because of its scale and material, fine textured and detailed plantings are inappropriate, except where the plaza meets the building entry (see *entry court* above).



Figure 21. Entry court

*Plaza edges* should be carefully treated, with elements such as curbs or other architectural details to unite the plaza with the adjacent building, and devices such as planters or bollards to separate it from the street. Seating should be available, using steps, curbs or low benches. (see *Figure 22*)

*Garden courts* are wind protected gardens, usually a minimum of 40 x 60 feet in size, for quiet gathering and relaxation. They should include a balance of rich planting beds and paving, with a variety of colors and textures of plants, and a choice of seating areas. Garden courts could be used for outdoor eating, receptions or small outdoor meetings. (see *Figure 23*)

Outdoor spaces that are likely to be gathering or resting spots should not be located adjacent to facilities which necessarily produce high levels of noise.

### 3. open green

The *open green* is a large informal lawn, a minimum of approximately 80 x 80 feet in size, for picnicking and active recreation. The green should be wind protected with buildings or windrows along the western edge, have large canopied trees for shade, and typically have an open flat lawn area of around 50 x 80 feet.

### 4. promenade

The *promenade* will be minimum 8 foot wide walkway, generally with trees on either side. It should extend for a length of at least 100 feet.

### 5. linear landscape beds

*Linear landscape beds* are planting beds, a minimum of 15 feet wide, which occur between the buildings and sidewalk. They are important for visual interest, to enrich the campus landscape, and to screen buildings where necessary. These beds should be



*Figure 22. Plaza*



*Figure 23. Garden court*

densely landscaped with groundcovers, shrubs and trees.

#### 6. windbreaks

*Windbreaks* are rows of tall, dense, closely spaced evergreen trees and/or hedges positioned to provide wind shelter. Examples of trees that may be used are Eucalyptus or Monterey Cypress.

#### 7. service and delivery spaces

Exterior *service and delivery spaces* for individual buildings should be simple and uncluttered, reflecting their function. Views of service and delivery areas should be screened from major pedestrian gathering and public areas.

#### 8. site entries and boundaries

*Site entries* should be marked with distinctive tree plantings and other landscaping. Gate houses should be simple welcoming volumes, adjacent to perimeter walls, fences or building elements. They must be carefully sited and joined to the ground and should have overhangs only at openings. They should be of materials and colors similar to other new buildings. Windows should be integral with exterior finish.

*Temporary and permanent perimeter boundaries* should harmonize with the site buildings. They will utilize appropriate combinations of concrete panels, columns, steel grillwork, and landscaping to establish a rhythm and cadence at human scale. (See Figs. 24 and 25)



Figure 24. Temporary site perimeter walls



Figure 25. Permanent site perimeter walls

#### 9. surface parking areas

*Long term and Permanent surface parking areas* should be screened and well landscaped. Broad canopy street trees shall be placed along the perimeters at approximately 18 foot centers. The perimeter planting strip shall be a minimum of 5 feet wide. At the edges of parking areas next to streets or other public areas shall be a 4

foot high view-obscuring fence, wall or compact evergreen hedge, broken only for access driveways and walkways. This may be located anywhere within the perimeter planting strip. It is intended to shield the low cars from view.

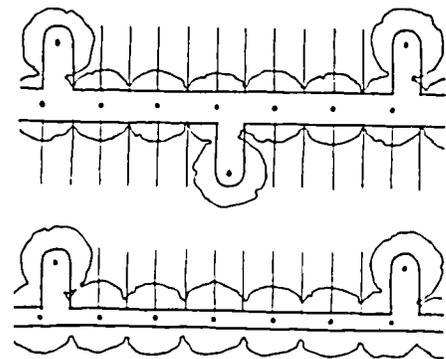
*Surface parking areas* with more than two rows of parking should have a minimum 10 foot wide planting median between the interior rows of parking, with trees planted in the median at the end of every other parking stall. In addition, every eleventh parking space on either side of the driving lane in double loaded parking areas will be a planting "peninsula" dedicated to landscaping, with one tree planted at the aisle edge of the peninsula. By alternating this pattern throughout the parking lot, every fifth parking space on one side will be a planting peninsula. (See *Figure 26*)

All parking areas will meet City of Berkeley standards for parking stall sizes and number of compact spaces. Lighting should be designed with attention to safety, neighborhood impact and fixture location and appearance.

*Temporary surface parking*, as defined in the Site Development Standards, shall have trees and perimeter screening that follow the same guidelines as the perimeters of *permanent surface parking* (see above).

#### 10. temporary building landscape

All temporary buildings should include a ground level *entry court* or a raised deck. The treatment of the edges of the buildings which face the street should respond to the guidelines for that type of street. Planting around temporary buildings should include, at a minimum, shrubs and groundcovers. Planting beds should receive the same soil preparation and plant types specified in the guidelines for permanent buildings (See Appendix A).



*Figure 26. Surface parking: plan*

## V. SITE SPECIFIC CONDITIONS AND INSTRUCTIONS

This section outlines the existing conditions, general design intents and urban design concepts, and instructions for the treatment of each street:

- A. Fourth Street
- B. Cutter Way
- C. Parker Street
- D. Sixth Street
- E. Dwight Way
- F. Seventh Street
- G. Eighth Street
- H. Carleton Street
- J. Site Edge at Aquatic Park
- K. Service Accessways

The instructions refer to building characteristics and outdoor space types described in Sections III and IV. They reflect the Urban Design Framework outlined in Section II.

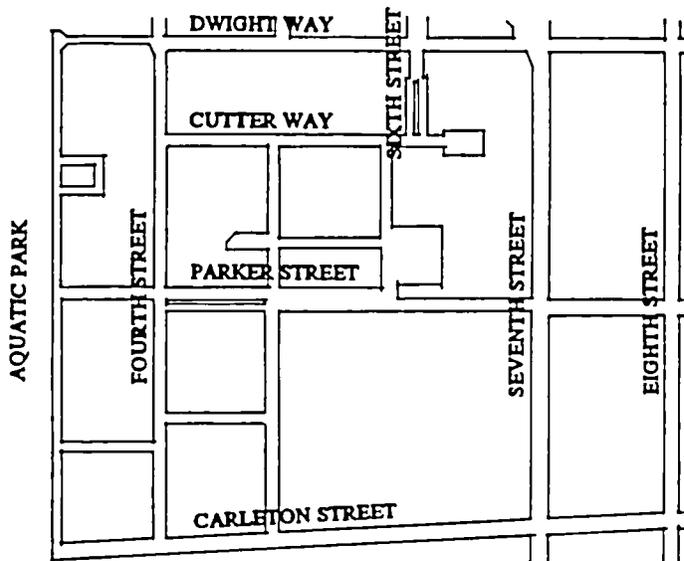


Figure 27. Street Map



A. FOURTH STREET

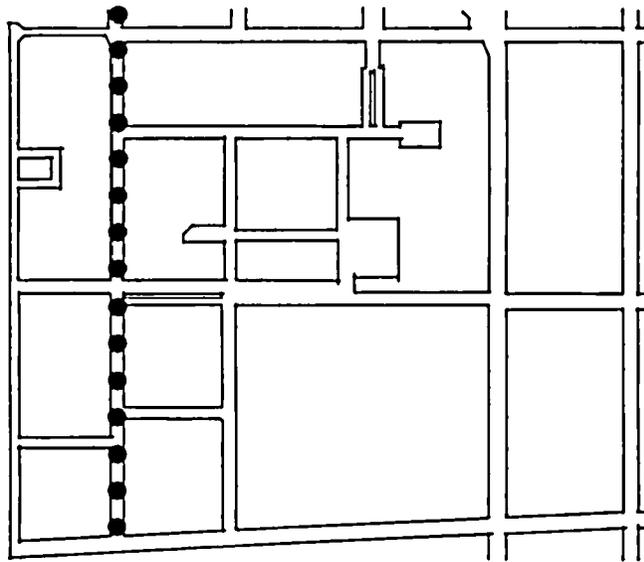
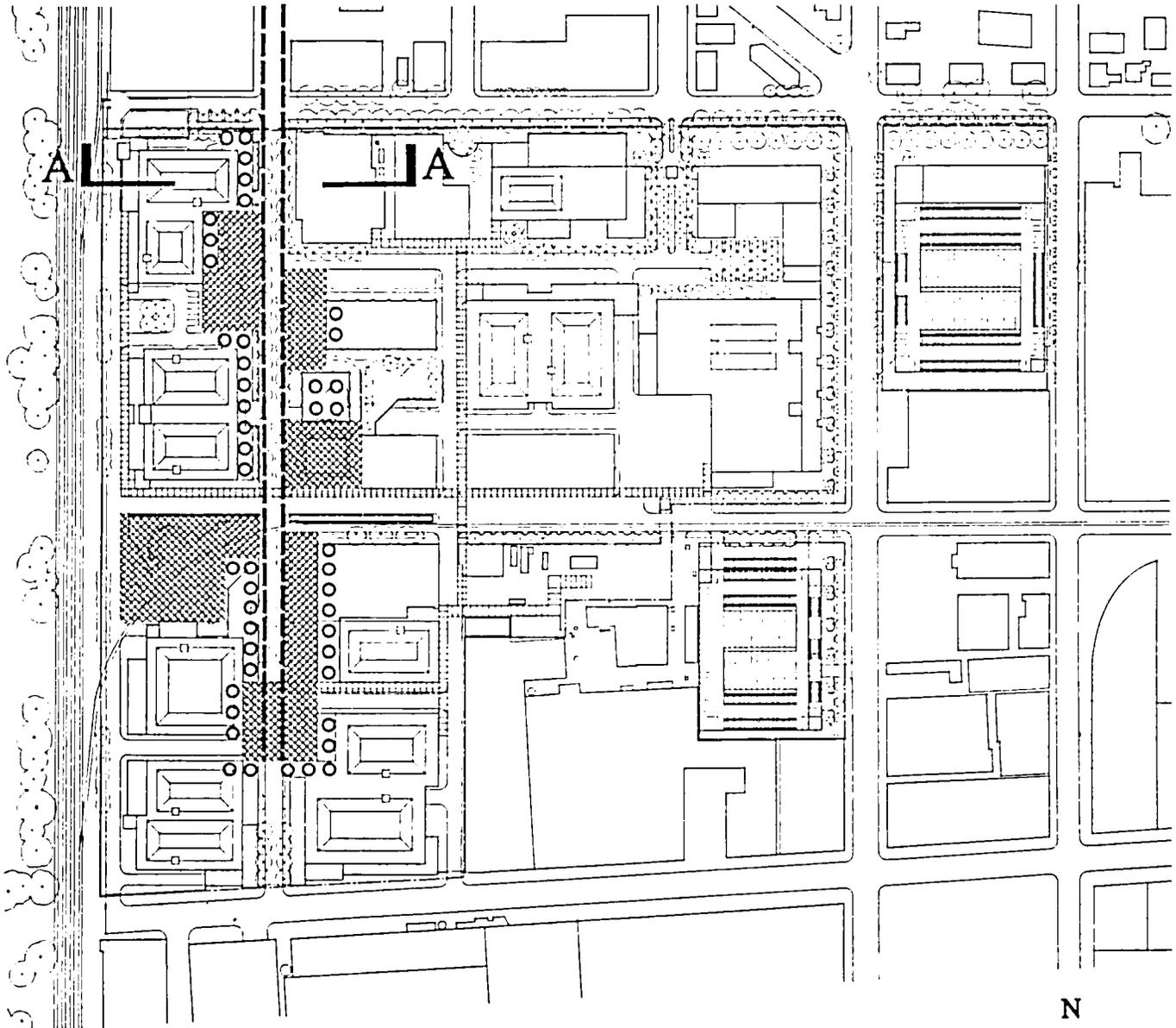


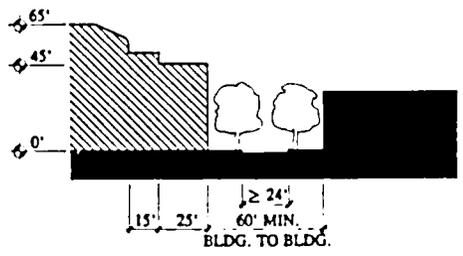
Figure 28. Location Map





**URBAN DESIGN CONCEPTS PLAN**

- ○ ○ - Develop Fourth Street as a *campus street* with active uses.
- XXXXXX - Develop a series of varied open spaces.
- — — - Extend the existing Fourth Street grid and character into the site.



**SECTION A**

*Figure 29. Fourth Street: Urban Design Concepts and Dimensional Requirements*

**Develop Fourth Street as a major internal pedestrian circulation spine, a *campus street*.** This will be one of the two main locations for the "front" of buildings, the other being Cutter Way.

#### **Current Conditions:**

Fourth Street is an internal street, running between Dwight Way and Carleton Street, with one to three story buildings of various types and parking lots defining its edges.

Off the site north of Dwight Way it is lined by buildings, mostly of industrial character and built to the property line.

There are gardens around the existing research building, library and production facility, which give character to the street.

#### **Instructions:**

**Develop Fourth Street as a *campus street* with active uses.**

1. Locate a majority of active uses including building entries, lobbies, offices and internal circulation elements facing directly onto Fourth Street.

2. To the greatest extent possible, set back the major *production spaces* and avoid *service access* from Fourth Street.

3. The buildings, walls and landscaping along the west side of Fourth Street should be used to shield the site from westerly wind and noise exposure.

**Develop a series of varied open spaces.**

4. Concentrate a variety of open spaces along Fourth Street, including small but richly landscaped *entry courts, plazas* and *garden courts*.



*Figure 30. Fourth Street:  
character sketch*

5. Develop nodes of gathering and recreational activity (cafeteria, meeting rooms, and *garden courts*) at locations along Fourth Street.

6. Narrow the existing Fourth Street roadway to not less than 24' to provide more pedestrian space, room for street trees, landscaping, sidewalks, *garden courts* and *entry courts*.

7. Between Dwight and Parker a minimum of 14 feet (within the 60 foot corridor defined in the Site Development Standards) will be available on both sides of the street for sidewalks and landscaping. In this area on either side of the street, there will be a minimum 4 foot wide continuous planting strip for street trees set in permeable paving adjacent to the curb, a minimum 6 foot wide sidewalk and a 4 foot wide planter next to the building line.

8. At the south-west corner of Fourth Street and Parker locate an *open green* which visually extends Aquatic Park into the site and allows for views out to the bay.

9. Where Fourth Street continues south of Parker, a *plaza* will be formed by the walls of four new buildings. This *plaza* will be urban in scale and material, with little planting except, possibly, broad canopy shade trees.

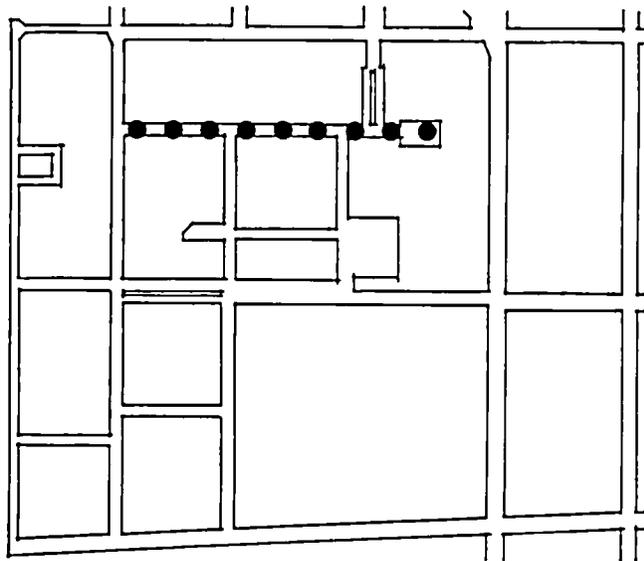
10. South of Parker, Fourth Street's character changes somewhat, with narrower clearances between building lines for sidewalks and planting. Street trees may be discontinued, but there will be a minimum 6 foot wide sidewalk next to the curb and areas for tree planting at the building entryways.

**Extend the existing Fourth Street grid and character into the site.**

11. New landscaping will supplement and reinforce the existing planting patterns within the site and will establish a strong rhythm of street trees. Use Sweetgum trees to extend the existing pattern from Fourth Street into the site. Healthy planting around buildings to remain should be preserved and nurtured whenever possible.

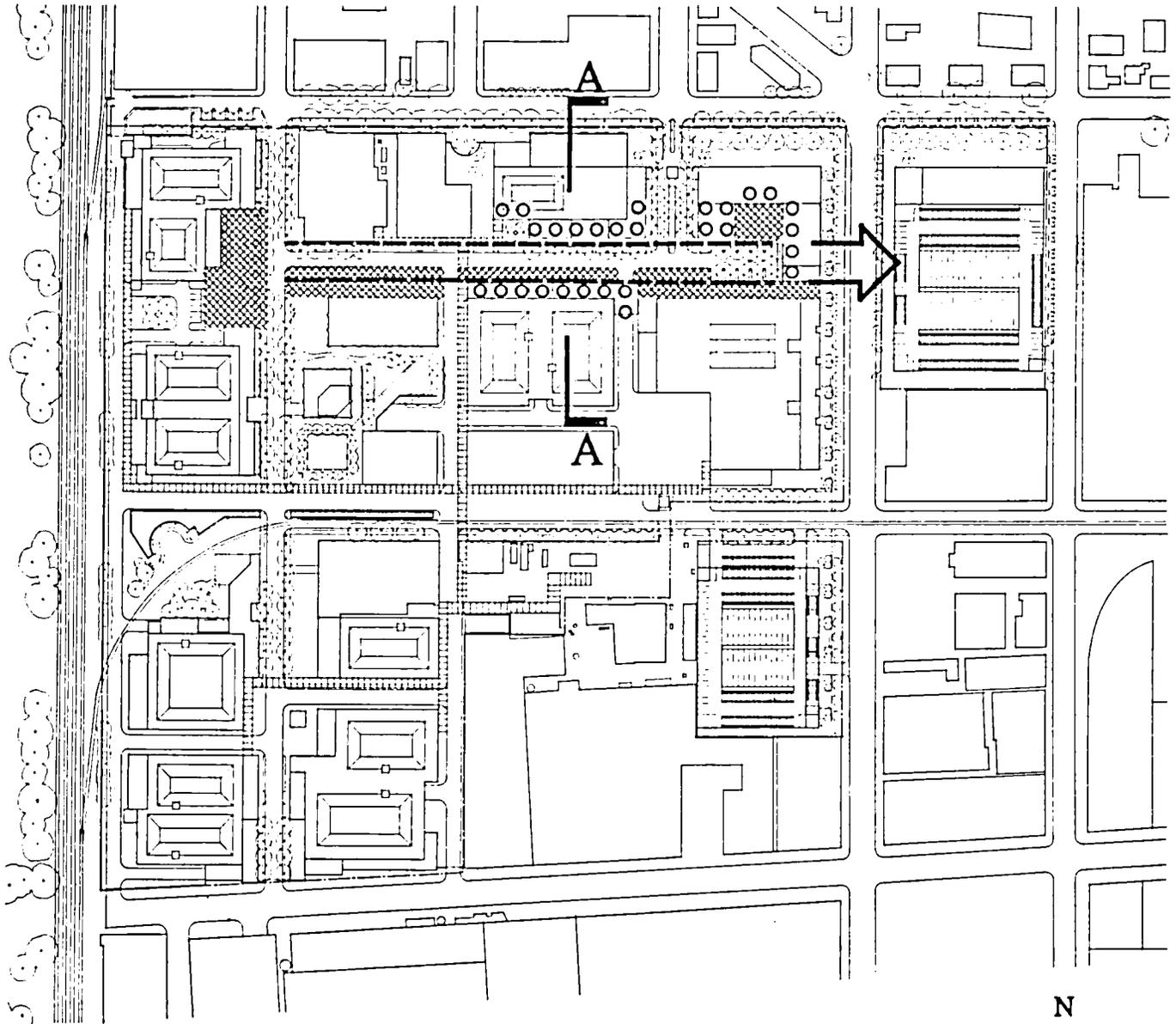
**Refer to Exhibit D of the Development Agreement and *Figure 29* for Setbacks and Stepbacks.**

**B. CUTTER WAY**



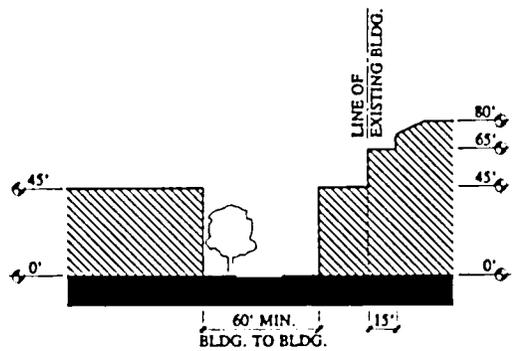
*Figure 31. Location Map*





**URBAN DESIGN CONCEPTS PLAN**

- ○ ○ - Develop Cutter Way as a *campus street* with active uses.
- ▨▨▨▨ - Emphasize the easterly vista.
- ▩▩▩▩ - Anchor the ends of the street with landscaped spaces.



**SECTION A**

*Figure 32. Cutter Way: Urban Design Concepts and Dimensional Requirements*

Develop Cutter Way as an internal street, the primary pedestrian link between the site entry at Sixth Street and the Fourth Street spine.

#### Current Conditions:

Cutter Way is an internal street that currently runs between Fourth Street and Seventh Street. The west end is now open to Aquatic Park and bounded by Miles buildings on either side of the intersection with Fourth. At present it has a rail spur through its center and curving to the south at the west end.

The east end is flanked by a surface parking lot and the Gary Steel building.

#### Instructions:

Develop Cutter Way as a *campus street* with active uses.

1. Provide visitor *surface parking* as needed at the east end of Cutter Way to serve the main site entry at Sixth Street. The parking should be visually screened from Seventh Street.
2. Broad canopy street trees spaced at approximately 18 feet on center should extend the length of Cutter Way on the north side. These will define the primary pedestrian access from the entry *plaza* on Sixth into the site. Possible trees for this corridor are Raywood Ash, Locust or Chinese Pistache.
3. The trees are to be planted next to the curb in a minimum 4 foot wide planting strip with permeable paving such as decomposed granite or masonry on sand.
4. Concentrate building entries and *entry courts* along Cutter Way.



Figure 33. Cutter Way: character sketch

**Emphasize the easterly vista.**

5. On the south side of the street, provide a large *linear landscape bed* with planting that emphasizes the length of the street and accentuates the long easterly vistas toward the hills.

**Anchor the ends of the street with landscaped spaces.**

6. *Plazas* or *entry courts*, along with special landscape features shall be used to anchor the ends of Cutter Way within the site.

**See Exhibit D of the Development Agreement and *Figure 32* for required Setbacks and Stepbacks.**

C. PARKER STREET

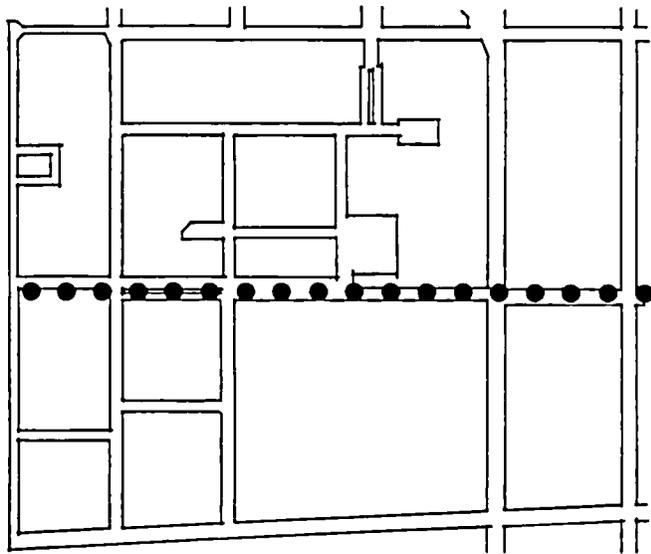
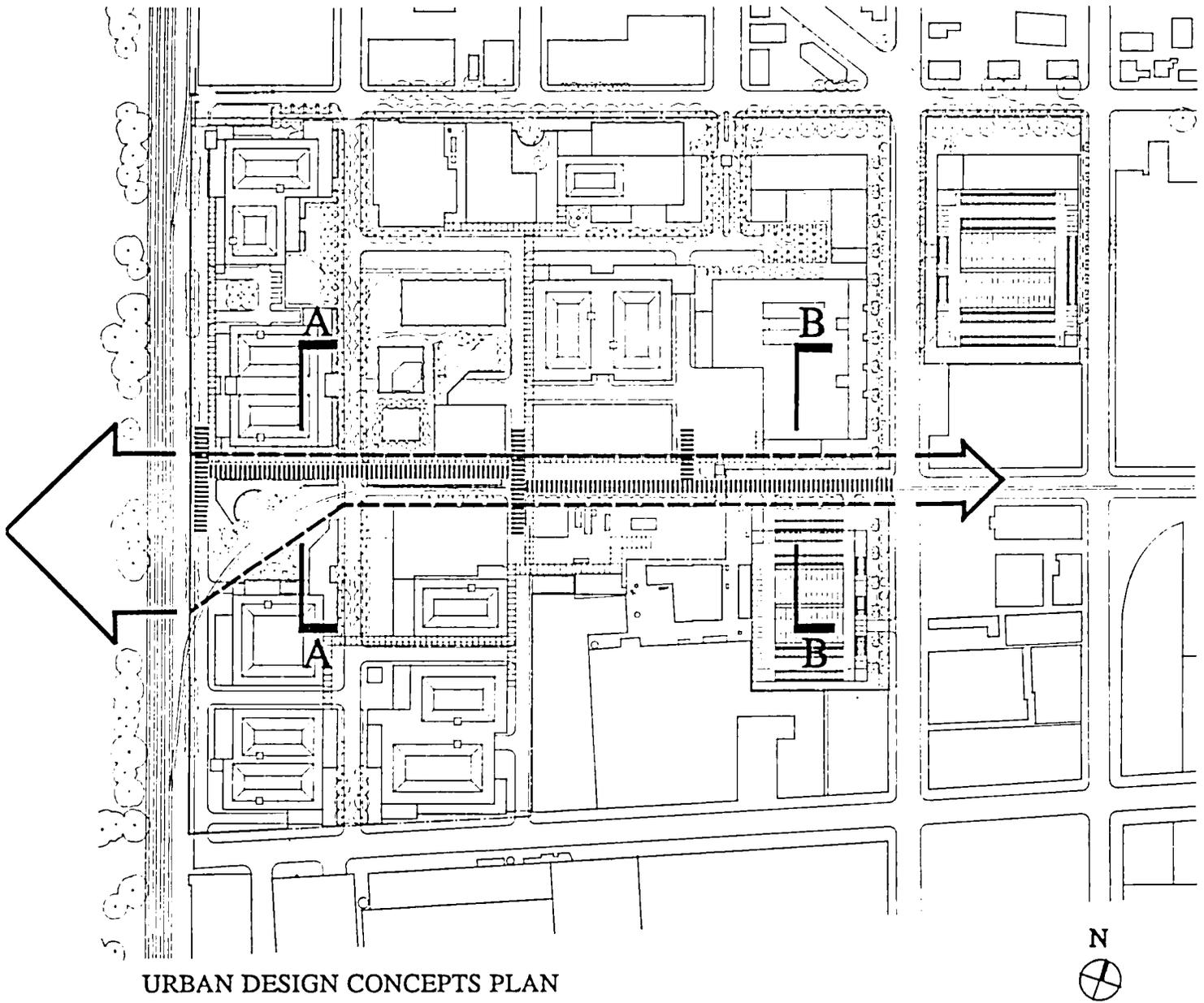


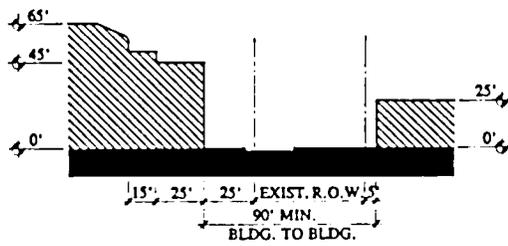
Figure 34. Location Map



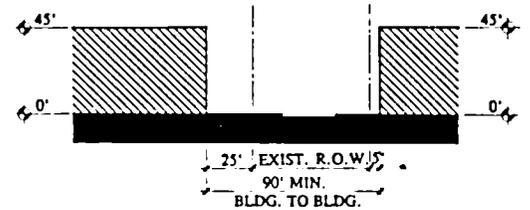


**URBAN DESIGN CONCEPTS PLAN**

- — — — — - Maintain Parker Street as a view corridor through the site.
- ||||||| - Develop Parker as a *service street* with pedestrian amenities and *service accessway* connections.



**SECTION A**



**SECTION B**

*Figure 35. Parker Street Urban Design Concepts and Dimensional Requirements*

Develop Parker Street as a major view corridor through the site and an *industrial street* with new pedestrian amenities. It will provide primary *service access* to the site. Continue the street to the western boundary of the site so as to allow views of the Bay. Landscape elements such as trees or hedges may screen buildings adjoining the street but should not encroach on potential views of the water.



Figure 36. Parker Street:  
*character sketch*

### Current Conditions:

At present the public right-of-way of Parker Street terminates in the Miles site. Up to that point it is presently hard in character, with few trees, dominant paving and a rail spur. The visual corridor through the site is now partially blocked by a building, but beyond that is open through Aquatic Park. West of Seventh Street to the current site entry, evergreen pear trees are located along Parker Street.

### Instructions:

Maintain Parker Street as a view corridor through the site.

1. Re-align the western portion of Parker Street approximately 25 feet to the north to provide for a landscaped open space in the foreground view of Aquatic Park.
2. Widen the angle of view at the western end of Parker Street. Continue the road from Fourth Street to the western property line, including an informal *open green* which extends from Parker to the existing railroad spur. This space will include no buildings and should be landscaped so as not to interrupt the view corridor. It will be reserved for a water retention area, to be designed in a way that adds positively to the network of outdoor spaces.

Develop Parker as a *service street* with pedestrian amenities.

3. Develop a *site entry* at Parker west of Seventh.

4. Use Parker Street as the major delivery and *service access* to the site.

5. On the north side of Parker between Seventh Street and the entry area, install a single row of upright trees, as well as additional planting as appropriate. Moraine Ash, Raywood Ash, or Locust trees are examples of appropriate plants. These landscape elements should be located in the designated 25 foot setback, spaced at approximately 18 feet on center.

6. On the south side of the street, the curb should be moved 8 feet into the street, taking up the existing parking lane, to provide additional room for sidewalk and planting. This will include a row of upright trees and incidental landscape next to the buildings. Moraine Ash, Raywood Ash, or Brazilian Pepper Tree are examples of appropriate plants.

7. The 25 foot setback on the north side of the street may also include similar upright trees and incidental landscaping as desired. In addition, the *utilities rack* may be located here. (See Exhibit D of the Development Agreement.)

8. Give special design attention to the *utilities rack* as it crosses the street.

Refer to Exhibit D of the Development Agreement and *Figure 35* for required Setbacks and Stepbacks.

D. SIXTH STREET

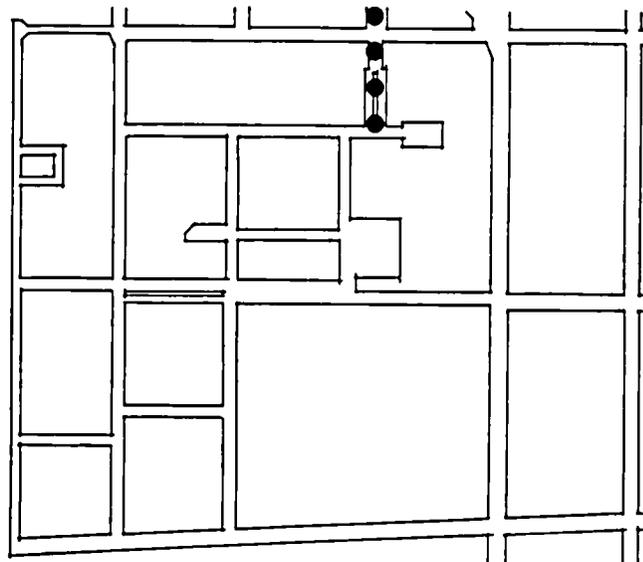
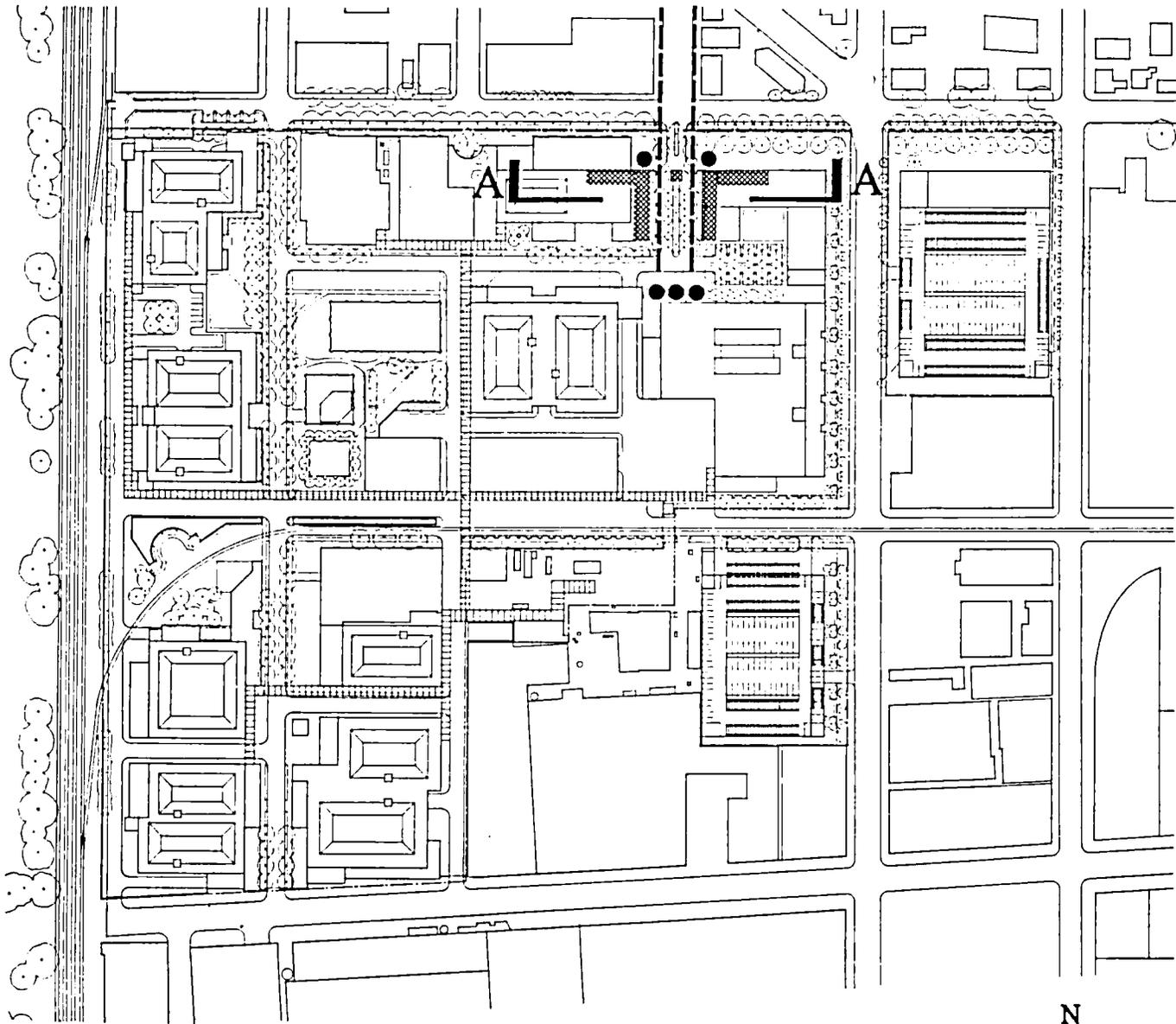


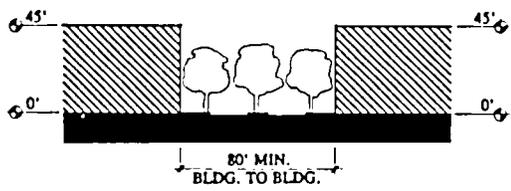
Figure 37. Location Map





**URBAN DESIGN CONCEPTS PLAN**

- — — - Extend the existing street grid into the site.
- ▨ - Create a *site entry* gateway defined with buildings.
- ● ● - Emphasize the *site entry* with landscape elements and a landscaped visual terminus.



**SECTION A**

*Figure 38. Sixth Street: Urban Design Concepts and Dimensional Requirements*

Sixth Street should be developed as a main visitor *site entry*, with a gate, entry court and activity center opposite the terminus of Sixth Street.

**Current Conditions:**

At present Sixth Street does not extend into the site.

**Instructions:**

Extend the existing street grid into the site.

1. Continue Sixth Street in its present alignment to meet Cutter Way, extending the local street grid and creating a visual link between the adjacent neighborhood and the main employee and visitor *site entry*.

2. Plant trees along Sixth Street to visually tie the street to the surrounding neighborhood, extending the pattern of existing London Plane trees found on Sixth Street.

Create a *site entry* with a landscaped visual terminus.

3. Use building frontages on either side of Sixth Street to help define this principal gateway.

4. Mark the gateway with distinctive tree plantings similar to the gateway planting at Dwight Way and Seventh and other landscaping to supplement the street tree pattern.

5. Locate dense, tall plantings to form a strong terminus at the end of Sixth Street. Possible choices are Poplar, Eucalyptus, Cedar and Pine.

Refer to Exhibit D of the Development Agreement and *Figure 38* for dimensional requirements.

E. DWIGHT WAY

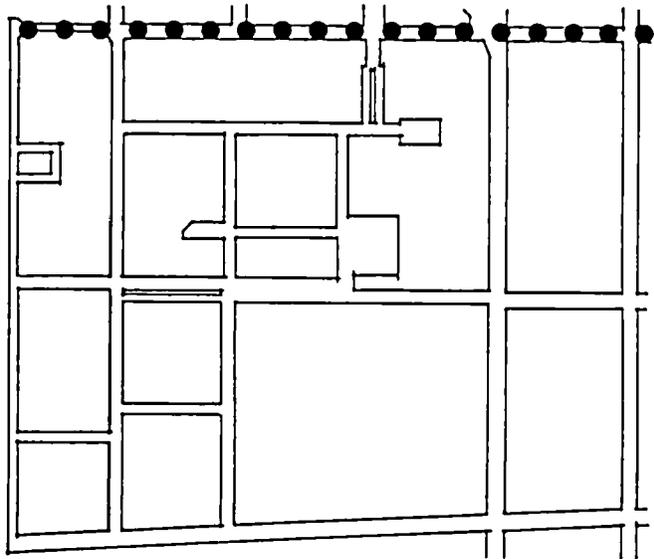
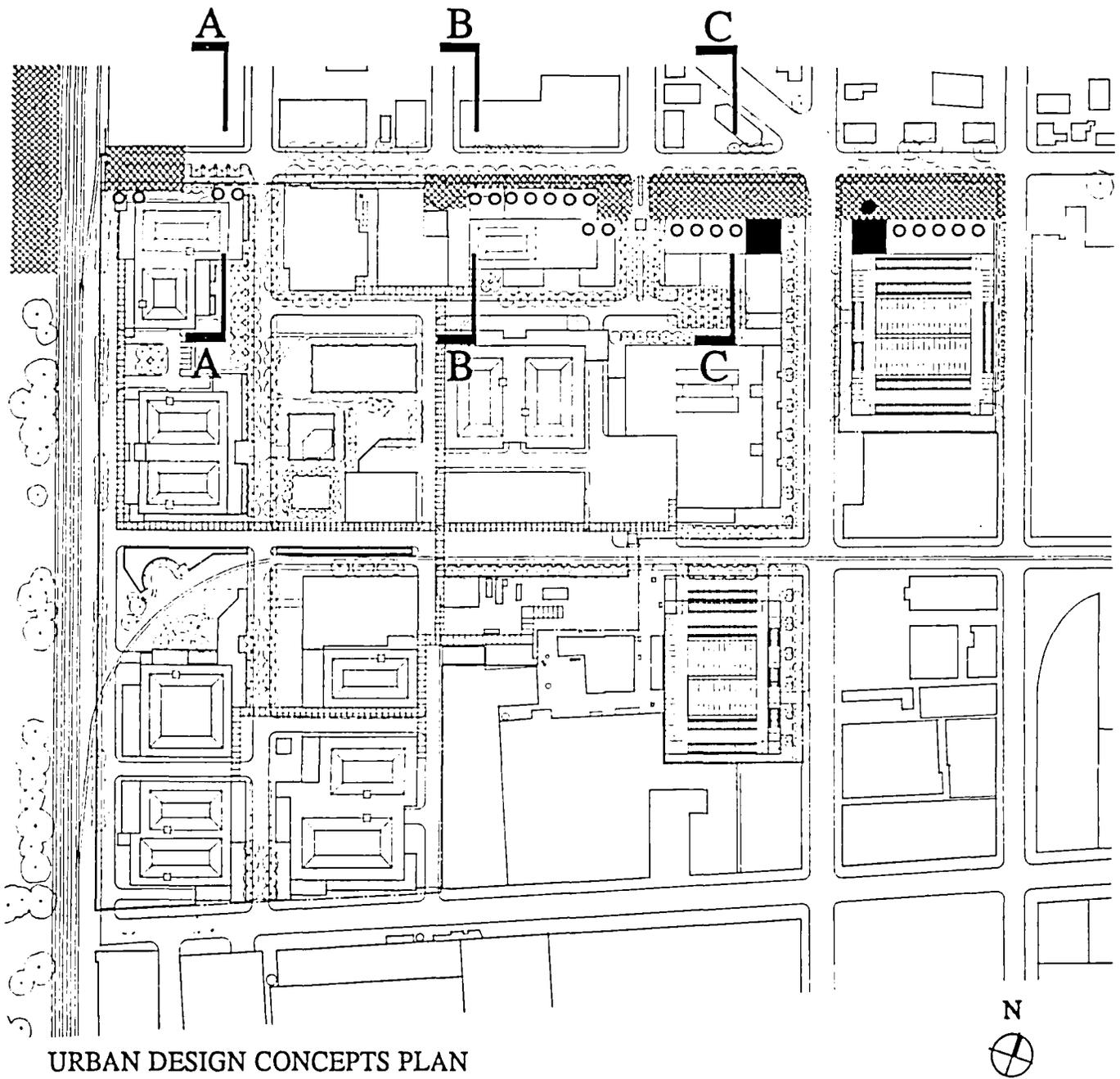


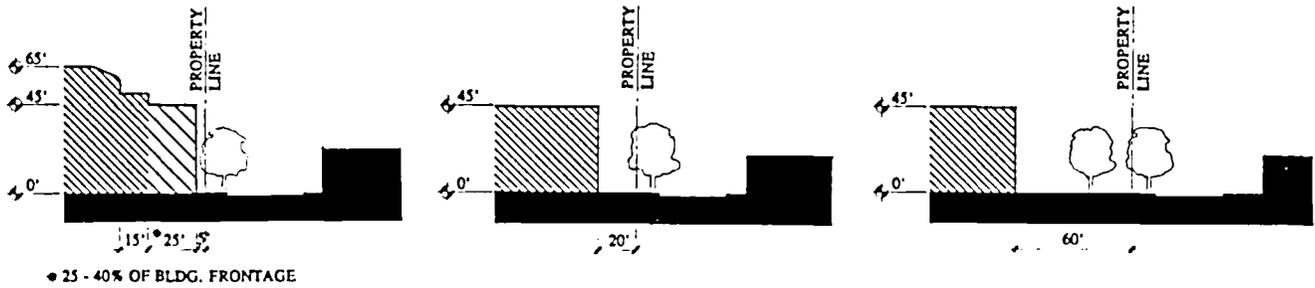
Figure 39. Location Map





**URBAN DESIGN CONCEPTS PLAN**

- ○ ○ - Locate active uses at lower levels.
- - Create a cohesive frontage along Dwight Way, including an architectural anchor for the site at Seventh Street.
- ▨ - Develop a network of open spaces connecting to Aquatic Park.



◆ 25 - 40% OF BLDG. FRONTAGE

**SECTION A**

**SECTION B**

**SECTION C**

*Figure 40. Dwight Way Urban Design Concepts and Dimensional Requirements*

Enhance the character of the neighborhood by giving special treatment to Dwight Way.

**Conditions:**

Dwight Way is a major street in Berkeley, forming, in its upper reaches, the southernmost border to the University's direct influence and providing, west of Martin Luther King Jr. Way, one of the few signaled east-west through streets. It shifts alignment slightly at San Pablo, so the view corridor that the street space establishes from the higher ground east of San Pablo passes over the properties to the north of Dwight Way, not over Miles property. West of San Pablo the street space has so little slope that views out to the Bay at the end of the street are blocked by trees along Dwight Way and in Aquatic park. West of Fourth Street there is a slot view to the bay across the northwest tip of the property, but at present this area of the street is mostly deserted, ill-maintained and potentially unsafe. Existing trees along Dwight Way west of Eighth Street soften the edge of the site and provide a residential scale to this edge.

Existing tree species along Dwight Way are Chinese Elm, London Plane and Sweetgum, all of which are thriving. The Chinese Elm trees are susceptible to Dutch Elm disease and will need to be replaced with other tree types in the future if they decline. No new plantings of Chinese Elms are allowed in the city.

**Instructions:**

**Locate active uses at lower building levels.**

1. Arrange buildings so that there are offices and congregating spaces adjacent to and overlooking Dwight Way. There



*Figure 41. Dwight Way: character sketch*



Figure 42. Dwight Crescent:  
character sketch

should be a sense of activity within the buildings evident from the street and employees should be able to view the street and Dwight Gardens.

Create a cohesive frontage along Dwight Way, including an architectural anchor for the site at Seventh Street.

2. Along Dwight Way, the facades' cadence and scale should create a cohesive street frontage. This would include both the buildings and the *site boundary*.

3. The *site boundary* should be located so that landscaped areas on Dwight between Sixth and Eighth Streets are accessible to the public. The *site boundary* along the remainder of Dwight Way should be free of visual obstruction where appropriate.

4. Clarify the entry sequence into the site by emphasizing the main building entrance with an arcade, porch, canopy, or equivalent architectural element. This should occur within view of the principal gateway into the site, visitor parking area, or both.

5. New buildings located at the corners at Dwight Way and Seventh Street should create an architectural anchor for the Miles site. To this end, special attention should be given to the design of these buildings, and a taller element shall be employed on the buildings on either side of the intersection of Dwight and Seventh to mark this intersection. The width of this element shall not exceed 25% of the total building frontage on Dwight.

Develop a network of open spaces connecting to Aquatic Park.

6. Create *linear landscape beds* along the Dwight Way edge of the property and at the end of the street with plant

types related to those along Dwight Way.

7. Set buildings back to provide a 60 foot wide continuous *linear landscape element* spanning between Sixth Street and Eighth Street. If this space becomes wider than 80 feet, it should conform to the guidelines for an *open green*. This area should be used to establish a strong identity for the Miles campus and to define an employee and visitor *site entry* at the terminus of Sixth. It will provide a community amenity, help to visually clarify the shift of southbound traffic from Sixth to Seventh Streets, and act as a transitional space between the Miles campus and housing on the north side of Dwight Way.

8. Create a well lighted *promenade* along the south side of Dwight Way leading to the main entry on Sixth Street by continuing the existing street tree pattern using London Plane trees, adding a double row if possible between Sixth and Eighth Streets. This strategy increases the presence of people on the street and establishes further linkages with the community.

9. Where possible, plant additional trees within the Dwight Way setback to punctuate and screen the building facades. These trees will be of more vertical habit than the street trees, with contrasting form and texture. Appropriate choices are Alder and Hornbeam.

10. Create Dwight Gardens, a cul-de-sac with a pleasant *garden court*, as the terminus of Dwight Way. Possibly work with the City of Berkeley in the future to develop an at-grade pedestrian accessway to Aquatic Park, by a ramp and stair from the street. Establish this new public amenity as the culmination of a series of green spaces and passages along Dwight Way. A composition of trees, open areas, and possibly a special

water feature will define this public transition area.

11. As existing Chinese Elm between Fourth and Sixth Streets decline, replace with London Plane trees or Sweetgum trees.

12. Use site-specific art installations to highlight the history of the area and of the scientific and technical developments leading to the Miles site. This could take the form of mosaic murals with text and images combined with areas of specialized pavings. These could recur at several points along the wall at the Dwight Way property edge.

13. Work with the City of Berkeley to devise an appropriate localized lighting system that will enhance pedestrian security in the area.

14. At the intersection of Seventh Street and Dwight Way an emphatic cluster of tall trees should be planted to provide a visual terminus to Dwight Crescent. A similar planting of tall trees across Seventh Street would emphasize the gateway or transition into the industrial area south of Dwight Way. The gateway to the site at Sixth Street should also be marked with the same tree species. Lombardy Poplar, Deodar Cedar, Canary Island Pine, Eucalyptus, Blue Atlas Cedar, and Monkey Puzzle Trees are appropriate choices.

Refer to Exhibit D of the Development Agreement and *Figures 40* and *43* for required Setbacks and Stepbacks.

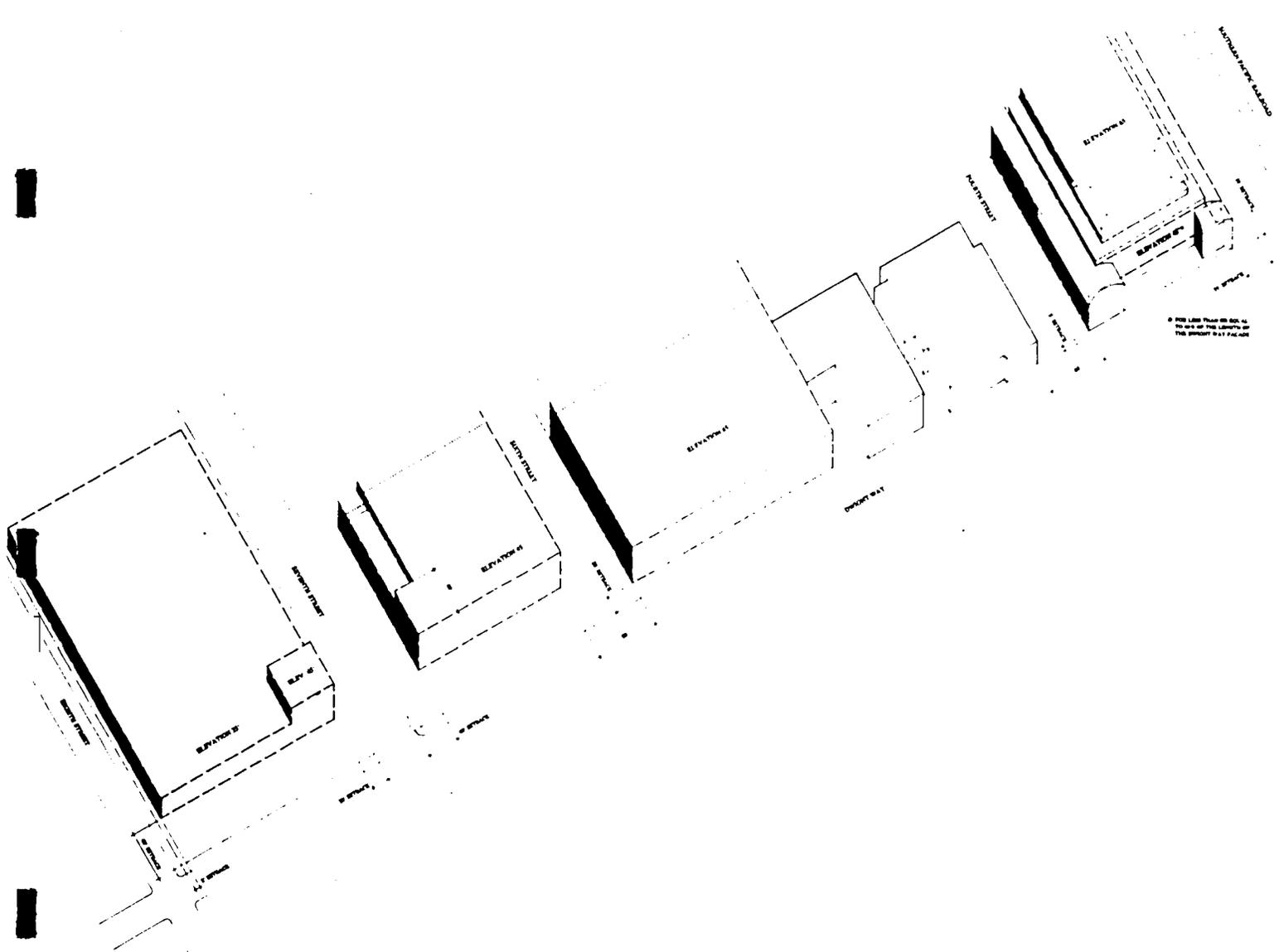
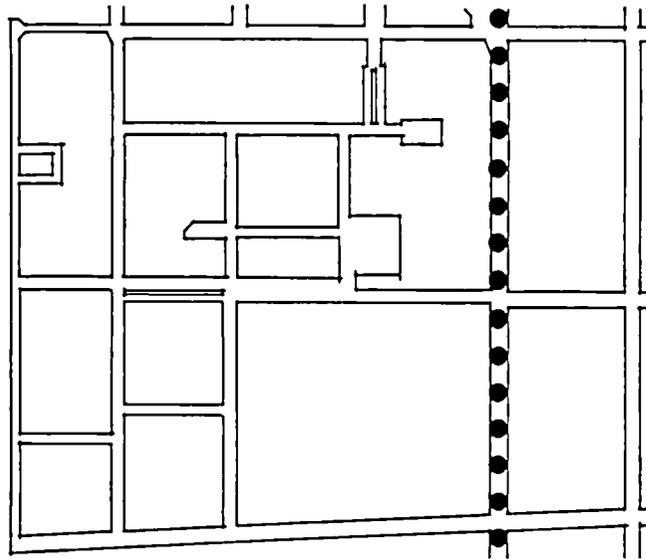


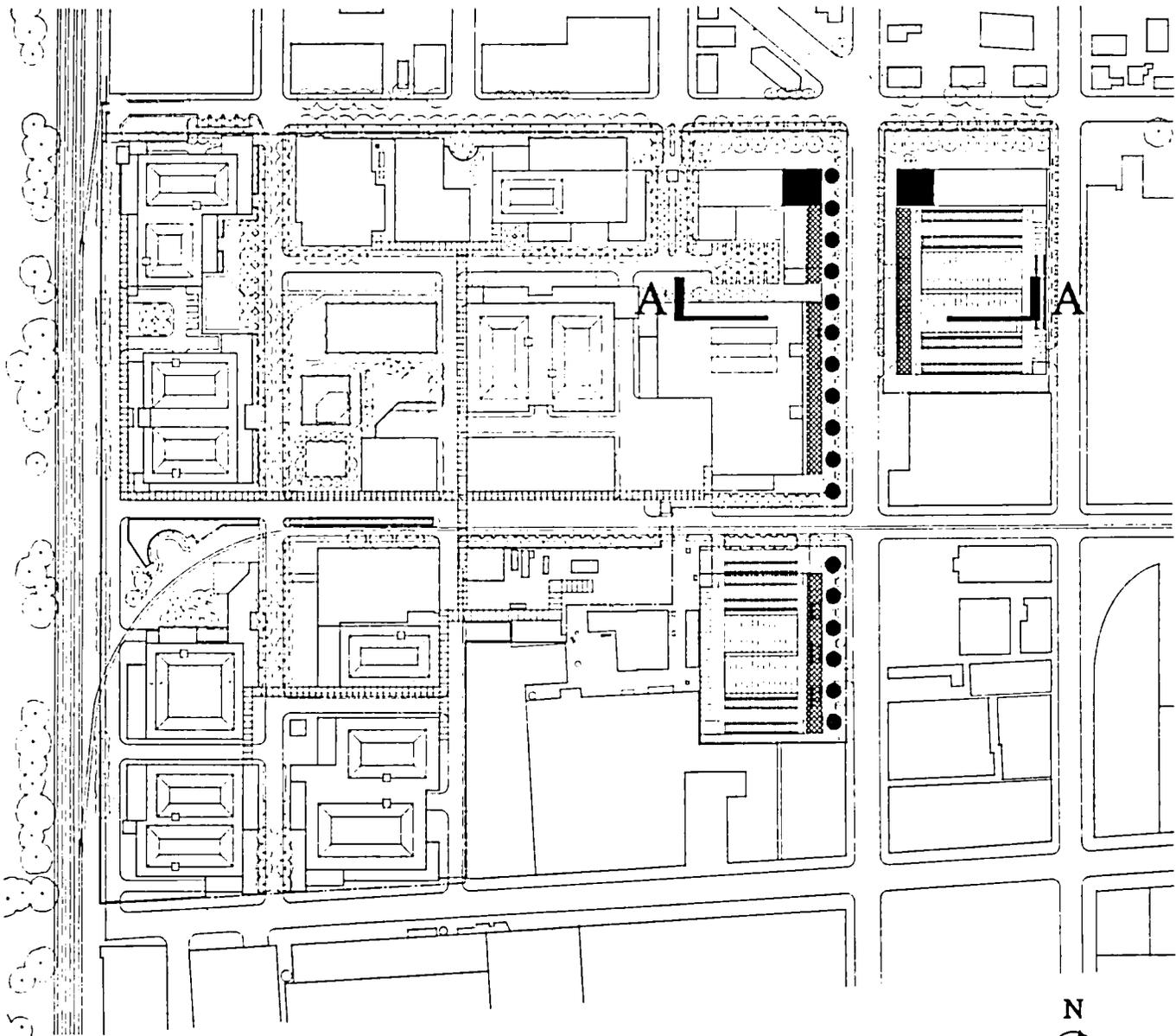
Figure 43. Dwight Way: Allowable Building Envelope

**F. SEVENTH STREET**



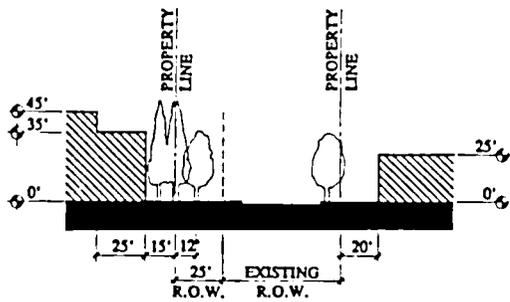
*Figure 44. Location Map*





**URBAN DESIGN CONCEPTS PLAN**

-  - The architectural design of new buildings should respond to the visual importance of the Seventh Street frontage.
-  - Create an architectural anchor at Dwight Way.
-  - Create an emphatically landscaped edge.



**SECTION A**

*Figure 45. Seventh Street: Urban Design Concepts and Dimensional Requirements*

The long stretch of Miles property along Seventh offers the opportunity to set the standards for new industrial development in West Berkeley. It will be important to retain the industrial quality of Seventh Street, while meeting the standards for architectural excellence established throughout the site.



*Figure 46. Seventh Street:  
character sketch*

#### **Current Conditions:**

A major north-south throughway from the Ashby Exit to Dwight Way where traffic is shunted over to Sixth Street. It is primarily industrial in character, with warehouses and related uses currently making up the street frontage between Ashby and Dwight Way. Presently there are few street trees on Seventh but existing London Plane on Sixth Street are a strong feature of this route. These should be carried through to the intersection of Dwight and Seventh Street.

#### **Instructions:**

Respond to the importance of the Seventh Street with special attention to the architectural design of the buildings located along its frontage.

1. Design all structures and the *site boundary* to meet the architectural standards defined for the site.
2. Work with the City of Berkeley to establish an appropriate street lighting system that is effective for pedestrians and for traffic.
3. Do not locate service entries on Seventh Street.
4. If a site perimeter wall is needed, locate and design it so as to maximize visual accessibility of the buildings and landscape.

**Create an architectural anchor at Dwight Way.**

5. Use the additional allowable height on either side of Seventh Street to develop an architectural element which will anchor the site.

**Create an emphatically landscaped edge.**

6. From Dwight to Carleton plant columnar trees in a specific rhythmic sequence corresponding to the broad structural bays and large building modules which characterize this industrial area. The clusters could consist of three trees spaced at 10 foot centers. The trees can be planted in the 15 foot building setbacks. This tree planting along an otherwise hard-edged industrial road will reinforce the community importance of this major north-south through street, enhance the approach to the Miles site, and screen the warehouse and parking buildings. Lombardy Poplars or Fremont Poplars would be appropriately emphatic trees for this important thoroughfare. In addition, a row of smaller trees next to the street at 20 foot centers will be located in a minimum 4 foot planting strip adjacent to a public sidewalk, so that they will remain if the street is widened. Appropriate choices are Raywood Ash, Chinese Pistache and Hornbeam.

**Refer to Exhibit D of the Development Agreement and Figures 45 and 47 for required Setbacks and Stepbacks.**

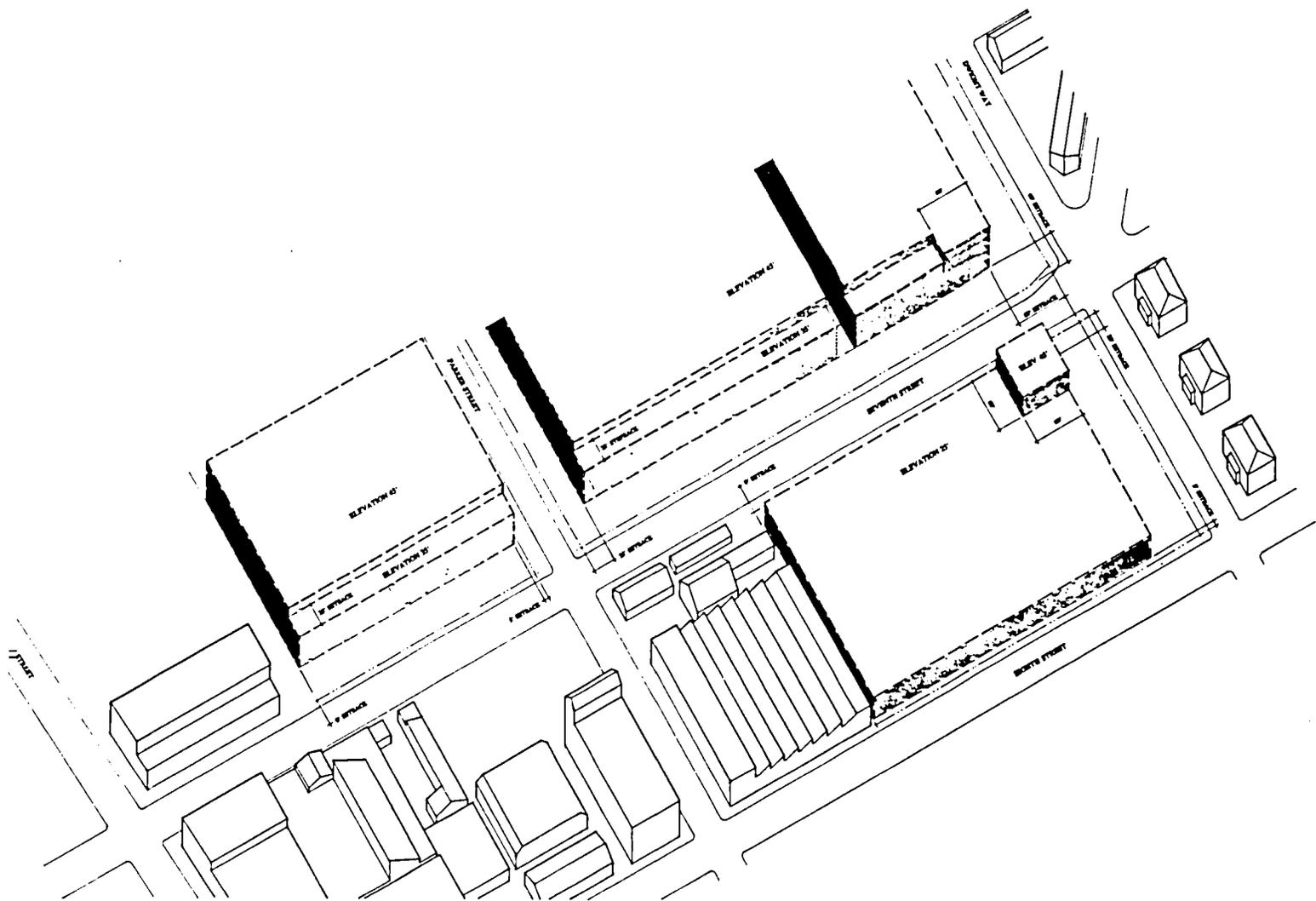


Figure 47. Seventh Street: Allowable Building Envelope

G. EIGHTH STREET

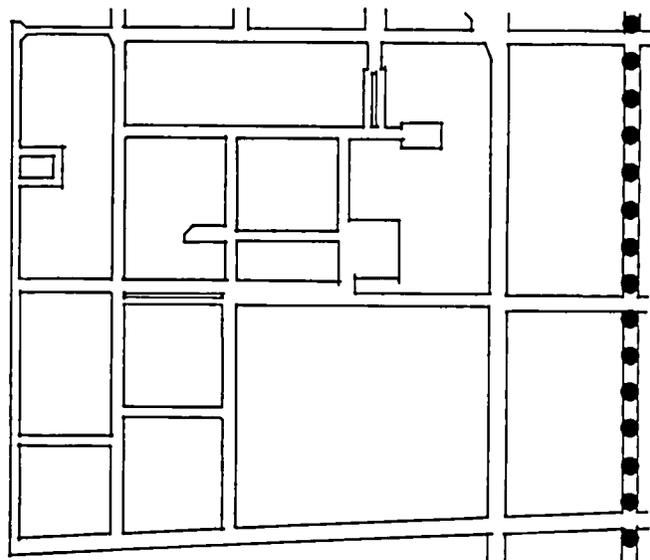
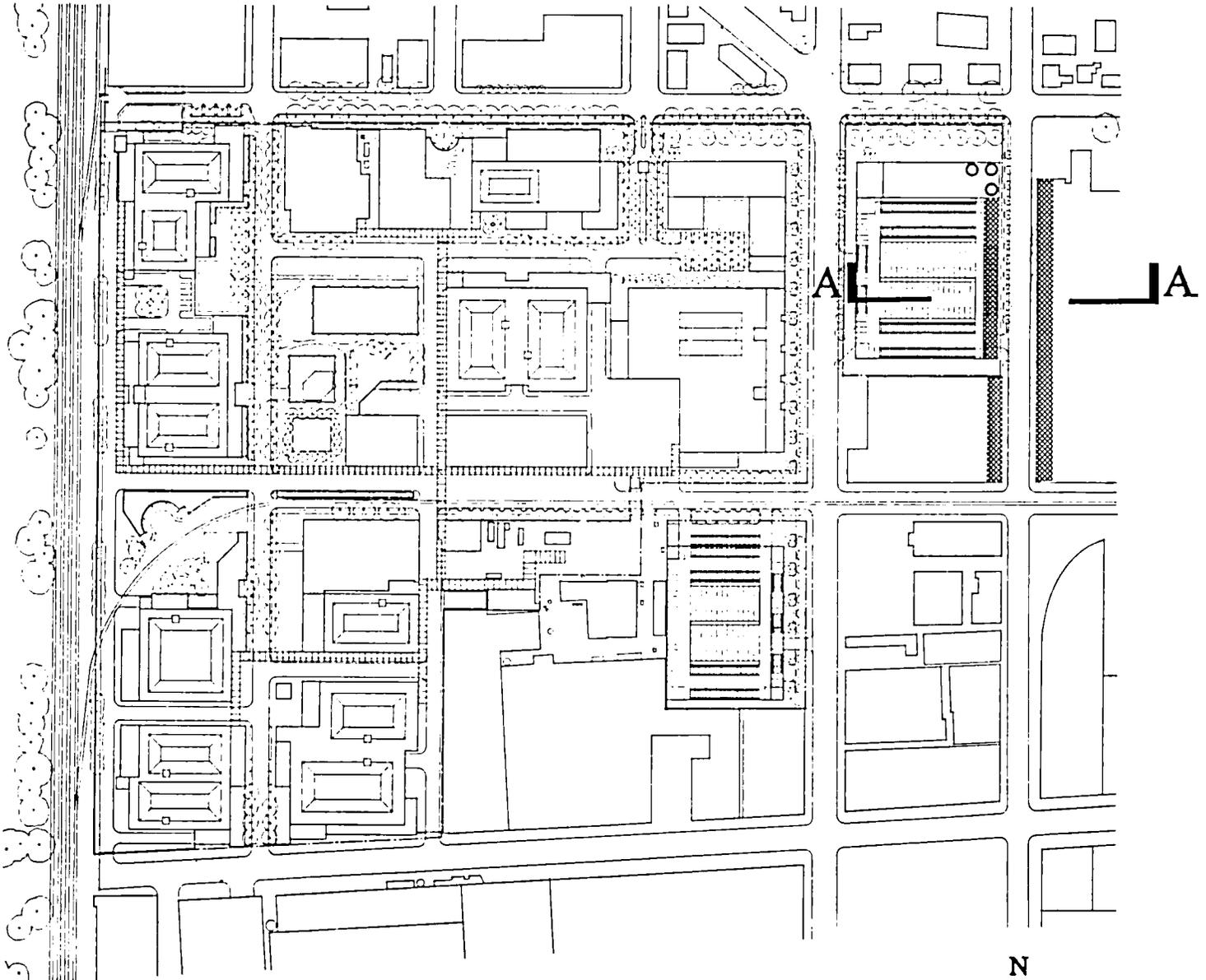


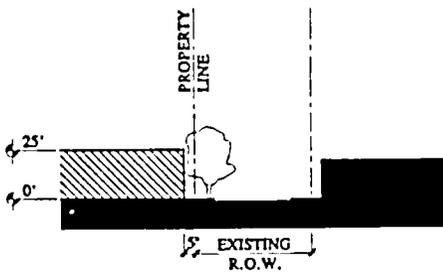
Figure 48. Location Map





**URBAN DESIGN CONCEPTS PLAN**

- ○ ○ - Develop active uses at the corner of Dwight Way.
- ▨ - Harmonize with the existing context.



**SECTION A**

*Figure 49. Eighth Street: Urban Design Concepts and Dimensional Requirements*

**Eighth Street should be treated in such a way as to harmonize with the neighboring buildings.**

**Current Conditions:**

Little used by through traffic, Eighth Street is bordered on the east by a converted industrial building which houses live/work spaces. London Plane trees line a portion of the western frontage.

**Instructions:**

**Develop active uses at the corner of Dwight Way.**

**1. Provide active uses at the northeast corner of the site fronting the *linear landscape bed*.**

**Harmonize with the existing context.**

**2. Design all structures (including buildings and the *site boundary*) to meet the architectural standards defined for the site.**

**3. Continue existing Sycamore trees along the west side of the street adjacent to the new building.**

**4. Locate curbcuts along Eighth Street to minimize impacts on the neighborhood and on the intersection of Eighth Street and Dwight Way.**

**Refer to Exhibit D and *Figure 49* for required Setbacks and Stepbacks.**

H. CARLETON STREET

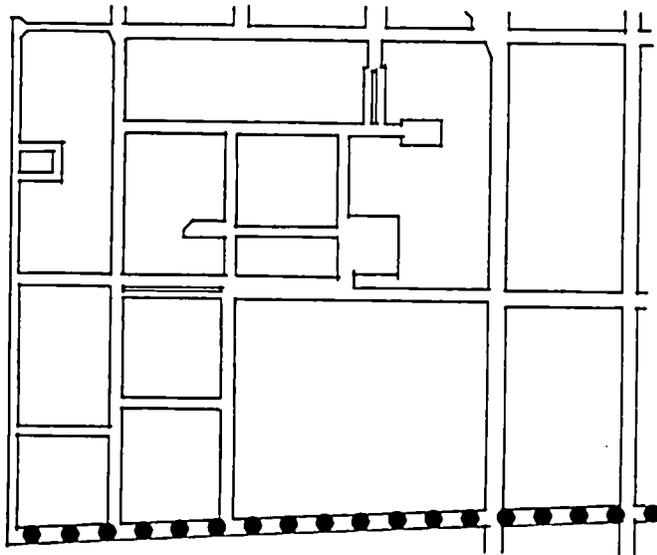
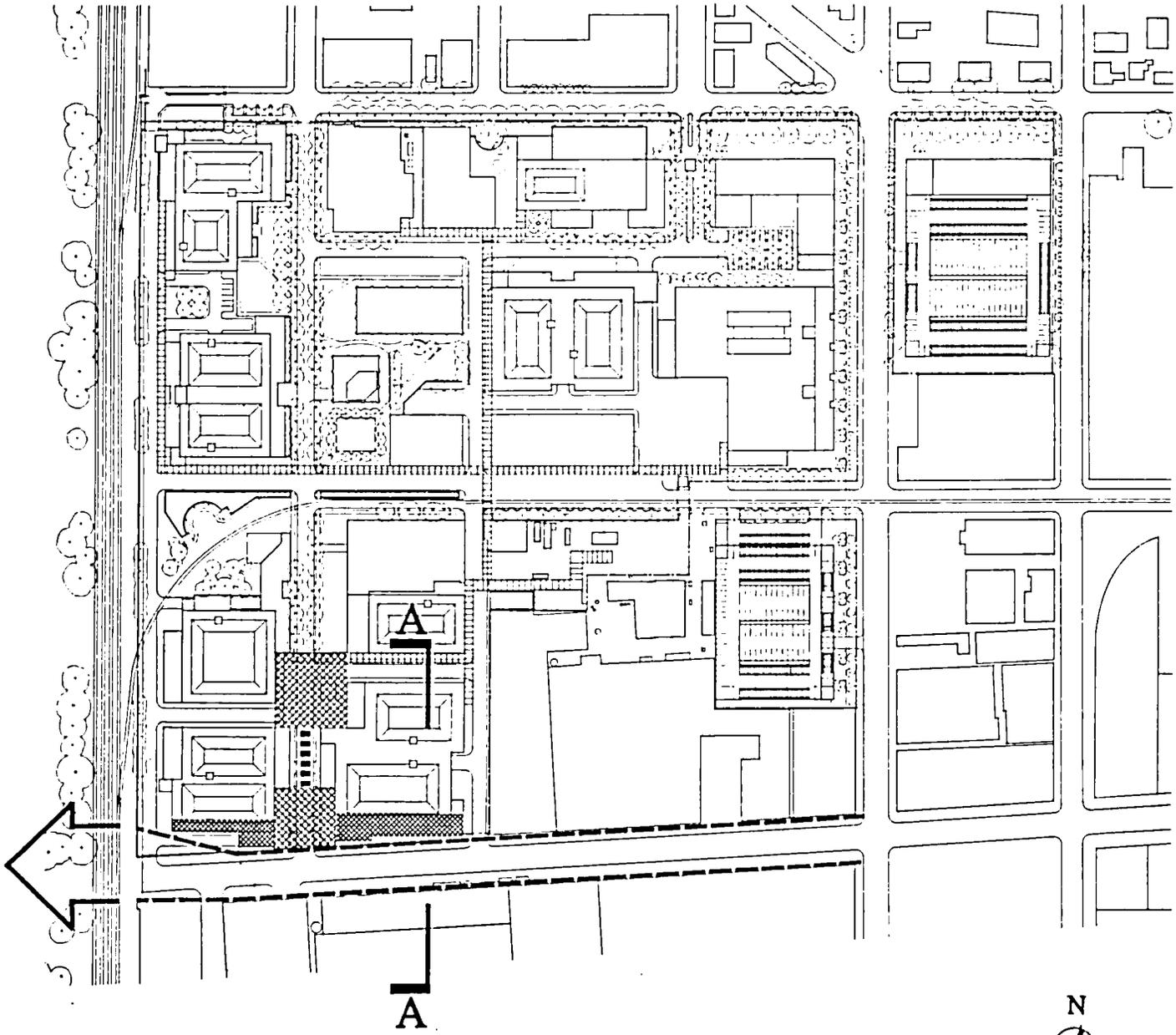


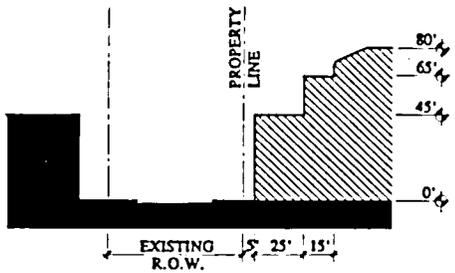
Figure 50. Location Map





**URBAN DESIGN CONCEPTS PLAN**

- - Maintain the view corridor.
- ▨ - Develop an industrial character with lower volumes at the street edge.
- ▩ - Visually connect the inner plaza to the street.



**SECTION A**

*Figure 51. Carleton Street: Urban Design Concepts and Dimensional Requirements*

**Maintain Carleton as a view corridor with an industrial character.**

**Current Conditions:**

Carleton Street jogs at San Pablo, so the view corridor is only from west of this point, providing a narrow slot view to the Golden Gate Bridge. From Seventh Street, Carleton is presently bounded west by two, three and four story industrial buildings, most are built to the sidewalk, some have significant historical features.



*Figure 52. Carleton Street:  
character sketch*

**Instructions:**

**Maintain the view corridor.**

1. Maintain a view corridor to the Bay, widening the ground level view at the end of the roadway.

**Develop the industrial character with lower volumes at the street edge.**

2. In keeping with the existing quality of the street, bring lower building elements to the required City setback and provide no landscaping on this edge except at the westernmost end.

**Visually connect the inner plaza to the street.**

3. In the southwestern quadrant of the site, use street trees to visually connect with the inner *plaza* on Fourth Street with the intersection at Carleton with street trees at the corner of Carleton.

Refer to Exhibit D of the Development Agreement and *Figures 51 and 53* for required Setbacks and Stepbacks.

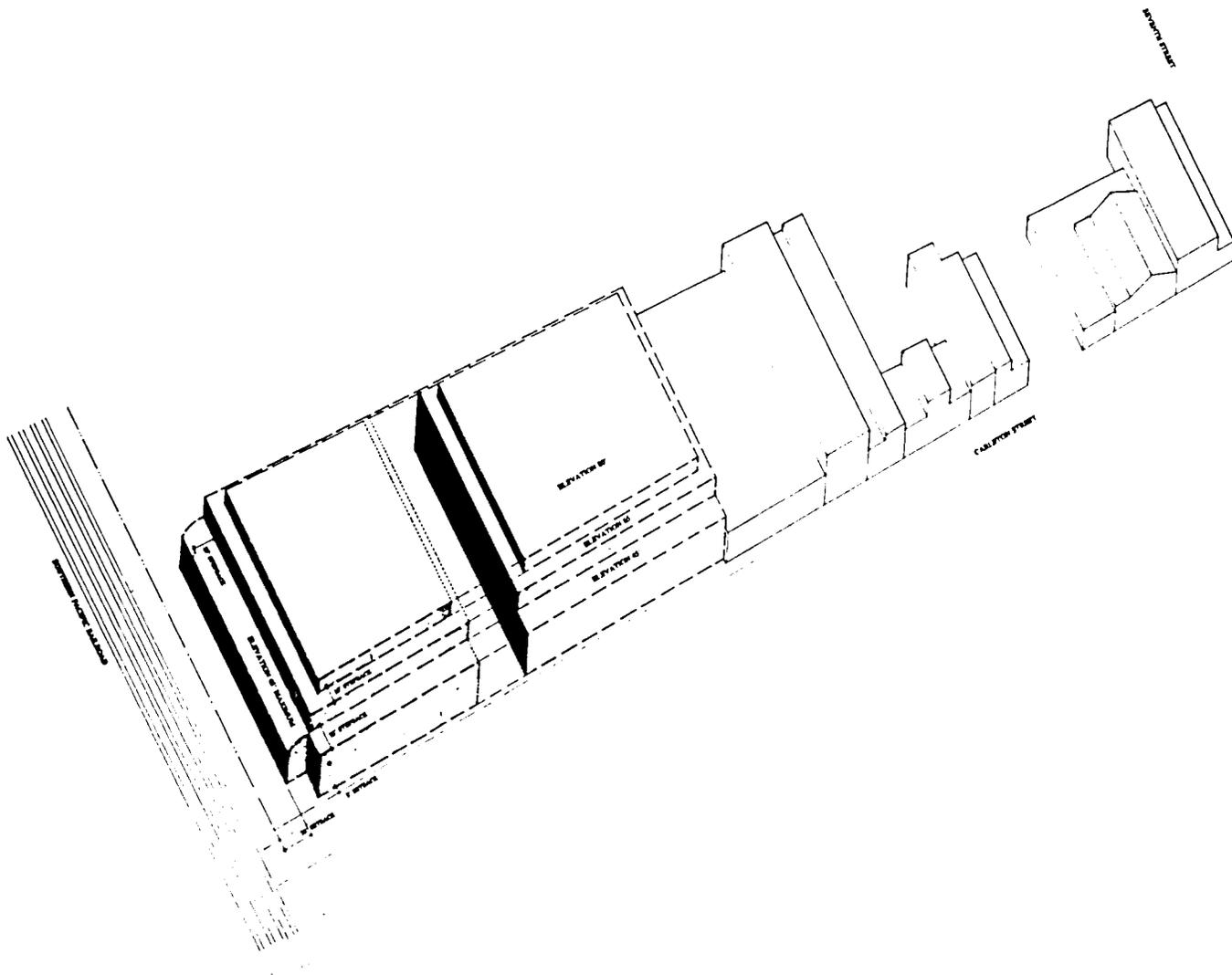


Figure 53. Carleton Street: Allowable Building Envelope

J. SITE EDGE AT AQUATIC PARK

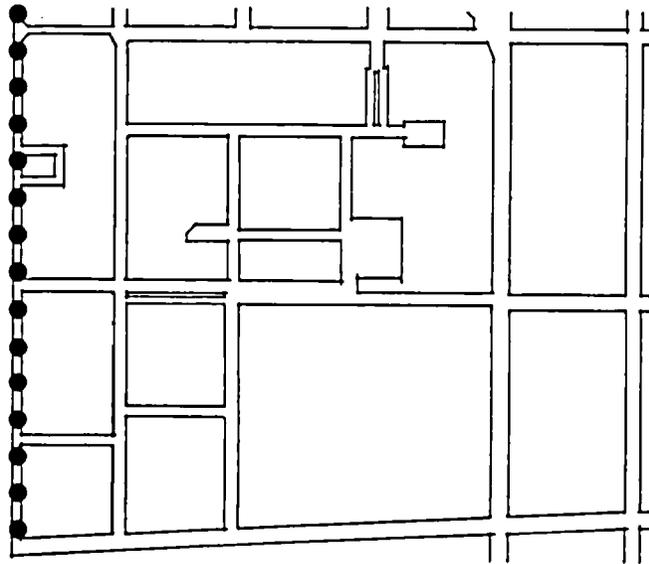
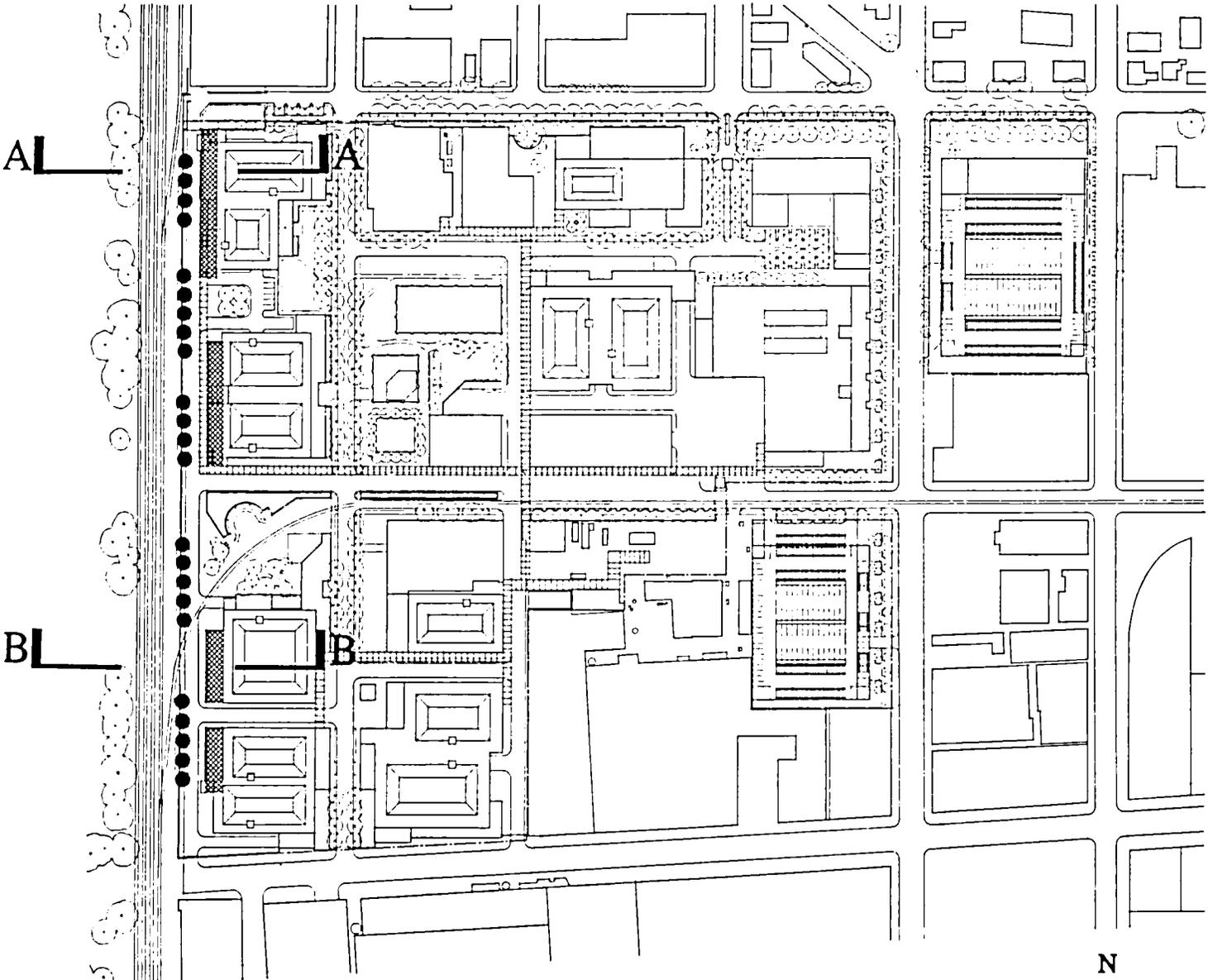


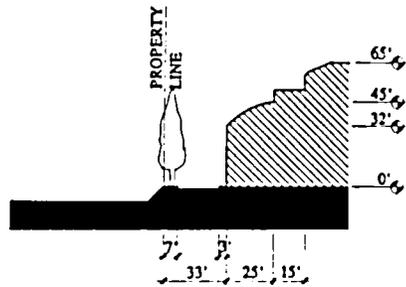
Figure 54. Location Map



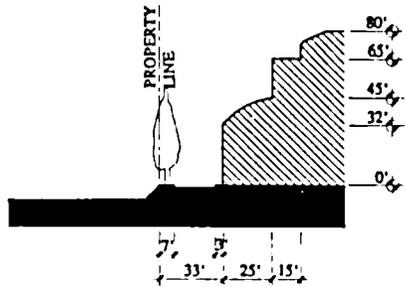


**URBAN DESIGN CONCEPTS PLAN**

- - Create a windbreak.
- ▨ - Minimize the apparent building volume.



**SECTION A**



**SECTION B**

*Figure 55. Site Edge at Aquatic Park: Urban Design Concepts and Dimensional Requirements*

**Set back buildings at the western edge (Railroad Right-of-Way) to minimize the impact of the buildings on Aquatic Park.**

**Current Conditions:**

The western edge of the site is bordered by the railway and Aquatic Park. It is generally swept by winds off the bay and is dominated by the constant sound of freeway traffic. The site forms a background to this segment of the Park. The Park Master Plan calls for soundwalls along the Freeway that will block views of the site from the highway. Existing trees in Aquatic Park include Willows, Eucalyptus and Poplar.

**Instructions:**

**Create a windbreak.**

1. Provide tall windrows at the western boundary of the site along the Southern Pacific Railroad tracks to provide a backdrop for the park. There should be openings between the windrows to provide views from the site into the park at locations relating to the architectural features of the buildings. Windrows should be placed to provide screening for the buildings and to diminish winds entering the site.

**Minimize apparent building volume.**

2. Create a *site boundary* and employ scale giving elements in the design of the buildings along the west edge of the site to diminish the apparent massing of future buildings seen from the park. The wall and windrows mentioned will be located in a 7 foot wide strip on the extreme western edge of the site. The wall shall be constructed with pier footings to provide plants with adequate space for roots to develop. For the same reason, utilities should be kept out

of the planting beds and placed in the service road with a wide utility corridor.

3. Provide at least 3 feet between the curb and the building face to protect the lower walls from passing vehicles. (See Section K for Service Accessway instructions)

Refer to Exhibit D of the Development Agreement and *Figures 55 and 56* for required Setbacks and Stepbacks.

#### K. Service Accessways

Develop additional circulation elements primarily as *service accessways*. The intent is to provide on-site access for Miles, fire access, and visual breaks between building masses, especially adjacent to Aquatic Park.

#### Current Conditions:

N/A

#### Instructions:

1. Locate a *service accessway* parallel to the western boundary of the site, within the 33 foot setback. The roadway should be kept at least 3 feet from the building. At the property line there should be a 7 foot wide landscape strip (see section K. Aquatic Park Edge for details).

2. New *service accessways* shall link Fourth Street to the western frontage. These shall help prevent excessively long building facades facing Aquatic Park. One accessway shall be located within the middle third of the block defined by Dwight, Parker, Fourth and the western frontage. Another shall be located within the middle third of the block defined by Parker, Fourth, Carleton and the western frontage.

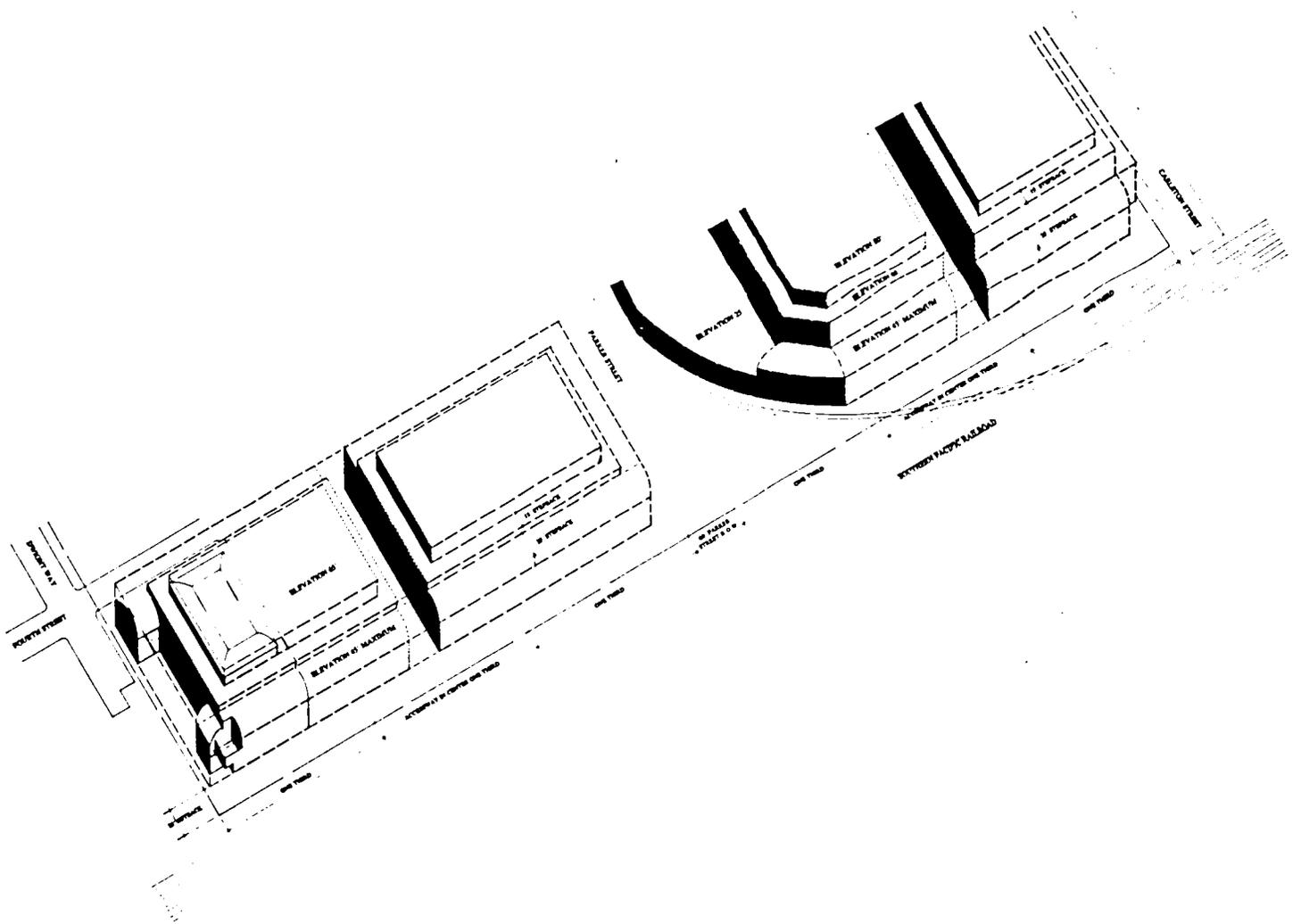


Figure 56. Site Edge at Aquatic Park: Allowable Building Envelope

## VI. ILLUSTRATIVE MASTER PLAN

The Illustrative Master Plan shows a projected build-out over the thirty year period following the Site Standards and Guidelines. To visualize an outcome over that period of time a series of assumptions have been made regarding the selection of options for the location of uses on the site and the size and configuration of structures within the designated building envelopes. The Illustrative Master Plan demonstrates that the projected building requirements for the Miles development can be met within the established framework in a way that contributes positively to the character of the city. It is organized effectively for the operations of the company, makes an enjoyable place to work and creates a campus-like setting integrated with the surrounding community of which Miles Inc. and the city of Berkeley can both be proud.

The higher buildings required by the Miles production processes have been located away from the adjoining residential areas and grouped so that they leave a lower view corridor along Parker Street and do not impact on the street level views along Dwight Way and Carleton Street. Buildings along Aquatic Park are varied in height and spacing so that they make a modulated edge to the park with a larger space at the center adjoining Parker Street, which opens views back up to the hills.

Seventh Street, which is an important passage through the city and a boundary for the manufacturing zone, has been given special attention in the plan. There are large setbacks which would allow for the eventual widening of the street and for a distinctive landscape of columnar tree intervals that are consistent with the industrial character of the area. The street is bordered, in the Illustrative Master Plan, by structured parking, warehouse and administrative buildings. Entry to the site by employees and deliveries will be simple and clear. Parking at this perimeter of the site will encourage some employees to take advantage of neighborhood services. Buildings along Seventh Street will all be within the existing zoning envelope or lower and set back farther. They will be big, simple undemanding structures consistent with the existing industrial character of the street but with areas of special interest in detailed architectural treatment.

The administrative headquarters for the site is at Dwight Way, where Seventh Street angles over to Sixth. This corner, and the frontage between Seventh and Eighth, are used to create a larger green space along Dwight Way fronting the residential neighborhood and allowing for the development of a coordinated building facade with many windows and openings to reinforce and watch over the street. There will be a gateway and entrance at Sixth and Dwight Way which will serve the administration building and provide access to the site for visitors and employees parking between Seventh and Eighth Streets. The buildings will be visually related by a consistent rhythm of structure and openings.

Utilities, maintenance and deliveries are located at the center of the site along Parker Street so that these essential services can be efficiently grouped, so that their impact is internal to the site and so that their low volumes and larger street

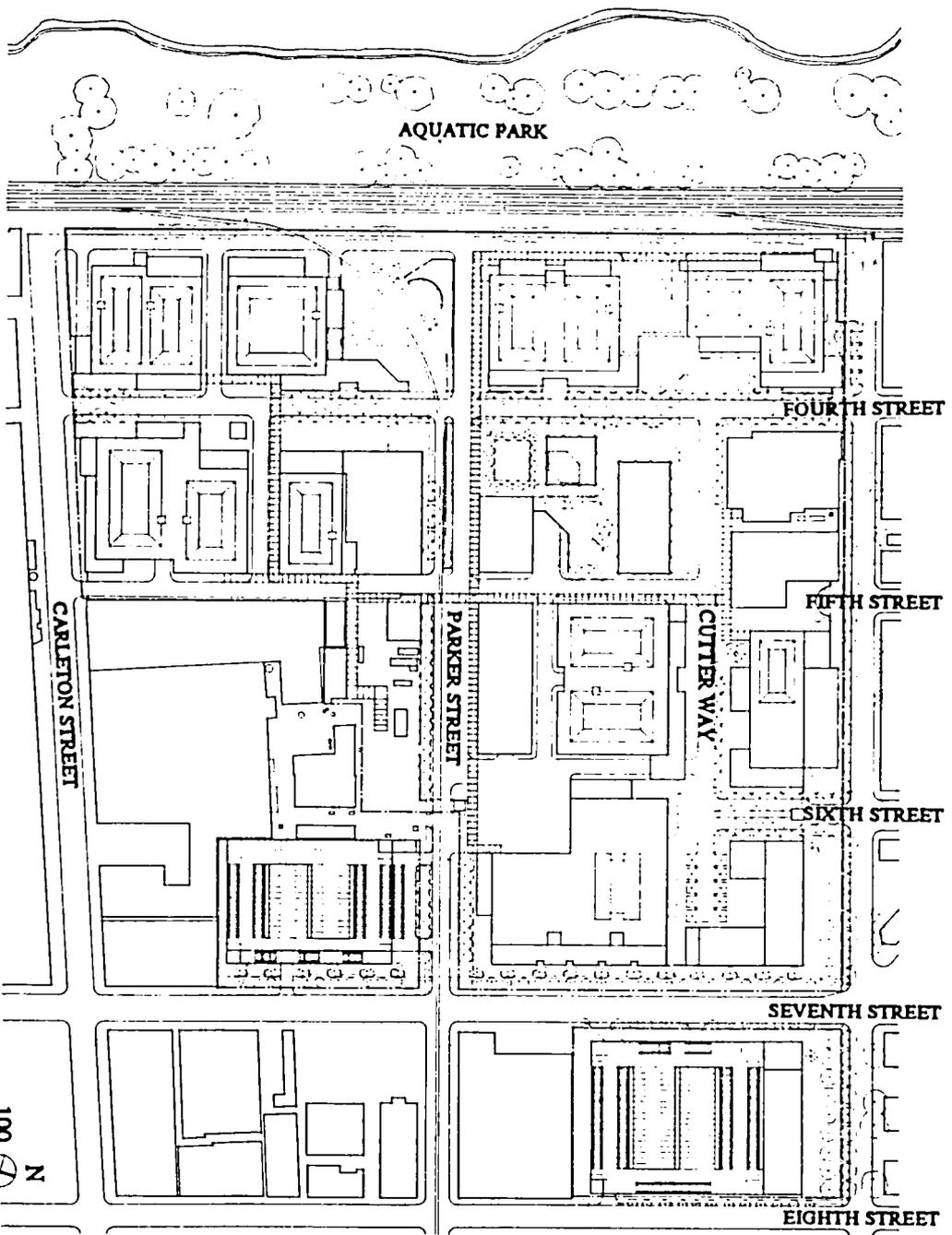


Figure 57. Illustrative Master Plan

spaces they require will contribute to and reinforce the openness along Parker Street to Aquatic Park. A row of street trees along the southern edge, combined with a widened sidewalk, would provide a landscaped, shaded walk from the parking structure into the site. The Utilities and Maintenance buildings which border Parker are simple structures that can provide an appropriate street wall for this space, fronted by the utilities rack which services the rest of the site from this location. As the rack passes over Parker Street it creates a large framed opening, a gate to the campus streets beyond.

Fourth Street and Cutter Way are the two campus streets that organize the pedestrian character of the site. Office sections of the production buildings, research spaces, the library and conference center, the cafeteria and administrative spaces front onto these two streets and a series of courts and landscaped spaces associated with them. Fourth Street is designed specifically to extend the character of this important Berkeley street into the site and Cutter Way is designed as an internal space, visually closed at each end to make a distinctively landscaped space within the complex and along the path between the administration building, the Sixth Street entry and the rest of the site. A diagonal series of courtyards and open spaces cuts across from Cutter Way to the green which is located in front of the cafeteria and at the foot of Parker Street. In the southwest corner of the site, production buildings have been shown grouped around a 120 foot x 120 foot hardscape plaza that terminates Fourth Street, but in turn has a clear visual and service link to Carleton Street beyond.

By visualizing build-out over thirty years this Illustrative Master Plan necessarily represents only one version of the specific way in which the site may be developed. The actual build-out will undoubtedly be different in specific configuration, but the essential framework that has guided the development of this plan is embodied in the Site Standards and Guidelines. These, properly administered by Miles and the City, will set the basis for a development that meets the goals and objectives illustrated in this Master Plan.

Lyndon/Buchanan Associates

## APPENDIX A

The soils on the site are generally heavy and poorly drained, with a high water table (reported in some areas to be 4-5 feet below the surface). The soils are capable of supporting only a narrow range of plant types. The attached plant list indicates several plants that are appropriate to the existing soil conditions. These plants should be used in locations where the extensive soil preparation described below are not required.

In order to create a healthy, well landscaped campus setting, the planting areas in the primary public outdoor spaces must be prepared in a manner that addresses the soil texture, soil drainage and soil chemistry. Agricultural suitability soil analyses are required for all planting areas, and the results should dictate the specific needs for preparation of each planting bed. In general, however, the following guidelines for planting area preparation should be required:

Planting areas should be a minimum of 4' wide and continuous to allow as much room as possible for healthy root growth. For street tree planting, continuous planting areas are preferred over individual tree wells.

The existing heavy soils within the planting beds should be excavated to a minimum depth of 3' and replaced with good quality imported topsoil.

Gravel subdrainage must be provided beneath the imported topsoil. This will entail an additional 1' deep excavation below the initial 3' excavation. Subdrainage in raised planting areas should be designed to discharge to the street or to the storm drainage system. A 4" perforated pipe should be installed in the gravel subdrain where necessary to daylight or to connect with the site drainage system.

Existing specimen trees located in areas of future construction shall be protected or transplanted. These are to be identified at the time of construction.

Plants are to be selected from the following plant list.

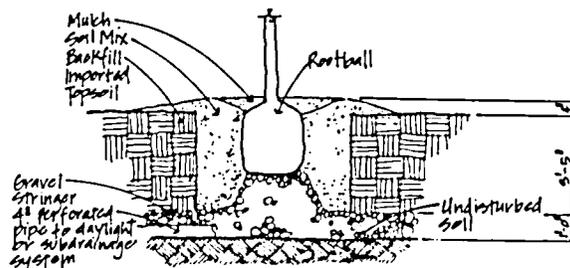


Figure 58. Soil Profile/Tree Planting Detail

The following tables are included for reference in the landscaping of the Miles site:

1. A chart describing plant types envisioned for the site.
2. A list of trees, shrubs and groundcovers that are compatible with wet clay soil, wind and drought, the fundamental conditions found at the Miles site. If the soil or micro-climate is altered significantly, the list of options increases enormously.
3. A list showing existing plants on or adjacent to the site which appear healthy and which could be used with proper soil preparation and climate control.

This listing includes mature sizes and indicates whether the plant would be suitable for use in plazas, streets or wind rows. It gives a cursory description of the plant's leaf and habit, tells whether the plant has notable flower color or autumn leaf change. It also indicates the normal plant growth rate under good conditions.

On the first list, all plants are tolerant of the conditions noted. However a plus sign on the chart indicates that the plant is *very* tolerant of the condition listed, a minus sign indicates that plant is tolerant of the condition.

A small "J" appears next to plants which are also listed by Jerold Mitchell in his letter to Robert Cole of August 31, 1990.

Appropriate "lawn substitutions" depend entirely on use. If the appearance of lawn is required and the area does not have to be walked on, the listed *Baccharis*, *Arctostaphylos*, *Thymus Praecox Arcticus* and *Hedera* can be used given that other conditions are right. If the proposed area of lawn is for pedestrian use, soft paving of gravel or decomposed stone is sometimes appropriate instead of grass. Sand can also be used for certain types of play areas. For all grassy lawn areas, drought tolerant grasses should be used. There is now a wide variety of hearty, drought tolerant and handsome grasses to choose from. Most can be kept green with limited water and mown to function as a traditional lawn or allowed to grow higher with a more natural appearance.

## GENERAL PLANT TYPES & CHARACTERISTICS

Plant Type & Location	Typical Conditions	General Characteristics
1. Street Trees (Dwight Way, 7th St., Eighth St., Parker St., 4th St.)	a. Exposed to wind and poor soil/drainage b. Exposed to wind and good soil/drainage	Take heat, poor drainage, smog, wind and pests. Non invasive roots. Good structure & easily pruned. Insignificant fruit. Work well in formal groupings.
2. Wind Rows (Western Edge: RR right-of-way)	a. Exposed to wind and poor soil/drainage	Compatible with surrounding street trees. Dense, tall. Take wind, smog, salt air, heavy soil.
3. Small Plazas & Planting Beds (Internal campus, building entries & courtyards)	a. Exposed to wind and good soil/drainage b. Protected from wind and good soil/drainage	Year round interest: flower, fall color, fragrance, fruit, leaf texture, bark texture, form. Interest upon close inspection.
4. Large Plazas (Dwight Gardens, major open areas within campus, campus entries)	a. Exposed to wind and good soil/drainage	Large & small scale transitions from more intimate spaces. Year round interest. Work well in architectural arrangements.
5. Lawn Options (Public areas, heavy use areas internally)	a. Exposed and/or protected good soil.	Drought tolerance. Take traffic. Limited maintenance.

LIST OF POSSIBLE PLANT MATERIAL COMPATIBLE WITH WET CLAY SOIL, WIND & DROUGHT  
Miles Inc., Berkeley

Type	Botanical Name/ Common Name	Width x Height	Clay	Wet	Wind	Street	Plaza	Flower	Leaf	D*	E*	Autumn	Texture	Habit	Rate	Drought
Trees	<u>Agonus flexuosa</u> Peppermint Tree	25'-30' x 25'-30'	+	+			+		Green		x		Medium	Open Weep	Mod.	+
	<u>Alnus oregana</u> Red Alder	20' x 45'	+	+	-		-		Green	x			Medium	Upright	Fast	-
	<u>Casurina equisetifolia</u> Horsetail Tree	20' x 40'-60'	+	+	+				Green		x		Fine	Open Weep	Mod.	+
	<u>Celtis australis</u> European Hackberry	25' x 40'	+	+		+	+		Green	x		Yellow	Medium	Round Dense	Mod.	+
	<u>C. sinensis</u> Chinese Hackberry	25' x 50'	+	+		+	+		Green	x		Yellow	Medium	Vase Open	Mod.	+
	<u>Cercis canadensis</u> Eastern Redbud	20' x 25'	+	+		+	+	Purple	Green	x		Yellow	Medium	Round Open	Mod.	-
	<u>Eucalyptus nicholii</u> Peppermint Gum	20' x 40'	+	+	-		-	+	Gray		x		Fine	Erect Weep	Fast	+
	<u>Fraxinus oxycarpa</u> 'Raywood' Raywood Ash	20'-30' x 20'-30'	+	+		+	+		Green	x		Red	Medium	Upright	Mod.	+
	<u>Melaleuca nesophila</u> Pink Melaleuca	20' x 20'	+	+	+		+	Pink	Green		x		Fine	Round & Large	Mod.	+
	<u>M. quinquenervia</u> Cajeput Tree	20' x 20'-40'	+	+	+		-	+	Green		x		Medium	Erect Weep	Mod.	+
<u>M. styphelioides</u> Prickeley Melaleuca	20' x 20'-40'	+	+	+		-	+	Green		x		Fine	Erect Open	Mod.	+	
<u>Metrosideros excelsus</u> New Zealand Christmas Tree	20' x 20'	+	+	+		-	+		Dark Green		x		Medium	Dense	Mod.	+

\* D - Deciduous E - Evergreen

LIST OF POSSIBLE PLANT MATERIAL COMPATIBLE WITH WET CLAY SOIL, WIND & DROUGHT  
Miles Inc., Berkeley

Type	Botanical Name/ Common Name	Width x Height	Clay	Wet	Wind	Street	Plaza	Flower	Leaf	D*	E*	Autumn	Texture	Habit	Rate	Drought
Trees	<u>Pinus brutia</u> Calabrian Pine	30' x 40'-80'	-	+	+		+		Green		x		Medium	Umbrella	Mod.	+
	<u>P. halepensis</u> Alefo Pine	20' x 30'-80'	+	+	+				Green		x		Medium	Open	Mod.	+
	<u>P. pinea</u> Italian Stone Pine	25' x 40'-80'	-	-	-		-		Green		x		Medium	Open	Mod.	+
	<u>Populus fremontii</u> Fremont Poplar	15' x 40'-60'	+	-	-	-	+		Green	x		Yellow	Medium	Upright	Fast	+
	<u>Quercus agrifolia</u> Coast Live Oak	20'-70' x 20'-80'	+	-	-	-	+		Green		x		Fine	Stiff Open	Mod.	+
	<u>Rhus lancea</u> African Sumac	20' x 25'	+	+	+	-	+		Green		x		Medium	Round Compact	Mod.	+
	<u>Washingtonia filifera</u> California Fan Palm	15' x 80'	+	+	+	+	+		Green		x		Coarse	Emphatic	Mod.	+
<u>Sequoia sempervirens 'AB'</u> Aptos Blue Coast Redwood	30' x 80'	+	+	+		+		Green		x		Medium	Emphatic	Mod.	-	
Shrubs	<u>Agapanthus africanus</u> Lily of the Nile	4' x 1 1/2'	+	-	-			Blue or White	Green		x		Coarse	Loose Mound	Fast	+
	<u>Atriplex lentiformis 'breweri'</u> Brewer Saltbush	6'-8' x 5'-7'	+	+	+				Gray		x		Fine	Stiff Open	Fast	+
	<u>Buxus microphylla japonica</u> Japanese Boxwood	4'-6' x 4'-6'	+	-			+		Yellow Green		x		Fine	Dense Mound	Fast	+
	<u>Callistemon citrinus</u> Lemon Bottlebrush	10' x 10'-25'	+	+	+	-	-	Red	Green		x		Medium	Open	Mod.	+
	<u>Elaeagnus pungens</u> Silverberry	6' x 6'-15'	+	-	+		+		Gray		x		Medium	Dense & Large	Fast	+

\* D - Deciduous E - Evergreen

LIST OF POSSIBLE PLANT MATERIAL COMPATIBLE WITH WET CLAY SOIL, WIND & DROUGHT  
Miles Inc., Berkeley

Type	Botanical Name/ Common Name	Width x Height	Clay	Wet	Wind	Street	Plaza	Flower	Leaf	D*	E*	Autumn	Texture	Habit	Rate	Drought
Shrubs	<u>Feijoa sellowiana</u> Pineapple Guava	18'-25' x 18'-25'	+	-	-		+	White W/Red	Gray		x		Medium	Open	Mod.	+
	<u>Griselinia littoralis</u> N.C.N.	10' x 12'	+	+	+		+		Green		x		Medium	Round Dense	Mod.	+
	<u>Greijia occidentalis</u> Lavender Starflower	5' x 6'-10'	+	-			+	Laven- der	Green	1/2	x		Medium	Open Limber	Mod.	-
	<u>Leptospermum laevigatum</u> Australian Tea Tree	30' x 30'	+	+	+		+	White	Green		x		Fine	Open & Large	Slow	+
	<u>Myrtus communus</u> Myrtle	4'-5' x 5'-6'	+	-	-		+	White	Dark Green		x		Fine	Dense Mound	Mod.	+
	<u>Nandina domestica</u> Heavenly Bamboo	5'-8' x 2'-4'	-	-			+	White	Green /Pink		x	Red	Fine	Erect	Mod.	-
	<u>Osmanthus fragrans</u> Sweet Olive	6' x 10'	-	-			+		Green		x		Medium	Round Dense	Mod.	-
	<u>O. heterophyllus</u> Holly-Leaf Osmanthus	4' x 6'-8'	-	-			+		Green		x		Medium	Round Dense	Mod.	+
	<u>Philodendron selloum</u> N.C.N.	5' x 5'	-	-			+		Dark green		x		Coarse	Open	Mod.	No
	<u>Phormium tenax</u> New Zealand Flax	8' x 8'	+	-	+		+		Green		x		Coarse	Sword	Fast	+
<u>Rhamnus californica</u> 'Eye Case' Coffee Berry	4'-8' x 4'-8'	+	-	-		+		Green		x		Medium	Loose Mound	Mod.	+	
<u>Rhapiolepis umbellata</u> Yeddo Hawthorn	4'-6' x 4'-6'	-	-			+	White	Green		x		Medium	Loose	Mod.	+	

\* D - Deciduous E - Evergreen

LIST OF POSSIBLE PLANT MATERIAL COMPATIBLE WITH WET CLAY SOIL, WIND & DROUGHT  
Miles Inc., Berkeley

Type	Botanical Name/ Common Name	Width x Height	Clay	Wet	Wind	Street	Plaza	Flower	Leaf	D*	E*	Autumn	Texture	Habit	Rate	Drought
Shrubs	<u>Sarcococca ruscifolia</u> N.C.N.	4'-6' x 3'-7'	-	-			+		Dark Green		x		Medium	Loose	Slow	No
	<u>Ternstroemia gymnanthera</u> N.C.N.	4'-6' x 3'-4'	-	-			+		Green Red		x		Medium	Loose	Mod	-
	<u>Viburnum burkwoodii</u> N.C.N.	4'-5' x 6'-12'	-	-			+	White	Green		x		Medium	Upright	Mod	-
	<u>Viburnum tynus</u> Lauristynus	1 1/2'-6' x 3'-12'	-	-			+	White	Green		x		Medium	Upright	Mod	-
	<u>Xylosma congestum</u> N.C.N.	8'-10' x 8'-10'	-	-	-		+		Yellow Green		x		Medium	Stiff & Large	Mod	+
Ground Cover	<u>Atriplex semibaccata</u> Australian Saltbush	6' x 1 1/2'	+	+	+				Blue- Green		x		Fine	Stiff Mat	Fast	+
	<u>Baccharis pilularis</u> 'Twin Peaks' Coyote Bush	6' x 1 1/2'	+	+	+		+	Pink	Green		x		Fine	Stiff Mound	Mod	+
	<u>Arctostaphylos uva-ursi</u> Bearberry	6' x 1 1/2'	+	+	+		+	Pink	Green		x		Fine	Stiff Mound	Mod	+
	<u>Coprosma pumila</u> 'Verde Vista' Verde Vista Coprosma	8' x 2 1/2'	-	-	-		+		Green		x		Fine	Loose Mound	Mod	+
	<u>Hypericum calycinum</u> St. John's Wort	x 4"	-	-			+	Yellow	Green/ Red		x		Medium	Loose	Fast	+
	<u>Iberis sempervirens</u> Evergreen Candytuft	1' x 3'	-	-			+	White	Green		x		Medium		Fast	-

\* D - Deciduous E - Evergreen

LIST OF POSSIBLE PLANT MATERIAL COMPATIBLE WITH WET CLAY SOIL, WIND & DROUGHT  
Miles Inc., Berkeley

Type	Botanical Name/ Common Name	Width x Height	Clay	Wet	Wind	Street	Plaza	Flower	Leaf	D*	E*	Autumn	Texture	Habit	Rate	Drought
Ground Cover	<u>Teucrium chamaedrys</u> N.C.N.	3' x 6'	+	-			+	Pink	Gray		x		Fine	Stiff Compact	Fast	+
	<u>Thymus citriodorus</u> Lemon Thyme	x 4"-8"	+	-	+		+	Pale Purple	Green		x		Fine	Spread	Fast	+
	<u>T. praecox arcticus</u> Creeping Thyme	x 2"-6"	+	-	+		+	Purple White	Green		x		Fine	Spread	Fast	+
Vines	<u>Hedera helix</u> English Ivy	x 30'	-	-			+		Dark Green		x		Medium		Fast	-
	<u>Ficus pumila</u> Creeping Fig	x 30'	-			+			Green		x		Medium		Fast	+
	<u>Rosa banksiae</u> Lady Bank Rose	x 20'	-	-	+		+	Yellow	Green		x		Medium		Mod..	-

\* D - Deciduous E - Evergreen

LIST OF TREES REQUIRING SPECIAL SOIL PREPARATION - FOR POSSIBLE USE AT THE MILES SITE  
Miles Inc., Berkeley

Name	Height	Spread	D*E*	Flower	Leaf	Texture	Autumn	Rate	Form & Habit	Leaf Drop	Fruit Drop	Roots	Infestations	Drought	Other Comments
<u>Acacia melanoxylon</u> Black Iron Bark	40'	20'	X	White/ Cream	Dark Green	Medium/ Fine		Fast	Upright Dense	Messy		Shallow		+	Heat OK; Smog OK; Brittle
<u>Aesculus carnea</u> Red Horsechestnut	40'	30	X	Rose	Dark Green	Coarse	Brown	Slow	Dense Roundhead		Problem				Allergies for some people
<u>Alnus cordata</u> Italian Alder	40'	25'	X		Green	Medium	Brown	Fast	Horizon, Branch Pyramidal		Persists	Invasive		+	
<u>Celtis australis</u> European Hackberry	40'- 75'	35'- 50'	X		Dark Green	Medium		Mod.	Upright Vase Shape			Deep	Aphids Occasionally	+	Wind OK; Heat OK
<u>Celtis sinensis</u> Chinese Hackberry	30'- 50'	30'- 50'	X		Green	Medium/ Fast			Roundhead Vase Shape			Deep	Aphids Occasionally	+	Wind OK; Heat OK
<u>Ceratonia siliqua</u> Carob	30'- 40'	30'- 40'	X	Messy Litter	Dark Green	Medium		Mod.	Dense Roundhead		Pods on Female	Buttress Heave Pavement	Crown Rot	+	Male flowers smell bad; Thin to prevent wind damage
18-1 <u>Fraxinus holotricha</u> 'Moraine' Moraine Ash	40'	30'	X		Green	Fine	Yellow	Fast/ Mod.	Upright Roundhead					-	
<u>Fraxinus oxycarpa</u> 'Raywood' Raywood Ash	25'- 40'		X		Green	Fine	Purple /Red	Fast	Upright Roundhead					-	
<u>Gleditsia triacanthos</u> 'Intermis' Thornless Honey Locust	35'- 50'	to 50'	X		Yellow Green	Fine		Fast	Open Spreading		Some Pods		Pod Gall	+	Wind OK; Heat OK
<u>Ginkgo biloba</u> 'Fairmont' Fairmont Maidenhair	35'- 50'		X		Light Green	Medium	Yellow	Slow/ Mod.	Open Angular Pyramidal		Female Only			-	Heat OK; Wind OK
<u>Lagerstromea indica</u> Crape Myrtle	10'- 30'	10'- 30'	X	White, Pink, Red	Green		Yellow	Fast	Vase Shape				Mildew	+	Heat OK; Prune to tree form
<u>Koelreuteria bipinnata</u> Chinese Flame Tree	30'- 40'	25'- 30'	X	Yellow	Green	Medium/ Fine	Yellow	Slow/ Mod.	Spreading Flat Top		Persists	Deep		-	Heat OK; Wind OK

\* D - Deciduous E - Evergreen

LIST OF TREES REQUIRING SPECIAL SOIL PREPARATION - FOR POSSIBLE USE AT THE MILES SITE  
Miles Inc., Berkeley

Name	Height	Spread	D*E*	Flower	Leaf	Texture	Autumn	Rate	Form & Habit	Leaf Drop	Fruit Drop	Roots	Infestations	Drought	Other Comments
<u>Koelreuteria paniculata</u> Goldenrain Tree	20'-35'	10'-40'	X	Yellow	Green	Medium/ Coarse		Slow/ Mod.	Open, Round Top Dense		Persists	Deep		+	Heat OK; Wind OK; Prune young to shape; Smog OK
<u>Magnolia grandiflora</u> 'Majestic Beauty' Majestic Beauty Southern Magnolia	30'-50'	20'		X White	Dark Green	Coarse		Slow	Dense Pyramidal	Some	Some	Shallow		-	Prune to open habitat
<u>Pistacia chinensis</u> Chinese Pistash	30'-60'	50'	X		Dark Green	Medium	Red/ Yellow	Mod.	Dense		Female only persists	Non- destruc- tive	Verticillium	+	Heat OK; Smog OK; Prune trees to form
<u>Plantanus acerfolia</u> 'Bloodgood' Bloodgood Sycamore	40'-80'	30'-40'	X		Green	Coarse	Brown	Fast	Open Globose				Mites, Scale, Mildew	-	Smog OK; Ref. Heat OK; Allergies for some people
1-82 <u>Pyrus calleriana</u> 'Aristocrat' Aristocrat Pear	25'-50'	30'	X	White	Green	Medium	Purple /Red		Upright/ Oval				Fireblight	+	
<u>Pyrus calleriana</u> 'Bradford' Bradford Pear	50'	30'	1/2	White	Dark Green	Medium	Purple /Red	Mod./ Fast	Horizontal Limbs				Fireblight	+	
<u>Quercus coccinea</u> Scarlet Oak	60'-80'		X		Brt Green	Medium/ Coarse	Red	Mod./ Fast	Open High Light			Deep			Deep rich soil
<u>Robinia ambigua</u> 'Idahoensis' Pink Robinia	40'	20'	X	Rose		Medium/ Fine		Fast	Open Irregular			Aggressive Suckering		+	Brittle Wood; Heat OK; Smog OK
<u>Tilia cordata</u> Little Leaf Linden	30'-50'	30'	X	Yellow White	Dark Green	Medium/ Fine		Fast	Dense, Even Pyramidal				Aphids, Bees		Prune young trees to form
<u>Schinus terebinthifolius</u> Brazilian Pepper Tree	15'-30'	15'-30'	X	White	Dark Green				Dense Dome		Female Only, Persists	Surface		+	Prune for high crown and to thin

\* D - Deciduous E - Evergreen

EXISTING PLANTS WHICH APPEAR HEALTHY  
WITHIN & ADJACENT TO THE MILES/CUTTER SITE  
AND WHICH MAY BE CONSIDERED FOR FUTURE PLANTINGS

	PLANTS		COMMENTS
TREES*	Japanese Maple	<u>Acer palmatum</u>	Requires windshelter, ample water
	Red Horsechestnut	<u>Aesculus carnea</u>	Requires windshelter
	Italian Alder	<u>Alnus nigra</u>	Good drainage
	Monterey Cypress	<u>Cupressus macrocarpa</u>	
	Blue Gum	<u>Eucalyptus globulus</u>	
	Silver Dollar Gum	<u>Eucalyptus polyanthemus</u>	
	Sweetgum	<u>Liquidambar styraciflua</u>	Needs iron supplement and water
	Canary Island Pine	<u>Pinus canariensis</u>	
	Mugo Pine	<u>Pinus mugo</u>	Good drainage
	Bishop Pine	<u>Pinus muricata</u>	Aphids a problem
	Black Pine	<u>Pinus thunbergii</u>	
	London Plane	<u>Platanus acerifolia</u>	
	Lombardy Poplar	<u>Populus nigra</u>	
	Purple Leaf Plum	<u>Prunus cerasifera</u> <u>Atropurpurea</u> or <u>Bliriana</u>	Aphids a problem
	Evergreen Pear	<u>Pyrus kawakami</u>	Selected locations only
	Willow	<u>Salix sp.</u>	
	Chinese Elm	<u>Ulmus parvifolia</u>	Susceptible to Dutch Elm disease
SHRUBS	Sydney Golden Wattle	<u>Acacia longifolia</u>	
	Bear's Breach	<u>Acanthus mollis</u>	Accent special places
	Strawberry Madrone	<u>Arbutus unedo compacta</u>	Wind protection, good drainage
	Bottlebrush	<u>Callistemon citrinus</u>	
	Camellia	<u>Camellia sp.</u>	Ample water, windshelter, special soil
	Escallonia	<u>Escallonia exoniensis</u>	
	Juniper	<u>Juniperus sp.</u>	Several varieties thrive
	Oregon Grape	<u>Mahonia compacta</u>	Good drainage
	Myoporum	<u>Myoporum laetum</u>	Freeze problems but comes back fast
	Heavenly Bamboo	<u>Nandina domestica</u>	Wind protection
	Tobira	<u>Pittosporum tobira</u>	
	Podocarpus	<u>Podocarpus gracilior</u>	
	Raphiolepis	<u>Raphiolepis indica:</u> <u>'Rosea'/'Pink'/'Ballerina'</u>	good drain and wind protection
	Wisteria	<u>Wisteria sinensis</u>	
ACCENT PLANTS & GROUND COVERS	Lily-of-the-Nile	<u>Agapanthus sp.</u>	
	Cotoneaster	<u>Cotoneaster horizontalis</u>	
	Fortnight Lily	<u>Dietes sp.</u>	
	English Ivy	<u>Hedera helix 'Hahn's'</u>	
	Rosemary	<u>Rosmarinus sp.</u>	Selected locations
	Bracken Fern	.	Ample water, windshelter, special soil
	Tree Fern		Ample water, windshelter, special soil

\* Most of the trees on site have received special soil and sub-surface drainage treatment.

**EXHIBIT J**  
**SPECIAL CONDITIONS**

**EXHIBIT J**  
**SPECIAL CONDITIONS**

I. Purpose and Intent

These Special Conditions pertain to the processing and issuance of the Reserved Discretionary Approvals for the Project. Terms used herein which are defined in the body of the Agreement shall have the meanings previously identified.

II. Special Determinations

A. In order to implement the General Plan and the April 9, 1991 draft of the Preferred Land Use Concept of the West Berkeley Area Plan and ensure the attainment of the goals of the Agreement, Miles accepts and agrees to be bound by the requirements for special determinations set forth herein as conditions governing the future development of the Project Site. Further, City agrees to issue the Reserve Discretionary Approvals upon compliance with these Special Conditions and the other guidelines, standards and conditions referred to or contained in this Agreement.

B. The Reserved Discretionary Approvals shall be granted when, in addition to other findings, determinations and conditions as may be applicable to the development of the Project Site under the applicable Ordinances consistent with the provisions of this Agreement, the approving body either: (1) makes the following written special determinations based upon substantial evidence, in substantially the form set forth below; or (2) expressly waives such determinations, in whole or in part, as not applicable to the Project or to the particular approval for which application is made, with the waiver and reasons therefore to appear in the record of approval.

Special Determinations:

1. The application is complete.
2. The requested approval, together with conditions attached thereto, is consistent with the applicable Ordinances and this Agreement.
3. The City Manager has certified that Miles is in compliance with the provisions of this Agreement, including the programs, plans and requirements set forth in Exhibits F, G-1 through G-9 and H of this Agreement.
4. Miles has entered into agreements, with or obtained necessary permits and approvals from, other regional, State or Federal agencies

with jurisdiction over all or part of the Project, to the extent necessary for the approval sought.

5. To the extent necessary for the approval sought, the requirements of the California Environmental Quality Act (CEQA) have been satisfied. It is anticipated that future applications for use permits and any other discretionary land use approvals needed prior to actual construction of production buildings, parking structures and other improvements will be reviewed to determine whether the Final EIR adequately identifies, analyzes and mitigates, as appropriate, significant project-level environmental impacts, including any significant adverse impacts on Aquatic Park. Where the impacts of proposed development activities are not adequately addressed, supplemental environmental analysis will be conducted and appropriate mitigation, as determined by the City pursuant to CEQA Guidelines section 15091-15093, shall be required.

6. The requested approval is consistent with the Site Plan, Site Development Standards and the Design Guidelines. The use, location, size and height of any proposed building will be deemed to be appropriate if it complies with the Site Development Plan (overall and for the block in question), Site Development Standards and Design Guidelines, unless City makes an express finding supported by substantial evidence that reasonable deviations from the provisions of the Site Plan, Site Development Standards or Design Guidelines are necessary to avoid or mitigate a specific detriment to the community. City shall retain the right to review and approve the location of the warehouse, Administration Building and parking structures if Miles proposes to locate those structures in any Block other than:

Administration Building - Block VII

Warehouse - Blocks I, III, V and VI

Parking - Block VI or any parking structure in Block VIII

prior to December 31, 2001.

7. Insofar as the application requests approval for construction of one or more buildings in excess of forty-five (45) feet, the uses proposed for such building(s) have not materially changed from the proposed uses as described in the Final EIR certified in conjunction with this Agreement and Miles has submitted a written verification that the height in excess of forty-five (45) feet is necessary to meet constraints dictated by the manufacturing process to be carried out in the building(s). This statement shall be supported by an engineering report which includes the information listed in V.A.8. of this Exhibit.

8. If the application is for a Use Permit, Miles has met or committed to meet to the City's satisfaction, the City's standard conditions applicable to Use Permits which are not in conflict with this Agreement, including

without limitation the following:

- (a) Financing and/or constructing necessary public infrastructure as required by this Agreement.
- (b) Installation of required landscaping, irrigation and sidewalks.
- (c) Preparation of a Risk Management and Prevention Program, if applicable.
- (d) Remediation of hazardous materials contamination on the Project Site, as necessary.
- (e) Mitigation of impacts relating to construction, for example, dust, noise and debris.
- (f) Issuance of final Design Review approval.
- (g) Conditions addressed to the duration of the Use Permit.
- (h) Provision of adequate parking during construction and after completion of construction and occupancy.
- (i) Certification by the City's Traffic Engineer that circulation aspects of the Administration Building on Block VII, the warehouse on Blocks I, III, V or VI, and the parking structure(s) on Block VI and VIII have been adequately addressed.

9. The proposal meets the requirements for energy and water conservation and waste reduction as agreed to by the parties.

10. The proposal will not adversely affect the public health or safety.

C. In the event that any of the special determinations required herein for issuance of a Reserved Discretionary Approval cannot be made, approval may nevertheless be granted if unique or special circumstances exist or there are overriding public benefits or considerations with respect to the Project that warrant granting the requested approval consistent with the applicable Ordinances and this Agreement, notwithstanding the inability to make all the special determinations.

D. Failure of the City to strictly comply with the requirements of this Part II shall not invalidate any approval issued by the City in good faith and reasonably relied upon by Miles.

### III. Administrative Use Permits and Zoning Permits

A. Proposals for the following types of private improvements and activities shall not be subject to review by the Zoning Adjustments Board, but instead may be authorized by an administrative use permit issued by the Zoning Officer consistent with these Special Conditions:

1. Buildings of less than 40,000 square feet.
2. Temporary buildings (trailers or structures).
3. Temporary surface parking.
4. Demolition of buildings.

B. Construction of minor structures, as defined by the City Manager, may be approved pursuant to a zoning permit if such buildings comply with the Site Plan, Site Development Standards and Design Guidelines and pose no environmental hazard.

### IV. Steps in Use Permit Application Process

- A. Develop building program (scope).
- B. Pre-application discussion with City, if requested by Miles.
- C. File Application for Use Permit.
- D. Environmental checklist.
- E. Environmental initial study and further environmental review, if required.
- F. Preliminary Design Review.
- G. Zoning Adjustments Board or Zoning Officer review, as applicable.
- H. Use Permit issued.
- I. Final Design Review.
- J. Building Permit Application(s) filed.

K. Building Permit issued.

V. List of Required Items for Complete Reserved Discretionary Approval Applications

A. All applications for Reserved Discretionary Approvals (Use Permits and Variances) shall include all of the following, unless explicitly waived by the City at the time of application:

1. Use Permit Application Form.
2. Applicant's Statement - a written summary of the project including description of proposed building or addition, organisms to be used in the building, basis for making the findings required by Section II, Special Determinations.
3. Fees - application fees required by City Council Resolution as may be amended from time to time.
4. Environmental Information Form - a checklist, explanatory material and additional analysis which allows the City to complete an Initial Study under CEQA. (Note that the City may request additional environmental information after determination that the permit application is complete).
5. Design Review Application - for new construction and changes to building exteriors. Including application form and other submittal requirements for design review.
6. Vicinity Map - to show project in context of the site and the neighborhood.
7. Drawings - two sets of the following full size plans and one reduction to 8 1/2" x 11". Project address, scale, north arrow, legend must appear on each sheet.

Site Plan - show proposed and existing buildings, parking spaces, driveways, property lines, fences, streets, curbs, sidewalks, landscape and natural features. Indicate dimensions of property, building, setbacks and parking.

Floor Plans - overhead view of each floor, mezzanine, basement, mechanical service area. Label rooms/areas with the use and dimensions of all spaces. Differentiate graphically existing from proposed walls, doors, windows, stairs, counters and fixtures.

Elevations - front, rear and side views of buildings. Show exterior walls, fences, landscaping, signs, etc. Include windows, doors, exterior finishes, roof and eave lines.

Rendered Perspective - for new buildings as viewed from the street.

Grading Plans - to show slope, excavation and fill areas.

Landscaping Plans - show planting and irrigation system.

8. For Production Buildings over 45 feet in Height - Engineering Report prepared and submitted by Miles which supports the need for height in excess of 45 feet. This report is to include discussion of the following topics to the extent that they relate to and influence the height of the building under consideration. The report is not to contain any information which Miles considers to be confidential and subject to non-disclosure restrictions.

a. A brief summary of the process and facility concepts on which the design of the building is based.

b. The process and support requirements and relationships including, by example: the required vertical relationships between process vessels such as media tanks and fermentation vessels, spacial relationships between the process vessels and the cleaning and decontamination systems.

c. Tank volumes, aspect ratios and dimensions.

d. Support and process equipment requirements including, for example: clean steam generators, process and building refrigeration systems, electrical substations and switches and air handling systems.

e. Room cleanliness standards, clean room classifications, air flow and air filtration requirements.

f. Techniques used to minimize building height.

g. Maintenance and equipment access requirements.

h. Utility and support systems.

i. Requirements imposed by governmental agencies.

9. For Production Buildings - description of water conservation measures incorporated in the design.

10. For Production Buildings - description of energy conservation measures incorporated in the design.

11. Tabulation - submit information to complete the table below.

	BASELINE	CUMULATIVE
TOTAL	1-1-1992	PRIOR TO APPL.
PROJECT		

a. Gross floor area by use:

Production

Production/Laboratory

Utility

Maintenance

Administration

Warehouse

b. Floor Area Ratio

c. Number of employees

d. Number of parking spaces

12. Other information which may be reasonably requested by the City to complete review of the application.

B. Applications for permits other than Use Permits and Variances shall include the following:

1. Zoning Permit Application.

2. Design Review Application - for new construction and changes to building exteriors, including application form and other submittal requirements for design review.

3. Building Permit Application - all submittals required for complete building permit application.

**EXHIBIT K**

**FINDINGS PURSUANT TO THE  
CALIFORNIA ENVIRONMENTAL  
QUALITY ACT**

**EXHIBIT K**  
**FINDINGS PURSUANT TO THE**  
**CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Pursuant to the California Environmental Quality Act, the City Council for the City of Berkeley makes the following findings based on the information contained in the record of proceedings for the Project:

I.    Introductory Findings

A.    Background

For several years, the City of Berkeley has been working with a broad cross-section of the community on the development of a plan for the growth and development of the West Berkeley area, consisting of the land between San Pablo Avenue and the I-80 Eastshore Freeway. This continuing process has resulted in the preparation of a document entitled the Preferred Land Use Concept for the West Berkeley Area Plan, which was approved by the City Council on April 9, 1991. This document reflects a general community consensus as to what types of future land uses ought to be allowed in the West Berkeley area. As stated in the concept plan, a central objective is to retain and expand manufacturing uses pursuant to standards which ensure environmental protection. The concept plan also envisions a special review process for large-scale development proposals for which the City's standard use permit process is not well-suited.

Miles Inc. is the owner and operator of a manufacturing facility in West Berkeley which has been in operation since the early 1900s. The primary operations at present involve research, development and manufacturing of pharmaceutical products. In early 1990, Miles Inc. began discussions with the City about the possibility of converting this West Berkeley facility into a modernized, state-of-the-art facility for the development, testing and manufacture of therapeutic pharmaceuticals using the techniques of biotechnology. Because the research, development and federal licensing of a new pharmaceutical product requires an average time frame of 10-12 years and a capital investment of hundreds of millions of dollars, the ordinary use permit process would not provide sufficient long-term certainty to justify the massive private investment associated with such an endeavor.

On February 15, 1991, the Berkeley City Council adopted an ordinance which established procedures for processing, considering and implementing development agreements for large-scale projects such as the Miles Inc. Project. Pursuant to Section 3.5 of the City's Development Agreement Procedures, the City Council, on April 16, 1991, determined that a development

agreement is an appropriate form of land use entitlement for the Project. In an effort to achieve maximum opportunities for community input, the City has held numerous informal meetings, community workshops and public hearings to discuss environmental and other issues raised by the Project. These discussions covered a broad range of community concerns, including environmental, economic and social issues. Participants included residents, property owners, environmentalists, labor representatives, small and large business owners, scientists, engineers, manufacturers, animal rights activists, child care providers and educators, among others.

As more specifically set forth below, the Project (as described in the Final EIR and Development Agreement) which has emerged from this process contains extensive environmental protection measures designed to mitigate potentially significant environmental effects identified in the Draft EIR for the Project and in public comments. As described in the Statement of Overriding Considerations, the impacts which could not be avoided or mitigated to a level of insignificance are outweighed by the numerous public benefits which will be realized as a result of the Project.

#### B. The Development Agreement<sup>1</sup>

Briefly stated, the Development Agreement authorizes implementation of a long-range development program for the Project Site, subject to detailed standards setting forth permitted uses, design and construction standards, environmental protection measures and contributions to public improvements and community programs well beyond what would be needed to mitigate the direct impacts caused by the Project. The Development Agreement incorporates the maximum feasible requirements for mitigation of the Project's environmental impacts as identified and analyzed in the Final EIR, which serves primarily as a program-level analysis of the long-range development program. It is anticipated that future applications for use permits and any other discretionary land use approvals needed prior to actual construction of production buildings, parking structures, and other improvements will be reviewed to determine whether the EIR adequately identifies, analyzes and mitigates, as appropriate, significant project-level environmental impacts, including any significant adverse impacts on Aquatic Park. Where the impacts of proposed development activities are not adequately addressed, supplemental environmental analysis will be conducted and appropriate mitigation, as determined by the City pursuant to CEQA Guidelines

---

<sup>1</sup> The terms used in these CEQA Findings which are defined in the body of the Agreement shall have the meanings previously identified. References in these findings to the "proposed project" refer to the proposed project as described in the Draft EIR.

section 15091-15093, shall be required.

C. Record of Proceedings; EIR Certification

For the purposes of CEQA and the findings made herein, the record of the proceedings before the City Council relating to the Miles Inc. Project includes, without limitation, the following:

1. All files maintained by the City, including its departments, boards and commissions, relative to the Project.
2. All documentary and oral evidence received by the Planning Commission, City Council and other City boards and commissions, during the informal meetings, community workshops and public hearings on the Project, including, without limitation, the workshops and hearings on the Draft EIR, Final EIR and Development Agreement.
3. The Draft EIR, consisting of Volumes I (Draft EIR) and II (Technical Appendices).
4. The Final EIR, consisting of the Draft EIR, Final EIR Volume I (Comments on Draft EIR and responses thereto), Final EIR Volume II (Comment letters and public hearing transcripts) and responses to comments on Volumes I and II of the Final EIR prepared by the City's EIR consultant and dated November 21, 1991, November 25, 1991, December 3, 1991 and December 9, 1991.
5. The Development Agreement, and all exhibits thereto.
6. All applicable City Ordinances, Resolutions, staff reports and planning documents.

City staff and various members of the Planning Commission, City Council and other City boards and commissions have participated extensively in the environmental review process and have worked closely with the City's independent EIR consultant, other consulting experts and the Project applicant to ensure that all significant environmental issues have been identified and adequately addressed. At every stage of the environmental review process, the City has exercised independent review, analysis and judgment when using the EIR documents submitted by its EIR consultant to ensure that the Final EIR is complete, adequate and objective.

**Accordingly, the City Council certifies as follows:**

1. The Final EIR has been completed in compliance with CEQA.
2. The Final EIR has been presented to the City Council.
3. The City Council has thoroughly reviewed and considered the information contained in the Final EIR prior to approving the Project.
4. The Final EIR is complete, adequate and reflects a good faith effort to fully disclose and -- where feasible -- mitigate or avoid the significant environmental effects of the Project.
5. Modifications to the original proposed Project described in the Draft EIR have substantially reduced the Project's environmental effects. The Project modifications do not increase the severity of any adverse environmental effects of the Project or involve new significant environmental effects not considered in the Draft EIR and therefore do not constitute changes requiring important revisions to the Draft EIR or raise important new issues about the Project's significant effects on the environment.
6. The procedures followed by the City with respect to the Final EIR for the Project fully complied with CEQA and provided ample opportunities for review of environmental documentation and input by interested public agencies and members of the public. In fact, the CEQA process for the Project went well beyond legal requirements in many respects. The City has analyzed and responded in good faith to all significant environmental issues raised with respect to the Project.

**II. Non-Significant Impacts**

The following are potential impacts discussed in the Final EIR that the Council finds will not have a significant adverse environmental effect:

- A. The Project would not have significant shadow impacts. (Draft Environmental Impact Report (DEIR) at pages 5C-52-54; Planning Analysis & Development's (PAD) Response to Comments, November 21, 1991, at pp. 6, 7).
- B. The loss of Building 12 on the site, taken by itself, would not cause a significant impact on historical resources. (DEIR at p. 5D-7).
- C. Traffic impacts on signalized intersections in the Project vicinity would not be significant. (DEIR at p. 5E-25).

D. The construction of the Pilot Plant in Phase I of the Project would not by itself cause a significant traffic impact. (DEIR at p. 5E-26).

E. The Project will not have a significant parking impact with respect to Miles Inc. employees. (DEIR at p. 5E-28).

F. There will be no significant parking impact resulting from the construction of the Pilot Plant. (DEIR at p. 5E-30).

G. There will be no significant air quality impacts resulting from the operation of the Pilot Plant or from Phase I of the operation. (DEIR at p. 5F-9).

H. The air quality impacts due to increased vehicular traffic will not, by themselves, be significant. (DEIR at p. 5F-10, 11; FEIR at p. 3.8-2).

I. The increase in daytime traffic to and from the Project would not significantly increase daytime traffic noise. (DEIR at p. 5G-3).

J. Exposure to mammalian cell lines to produce Recombinant Factor VIII does not involve the use of organisms that could produce human disease, nor would they impact plants and animals in the environment. (DEIR 5H-15; FEIR at p. 3.9-12).

K. There will be no significant impacts relating to exposures to Epstein-Barr virus under normal circumstances. (DEIR at p. 5H-16).

L. The possibility that Human plasma fractionation products on site will be contaminated, and that they will be released by a catastrophic event, is considered remote and would not be a significant impact on on-site personnel following standard operating procedures. (DEIR at p. 5I-24).

M. There will be no significant impact on-site or off-site with regard to animal waste. (DEIR at p. 5H-50).

N. There would be no significant impact to animals resulting from the use of Class 2 organisms in Research and Development and Quality Assurance. (DEIR at p. 5H-50).

O. There would be no significant impact caused by exposure from animals escaping from the facility because animals are not inoculated with anything greater than Class 1 bacteria and injected with only small amounts of radioactive material. (DEIR at p. 5H-50.)

P. The demolition of buildings formerly used in the manufacture of a virulent anthrax will not cause a significant impact, nor would the demolition of buildings utilizing various Class 2 infectious materials, where standard disinfection procedures are used. (DEIR at p. 5H-51.)

Q. The delivery, distribution, storage, use and disposal of chemicals, including carcinogens, to individual laboratories at the facility will not cause significant impacts in Phase I of the operation where present safety procedures are continued. (DEIR at p. 5I-24).

R. The disposal of water-soluble radioactive wastes by Miles Inc. through the sewer system is well below the regulatory limit, as is the total discharge of such wastes by biotechnology companies in the Berkeley-Emeryville area. The Project would not significantly increase the amount of radioactive waste. (December 9, 1991 Response to Comments at p. 7).

S. The Project will have a beneficial economic impact on employment in Berkeley. (DEIR at 5J-2-6).

T. The Project would not significantly change runoff quantities and peak flow rates and would therefore not place further demand on existing storm drain facilities. (DEIR at p. 5L-3).

U. The Project will not tax significantly current wastewater treatment facilities. (DEIR at p. 5L-12).

V. The Project is not expected to significantly alter the area available for groundwater recharge. (DEIR at p. 5L-16).

W. Miles Inc. is not responsible for, and will not further contribute to, a plume of groundwater contaminated by hydrocarbons discovered in West Berkeley. (DEIR at p. 5L-10).

X. The acquisition by Miles Inc. of the Don Jones property under Option One could lead to the displacement of 45 workers currently employed by Gary Steel, and displacement of five additional workers. This economic impact will not cause any significant adverse change in the physical environment. The City will make attempts to relocate Gary Steel within Berkeley and Miles Inc. will make all reasonable efforts to retain Gary Steel in place for ten years. But even if Gary Steel is not relocated within Berkeley, the resulting loss of employment and municipal revenue is more than offset by substantial gains in revenue and employment resulting from the Project.

### III. Findings Regarding Significant Environmental Impacts

#### A. Visual Quality and Urban Design

##### 1. Facts

##### (a) Building Height

In the original proposed Project, production buildings up to 100 feet and administrative and warehouse buildings up to 80 feet were contemplated. Under the Project as approved, the City will allow building heights greater than 45 feet only for production buildings and only as necessitated by constraints in the production process. The height of the Pilot Plant shall not exceed 65 feet, and the height of the other production buildings shall not exceed 80 feet. These building heights will nonetheless have significant impacts on the views from West Berkeley, and from the Berkeley Hills. Miles Inc. could mitigate visual impacts to a level of insignificance by reducing all building heights to 45 feet. The City has rejected this alternative, however, because of Miles Inc.'s research and development and production requirements further elaborated in an independent report on file with the City entitled "Investigation into the Height Requirements of Mammalian Cell Pilot Plant." (Response Document at p. 3.5-12 Appendix E), and would therefore make the Project infeasible. Mitigation of view impacts can still occur through the implementation of Site Design Guidelines which are incorporated into the Development Agreement. Specific view impacts and mitigations are as follows:

(i) View from the East Side of Aquatic Park: These views would show buildings of 80 feet in height, with stepbacks in the western facade at a height of 65 feet, and a depth from 20 to 35 feet. Architecture features that Miles Inc. has agreed to in the Development Agreement, in Exhibits D & I, include such measures as fenestration, recesses, detailing, changes of material and color and variations in rooflines.

(ii) View from the Aquatic Park Picnic Area: This view would show production buildings 80 feet high, with stepbacks above 65 feet, and the Pilot Plant, with a height maximum of 65 feet and stepbacks of 30 feet above a height of 50 feet. Miles Inc. will adopt design measures referred to in subsection (i), above, to mitigate the visual impacts to a level of insignificance.

(iii) View from the west side of the Aquatic Park picnic area would show 80 foot production buildings. While the visual impacts would be mitigated by the design measures referred to above, these would not mitigate to a level of insignificance the obstruction of the ridgeline of the Berkeley Hills

from Aquatic Park.

(iv) The view impacts from the streets adjacent to the Project, particularly Dwight Street and Seventh Street will be mitigated by the use of stepbacks and setbacks, and other Site Design measures referred to above. The heights of the administrative buildings have been reduced so as not to exceed the 45 foot limit. Under Option One, the 80 foot production building proposed for Dwight Way has been moved to the interior of the project, and Seventh Street is fronted by uniform 45 foot building envelopes. The garage, which may be located at Seventh and Dwight, will not exceed a 25 foot height limit, which will mitigate view impacts from Seventh Street and Eighth Street looking west. These measures will mitigate the view impacts from Dwight Street, Seventh Street, Eighth Street and most of the other adjacent streets, but not to a level of insignificance. An extensive discussion of these impacts and mitigations is to be found at pages 7-25 to 7-38 of the DEIR and pages 4.1-19 to 33 of the FEIR.

(v) Views looking at the project from the east side westward, from such vantage points as the upper stories of the Fantasy Records Building and from the Berkeley Hills, show eighty foot production buildings that partially obstruct a view of the water. Miles Inc. has agreed to cluster tall buildings and step them back from public view corridors, but this will not mitigate these impacts to a level of insignificance.

(b) Glare

The presence of tall buildings can have glare impacts, particularly in Aquatic Park. Miles Inc. has agreed to forego the use of highly reflective glass or other highly reflective surface material (see Development Agreement, Exhibit I at p. I-14). This will reduce glare impacts to a level of insignificance.

(c) Other Visual Impacts

Buildings originally offered in the proposed Project would have resulted in building designs that were bulky, unattractive and without uniform architectural identity. These impacts are mitigated through the adoption of specific architectural guidelines as set forth in Appendices D & I of the Development Agreement.

2. Findings

(a) The visual impact of 80 foot production buildings, and of a 65 foot Pilot Plant, cannot feasibly be mitigated by reducing the height of the

buildings to 45 feet or less, because the production and Research and Development processes employed by Miles. Administrative buildings and warehouses have been reduced from their initially-proposed heights so as not to exceed 45 feet.

(b) The visual impact of the production buildings and Pilot Plant on the streets adjacent to the Project will be mitigated, but not to a level of insignificance, by the use of architectural and landscaping measures such as setbacks and stepbacks that will make these buildings less visible and imposing from Dwight Way, Parker Street, Seventh Street and other adjacent streets. These measures are incorporated in the Development Agreement.

(c) The unattractive, boxlike and architecturally inharmonious features of the buildings originally proposed for construction will be mitigated to a level of insignificance by the architectural and design standards adopted by the Development Agreement.

(d) Views from Aquatic Park will be impacted by development along the Western Boundary of the Project site. Architectural and landscaping measures will mitigate these impacts, but will not reduce them to a level of insignificance.

(e) The view of the waterfront from the Berkeley Hills will be adversely impacted, when the project is considered cumulatively with other proposed waterfront development. In the Development Agreement, Miles has agreed to cluster tall buildings and step back these structures from public view corridors. These measures will not mitigate the impact on the views from the east toward the waterfront to a level of insignificance.

(f) To the extent that any of the impacts of the Project relating to visual quality and urban design are not insignificant or reduced to a level of insignificance by the imposition of mitigation measures, the economic, social and other benefits of the Project override any such significant impacts, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## B. Land Use Policy

### 1. Facts

(a) The Project would be one of the largest projects within the West Berkeley/Emeryville area and intensifies land use in the area. Nonetheless, the Project conforms to the planning goals of the West Berkeley Area Plan's Preferred Land Use Concept, especially the goal to encourage

manufacturing in West Berkeley in the vicinity of the Project site.

(b) Project Alternative One, Option One would increase Floor Area Ratio (FAR) significantly but would be a substantial reduction from the FAR contemplated for the original proposed project. The total square footage has been reduced in the Development Agreement from 1.6 to 1.33 million. Miles Inc. will site and design buildings to reduce impact of increased building space, as set forth in Site Plan and Site Planning and Architectural Design Guidelines, Appendices C, D and I of the Development Agreement.

(c) The height of the production buildings and the Pilot Plant will be greater than the 45 foot height limit for West Berkeley, as discussed in Section III(A). The mitigation of the adverse impact of the building heights is also discussed in Section III(A).

## 2. Findings

(a) The Project conforms with the overall land use goal of the City to increase manufacturing in that area of West Berkeley.

(b) The impact of the increase in Floor Area Ratio will be mitigated to a level of insignificance by Site Planning and Design measures in conformance with the Site Plan, Site Development Standards and Design Guidelines set forth in the Development Agreement, and by expansion of the Project site to include the Don Jones property under Option One of the Project and by reductions in the total allowable square footage for the Project Site.

(c) The impact of building heights exceeding the 45 foot limit for West Berkeley will be mitigated by measures discussed in Section III(A) of these findings.

(d) To the extent that any of the impacts of the Project relating to land use policy are not insignificant or reduced to a level of insignificance by the imposition of mitigation measures, the economic, social and other benefits of the Project override any such significant impacts, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## C. Recreation

### 1. Facts

(a) The increase in employment resulting from Miles Inc. facilities, and the lack of any provision of recreational facilities on-site, could result in the increased use of Aquatic Park, with the resulting increase use in required maintenance of the park. Miles Inc. will contribute \$250,000 to the improvement of Aquatic Park, and \$50,000 for performing a water quality study in Aquatic Park, as set forth in Exhibit F of the Development Agreement.

(b) A potential hazard exists from employees crossing the railroad tracks along Fourth Street in order to gain access to Aquatic Park. Miles will ensure that its safety guidelines address railroad crossing safety. Miles will continue to explore with the City the feasibility of a Pedestrian Crossing at the terminus of Dwight Way, but its expense may make such a crossing infeasible. At present no mitigation measure has been agreed to that would reduce the potential safety risks to a level of insignificance.

### 2. Findings

(a) Potential increase in the use of Aquatic Park by Miles' employees is mitigated to a level of insignificance by Miles Inc.'s contribution to park improvements.

(b) Safety hazards created by Miles Inc.'s employees attempting to gain access to Aquatic Park via crossing the railroad tracks will be partially mitigated by Miles Inc., ensuring that safety guidelines addressing railroad crossing safety are followed. This measure will not mitigate the safety hazard to a level of insignificance.

(c) To the extent that any of the visual impacts of the Project are not insignificant or mitigated to a level of insignificance by the imposition of mitigation measures, the economic, social and other benefits of the Project outweigh and override any such significant impact, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## D. Historical Resources

### 1. Facts

(a) Building 12 on the Project Site, which will be demolished, is designated a Structure of Merit by the Berkeley Landmarks

Preservation Commission. Because of the alterations the building has undergone, and the lack of public access, the demolition of the building is not considered a significant impact. Cumulatively, however, the demolition of Building 12 could represent a trend of demolishing buildings that represent Berkeley's past. The City may take measures to forestall this trend, such as prioritization of historic buildings worthy of preservation, but these measures would not eliminate this cumulative impact.

## 2. Findings

(a) The individual impact of demolishing Building 12 is not individually significant, but the cumulative impact of demolishing this and other historically significant buildings in West Berkeley as this area develops may be significant. This impact may be mitigated, though not to a level of insignificance, by the City prioritizing the West Berkeley buildings and historic periods it wishes to save.

(b) To the extent that this cumulative historical impact is not insignificant or reduced to a level of insignificance through mitigation, the economic, social and other benefits of the project override such significant impacts, as more fully stated in the Statement of Overriding Considerations. (Section V, below).

## E. Transportation and Parking

### 1. Facts

(a) Vehicular traffic at several intersections located near the Project site during peak hours is already congested, operating at Level of Service (LOS) E (severe congestion with some long-standing queues) or F (total breakdown, stop and go). The Project would add to traffic volume and, in some cases, contribute to further deterioration of traffic conditions. This deterioration can be mitigated to a considerable degree but, under a cumulative development scenario for the area, a number of intersections would continue to operate at LOS E or F after mitigation. The analysis of traffic impacts is based on the assumption that the garage entrance will be at Seventh Street and Cutter Way. If the garage site is moved, a possibility contemplated in Option One, the analysis of impacts might change.

(i) The Heinz Street approach to the Seventh Street/Heinz Street intersection operates at LOS E. Traffic at these intersections would increase 1-2% as the result of the Project. The City will signalize this intersection to mitigate the traffic increases. Similar conditions exist and a

similar impact can be anticipated on the Potter Street approach to the Potter Street/Seventh intersection. However, this intersection does not meet the Caltrans warrants for signalization due to its proximity to the signalized intersection of Ashby and Seventh Street. Congestion will be mitigated to a level of insignificance by the use of traffic rerouting measures elaborated on page 5E-25 of the DEIR.

(ii) The Parker Street approach to the Seventh Street/Parker Street intersection operates currently at LOS F, and traffic would increase by more than 3% in Phase I of the Project. The City will signalize the intersection of Parker and Seventh Streets. During Phase II of the Project, the Project entrance will be oriented away from Parker Street to Cutter Way. The intersection of Cutter Way and Seventh Street would then operate at LOS F, and the City will signalize the intersection and create a left turn storage lane, at Miles Inc.'s expense, which would reduce the impact on this intersection to a level of insignificance. If the Garage entrance should be located somewhere other than the corner of Cutter Way and seventh streets, Miles Inc. will analyze the impact of alternative locations and provide appropriate mitigation measures at the time construction is approved.

(iii) Miles Inc.'s current and anticipated truck and loading impacts are small, and all loading is done on loading docks and not city streets. Miles Inc. will prepare reports on loading/unloading operations at each phase of the project, and provide additional loading facilities as needed.

(b) Construction of the Project will bring an estimated 200 construction workers to the area, who will compete with local residents for on-street parking. Miles Inc. will provide for off-street parking for the construction workers at all phases of the project by entering into leasing agreements for parking space with nearby underutilized or vacant lots.

(c) Pedestrian impacts would be created when employees parking in the garage at Seventh Street and Dwight Way cross Seventh Street to get to and from work. The signal at Seventh Street and Cutter Way at Phase II of the Project will mitigate the impact. Miles Inc. will also locate some parking on the western side of Seventh Street to reduce pedestrian traffic. The signals at Dwight and Seventh and Cutter and Seventh will have pedestrian signal heads and call buttons. These measures taken together will reduce pedestrian traffic impacts to a level of insignificance.

(d) An increase in traffic to and from the site will contribute to air pollution. This increase will be mitigated to a level of insignificance by a Trip Reduction Program that Miles Inc. will adopt to increase Average Vehicle

Ridership through such measures as carpools and vanpools. The Trip Reduction Program should be part of an overall Transportation Demand Management Program for West Berkeley developed by the City. See Section F, below, for a more complete discussion of air quality issues.

(e) The Project would contribute to cumulative traffic impacts together with other planned developments in West Berkeley, that would result in LOS E or F at several intersections, even after mitigation. These include the intersections of Sixth and University, San Pablo and University, San Pablo and Dwight, Seventh and Ashby and San Pablo and Ashby.

(f) A 200-space lot at the corner of Dwight and Seventh, leased by Miles Inc. to Parker Plaza, will be used for the Project, and the loss of those spaces will be a significant impact. Thirteen vacant lots are present in the vicinity, and will allow the owners of Parker Plaza to seek alternative parking arrangements. Miles Inc. has agreed to extend the Parker Plaza lease to allow use of that site for at least five years, and extended for an additional five years under conditions specified at page G-9-3 of the Development Agreement, during which time Parker Plaza will be able to find alternative parking. This will mitigate the impact of displacing Parker Plaza parking to a level of insignificance.

## 2. Findings

(a) Increased traffic along Seventh Street at the intersections of Parker Street, Cutter Way, Heinz Street and Potter Street, will contribute to high levels of traffic congestion (LOS E or F). Signalization at Parker Street, Cutter Way and Heinz Streets will reduce these impacts to a level of insignificance. The Seventh Avenue/Potter Street intersection will be restricted to right turns only, and other traffic re-routing measures, described more fully at page 5E-25 of the DEIR, will be employed by the City to mitigate the congestion at the Seventh/Potter intersection. Miles Inc. will pay for the necessary traffic improvements. Traffic impacts and mitigation measures will be reevaluated should the garage entrance at Phase II of the project be located somewhere other than Seventh and Cutter.

(b) Truck and Loading impacts will continue to be monitored to determine if they become significant.

(c) Increased pedestrian traffic resulting from employees walking from a garage located on the east side of Seventh Street to the site on the west side of the street will be mitigated to a level of insignificance by the location of some parking facilities by Miles Inc. on the west side of Seventh Street, and the signalization of Seventh Street and Cutter Way.

(d) Increased air pollution due to greater traffic to and from the site will be mitigated to a level of insignificance by the adoption of a Trip Reduction Program by Miles Inc. to increase the Average Vehicle Ridership of its employees.

(e) The cumulative traffic impact of the Project, together with other planned West Berkeley developments, would lead to significant congestions on several nearby intersections, referred to at p. 6-3 of the DEIR, which could not be feasibly be mitigated to a level of insignificance.

(f) The loss of parking spaces by Parker Plaza will be mitigated to a level of insignificance by giving Parker Plaza five to ten years to find new parking spaces amid the considerable amount of vacant land in the vicinity.

(g) To the extent that the traffic, transportation and parking impacts of the Project are not insignificant or reduced to insignificance by the imposition of mitigation measures, the economic, social and other benefits of the Project outweigh and override any such significant impacts, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## F. Air Quality

### 1. Facts

(a) The Project would involve the demolition of 34 buildings that are likely to contain asbestos. Miles Inc. will remove all friable asbestos from existing buildings prior to demolition, in accordance with Cal-OSHA, EPA, DHS and OSHA standards. Disposal will be handled by a licensed contractor. This will reduce the impact of asbestos contamination to a level of insignificance. If asbestos contamination is nonetheless discovered during demolition, all activity in the affected area will cease until proper safety procedures are implemented, which will reduce the level of asbestos contamination to a level of insignificance.

(b) The demolition of buildings used for manufacture of the plague vaccine could pose serious public health dangers. A complete fumigation program will be conducted by Miles Inc. prior to demolition, the effectiveness of which will be verified by swab sampling. This will reduce the public health threat to a level of insignificance. The use of formaldehyde for fumigation, which is a carcinogen, could have a public health impact. This impact will be reduced to a level of insignificance by sealing off the buildings prior to the release of the formaldehyde, as described at pages 5F-6 and 5F-7 of the Draft EIR, and the proper disposal of the formaldehyde according to pertinent

regulations.

(c) Construction and demolition will generate a significant amount of dust on an intermittent basis over a thirty year period. This impact will be reduced to a level of insignificance by Miles Inc.'s observance of standard dust suppression measures listed on pages 5F-8 and 5F-9 of the Draft EIR. Emissions from construction vehicles could also cause intermittent violations of Carbon Monoxide standards. Miles Inc. will specify in its construction contracts that construction equipment will not be kept idling and will be subject to regular maintenance, and will comply with existing City Ordinances and constraints imposed by use permits to reduce exhaust from construction vehicles. These mitigation measures will reduce this impact to a level of insignificance.

(d) Miles Inc.'s natural gas consumption will double by the end of phase two of the Project, and increase to 3,400,000 therms per year by the end of Phase III. Nitrous Oxide emissions could increase to .12 tons per day, which would be a significant impact. Miles Inc. will apply for a permit with the Bay Area Air Quality Management District (BAAQMD), and will comply with all applicable regulations concerning installation of pollution control equipment or modification of operations pursuant to that permit. These mitigation measures will reduce the air quality impacts resulting from natural gas consumption to a level of insignificance.

(e) If natural gas supply is curtailed, Miles Inc. would burn fuel oil, which could lead to a significant increase in Nitrous Oxide, sulfur oxides and particulates. Miles Inc. would apply to the BAAQMD for a permit and comply with all BAAQMD regulations, which would reduce this impact to a level of insignificance.

(f) Cumulative development would cause significant increases in vehicular emissions in West Berkeley. Miles Inc. will participate in a Transportation Demand Management Program developed by the City of Berkeley and referred to in Section III(E) of these findings, above, and institute a number transportation control measures enumerated at pages 5F-11 and 12 of the Draft EIR.

## 2. Findings

(a) Impacts from construction and demolition referred to above, including asbestos contamination, contamination from biological virus and from formaldehyde, dust pollution and emission from construction vehicles, will be reduced to a level of insignificance by Miles Inc.'s compliance with applicable ordinances, regulations and safety procedures.

(b) Miles Inc. will reduce to a level of insignificance increased Nitrous Oxide emissions resulting from the increased natural gas consumption or the consumption of fuel oil in case of natural gas supply restriction by complying with all applicable regulations in accordance with a permit obtained by the BAAQMD.

(c) Increased vehicular traffic, considered cumulatively with other proposed West Berkeley development, will significantly impact Nitrous Oxide emissions in the area. Participation in a Transportation Management Program designed to reduce Average Daily Ridership for West Berkeley developments will, taken together, reduce traffic-caused air quality impacts to a level of insignificance.

(d) To the extent that any of the air quality impacts are not insignificant or are not reduced to a level of insignificance by the imposition of mitigation measures, the economic, social and other benefits of the Project outweigh and override any such significant impacts, as more fully stated in the Statement of Overriding Considerations. (Section V, below).

#### G. Noise

##### 1. Facts

(a) The Project would generate operational noise from compressors, boilers and cooling towers that could impact Aquatic Park and the residences along Dwight Way. Miles Inc. will mitigate these impacts by enclosing the noise sources and carrying out other noise suppression measures in order to comply with the City's Noise Ordinance.

(b) Construction and demolition on the site will generate substantial noise which will be mitigated by Miles Inc. via noise suppression measures described on page 5G-6 of the Draft EIR, and via on-site monitoring to reduce these impacts to a level of insignificance.

(c) Nighttime traffic noise will increase, due to the increasing number of swing shift and graveyard shift employees. Miles Inc. will comply with the City's Noise Ordinance and carry out noise suppression measures as needed. Moving of the garage from Cutter and Seventh Street to somewhere further into the interior of the site, as is contemplated under Option One, could reduce nighttime noise impacts.

## 2. Findings

(a) Noise from plant operations will be mitigated to a level of insignificance by Miles Inc. by enclosing noise sources and carrying out other noise suppression measures.

(b) Miles Inc. will mitigate to a level of insignificance noise generated by demolition and construction from the Project through the use of noise suppression measures enumerated in the Draft EIR, and through on-site monitoring of noise levels so as to comply with the City's noise ordinance.

(c) Miles Inc. will mitigate to a level of insignificance the nighttime noise generated by the increase in nighttime employees using the garage on Seventh Street by the use of noise suppression measures so as to comply with the City's Noise Ordinance. This problem could also be mitigated by relocation of the garage further into the interior of the site, a possibility being considered under Option One.

### H. Chemical Hazards

#### 1. Facts

(a) Miles Inc. is a generator of small quantities of hazardous chemical waste. The shipment, storage, handling and disposal of hazardous materials is extensively regulated by Federal, State and local law and Miles Inc. will comply with these regulations.

(b) The City requires more information on chemical usage than is provided by Miles Inc. on its current inventory reporting forms, so that emergency responders to chemical hazards are better prepared. Miles Inc. will adopt a computerized inventory system that will list chemicals used by building and by room.

(c) A chemical or radionuclide release during delivery, distribution, use, disposal or storage could pose hazards to workers and emergency responders. Miles Inc. will implement an Emergency Preparedness Program, as outlined on pages I-26 and I-27 of the DEIR and elsewhere in Chapter 5I of the DEIR.

(d) A permanent above-ground storage tank would be located on-site, no closer than 200 feet from Dwight Way, Seventh Street or Carleton Street. This tank will be capable of storing 100,000 gallons of diesel fuel and will create a significant hazard in the event of a threat of fire or release. The fuel

tank is currently needed because Miles Inc.'s contract with Pacific Gas & Electric is for an interruptible supply of natural gas. Miles Inc. is currently studying the feasibility of obtaining a contract from PG&E. that would deliver an uninterruptable supply of natural gas which would obviate the need for large storage capacity. Miles Inc. will provide the City with a report of its investigation into the feasibility of obtaining an uninterruptable fuel supply, including an explanation of why, if at all, the fuel tank is needed. The division of its natural gas storage supply among smaller tanks will not significantly mitigate the impact of a fuel storage tank fire or explosion, and would interfere with Miles Inc.'s site planning. Miles Inc. will conduct a Hazard Operability Study and Off-site Consequences Analysis prior to initial fuel delivery, will conduct proper training for maintenance workers and emergency responders, will have emergency response equipment adjacent to the delivery and storage area and will regularly maintain and inspect the tank. Moreover, siting of any fuel tank greater than 25,000 gallons will be subject to the approval of the City Manager or his designee. These measures will not, however, mitigate the hazard posed by the storage tank to a level of insignificance.

(e) Phosphoric Acid will be delivered in 55-gallon drums. Phosphoric Acid will pose a hazard to workers and emergency responders if release due to accident causes skin contact. Miles Inc. will prepare a Hazard Operability Study and maintain appropriate safety equipment to contain the spill and protect workers and emergency responders and adequate training programs which will reduce the hazard to a level of insignificance.

(f) Compressed or liquified gas, while non-toxic, poses a hazard to workers and emergency responders if release results in their contact with freezing temperatures from the liquified gas or injury from pressurized gas. These impacts will be mitigated to a level of insignificance by Miles Inc.'s location of emergency response equipment to clean up a release, its continued training of employees in the safe handling of compressed and liquified gasses and its implementation of an on-site training program for City emergency responders.

(g) Emergency fuel will be delivered infrequently but, when delivered, will pose a threat in the event of accidental release to workers and emergency responders. As stated above in paragraph (d), Miles Inc. will prepare a Hazard Operability Study that will incorporate safety features designed to contain a release and to therefore reduce the threat of release to a level of insignificance.

(h) An accidental mixing of Acid and Caustic materials could result in an explosion and produce an acid or caustic mist impacting workers, emergency responders and the public by inhalation and skin contact. Miles Inc.

will perform a Hazard Operability Study performed on the delivery and storage system to ensure that designs include all appropriate safety precautions and meet seismic safety standards outlined at p. 4.3-20 of the Response Document.

(i) In lieu of increased use of CFC's, a new refrigeration system using ammonia is contemplated. CFC's pose a cumulative risk to the environment through depletion of the ozone layer, but ammonia, if released, would pose a greater acute risk to workers, emergency responders and the public. In mitigation, Miles Inc. will implement a Risk Management Prevention Program for its Ammonia Refrigeration System, which will be in place before the system begins to operate. The system will also include a secondary containment facility, a deluge sprinkler system and ammonia-sensing equipment.

## 2. Findings

(a) Miles Inc. will implement an extensive Emergency Preparedness Program that will mitigate to a level of insignificance the possibility of release of the small quantities of hazardous chemicals that it transports, uses, stores and disposes of.

(b) A 100,000 gallon permanent fuel storage tank, even if located no closer than 200 feet from Dwight Way, Seventh Street or Carleton Street, could pose a significant threat to the public in the event of a fire or release. Miles Inc. will mitigate this danger by preparing a Hazard Operability Study and an Off-site Consequences Analysis prior to fuel delivery and following various safety precautions, but this will not mitigate the impact to a level of insignificance. Division of the fuel supply into smaller tanks will not significantly mitigate the impact of a fire and explosion, and will result in a disruption in the site plan. Prior to seeking City approval of construction of the fuel storage tank, Miles Inc. will study and report on the feasibility of contracting with PG&E. for an uninterrupted supply of natural gas, so that it will not have to construct the storage tank. Miles Inc. will seek approval from the City Manager for siting of all tanks greater than 25,000 gallons. These measures will not mitigate the fuel tank hazard to a level of insignificance.

(c) Miles Inc. will reduce to a level of insignificance the hazards posed by the delivery of phosphoric acid and by the delivery of an emergency fuel supply by conducting Hazard Operability Studies, maintenance of appropriate safety equipment and training of appropriate personnel. Miles Inc. will also maintain the proper safety equipment and train the appropriate personnel to ensure proper response to accidental release of compressed or liquified gas.

(d) The use of an ammonia coolant in Miles Inc.'s refrigeration system rather than ozone-depleting CFC's poses a potential acute public health hazard should an accidental release occur. Miles Inc. will mitigate this threat to a level of insignificance by implementing a certified Risk Management Prevention Program before the refrigeration system begins to operate and by including, as part of the system a secondary containment facility, deluge sprinkler system and ammonia-sensing equipment.

(e) To the extent that any of the impacts of the Project relating to chemical hazards may be significant, notwithstanding the imposition of mitigation measures, the economic, social and other benefits of the Project override any such significant impacts, as more fully stated in the Statement of Overriding Considerations (Section V, below).

I. Socioeconomics

1. Facts

(a) Employment

(i) The Project is expected to generate a significant number of new jobs, both permanent manufacturing, administrative and maintenance jobs, and temporary construction jobs. The First Source Employment Program will refer unemployed Berkeley residents to Miles Inc. for employment and Miles Inc. has agreed to hire a significant number of its new employees from this source, as specified in Appendix G-2 of the Development Agreement. But, given that some college is required for a majority of the permanent jobs many First Source Applicants would not qualify for employment, resulting in a reduced number of new employment opportunities to Berkeley residents. This is not considered to be an adverse environmental impact of the Project, because the Project will result in a net gain in employment opportunities for Berkeley residents. To maximize these gains, Miles Inc. has agreed to provide on-the-job training as well as classroom instruction to assist First Source participants to qualify for employment at Miles Inc. Miles Inc. will also fund a Biotech Academy within Berkeley High School and a Career Institute within the community college system, with contributions totalling over \$2 million.

(ii) Miles Inc. will also draw on First Source employees for the 200 temporary construction jobs anticipated, and it will establish a goal of one First Source participant for every five workers and that replacement workers would be hired through the First Source Program. Miles Inc. will also train unemployed residents for entry-level classifications that do not have union apprenticeships, such as laborers and cement masons.

(b) Housing

The Project will generate the need for an estimated 80 units of housing, 21 of those units being for Affordable Housing. Miles Inc. will contribute to the City's Housing Trust fund for 21 units of low- and very low-income housing, a total contribution of \$615,000 over 11 years, with at least 50% of those funds used for projects in West Berkeley south of University Avenue.

(c) Child Care

The approximately 380 new employees added over a 30 year period would create an estimated demand for 40 new child care slots, 13 of which would be subsidized. Miles Inc. would contribute into a Capital Fund for the conversion of 40 child care slots from preschool slots, for which there is excess supply, to infant care slots for which a shortage of supply is anticipated, and will contribute to an operating fund for the subsidization of 14 child care slots. These contributions would be in the form of annual fees over the next ten years that will cover the increased child care needs generated by each phase of the Project. Miles Inc. would also subsidize medical care to child care facilities as specified in Exhibit F of the Development Agreement. Providing on-site child care will not be feasible until Phase III, as there will not be sufficient demand to support a center in Phases I and II. Funding off-site care will be the most feasible way of providing child care throughout all Project phases.

2. Findings

(a) The social and economic impact due to the loss of potential employment opportunities by Berkeley residents as the result of lack of qualifications will be mitigated to a level of insignificance by recruitment, on-the-job and classroom training programs and the establishment of Biotechnology Academies offered by Miles Inc. to First Source program participants and other Berkeley residents.

(b) The increased need for affordable housing in Berkeley generated by the Project will be mitigated to a level of insignificance through Miles Inc.'s contribution to the City's Housing Trust Fund and Community Program Fund.

(c) The increase in the need for child care generated by the Project will be mitigated to a level of insignificance by Miles Inc.'s contribution to a Capital Fund and its subsidization of 14 child care slots for low income households.

(d) To the extent that any of the social or economic impacts of the Project may be characterized as environmental in nature, and not insignificant or mitigated to a level of insignificance, the economic, social and other benefits of the Project outweigh any such significant impacts, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## J. Public Services

### 1. Facts

(a) The Project will create demand for City services. Yet the Project will be a net fiscal gain for the City, and the revenue granted by the Project will exceed the costs of providing the Project with services.

(b) The Project could impact police services in the vicinity. Miles Inc. will mitigate this impact to a level of insignificance by implementing measures recommended by the Berkeley Police Department, such as providing visible security guards, alarming buildings, providing adequate lighting and training employees in security measures.

(c) The Project, and in particular the Pilot Plant, could have an impact on fire protection services. These will be mitigated to a level of insignificance by Miles Inc. through its compliance with the fire code and all appropriate fire regulations, and through provision of water and hydrants sufficient to meet fire flow requirements. Miles Inc. will at all times maintain on-site fire suppression capability, and will jointly, with the City, assess this capability to determine the need, if any, for additional capability on site.

(d) Water consumption on site would increase by 10,000 gallons per day during Phase I of the Project, by 50,000 gallons by Phase II, and by 200,000 gallons by Phase III. These water consumption levels could cause a significant impact because of the need for conservation caused by the current drought. Miles Inc. will undertake a water conservation program as set forth in Exhibit G-8. Miles Inc. will also incorporate water conservation measures into the construction process and comply with City ordinances requiring a drought resistant landscape.

(i) Water needed to meet fire flow requirements could exceed existing water delivery line capacity. Miles Inc. will upgrade water delivery lines as needed to preserve adequate fire flow.

(ii) Cumulative water demand impact of this and other projects are such that EBMUD expects the demand for water to exceed supply.

In addition to participation in a water conservation program referred to above, Miles Inc. will study the feasibility of reclaiming waste water, and will implement a reclamation program if feasible. These measures would reduce water consumption impacts to a level of insignificance during non-drought periods.

## 2. Findings

(a) The impact of the Project on the need for police services will be mitigated to a level of insignificance by Miles Inc.'s implementation of security measures recommended by the Berkeley Police Department.

(b) The impact of the Project on the need for fire protection services will be mitigated to a level of insignificance by Miles Inc.'s compliance with the fire code and applicable fire regulations by maintenance of on-site fire suppression capabilities, and by its upgrading, as needed, of existing water lines to meet increased fire flow needs.

(c) Miles Inc. will reduce water consumption impacts by implementing a water conservation program, by incorporating conservation into construction and landscaping of the site and by implementing a water reclamation program where feasible. These measures will reduce the water consumption impacts created by the Project, as well as Miles Inc.'s contribution to cumulative water consumption impacts of new developments in the area, to a level of insignificance.

(d) To the extent that any of the impacts of the Project relating to Public Services may be significant, notwithstanding the imposition of mitigation measures, the economic, social and other benefits of the Project outweigh such significant impacts, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## K. Hydrology and Drainage, Wastewater and Groundwater

### 1. Facts

(a) The Project could contribute to water pollution from industrial runoff that could impact Aquatic Park pond and San Francisco Bay. These pollutants could include heavy metals, suspended solids, nutrients and floatables. Miles Inc. will implement a Best Management Practices to meet Federal regulations of the National Pollution Discharge Elimination System, which would reduce pollution from runoff to a level of insignificance.

(b) Groundwater contamination has been detected in Aquatic Park. The City will initially test the water of the park and should Miles Inc. be determined to have contributed to any contamination, it will contribute to the funding of continued monitoring and remediation. The Project will also be designed with appropriate safeguards to prevent groundwater contamination, such as further specified in mitigation 2 at page 5C-17 of the DEIR. Miles Inc. will implement an on-site soil and groundwater monitoring program and will remediate any contamination detected from excavated tank areas, if needed, in accordance with directions of the Regional Water Quality Control Board.

(c) The Project could cause accidental spills or chronic leakage of hazardous materials, resulting from storage of hazardous substances on-site, such as fuel in the proposed above-ground storage tank. Miles Inc. will implement a Best Management Practices to meet Federal regulations of the National Pollution Discharge Elimination System, and will equip storm drains downstream of hazardous materials storage areas with manual shut off valves. These measures will reduce the danger of a hazardous substance release to a level of insignificance.

(d) The Project could generate wastewater flows that exceed the capacity of current sewer lines. Miles Inc. will perform a sewer capacity evaluation and will upgrade, as needed, trunk sewer and local collection system capacity, which will reduce the impact of the additional wastewater flows to a level of insignificance.

(e) The wastewater generated by the Project will contain chemicals and biological oxygen demand (COD, BOD) sugars, amino acids and chemical used in research and development. These could impact the EBMUD wastewater treatment plant as well as San Francisco Bay. Miles Inc. will obtain proper permits for discharges from the EBMUD sanitary system, and comply with the conditions of the permit, which will mitigate the impacts of wastewater discharges to a level of insignificance.

## 2. Findings

(a) Miles Inc. will mitigate to a level of insignificance impacts caused by pollution runoff from the project on Aquatic Park and San Francisco Bay and the infiltration into soil and groundwater by implementing a Best Management Practices in compliance with Federal Law and by periodically monitoring surface water discharge.

(b) Miles Inc. will mitigate to a level of insignificance the impact of increased wastewater generated by the Project on existing sewer lines by evaluating sewer line capacity and upgrading trunk sewers and local collection lines as needed.

(c) Miles Inc. will mitigate to a level of insignificance the threat of hazardous waste spills or leaks from storage tanks by implementing a Best Management Practices to comply with Federal regulations.

(d) Miles Inc. will mitigate to a level of insignificance the generation of wastewater containing various pollutants by complying with all conditions and limitations imposed on such discharges by the EBMUD sanitary sewer system.

(e) The City will monitor the groundwater at Aquatic Park and will order Miles Inc. to engage in remediation of groundwater contamination if it is found. Miles Inc. will engage in on-site monitoring of groundwater and soil.

(f) To the extent that any of the above impacts are not insignificant, or mitigated to insignificance, the economic, social and other benefits of the project outweigh any such significant impact, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## L. Biosafety

### 1. Facts

(a) The Project will involve the use of various biohazardous materials in research and development, and in production. In the event of an accidental release from spills, or from a severe earthquake, emergency responders or other individuals on site might come into contact with Epstein-Barr virus, plague bacilli or Class 2 microorganisms such as measles and polio. Miles Inc. would continue to follow all National Institute of Health regulations in the storage and handling of hazardous biological materials. Miles Inc. would carry out the following measures to reduce the risk of exposure to biohazardous materials:

(i) The use of plague bacillus for the manufacture of plague vaccine for the Department of Defense would not increase as a result of the proposed development, and so the impact of plague bacillus is not a Project impact. Plague will cease to be used for the manufacture of plague vaccine in 1992, and will cease to be used in testing by 1994. With this one exception, the biological materials used in conjunction with the production of products at the

plant site will be limited to Class 1 and Class 2 organisms and to mammalian cell lines. Class 4 and 5 organisms will be prohibited. The use of Class 3 organisms, or non-mammalian cell lines, will require a major Amendment to the Development Agreement and CEQA review.

(ii) On-site workers would not be at risk of exposure to plague bacilli, because they are or would be vaccinated and access to areas where plague is used by non-vaccinated workers is restricted. However emergency responders and off-site populations could be exposed to plague in the event of a catastrophic event, and this could include airborne exposure. Miles Inc. will implement an Emergency Preparedness Program which would include training the City's emergency responders and coordination with the City's Fire and Police Departments. The Emergency Preparedness Program is set forth more fully at 5I-23 of the DEIR. Miles Inc. will make available to emergency responders and health care providers vaccines against plague. These measures would reduce the risk of exposure of plague bacilli to a level of insignificance. Miles Inc. will not be required to perform a demographic study to identify sensitive populations at risk in the Berkeley facility, as this measure is costly and not necessary to reduce to a level of insignificance the risk of exposure to plague bacillus from the site.

(iii) The risk of accidental exposure to Epstein-Barr virus, and to other Class 2 microorganisms by workers, emergency responders and off-site populations can also be reduced by compliance with NIH regulations for storage and handling and implementation of an Emergency Preparedness Program by Miles Inc. Miles Inc. would also make available to medical personnel gamma globulin, which is effective in treating some but not all viruses. Local health care providers will be notified in advance of the infectious materials at the site and the proper measures for immunization and treatment in case of exposures to these materials. These measures would mitigate the risk of accidental exposure, but not to a level of insignificance. This impact could be mitigated to a level of insignificance by an agreement to use only viruses for which there is a known treatment. This mitigation measure is rejected, however, because such a ban would render the research and development and production goals of the Project infeasible.

(iv) All proposed structures will be built incorporating the best current knowledge of earthquake resistant design and extensive seismic safety precautions will be taken, as set forth more fully at pages 4.3-20 and 4.3-21 of the Final EIR.

(b) As operations using infectious materials such as plague, polio and EBV are discontinued, Miles Inc. intends to demolish the buildings housing such operations. If these are demolished without the proper

decontamination, the result could be the spread of the hazardous material. Miles Inc. will carry out the proper decontamination and will furnish verification that the buildings have been disinfected in accordance with applicable regulations.

## 2. Findings

(a) The potential dangers posed by the release of biohazardous materials due to accidental spill or from a catastrophic event will be mitigated to the point of insignificance by Miles Inc.'s compliance with NIH regulations for containment and handling of such materials and its implementation of an Emergency Preparedness Program coordinated with the City's other emergency services.

(b) Miles Inc. will continue to follow safety procedures that will reduce the threat of the plague virus to a level of insignificance.

(c) The danger of spreading biohazardous materials by the demolition of buildings in which they were formerly kept will be mitigated by Miles Inc. to a level of insignificance by disinfecting those buildings prior to demolition in accordance with applicable regulations and furnishing verification of such compliance.

(d) Exposure due to accidental release of Class 2 organisms will be mitigated by following proper safety procedures, making gamma globulin available off-site and informing local health care providers of the infectious material present and proper measures for immunization and treatment. These measures will not reduce the risk of exposure to Class 2 organisms to a level of insignificance. It is not feasible to limit the viruses present on-site to those for which there is a known treatment.

(e) To the extent that any of the above impacts are not insignificant, or mitigated to a level of insignificance, the economic, social and other benefits of the Project outweigh any such significant impact, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## M. Energy and Waste

### 1. Facts

(a) There will be a cumulative increase in energy consumption from the Project together with 23 other proposed or approved projects in West Berkeley, which will lead to the depletion of fossil fuels. Miles Inc. will implement an energy conservation program to mitigate these impacts.

(b) Natural gas consumption is expected to rise by 400% by the completion of Phase III of the Project, thereby contributing to fossil fuel depletion. Miles Inc.'s energy conservation program will mitigate the impacts of such intensive use.

(c) The volume of non-toxic solid waste is expected to triple by the end of Phase III. Miles Inc. will implement a waste reduction and recycling program elaborated at pp. 5M-4-9 of the Draft EIR which will include participation in the City's recycling program that will reduce this impact to a level of insignificance.

## 2. Findings

(a) Miles Inc. will implement an energy conservation program that will mitigate the cumulative impact of increased fossil fuel consumption.

(b) Miles Inc. will implement a waste reduction program which will mitigate the increase in the amount of non-toxic solid waste generated by the Project.

(c) To the extent that these impacts are not insignificant or mitigated to a level of insignificance, the environmental, economic, social and other benefits of the Project outweigh any such significant impact, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## N. Seismic Safety

### 1. Facts

(a) There is a 67% likelihood, according to one U.S. Geological Survey study, of an earthquake of magnitude 7 or greater occurring in the San Francisco Bay area in the next thirty years. The project site is located 3 miles east of the Hayward Fault, and within 16-18 miles of the San Andreas and Calaveras Faults. The seismic safety of the Project is of concern not only because of the large number of people and buildings on site, but because of the presence of hazardous chemical and biological materials. The site is underlain by loosely consolidated sediments with a high water table, and the maximum ground shaking that can be expected from a major earthquake is classified by Association of Bay Area Governments (ABAG) as Category C, very strong. There is a small to negligible likelihood that liquefaction will occur at the site. Serious ground shaking could cause damage to structures, which can result in falling or moving objects and the release of hazardous substances, which can

harm workers and emergency responders. Miles Inc. will mitigate these dangers by incorporating into the construction of its facilities design and engineering measures that will maximize seismic safety, such as compliance with the most recent seismic requirements of the Uniform Building Code and the safeguarding of chemical and industrial processes by the use of redundant and back-up safety systems. Moreover, existing buildings that will continue to be occupied for some time will be upgraded for seismic safety purposes. These mitigation measures are outlined on pages 4.3-20 and 21 of the Final EIR.

(b) Strong seismic impacts could occur on the Project Site whether or not the Project is approved. The replacement of many of the existing buildings by new ones employing these state-of-the-art seismic safety design measures and seismic upgrading of the remaining buildings will result in a beneficial impact to the seismic safety of the Project Site.

## 2. Findings

(a) Miles Inc. will mitigate the impact a major earthquake may have on the site by incorporating engineering and design features to the maximum extent feasible.

(b) Given the incorporation of state-of-the-art seismic safety measures, replacing less-safe buildings presently standing and seismic upgrading of existing buildings, the Project will have a beneficial impact on the seismic safety of the Project Site when compared to existing conditions.

(c) To the extent that any of the seismic impacts of the Project are not insignificant or mitigated to a level of insignificance by the imposition of mitigation measures, the economic, social and other benefits of the Project outweigh and override any such significant impact, as more fully stated in the Statement of Overriding Considerations (Section V, below).

## IV. Findings Regarding Project Alternatives and Expanded Site Options

The Draft EIR described a proposed project consisting of the construction of 1,507,000 square feet of new construction containing production, warehouse and administration buildings in excess of the applicable height limits under the Berkeley Zoning Ordinance. The Draft EIR identified three alternatives to the proposed project:

1. The No Project Alternative. Disapproval of the proposed long-range development plan.

2. Project Alternative One. An alternative which focused on mitigation of the urban design and visual impacts of the Project by measures such as reasonable reductions in allowable building heights, and imposition of development standards such as building setbacks and setbacks.

3. The Zoning Conformance Alternative. This alternative would require the Project to conform strictly with the building height, parking and loading dock requirements contained in the Berkeley Zoning Ordinance.

Comments on the Draft EIR suggested that several impacts of the Project could be mitigated by expansion of the Project Site to include other land in the vicinity which was not owned by Miles Inc. By that time, it was apparent that Project Alternative One represented the optimal approach for development of the Project Site, taking into account the various considerations discussed in the Draft EIR. In response to these comments, the Final EIR included an analysis of three options for expansion of the Project Site and relocation of buildings to further mitigate the Project's environmental impacts. The expanded site analysis revealed that the "Gary Steel" property was the best option for mitigating Project impacts and achieving Project benefits. Accordingly, the Project as reflected in the Development Agreement and approved by the City Council consists of Project Alternative One as modified to include Expanded Site Option One and additional mitigation measures.

#### A. No Project Alternative

As described in the Draft EIR at page 7-2, if the proposed long-range development program embodied in the Development Agreement is not approved, the existing conditions on the Project Site would remain and the adverse Project impacts would not occur. Tall buildings which impact views would not be constructed. The noise, visual and traffic impacts of the proposed parking structure would not occur. There would not be an increase in traffic. The ground-level parking lot at the corner of Dwight Way and Seventh Street would remain available for public use. Building 12, a locally designated Structure of Merit, would not be demolished.

The City Council finds that the No Project Alternative is infeasible and less desirable than the Project, and rejects this Alternative, for the following reasons:

1. Mitigation measures incorporated into the Project have substantially lessened most of its environmental impacts, thereby diminishing the perceived mitigating benefits of approving the No Project Alternative.

#### D. Expanded Site Options

In response to public comments about the visual impacts, development intensity and neighborhood compatibility of the proposed project, the Final EIR included analysis of four options for relocating some of the proposed buildings onto nearby properties not owned by Miles Inc. These properties are depicted in Figure 4.1-2 at p. 4.1-3 of the Final EIR's Response to Comments document. Addition of land area to the Project Site enables greater flexibility in locating several of the proposed buildings including the parking garage, warehouse, production buildings, and maintenance building, to minimize land use, urban design and visual impacts. Addition of land area to the Project Site also permits reduction of overall development intensity. The City determines that Expanded Site Option One is the preferable option, taking into account environmental, social, economic, technological and public policy considerations, and would mitigate the visual impacts, development intensity and neighborhood compatibility of the proposed project to the greatest extent feasible. The decision to select Expanded Site Option One involved a complex weighing of numerous factors, as detailed in the Final EIR and summarized below. The Project as described in the Development Agreement has been modified to incorporate Expanded Site Option One and additional mitigation measures. Overall, Expanded Site Option One will achieve substantial environmental benefits without unduly interfering with Project objectives. Expanded Site Option One achieves many of the same mitigation benefits as the remaining options. To the extent that the remaining options might produce incremental benefits by further mitigating some adverse environmental impacts of the Project, those options are determined to be infeasible, as explained below in this Section D, and because these remaining options would interfere with achievement of the City's environmental, social, economic and land use planning objectives as described in Section V(B), below.

1. Expanded Site Option One. This option permits relocation of production, warehouse, maintenance, utility and parking uses onto the Gary Steel site. Height limits would be reduced in several locations. Buildings would be stepped back and set back to improve view corridors and street frontage aesthetics. The top floors of tall buildings would be limited to 50% of the floor area below. Building intensity (as measured by floor area ratio) would be reduced substantially, but not to the extent that underutilization of industrial land would occur. This option would ultimately result in the relocation of about 50 jobs from the Gary Steel site. If these jobs cannot be relocated within Berkeley, then the economic and social benefits of the Project stemming from the creation of new jobs will be reduced.

Expanded Site Option One achieves the optimal balancing of the benefits of reducing building intensity of the Project against the adverse

consequences of underutilization of the limited supply of industrial land in West Berkeley. It avoids the potential adverse impact upon historical resources which would occur if the red brick buildings on the Colgate Site were to be demolished. It avoids the potential problems relating to remediation of hazardous waste contamination on the Carleton Street Properties and the Colgate Site. It substantially reduces the visual, aesthetic and land use compatibility impacts of Project Alternative One. This option is preferable because it fills in the land area of the Project Site and produces site planning, internal access, circulation, distribution and security benefits.

2. Expanded Site Option Two. Buildings would be relocated onto the Gary Steel and Carleton Street properties. The parking garage would be moved away from the residences on Dwight Way and relocated onto the Gary Steel Site. The warehouse would be reduced in height but its footprint would increase. Some visual impacts would be reduced. An 80-foot building would be moved away from Dwight Way. This option would create visual and aesthetic impacts by relocating the parking garage and warehouse onto Seventh Street, requiring further mitigation. In addition, it would reduce the floor area ratio beyond the level necessary to mitigate the building intensity impact of the Project, resulting in underutilization of the limited supply of industrial land in West Berkeley and reduction of opportunities for economic development, job creation and enhancement of municipal revenues. Complete information is not available concerning potential hazardous waste contamination on the Carleton Street property, but the limited information which is available indicates that there is a risk of hazardous waste contamination.

3. Expanded Site Option 3A. The parking garage and three production buildings would be relocated onto the Colgate Site. Overall floor area ratio would be reduced. Certain buildings of potential historical significance on the Colgate Site would be demolished to accommodate the relocated buildings. Some visual impacts would be reduced; others would be increased. The parking garage would be farther from incompatible land uses, but also farther from the administration building and not contiguous to the Miles property. This option would reduce the floor area ratio beyond the level necessary to mitigate the building intensity impact of the Project, resulting in underutilization of the limited supply of industrial land in West Berkeley and reduction of opportunities for economic development, job creation and enhancement of municipal revenues. It would also create uncertainty concerning the future land use for the garage site located at Dwight Way and Seventh Street. Soil and groundwater testing has indicated the presence of metals and solvents on the Colgate Site which may have to be remediated.

4. Expanded Site Option 3B. This is a variation of Expanded Site Option 3A. Warehouse, production and parking uses would be relocated onto the Colgate Site. The potentially historic buildings would be demolished. The visual impacts would be similar to Expanded Site Option 3A. Parking would be scattered in several surface lots, including one on the Colgate Site. The warehouse could occupy an existing building on the Colgate Site. As with Expanded Site Option One, this option would reduce the floor area ratio beyond the level necessary to mitigate the building intensity impact of the Project, resulting in underutilization of the limited supply of industrial land in West Berkeley and reduction of opportunities for economic development, job creation and enhancement of municipal revenues. The buildings of potential historical significance on the Colgate Site would be demolished to accommodate the relocated buildings. Some visual impacts would be reduced; others would be increased.

## V. Statement of Overriding Considerations

### A. Unavoidable Adverse Impacts

The City Council finds that despite the imposition of numerous mitigation measures which have substantially lessened the adverse environmental consequences of the Project, it cannot be determined that all the Project impacts have been reduced to a level of insignificance. Further mitigation of the Project's impacts cannot feasibly be obtained, taking into consideration economic, environmental, social, technological and public policy factors. Therefore, the following adverse environmental impacts are determined to be unavoidable:

1. Land Use. Several buildings would exceed the 45-foot height limit established for West Berkeley in the Zoning Ordinance and Preferred Land Use Concept for the West Berkeley Area Plan. The tall buildings will have an adverse land use impact on the West Berkeley area. Changes incorporated into the Project will substantially lessen the Project's land use impact. As originally proposed, the Project would have included two buildings 100 feet tall. Those buildings have been eliminated. The project also would have included non-production buildings in excess of 45 feet in height. The maximum height for the Pilot Plant has been reduced from 80 feet to 65 feet. The maximum height for non-production buildings has been reduced to 45 feet. It is not technologically feasible to conduct the manufacturing and production processes envisioned for this Project in buildings of less than the heights permitted in the Development Agreement. Moreover, further reduction in building heights would impair achievement of the Project benefits. The Project building intensity as indicated by height and FAR will significantly contribute to cumulative land use impacts. In addition to reducing building heights, the Project has been modified

by the imposition of strict Site Development Standards and Design Guidelines which, among other things, require building setbacks and stepbacks to mitigate the land use impacts due to the building heights and FAR. However, these impacts have not been mitigated to a level of insignificance.

2. Visual Quality and Urban Design. The visual impacts of the proposed project are discussed in detail in Chapter 5C of the Draft EIR and Section 3.5 of the Response to Comments Document. The Project would obstruct views of the Berkeley Hills from Aquatic Park and obstruct views of the San Francisco Bay from certain locations within Berkeley. This impact is cumulatively significant when considered in conjunction with other waterfront development. The Project will also, despite the substantial design mitigation measures, still have significant view impacts on adjacent streets. Because the heights of production buildings cannot feasibly be reduced below the permitted levels, these impacts are unavoidable.

3. Traffic and Air Quality. The Project would contribute to cumulatively significant traffic in West Berkeley. Although mitigation measures will substantially lessen the traffic impacts, they will not reduce the traffic impacts to a level of insignificance in that several intersections will operate with levels of service E or F and cumulative development will increase vehicle miles traveled and, therefore, vehicular emissions.

4. Water Consumption. During drought periods when water storage is below acceptable levels, the water consumed during the production process will be an unavoidable adverse impact.

5. Seismic Hazards. There is a potential for damage to structures on the Project Site and danger to occupants of those structures in the event of a major earthquake. This seismic risk will be substantially lessened by the inclusion of several mitigation measures to ensure that all new buildings are designed and constructed to withstand a major earthquake to the maximum extent feasible. Existing buildings which will continue to be occupied for a significant period of time will be examined and upgraded for seismic safety purposes. The possibility of structural failure during an earthquake is an inherent risk for all buildings in seismically active areas such as the San Francisco Bay Area. The Project will have a significant offsetting benefit because many existing buildings will be replaced with new ones which will perform better in the event of an earthquake. The probability of release of hazardous substances or structural failure of buildings will decrease as a result of the Project. Overall, the Project will effect a substantial improvement in seismic safety for the Project Site as compared to existing conditions. However, the seismic safety impacts are included within this Statement of Overriding Considerations to emphasize the

City's conclusion that the seismic risks of the Project are outweighed by its overriding public benefits.

6. Aquatic Park Access. The Draft EIR points out that it will be hazardous for employees of Miles to cross the railroad tracks to gain access to Aquatic Park. Construction of an at-grade crossing for pedestrian access would not eliminate the hazardous condition. Construction of a pedestrian overcrossing could reduce this impact to a level of insignificance, but this mitigation measure would be prohibitively expensive and, if funded by the Project applicant, would divert money from other infrastructure elements and community programs which the applicant has agreed to finance.

7. Historical Resources. The Project will contribute to cumulatively significant demolition of structures with potential historical significance.

8. Chemical Hazards. The 100,000 gallon fuel storage tank will pose a significant risk to public safety in the event of a fire or release.

9. Energy and Waste. The Project will cause Project-specific and cumulative impacts on energy consumption and will cause increased volume of solid waste requiring disposal.

10. In General. To the extent that any of the environmental impacts of the project are not insignificant or reduced to a level of insignificance by the imposition of mitigation measures, but are not expressly listed in this Statement of Overriding Considerations, the Council finds that the public benefits of the Project as detailed below outweigh such unavoidable adverse environmental impacts.

#### B. Overriding Public Benefits of the Project

As more particularly detailed in the Final EIR and the Development Agreement, the Project would produce numerous substantial benefits to the City, its residents, surrounding communities and the public generally:

1. It will modernize the Miles facility by removing buildings which are no longer adequate due to age, state of repair or level of compliance with seismic requirements, or which are located such that they will obstruct the orderly build-out of the Project Site. The Project will result in the removal of unsafe buildings and the upgrading of remaining buildings to current seismic safety standards. It will provide state-of-the-art facilities for research, development and production of high quality therapeutic pharmaceuticals using the techniques of biotechnology, resulting in substantial public health benefits. The successful

development of the Project will enhance the reputation of Berkeley as a world-wide center for biotechnology, thereby encouraging other biotechnology companies to locate in, or remain in, Berkeley.

2. It will enable the comprehensive planning for and orderly development of the Project Site consistent with the City of Berkeley Master Plan and the Preferred Land Use Concept for the West Berkeley Area Plan. Absent a long-term commitment by the City to allow Project build-out, it would not be possible to obtain the massive private financial investment needed to ensure Project viability. Project development will enable the continued productive use of industrial property in an area where many such properties are underutilized or vacant.

3. It will enable the retention of 600 existing jobs and facilitate the creation of an estimated 380 additional jobs. Many of these jobs are high-paying, skilled positions. Miles will contribute a total of \$2.5 million toward employment and training programs. This will further the creation of new employment opportunities and expansion of manufacturing uses, consistent with the goals and objectives of the Preferred Land Use Concept of the West Berkeley Area Plan.

4. It will avoid the loss of municipal revenues, which would result if the Miles facility were to be closed, and ultimately result in a substantial net increase in City revenues.

5. It will result in a contribution of \$615,000 into the City's Housing Trust Fund to be used for the creation of new affordable housing units, at least half of which will be spent in the West Berkeley area.

6. It will result in contributions totaling \$864,000 for programs relating to child care.

7. It will result in contributions totaling \$1,964,000 for physical improvements to City streets and roads designed to reduce Project-related and cumulative traffic congestion.

8. It will result in contributions totaling \$1,450,000 for improvements to the City's sanitary sewer and storm drain systems.

9. It will result in contribution of \$250,000 for improvements to Aquatic Park as well as \$50,000 to perform a water quality study in the Park.

10. It will result in contributions totaling \$1,120,000 for transportation system management measures.

11. It will result in contributions totaling \$262,000 for a historical exhibit and public art.

12. It will result in contributions totaling \$2,461,500 for environmental protection programs.

13. It will result in contributions totaling \$1,030,000 for community service programs.

14. It will result in contribution of \$125,000 to fund outside research into alternatives to the use of animals for laboratory testing.

Provisions for financing and implementation of the various community facilities and programs to be provided by Miles are set forth in Exhibits F, G-1 through G-11, and H of the Development Agreement.

The City Council concludes that the numerous public benefits of the Project outweigh its unavoidable adverse environmental effects, and therefore the unavoidable environmental effects are considered to be acceptable.

#### VI. Monitoring and Reporting Program

Pursuant to Public Resources Code section 21081.6, the City has prepared a detailed monitoring and reporting program designed to ensure compliance during Project implementation with the changes to the proposed Project which have been adopted, or made conditions of approval in order to mitigate or avoid significant effects on the environment. This reporting and monitoring program is incorporated into the Development Agreement as Exhibit H.

**EXHIBIT L**

**REPORT OF CITY'S INDEPENDENT  
ENGINEERING CONSULTANT ON  
JUSTIFICATION FOR HEIGHTS IN EXCESS  
OF FORTY-FIVE FEET**

QZ - BERNZ - GZM - SMITHSUS - ROCCED - T

Energy - Air Conditioning - Controls - Facilities - Design - Operation - System Analysis - P.O. Box 980 Fair Oaks, California 95628 Phone (916) 961-3400

INVESTIGATION INTO THE HEIGHT REQUIREMENTS  
OF  
MAMMALIAN CELL PILOT PLANT

Miles/Cutter Facilities  
4th and Parker Streets  
Berkeley, California

Report Prepared by  
TAYLOR SYSTEMS ENGINEERING, INC.  
Fred H. Taylor, P.E.  
Consulting Engineer

Subconsultant  
TRIAD TECHNOLOGIES INC.  
New Castle, Delaware

Challenge Response by  
MILES/CUTTER BIOLOGICAL

TSE Project BER977

15 October 1991

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

TABLE OF CONTENTS

	<u>Page</u>
I. CHARGE AND OBJECTIVES OF INVESTIGATION	1
II. GENERIC PILOT AND PRODUCTION BUILDING REQUIREMENTS.	2
III. EXECUTIVE SUMMARY, PILOT PLANT HEIGHT INVESTIGATION	7
IV. BUILDING DESCRIPTION AND REQUIREMENTS Triad Technologies Report	12 Following 17
V. CHALLENGES TO MILES/CUTTER Miles/Cutter Response	18 Following 18
VI. QUESTIONS AND RESPONSES TO PLANNING COMMISSION SUBCOMMITTEE AND MILES/CUTTER DEVELOPMENT ADVISORY GROUP	19
VII. CRITERIA FOR FUTURE BUILDING HEIGHTS	27

DIAGRAMS

I. Proposed Pilot Plant Building Cross Section (Miles/Cutter)	3
II. Pilot Plant Building Elements	6
III. Pilot Plant Process Tank Relationships	8
IV. General Building Process Relationships	9
V. Schematic - Process and Floor Flow Diagram	13
VI. Schematic - 1st Floor WFI and Tank Cleaning Diagram	15

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

I. CHARGE AND OBJECTIVES OF INVESTIGATION

Taylor Systems Engineering, Inc. (TSE) has been retained by the City of Berkeley (City) to provide Consulting Engineering services to assist them in the evaluation of the Miles, Inc, / Cutter Biological (Miles/Cutter) 30-year Master Plan. Professional services are required for a facility system analysis of the Miles/Cutter project to be located on a 24.7 acre site, bounded by Dwight Way, Carlton Street, Seventh Street and the Southern Pacific Railroad right-of-way.

The following is to be reviewed and evaluated:

- \* The Pilot Plant (a 3-story building, 65' high, 200' long by 100' in depth) to be located on Parking Lot A in the northwest corner of the Miles site.
- \* Miles' 30-Year Long Range Plan for total site development.

This interim report concentrates on the Pilot Plant height issues. It is the result of meetings with both the Planning Commission Sub-Committee and the Miles/Cutter Development Advisory Group, tours of other production and pilot plant facilities, and interviews with Miles/ Cutters Pilot Plant Project Engineer, Mr. George Traugh.

Reports on water quantity mitigation and Miles' 30-Year Long Range Plan will follow.

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

II. GENERIC PILOT PLANT AND PRODUCTION  
BUILDING REQUIREMENTS

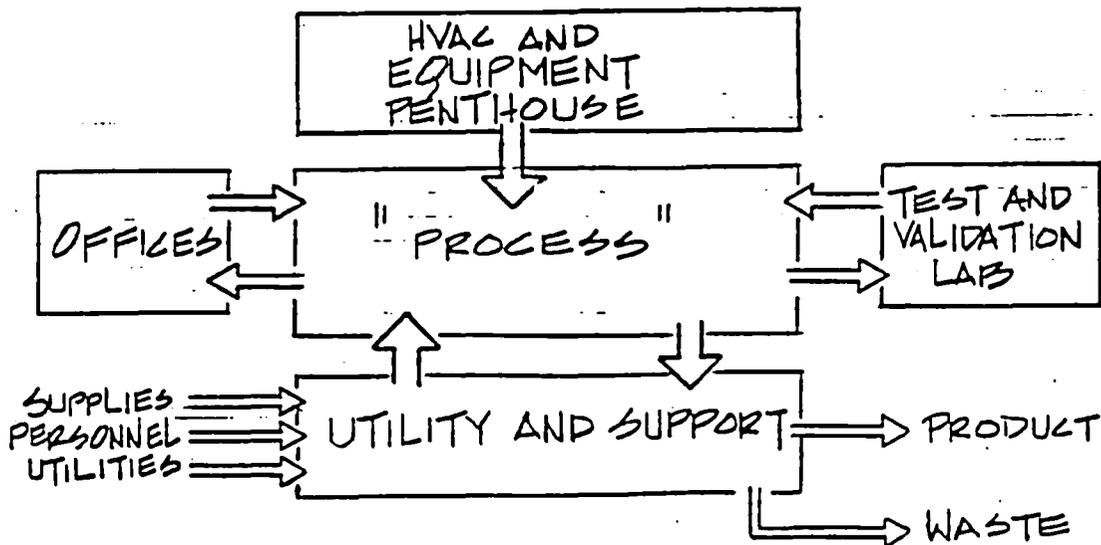
Current bio-tech pilot plants and production buildings are built around the "process" as the heart of facility. Everything within the building is grouped to feed the process and take its product or waste away.

These processes are very complex processes and are just now being developed or have been developed in the last few years. This truly is a "cutting edge science." The current technologies carry few concepts over from the past. To produce a product in today's market requires very sophisticated buildings. However, the planning of the building together follows basic concepts and sound engineering.

The "process" must be performed in very stringent conditions and environments, both within the process and its surroundings. The relationships and locations of process support services, and the cleanliness of the process and its environment, are the functions that most drive the design and layout of the "Process" building. As a general statement, these types of buildings are classified as "clean."

Another driving factor is the ability of the process to be validated and certified to satisfy the FDA (Federal Drug Administration). This requirement carries its own set of building and process requirements.

First let's look at the adjacencies of process support services. With the process as the heart, everything is clustered around to support it, much as in the diagram below.







MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

The clean room air handling equipment needs to be as compact as possible so as to limit the opportunities for contamination. This requirement, together with the downward air flow requirement, locates the equipment directly above the process.

Locating the air handling equipment remotely in an effort to lower the overall building height saves very little. The first 7 or 8 feet above the penthouse floor is used as a work area for servicing equipment. The air handlers share this space. The space above the work area and air handlers houses the air distribution ductwork. This ductwork is here, whether the air handlers are located in the penthouse or not.

In lesser buildings, this equipment might be located on the roof. Because of the nature of the equipment, the cleanliness required and the frequency of service it is placed in a "Penthouse" over the process.

The Penthouse contains more than just the air conditioning equipment. It is a work area. Much of the process equipment that requires frequent maintenance and is not required to be in the clean room environment is also located here. Normally, this is where you will find workers servicing either the air conditioning equipment and filters or the process equipment. It is a very busy place.

**TEST AND VERIFICATION LABORATORIES:**

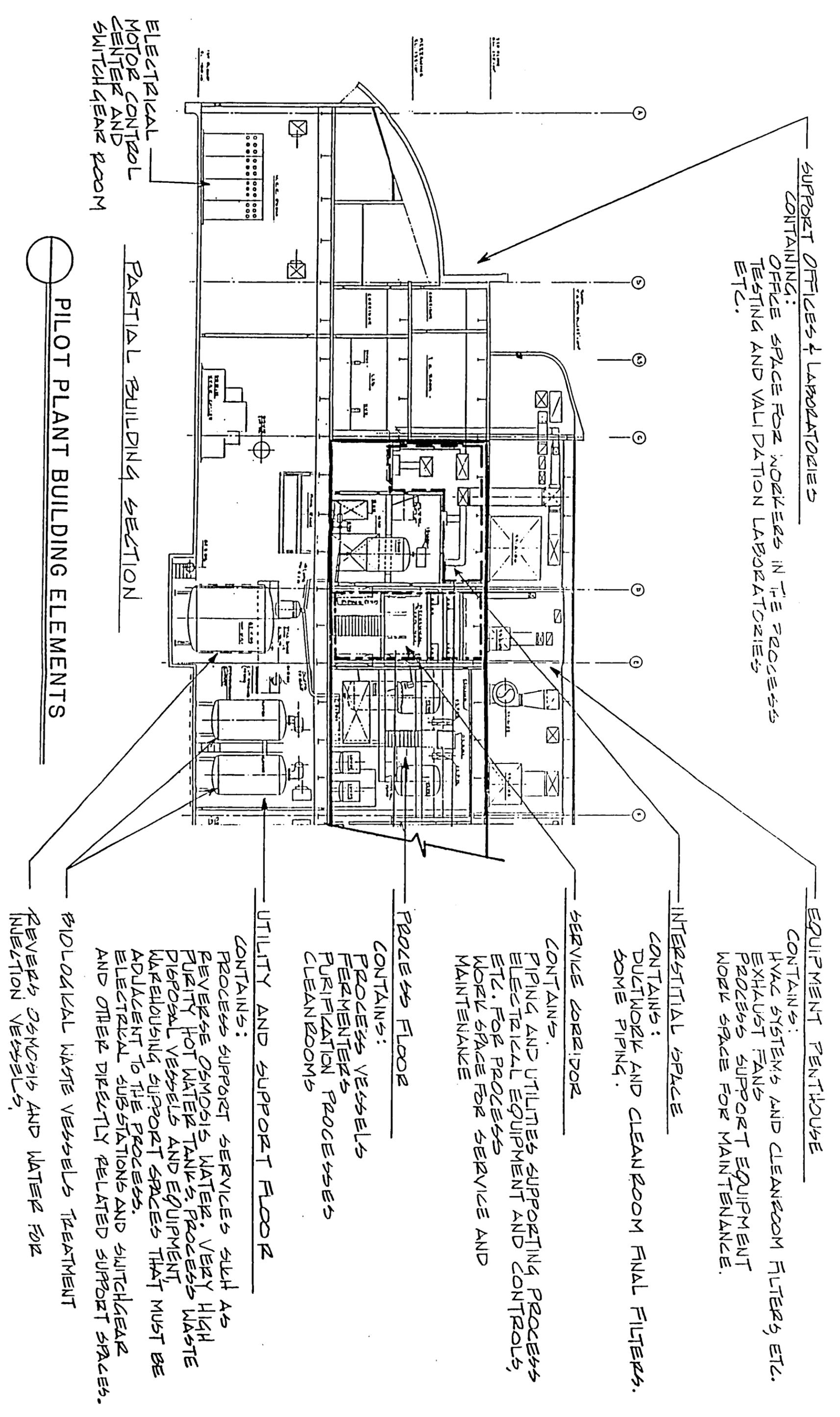
Constant testing and verification is carried out. Laboratory and facilities for the testing are placed directly adjacent to the process.

**SUPPORT OFFICES:**

Offices are required for the people that work on the process and are directly related to it. Immediate access to the process and all of its support functions are provided for in the building.

**OTHER:**

There are many other ancillary spaces and functions within the building. Examples are freezers, clean room clothing changing rooms, locker rooms, storage rooms, etc. All are directly related to the process and require immediate adjacencies.



SUPPORT OFFICES & LABORATORIES  
 CONTAINS:  
 OFFICE SPACE FOR WORKERS IN THE PROCESS  
 TESTING AND VALIDATION LABORATORIES  
 ETC.

EQUIPMENT PENTHOUSE  
 CONTAINS:  
 HVAC SYSTEMS AND CLEANROOM FILTERS, ETC.  
 EXHAUST FANS  
 PROCESS SUPPORT EQUIPMENT  
 MORE SPACE FOR MAINTENANCE.

INTERSTITIAL SPACE  
 CONTAINS:  
 DUCTWORK AND CLEANROOM FINAL FILTERS.  
 SOME PIPING.

SERVICE CORRIDOR  
 CONTAINS:  
 PIPING AND UTILITIES SUPPORTING PROCESS  
 ELECTRICAL EQUIPMENT AND CONTROLS,  
 ETC. FOR PROCESS  
 MORE SPACE FOR SERVICE AND  
 MAINTENANCE

PROCESS FLOOR  
 CONTAINS:  
 PROCESS VESSELS  
 FERMENTERS  
 PURIFICATION PROCESSES  
 CLEANROOMS

UTILITY AND SUPPORT FLOOR  
 CONTAINS:  
 PROCESS SUPPORT SERVICES SUCH AS  
 REVERSE OSMOSIS WATER. VERY HIGH  
 PURITY HOT WATER TANKS. PROCESS WASTE  
 DISPOSAL VESSELS AND EQUIPMENT,  
 WAREHOUSING SUPPORT SPACES THAT MUST BE  
 ADJACENT TO THE PROCESSES.  
 ELECTRICAL SUBSTATIONS AND SWITCHGEAR  
 AND OTHER DIRECTLY RELATED SUPPORT SPACES.

BIOLOGICAL WASTE VESSELS TREATMENT  
 REVERSE OSMOSIS AND WATER FOR  
 INJECTION VESSELS.

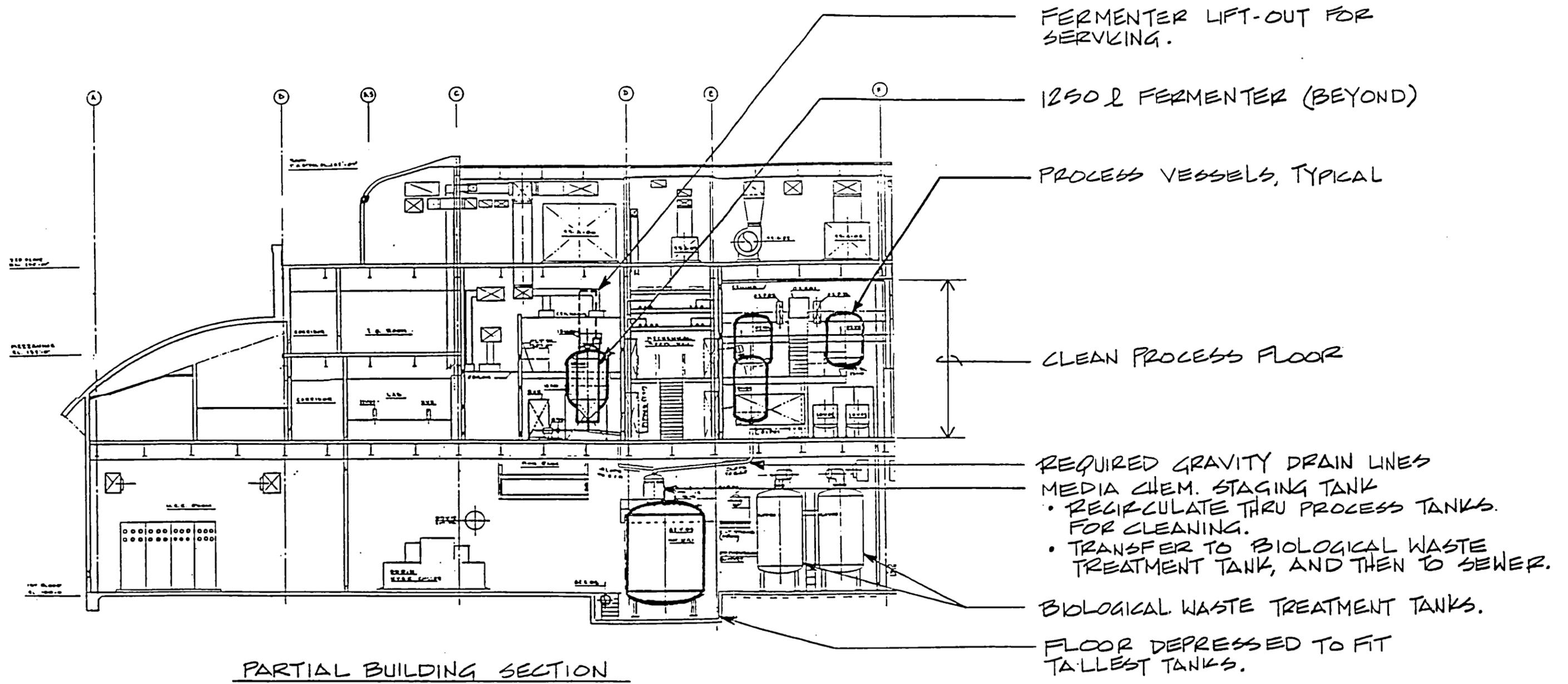
ELECTRICAL  
 MOTOR CONTROL  
 CENTER AND  
 SWITCHGEAR ROOM

PARTIAL BUILDING SECTION

PILOT PLANT BUILDING ELEMENTS

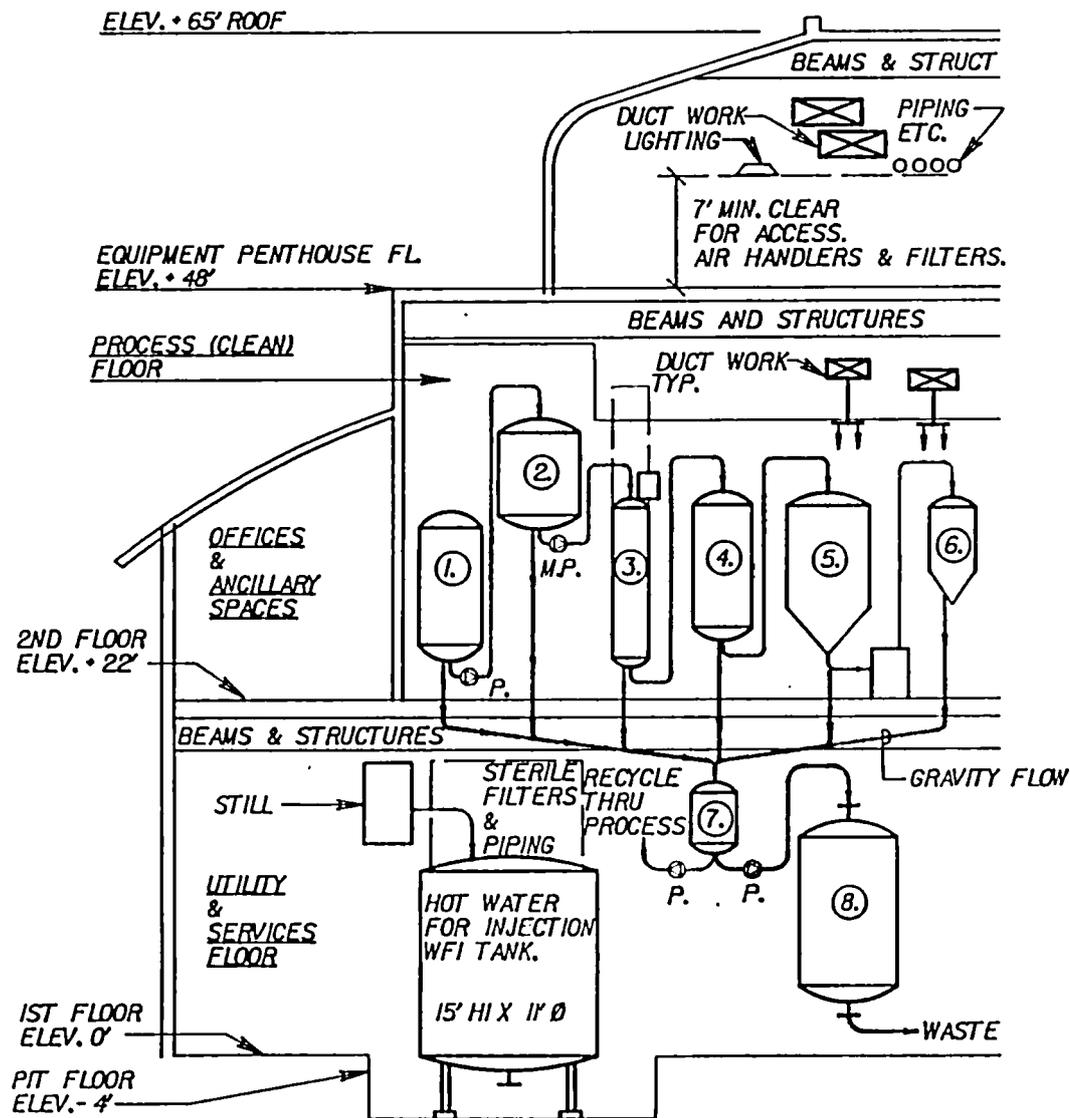
DIAGRAM II





PARTIAL BUILDING SECTION

○
PILOT PLANT PROCESS TANK RELATIONSHIPS



- ① MEDIA PREP
- ② MEDIA HOLD
- ③ FERMENTER
- ④ HARVESTER
- ⑤ STAGING
- ⑥ HARVESTING
- ⑦ MEDIA CIP RECYCLE TANK
- ⑧ NEUTRALIZATION TANK

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

The first floor height is required to be 22 feet, including the structure and floor slab above. This is dictated by the heights of some of the utility tanks with their service spaces above and below. The "process" has some impact but is not necessarily predominant.

The "Process" floor at the second level has a height requirement of 26 feet, including the beams and structure for the Equipment Penthouse above. The mounting height of the Media Mix Tank and its relationship to the Fermenter, and the Fermenter vessel with its cleaning and servicing requirement above it, each have a demanding impact on the height for this floor. This is further compounded by the requirement for a clean room environment and its required overhead air distribution systems.

See Diagram III (Page 8) for Pilot Plant Process Tank Relationships.

See Diagram IV opposite for the General Building Process Relationships.

The Equipment Penthouse has a height of 17 feet from floor to top of roof, including the structure, with only a 14-foot clear height for equipment, work space, ductwork and services. This height is considered a bare minimum for this type of space.

At most, only a few additional feet of height reduction could be realized through a relentless challenging process. The penalty for further arbitrary height reductions would be a severely impacted building with serious implications in the servicing of the equipment and its accompanying validation consequences.

The only way to significantly reduce the building height would be to remove the requirement for the first floor being directly below the "Process" floor, changing the building from three to two stories. This would require a major change in a critical portion of Miles/Cutter's technology. Their technology is an evolution of unsatisfactory processes in the Factor VIII plant and is proposed to assure that the new plant will be satisfactory.

The prospect of placing the Utility and Support level in a basement below the Process level is rejected by Miles\Cutter for valid reasons. This site is subject to serious groundwater problems that have been documented over the years. Their experience with other basements on the site have been very unsatisfactory. Even with the latest technology in clean

**MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES**

basements, potential leaks and contamination cannot be ruled out in future years following a few minor earthquakes that the area is sure to experience.

Any effort to lower the first level, either by grading or by excavating will require contending with this groundwater problem. The placing of equipment directly associated with the process in a basement that can be contaminated is not acceptable.

Notwithstanding the above arguments, further height challenges are recommended to be made to Miles/Cutter to verify that everything practical and possible has been done to hold the building at its lowest height.

## MAMMALIAN CELL PILOT PLANT INVESTIGATION MILES/CUTTER FACILITIES

### IV. BUILDING DESCRIPTION AND REQUIREMENTS

The primary function of the building is to house the Mammalian Cell Process. As is being implemented by Miles/Cutter, this is a cutting edge technology requiring extremely demanding conditions. The conditions include:

- \* A clean room process environment and a clean building.
- \* Fully cleanable equipment and spaces, both inside and out.
- \* Adequate service spaces around, over and under all equipment.
- \* Adequate spaces immediately around the process for support service, equipment and work space.
- \* The ability to validate the equipment, utilities, process, HVAC, flow of materials, personnel and air within the building. This validation is in accordance with current FDA Good Manufacturing Practices and is required for an establishment license to manufacture a parenteral drug.

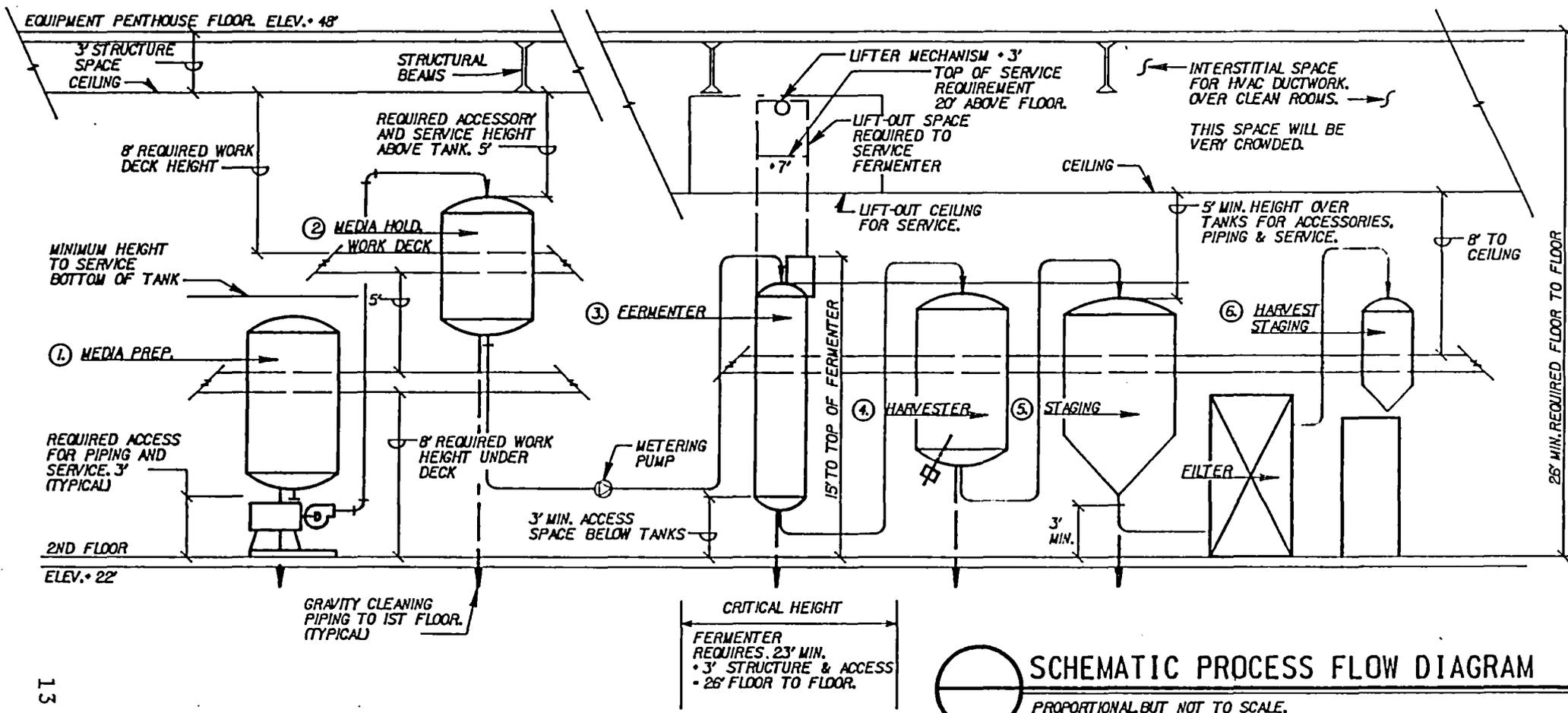
The building is configured to support the second floor process space with an Equipment Penthouse immediately above, utilities and waste spaces below, and supporting offices adjacent. This is the configuration that would be expected for this type of building.

See Diagram II (Page 6) for the building elements and Diagram III (Page 8) for the process tank relationships.

Each floor has its own height requirement criteria, all interrelated to the process. Common to each floor is the structural requirement for beams and ceilings. The interstitial ductwork and utility corridors have been buried into the building so that they do not impact building height.

The process is made up of self-generating, pumped and gravity flows, each with a different requirement. The supporting services (such as the HVAC systems and process waters) are all powered and located immediately adjacent.

See Diagram IV (Page 9) for the general building processes that have the greatest impact on building height.



**SCHEMATIC PROCESS FLOW DIAGRAM**  
 PROPORTIONAL, BUT NOT TO SCALE.

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

The height requirement for the "Process" second floor is 26 feet, including the 3 feet of beam and structure required. The critical heights for the process are the tanks, their services and access requirements. The Media Hold Tank (Item 2 on Schematic Diagram V opposite has a critical height relationship to the Fermenter (Item 3) and must have 5 feet clear access overhead. The Fermenter requires 3 feet below it for connections and service and 7 feet plus a lifting device. This places the top of its access space at 23 ft above the floor. With the structure above, this makes the 26-ft floor-to-floor height requirement.

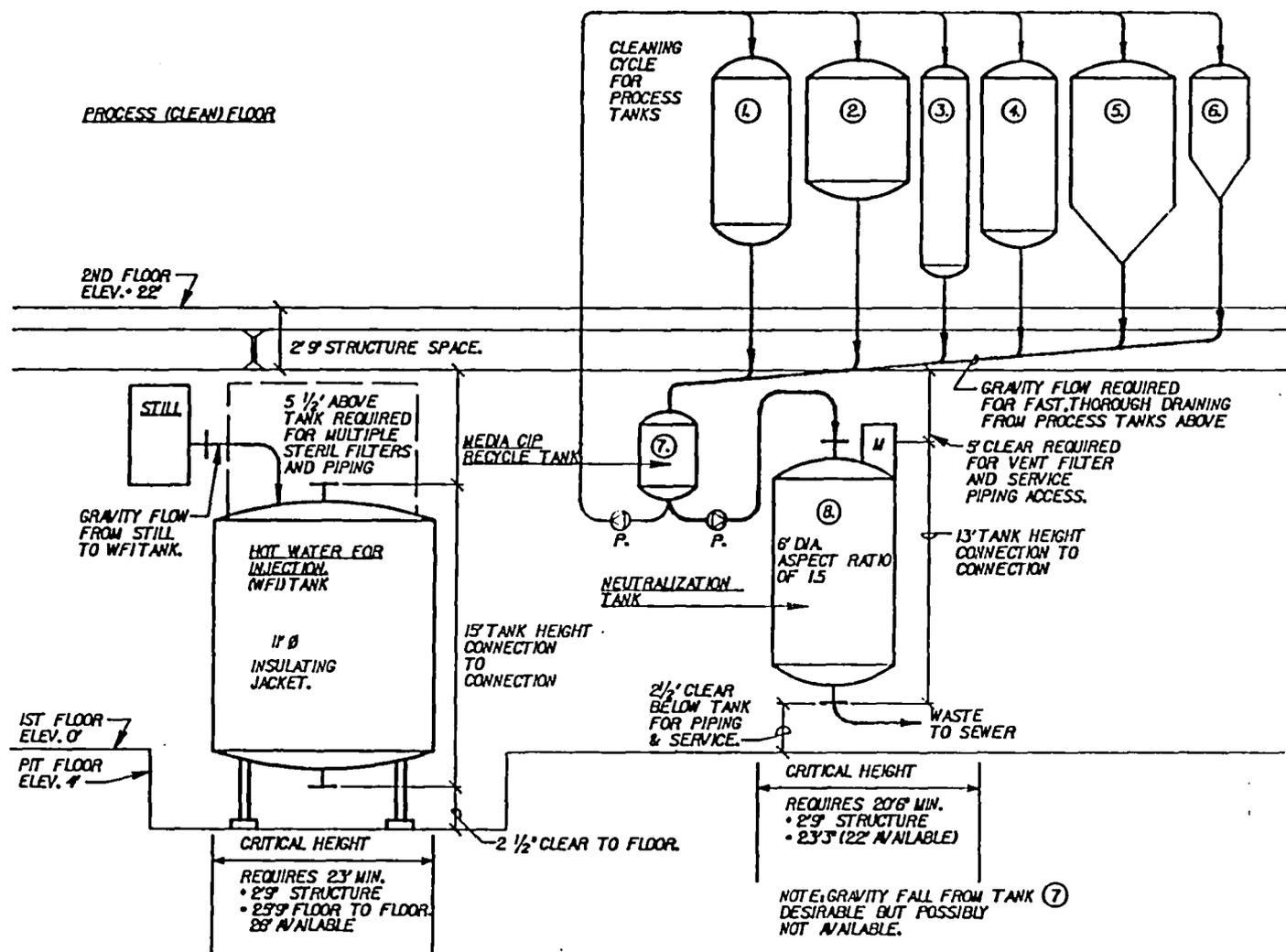
The flow in this part of the process cannot be pumped and the metering pump between them has no ability to raise the flow height, so that the height relationships are very important. There is no opportunity to reduce the building height here. Actually, each has its own equal impact on height, so that reducing the height in one only shifts the requirement to an equal adjacent height requirement.

The remainder of the cell process line (Items 4 through 6 in Diagram V) just fits adequately on this second floor.

Also impacting the height of this second floor is the clean room requirement. A clean room inherently requires vertically down air flow from the "absolute" filters above. This also requires the associated air handlers to be located directly above, both for efficiency and for the ability of validation.

The third floor Equipment Penthouse directly above the process floor has a 14-ft clear height with a 17-ft floor-to top-of-roof dimension. This is an absolute minimum and less than is normally expected for this type of installation. The minimum height requirement is 7 feet for personnel and equipment, so that work can be accomplished and for the primary air handlers and filters. Above this are levels for lights and electrical conduit, 5-ft minimum for supply and return ducts so they can cross, and a level for piping. This normally requires at least 16 feet clear; so the building will be tight.

The Miles/Cutter process uses a free flowing gravity cleaning drain cycle to clean the process vessels on the second level which feeds down to recycling and neutralization waste treatment tanks on the ground floor. This is critical to their technology as well as significantly reducing their water requirements. It is an evolution of prior unsatisfactory cleaning processes in the Factor VIII Pilot Plant and is an evolutionary development. It is only speculation that this



15

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

process can develop into a non-gravity system in future buildings.

It is this gravity requirement that dictates the two process building levels and the third HVAC and equipment penthouse level.

Diagram VI opposite presents a WFI and Tank Cleaning schematic.

As noted above, the gravity drain cleaning system, together with the Media CIP recycle tank, significantly reduces Miles\Cutter's water consumption. Each cleaning cycle for a single vessel consumes 1,000 liters of chemicals and water. Without recycle capability, that consumption would increase by a factor of four to 4,000 liters per cleaning cycle. When multiplied by the number of tanks to be cleaned, this is a significant water consumption mitigation.

The building also requires other technical and service functions. Things like the required FDA and process water tanks (Water for Injection [WFI] and Reverse Osmosis [RO]), warehouse, electrical substation/switching rooms, secondary refrigeration equipment, high purity steam boilers, shops and bio-containment spaces are also located on the first floor. These items are required to be adjacent to the process. To relocate them elsewhere and drop the building to two stories would essentially double the building footprint. Because of the adjacency requirements, this is not an acceptable alternative.

In an attempt to minimize the height of the building, the Miles/Cutter design engineers have made three specific compromises to their design.

1. On the first floor, they have placed the largest utility tanks which impact height into a 4-ft recessed hole in the floor, below the first floor level. Since these tanks are not as critical to cleanliness as some others, they believe that this is an acceptable mitigation.
2. On the second floor, they have used a removable ceiling section over the Fermenter Vessel to allow the core to be removed into the attic space for servicing. In this manner, at the cost of a much more difficult servicing process, additional building height is not required.

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

3. Also, on the second floor, the required interstitial spaces for HVAC ductwork and piping have been buried into the building so that these spaces do not add to the height of the building.

These mitigating measures have two advantages. They have saved building height and they have saved construction costs that would have otherwise been required for a taller building.

To further investigate the opportunities to reduce the height impact on the building caused by the gravity decontamination drain from the process vessels to the Media CIP Recycle Tanks, the services of Triad Technologies of New castle, Delaware, were retained to provide an independent evaluation of Miles/Cutter's proposed system.

Triad Technologies' report is included in the following 7 pages of this report.

As shown, there are technical alternatives to the proposed gravity vessel cleaning and decontamination process. However, the practicality of these alternatives are limited by design and process constraints, would require extensive facility redesign, and involve compromises in terms of maintenance and operation of the facility. In addition, in those instances where tanks would be located below ground, the potential environmental risk would have to be carefully considered.

The options presented by Triad Technologies for the media CIP recirculating tanks locate the tanks in pits or subgrade locations. Pits and subgrade locations have been previously rejected by Miles/Cutter due to a number of factors, including:

1. Possible contamination caused by the high water table.
2. The need for a minimum of 8 feet of working head room around the equipment.
3. Interferences with other equipment that will be placed under the process floor.



Triad Technologies Inc.

A Total BioPharmaceutical Service Corporation  
(302) 323-1550 • FAX (302) 323-1557

101 Centerpoint Boulevard  
New Castle, Delaware 19720

MEMORANDUM

Document FAXed October 14, 1991  
Document No. OC-065-0001  
Page 1 of 7

TO: Fred H. Taylor, P.E.  
Consulting Engineer

FROM: Daniel J. Raab *DR*  
Senior Staff Engineer

Jimmy Z. Yan, P.E.  
Project Engineer

SUBJECT: Miles, Inc./Cutter Biological Liquid Waste  
Decontamination Evaluation

---

Triad Technologies Inc. (Triad) reviewed the proposed liquid waste stream decontamination process for the Mammalian Cell Pilot Plant proposed by MILES INC./CUTTER BIOLOGICAL (Miles/Cutter) in their planned Berkeley, California facility.

Miles/Cutter proposes to use a gravity flow cleaning and decontamination system for the process vessels which requires a utility floor level be placed under the process floor. This requirement is one of the forces that drives the building to be three stories and therefore 65 feet high. The City height limit in this area is 45 feet.

Triad's task in this study is to determine if Miles/Cutter is justified in requiring a gravity flow cleaning and decontamination system which necessitates this space under process or if there are other techniques to accomplish the same result that are practical and can reduce the height of the building.

Our review involved a conceptual study of the gravity flow decontamination system philosophy of Miles/Cutter. This philosophy was gathered from limited documentation ("Investigation into the Height Requirements of Mammalian Cell Pilot Plant," Fred H. Taylor, P.E., September 25, 1991) and a conference telephone call between Mr. George Traugh, P.E. of Miles/Cutter, Fred H. Taylor, P.E. of Taylor Systems Engineering, Inc. and Daniel J. Raab of Triad Technologies Inc. on Friday, October 11, 1991. The review includes an overview of the method of cleaning and decontamination, the major pieces of equipment and technical alternatives.

**Clean-in-Place (CIP) and Decontamination System Philosophy:**

The process level (second floor) of the proposed Berkeley facility houses the actual process vessels. These vessels consist of a media prep tank, media hold tank, fermenter, harvester, staging and harvesting tanks. All tanks have three gravity flow drains; one to the media CIP recycle tank, the second to the neutralization tank and the third to process drain (P&ID of these systems not included in package).

The Miles/Cutter CIP process uses the media CIP recycle tank as a recirculation tank. The cleaning agent is pumped from the media CIP tank to the top of the vessel to be cleaned (spray ball inside), with the drain return being gravity back to the media CIP tank.

This recirculation type cleaning system will significantly reduce Miles/Cutter's water consumption. Each cleaning cycle for a single vessel consumes 1,000 liters of chemicals and water. Without recycle capabilities, that consumption would increase by a factor of four to 4,000 liters per cleaning cycle. When multiplied by the number of tanks to be cleaned, this is a significant water savings.

Miles/Cutter has had unsatisfactory cleaning systems in their Factor VIII Pilot Plant due to poor performance of a sump tank and pump design. Triad has not had the opportunity to review this design, therefore our evaluation of the existing CIP/decontamination process in the Factor VIII Pilot Plant is beyond the scope of this review.

**Decontamination Process Alternatives:**

Due to the limited information available to Triad, the following proposed alternative options are preliminary concepts based on our past experience with similar system design and the description provided by Taylor Systems Engineering, Inc.

OPTION #1:           Subground Decontamination System  
                      (Adjacent Building or Pit)

In this option, two decontamination tanks and the cleaning CIP system will be installed subground in an adjacent building or pit. The depth of this pit will be determined by the length of the gravity flow drains (slope requirements of 0.25 inch/foot). The process waste from the vessels can still be drained by gravity into the decontamination tanks or cleaning CIP system as shown in Fig. 1. The cleaning CIP system effluent then be pumped into the decontamination tank after a cleaning operation. The decontaminated effluent is then pumped out from the decontamination tank to the sewer. In order to meet the maximum underground deepness of 4 feet, the decontamination tanks may have to be installed in a horizontal configuration.

The following are the highlights for this option:

- This option will minimize the facility redesign effect.
- It retains all the gravity flow cleaning and decontamination operation advantages.
- Under the current Resource Conservation and Recovery Act (RCRA) amendment of EPA and California state law, any underground vessel must be constructed of double-wall containment vessel. This may increase the cost of the decontamination tanks.
- Due to the nature of a long horizontal tank configuration, it may be difficulty to mix the content well during the decontamination operation.
- More than one mixer may be required for a long horizontal tank.
- A decontamination tank discharge pump must be provided for each tank to drain the decontaminated effluent into the sewer.
- Due to the limitation of the underground space, the maintenance for the decontamination tanks and cleaning CIP system seem to be difficult.

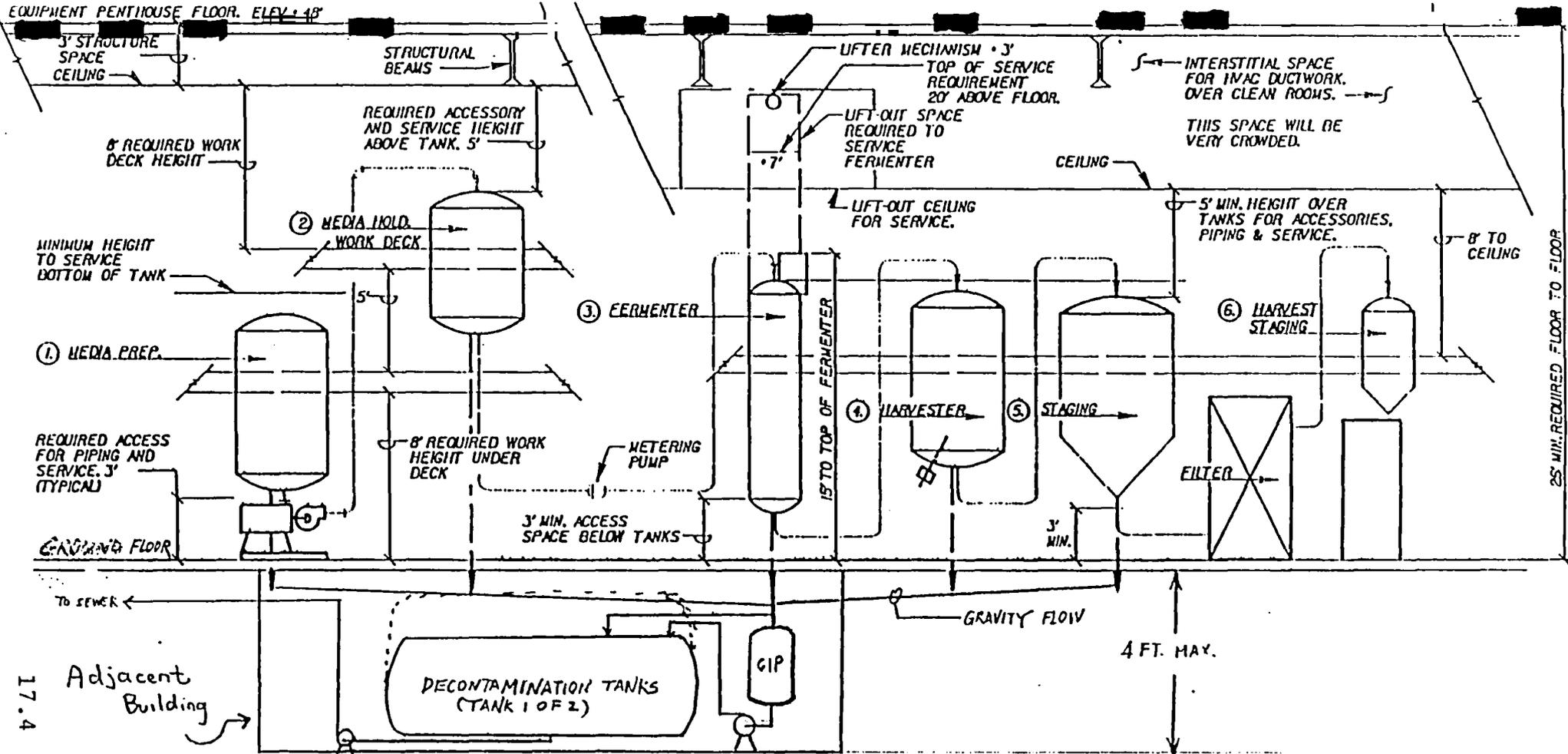


FIG. 1 UNDER-GROUND DECONTAMINATION TANK SYSTEM

17.4

## OPTION #2: Subground Sump Tank System

In this option, an appropriate sized containment sump tank will be installed under the floor level of the Process Facility or below the floor level of an adjacent building. The process and cleaning CIP waste will be drained gravimetrically into the sump tank. At a pre-determined level, the sump pump will be activated and transfer the waste from the sump tank to the decontamination tanks located on the ground level for treatment. The decontaminated effluent will then be discharged from the decontamination tanks into the sewer by gravity. Fig. 2 schematically shows the operation. Since the gravity return of the cleaning solution for the CIP is no longer available in this option, a return pump must be provide for the CIP system.

The following are the highlights for this option:

- This option requires more extensive facility redesign, since the cleaning CIP system and decontamination tanks will be relocated on the same floor with the process equipment.
- A major drain pipe redesign will be required.
- The sump tank and pump must be installed in a total contained enclosure.
- As the sump pump and sump piping will be handling contaminated waste, they must be designed as a leak proof system. This will increase the containment piping cost.
- A return pump must be provided for the CIP system.
- According to the Bio-safety containment practice, the sump tank and sump piping must be cleaned and decontaminated periodically. An extensive cleaning procedure must be established.

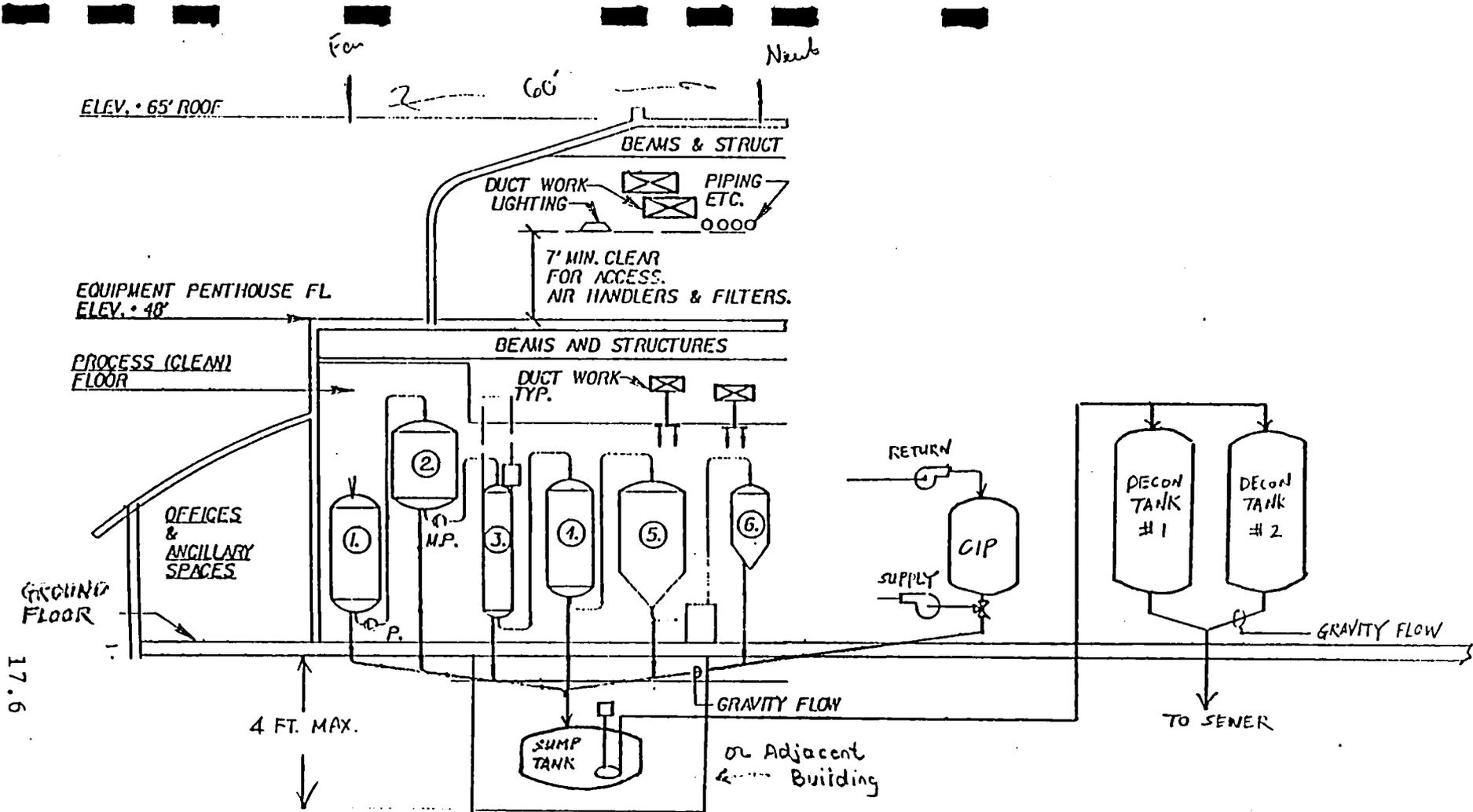


FIG. 2 UNDER-GROUND SUMP TANK SYSTEM

## OPTION #3: Penthouse Relocation

There is another possibility to eliminate one floor level to reduce the building height. If the Equipment Penthouse can be relocated adjacent to the building, then the proposed gravity flow cleaning and decontamination system for the process vessels, which requires a utility floor level be placed under the process floor still can be accomplished. If this is the case, some areas in the second floor "Process Facility" will be designed as the high bays to accommodate the larger vessels. Alternatively, if the Utility Support Floor is going to be eliminated as the result of the building height reduction there will be a major change for the cleaning and decontamination process operation.

**Conclusion:**

The Miles/Cutter design has taken into consideration many operational aspects required for unit operations of this facility and has involved many excellent features. This includes easy access to tanks and process equipment, gravity free flowing piping runs and minimization of pumps. All these characteristics are important in the cleaning and sterilization of systems, as well as preventive maintenance.

As shown, there are technical alternatives to the proposed gravity vessel cleaning and decontamination process, however the practicality of these alternatives are limited by design and process constraints and would require extensive facility redesign.

cc: Mike French, Cutter/Miles  
Jimmy Z. Yan, Triad  
Richard F. Geoghegan, Triad  
File

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

V. CHALLENGES TO MILES/CUTTER

Every practical means must be considered and taken into account in an effort to lower the profile of the Pilot Plant. The following challenges are made to Miles/Cutter for their evaluation and response to address possible height mitigation measures that have been identified in the course of this investigation:

1. The building has been placed on grade. If part or all of the building could be lowered, it would reduce the apparent height of the building while retaining the full internal height now planned.

Miles/Cutter is requested to investigate the possibility of this measure. It is expected that extra measures would have to be taken to combat the ground water conditions such as full french drains, subterranean drainage systems under the building and possible double containing the lower floor where it intrudes into the water table.

Miles/Cutter is asked to analyze this proposition and report to the City with an Engineering Report validating its findings.

2. The large WFI and RO tanks under the process 2nd floor cause this floor, among other things, to be 22 ft high. If these tanks, along with the waste treatment tanks, could be relocated to an appendage adjacent to the planned building and placed on grade, the total building could be lowered, the ground water situation would be avoided, and those critical items that rely on gravity would not be affected. The building could then be lowered to the next critical height item.

Miles/Cutter is asked to consider this proposition and report on its feasibility.

3. If both of these propositions are feasible, is it possible to combine them and achieve the maximum building height reduction?

Miles/Cutter is asked to also respond to this proposition.

Miles/Cutter's Response is provided in the following two pages.



Memorandum

Cutter Biological

Berkeley, CA

Date: *October 2, 1991*

Subject: *Challenges to the Mammalian Cell Pilot Plant Investigation*

From: *G. Traugh*

To: *J. Lew, F. Taylor*

*The following are responses to the challenges proposed by the Design Review Team:*

**CHALLENGE 1:** *The building has been placed on grade. If part or all of the building could be lowered, it would reduce the apparent height of the building while retaining the full internal height now planned.*

*Miles/Cutter is requested to investigate the possibility of this measure. It is expected that extra measures would have to be taken to combat ground water conditions such as full french drains, subterranean drainage systems under the building and possible double containing the lower floor where it intrudes into the water table.*

**RESPONSE 1:** *Miles/Cutter will investigate the possibility of these measures during the next design phase.*

**CHALLENGE 2:** *The large WFI and RO tanks under the process 2nd floor cause this floor, among other things, to be 22 ft high. If these tanks, along with the waste treatment tanks, could be relocated to an appendage adjacent to the planned building and placed on grade, the total building could be lowered, the ground water situation would be avoided, and those critical items that rely on gravity would not be affected. The building could then be lowered to the next critical height item.*

**RESPONSE 2:** *Placing these tanks outside the building does not lessen the height requirement of the first floor because of the other large utility equipment. The adjacent location does jeopardize the process in the utility manufacture as well as cleaning and final process solutions. All of these solutions must be in unpocketed piping, these tanks should be below the process floor.*

MEMO

DATE: October 2, 1991

SUBJECT: Mammalian Cell Pilot Plant

FROM: G. Traugh

TO: J. Lew, F. Taylor

PAGE: 2

CHALLENGE 3: --- *If both of these propositions are feasible, is it possible to combine them and achieve the maximum building height reduction?*

RESPONSE 3: Perhaps, depending on the results of the foundation study.

A1:1092391M2.GT

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

VI. QUESTIONS AND RESPONSES TO PLANNING COMMISSION  
SUBCOMMITTEE AND MILES/CUTTER DEVELOPMENT ADVISORY GROUP

Update - 2 September 1991

1. What are the requirements for a generic biotech building as they apply to this project?
  - a. The total building supports the "Process." It is surrounded by the various sub-processes required to feed, condition, staff, harvest and handle its waste products.
  - b. Everything in the facility is subject to FDA supervision, inspection and verification. The products, and therefore process streams, must be pure enough to be injected into the human body. This means that everything inside the process and the spaces that it is housed in must be immaculately clean, cleanable and verifiable.
  - c. The facility must be flexible. This technology is new and constantly changing requiring almost constant modification and retrofitting.
2. What are the justifications for the building height?
  - a. The basic cause of the building height is necessitated by Miles/Cutter's technology for a three-story building.
  - b. Each of the three floors have a height requirement dictated by the equipment on that floor. In general, this is required to house a vessel or equipment with its required access and piping spaces.
  - c. First floor examples are the WFI (Water For Injection) hot water storage tank and RO (Reverse Osmosis) water tank. These are each large tanks. The WFI tank has a still that must sit above it. To mitigate their impact on the height of the building, each tank has been recessed into a 4-foot-deep depression in the floor. The WFI tank requires 23 ft of height. With the 4-ft depression and taking out the structural height of the second floor, there

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

is just enough space for the tank and its appurtenances.

Other contributing height factors are the process cleaning tanks and system and the clean warehouse space.

See Diagram VI Schematic (Page 15), 1st floor WFI and tank cleaning diagram.

- d. The second floor height requirements are established by the Mammalian Cell process and its 1250-liter Fermenter and associated vessels. A critical height is established by the Media Hold tank (#2), the 5 ft of piping and service space above and its relationship to the Fermenter (#3). This is placed as high as possible to start the process and contributes to the floor height requirement.

Fermenter (#3) also impacts the floor height. It has a removable core that must be lifted out the top for servicing and cleaning. To do this, the engineers have placed a lift-out section in the ceiling over the vessel so that the work can be done in the attic interstitial space above. With this accommodation, the possible floor height has been reduced.

- e. The Equipment Penthouse with its clean room air handlers and other process support equipment must be located directly above the process floor. Essentially, this equipment is an extension of the process below. Normally, the first seven or eight feet is dedicated to personnel access work space and primary equipment, such as Air Handlers and high efficiency Filters. Above this area are levels for lighting, 5 ft for duct work, and 2 ft for piping. Each level is placed so that each service can cross and so that the various services do not conflict with one another. 16 ft clear is normally considered a minimum for this type of space. Miles is allowing 14 ft.

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

3. What are the opportunities for reducing the height of both the pilot plant and production plants?
- a. The building height is a direct function of the "Process," its configuration, and the various tank heights and drainage drop between them. Added to the process height are the fixed space required for the service requirements, support equipment (HVAC systems, etc.) and the building structure.
  - b. The most significant way to reduce the building height would be to change it from a three-story to a two-story building. This cannot be done with Miles/Cutter's current technology.
  - c. The Fermenter height is essentially fixed by design and production requirements. The tank heights are a function of their volume and the ratio of their height to diameter. The drainage consist of the tank connections and the pitch requirements of 1/4" per foot of pipe between connections.
  - d. The obvious opportunity to reduce the building height is to find a way to reduce the height of the "Process" or place the Utility and Support level in a basement. The Berkeley site is not suitable for a basement due to the groundwater conditions.
  - e. The next way would be to find a way to imbed the "Process" into the building so that it is housed more efficiently and has a smaller impact on the overall building height.

NOTE: Miles has already imbedded the process into the building. They have utilized a "pop-up" space in the overhead Equipment Penthouse for the required Fermenter service space. They have also utilized Interstitial spaces over shorter equipment to house HVAC ducts, piping, etc., that would normally be in the Equipment Penthouse and therefore require a higher roof elevation.

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
 MILES/CUTTER FACILITIES

- f. Reduce the height requirements of the Equipment Penthouse housing the primary HVAC equipment, support piping and equipment, and the electrical services.

--NOTE: Miles has already reduced the height of this space to a minimum for its requirements and more than is normally recommended for this type of building. (In fact, it is my opinion that Equipment Penthouse is at least two (2) feet short.)

- g. Eliminate the Equipment Penthouse and roof mount the equipment.

This is not possible. The Equipment Penthouse is a vital work area that also houses equipment that is an extension of the processes below. This area cannot be subjected to the elements.

- h. Lower the "Process" bottom elevation so that the roof height can likewise be lowered.

This has serious water table implications and has been resisted by Miles/Cutter. It is a subject of a challenge to Miles/Cutter.

4. Pumping vs. gravity process:

Why must this be a gravity process? Can the waste process be intercepted and pumped?

- a. This is not just a gravity process. The primary Cell process and supporting cleaning and utility services are a combination of pumped, internal propagated and gravity flow. The only strictly gravity requirement is the cleaning and rinse cycle from the process tanks to the CIP Recycle tank in the first floor space.
- b. Gravity, as used in the cleaning and rinse cycles, is used to assure the reliability of the cleaning process and to significantly reduce the water consumption of the plant. Experience with similar processes in the Factor VIII Pilot Plant has demonstrated that a pumped process is prone to failures and subsequent contamination. In order to justify the major investment in this plant, Miles must be assured that everything possible is done to make it work.



MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

required to be within the clean environment and require frequent maintenance are located in the equipment penthouse.

7. Can the roof of the Equipment Penthouse be removed and all the equipment mounted on the roof with a maximum height of, say, 7 ft?
  - a. No. The Equipment Penthouse is an integral extension of the process spaces below. Much more equipment is located here than the HVAC systems normally seen on a nontechnical building. Also, this space is a work area and access point for much of the process below. It is not possible to expose these processes on the roof, nor would it be acceptable.
  
8. Why must the HVAC systems be on top of the process in the Equipment Penthouse? Can the air handlers be located on shoulders of the building and the ductwork routed horizontally to the point of use?
  - a. By their nature, clean room air handling equipment should be located above the clean spaces for two specific reasons:
    - (1) Clean room air must be introduced from the ceiling with downward flow. It passes the process where it picks up any contaminants and is then exhausted from the space horizontally at the floor where it is then returned up to the air handlers.  
  
This downward air flow places the air handlers above the space.
    - (2) The surfaces of the ductwork are held to a minimum to reduce the opportunities for contamination. This results in as close a coupled system as possible to minimize duct runs and surfaces. Long runs of duct are not allowed.
  - b. There really isn't any advantage in relocating the air handlers away from their immediate adjacency to the process. The air handlers share the first 7-ft of height in the Penthouse work area with the personnel work area and other smaller process extensions. The Equipment Penthouse is a work area that supports the process below and houses much more

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

- than the air handlers, even though the air handlers are the largest items.
- c. Relocating the air handlers would not lower the building, would compromise the Clean Room systems and severely impact the ability to validate the system.
  - d. The air flow in the clean spaces is required to be a vertically down pattern from the ceiling. Air is introduced through "Absolute" filters in the ceiling, passes downward over the process and is exhausted from the space near the floor. The air is then ducted back up to the air handling equipment above.
  - e. Locating the HVAC primary equipment any place other than directly above the clean area is not practical. If this equipment could be remotely located on shoulders of the building (for example, at the same level as the process), it would not save any height because of the need to duct the air to the overhead location and provide access to the high efficiency filters.
9. What are the requirements of servicing equipment (such as filters) and how can they be mitigated to lower the building height?
- a. The service requirements of the equipment are part of the reason for the building height. This is a clean building so that most servicing must be done in a relatively clean environment.
10. Can the final process neutralization tanks be depressed into pits like the RO water tank?
- a. No. These tanks are part of the clean process. They cannot be located in any area that might be subject to contamination such as would be found in a pit.
11. Can the plant's high water use be mitigated?
- a. This is the subject of the next phase of this report.

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
MILES/CUTTER FACILITIES

VII. CRITERIA FOR FUTURE BUILDING HEIGHTS

As future buildings are required by Miles/Cutter, the building heights should be evaluated based on the needs of:

- \* Use
- \* Production capacities
- \* Technologies

The heights of production and pilot plants are primarily a function of the process, its configuration, the size of the vessels required, and the support facilities required to support the process. Height cannot be a function of an arbitrary height limitation.

It is proposed that the heights of future buildings be indexed to a set of technical criteria that is based on those things that directly influence the height of the building as required by its use, production capacities and the current technology.

To achieve this goal of indexing, the building heights will have to be delegated to a set of technical requirements agreeable to both the City and to Miles/Cutter.

Two primary factors influencing future building height are the technology of the process and the size of the vessels and equipment required. The vessel sizes are basically fixed by their volume. Equipment sizes are a function of their capacities. The technology is the factor that is subject to change.

Since this technology is new and can be expected to evolve and change with time, the building height requirements may need to change with new technology developments. Where possible, these new technologies should be used to minimize building height.

MAMMALIAN CELL PILOT PLANT INVESTIGATION  
 MILES/CUTTER FACILITIES

When production buildings over 45 feet in height are required by Miles/Cutter, their requirements and height will be judged, analyzed and evaluated by technical facilities engineering consultants experienced in similar projects and familiar with the current processes.

Miles/Cutter will provide an engineering report which supports the need for a height in excess of 45 feet. The report will include discussion of the following topics to the extent that they relate to and influence the height of the building under consideration. The report is not to contain any information which Miles considers to be confidential and subject to nondisclosure restrictions.

The criteria used to evaluate a future building should require that it fall within the requirements of the long range development plan, that the concepts of this report and that the building meets specific criteria. This criteria used in judging the validity of any future building shall include:

- a. A brief summary of the process and facility concepts on which the design of the building is based.
- b. The process and support requirements and relationships including, by example, the required vertical relationships between process vessels such as media tanks and fermentation vessels, spacial relationships between the process vessels and the cleaning and decontamination systems.
- c. Tank volumes, aspect ratios and dimensions.  
Examples are: Fermenters, Media processing vessels, Decontamination systems.
- d. Support and process equipment requirements including, for example, clean steam generators, process and building refrigeration systems, electrical substations and switches, and air handling systems.
- e. Room cleanliness standards, clean room classifications, air flow and air filtration requirements.
- f. Techniques used to minimize building heights.
- g. Requirements for maintenance and servicing of both process and support equipment.
- h. Utility and support equipment requirements.
- i. Requirements imposed by governmental agencies.

**EXHIBIT M**  
**PROJECT DESCRIPTION**

**EXHIBIT M**  
**PROJECT DESCRIPTION**

A. The Miles Long-term Site Development Program is intended to modernize the Berkeley plant site by removing buildings which are no longer adequate due to age, state of repair or level of compliance with seismic requirements, or which are located such that they obstruct the orderly progression of the development program. These buildings will be replaced with state-of-the-art facilities.

B. The primary mission of the site will be to develop cell lines, methods and procedures for the efficient manufacture and testing of high quality therapeutic pharmaceuticals utilizing the techniques of biotechnology, and to so produce those products for subsequent sale and distribution world-wide. Research, development, quality assurance and production activities related to other aspects of the Company's business will also be performed on the site.

C. With one exception, the biological materials (cells, cell lines and viruses) used in conjunction with the production of products at the plant site will be limited under this agreement, unless an amendment is secured, to those falling within the categories of Class 1 and Class 2 as defined in the Recombinant Advisory Committee guidelines and to mammalian cell lines. The exception is Yersinia pestis, which will cease being used for the manufacture of the plague vaccine in 1992 and will cease to be used for testing in 1994.

D. Many of the research and development activities carried out on the site will utilize methods and techniques of biotechnology, however, non-product oriented recombinant DNA (rDNA) research will not be carried out on the site. Examples of activities which will be performed include, but are not restricted to:

1. Cloning and subcloning of existing hybridoma and recombinant cell lines;
2. Initiating or enhancing the biosynthesis of potential therapeutic molecules in existing eukaryotic cell lines utilizing established recombinant techniques, the transfer of genetic information will be only into those host systems which, should they be inadvertently released from the culture vessel, would not survive and therefore pose no threat whatsoever to the surrounding environment;
3. The insertion of promoter/enhancer sequences into existing recombinant cell lines;

4. Polymerase chain reaction (PCR) testing, and the construction of probes and sequences related to PCR testing;
5. Large- and small-scale cell culture.

Examples of activities which will not be carried out include:

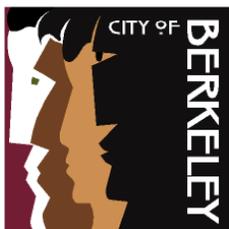
1. Deliberate formation of recombinant DNAs containing genes for the biosynthesis of toxic molecules lethal to man, animals and plants, at an LD<sub>50</sub> of less than 100 nanograms per kilogram weight of the organism. Examples of such toxins are botulinum toxin, tetanus toxin, diphtheria toxin and *Shigella dysenteriae* neurotoxin;\*
2. Deliberate transfer of a drug resistance trait to microorganisms that are not known to acquire it naturally if such acquisition could compromise the use of the drug to control disease agents in human or veterinary medicine or agriculture;\*
3. Use of Class 3, Class 4 or Class 5 agents as hosts for recombinant DNA vectors;\*
4. Use of DNA from Class 3, 4 or 5 agents which have not been demonstrated to be a totally and irreversibly defective fraction of the agents' genome for transfection into a host cell. (Note - Recombinant DNA molecules which contain less than two-thirds of the genome of any eukaryotic virus are considered defective.);\*
5. Use of defective Class 3, 4 or 5 animal viruses in vectors for transfection of eukariotic cells containing a specific helper virus;\*
6. rDNA research, including: (1) exploration of new types of organisms as hosts and vectors for transmission of genes, or expression of genes; (2) research to develop new rDNA techniques; and (3) investigations to develop new ways to construct rDNA and new ways to insert rDNA into host cells.\*

E. Amendments or modifications to the above restrictions on biological agents and permitted activities will require an amendment to the Development Agreement. Should Miles request such an amendment, the City may, at its discretion, hire a consultant to assist the City in evaluating the request. Miles will pay the reasonable costs of hiring the consultant. The City's evaluation will determine whether the proposed modification(s) will require a major or minor amendment to the Agreement. Changes in production of cell

lines to non-mammalian cells, and changes in the use of biological agents for production to those other than Class I and Class II shall require a major amendment.

F. Technological changes which are proposed to be used on the site which pose the potential for new risks or adverse impacts on the community or the environment shall require an amendment to the Development Agreement.

\* As described in the Federal Register, May 7, 1986, Guidelines for Research Involving Recombinant DNA Molecules.



Mayor Jesse Arreguín

INFORMATION CALENDAR

July 20, 2021

To: Honorable Mayor and Members of the City Council

From: Mayor Arreguín and Councilmember Taplin

Subject: Ad Hoc Advisory Group to the Mayor and District 2 Councilmember  
Regarding Bayer Development Agreement Community Benefits

INTRODUCTION

On February 25, 1992, the City of Berkeley and Miles Inc., now Bayer HealthCare LLC (“Bayer”), entered into a 30-year Long Range Development Program, or Development Agreement (DA). In anticipation of the upcoming February 2022 expiration of the DA, on March 30, 2020, Bayer submitted an application to: 1) extend the terms of the DA for an additional 30 years; 2) include the “South Properties” in the DA; and 3) modify various terms and development standards of the existing DA to better accommodate Bayer’s plans for long term development and investment in biopharmaceutical manufacturing facilities.

This report provides a summary of the ad hoc advisory group convened to provide feedback on the suite of programs and investments that Bayer proposes, including how those funds would be allocated across benefit categories. The ad hoc advisory group is tasked with providing feedback to ensure that the package of investments aligns with Berkeley’s needs and values.

CURRENT SITUATION AND ITS EFFECTS

Renewal of the Bayer Development Agreement is a Strategic Plan Priority Project, advancing our City’s goals to provide state-of-the-art, well-maintained infrastructure, amenities, and facilities; foster a dynamic, sustainable, and locally-based economy; champion and demonstrate social and racial equity; and be a global leader in addressing climate change, advancing environmental justice, and protecting the environment.

According to Vice President Drew Johnston in a letter to the City dated June 18, 2021,<sup>1</sup> “Without the DA, alternative locations such as Raleigh, Boston, and San Sebastian obtain a competitive advantage due to greater predictability than can be expected in Berkeley. Bayer needs the development certainty in order to deliver the necessary infrastructure quickly enough to meet the needs of our patients.”

Additionally, in a February 18, 2021,<sup>2</sup> letter to the City, VP Johnston stated: “It is also worth noting that under the existing and proposed Development Agreement, Bayer has limited the amount of development it could construct, as existing Mixed Manufacturing zoning allows for hundreds of thousands of additional square footage that Bayer has forfeited and is proposing to forfeit. Bayer has proposed sacrificing this development potential for certainty in terms of the timing of the land use entitlement process — it is that critical to investment in the Berkeley campus.”

#### BACKGROUND

Given that the City and Bayer’s economic development incentives are aligned in a positive-sum relationship, developing an equitable Community Benefits Package (CBP) with the input of local stakeholders is essential to ensure that the subsequent 30-year Development Agreement advances Berkeley’s social justice goals. The Mayor’s ad hoc advisory group convened over 20 representatives citywide from environmental, labor, faith, affordable housing, education, business and community groups to provide feedback on Bayer’s proposed benefits.

In its initial meetings, the ad hoc advisory group interfaced with Bayer representatives and studied the draft CBP. In the following meetings, the group provided feedback. Under the current proposal, the CBP and development impact fees together would amount to an annual total payment to the City of \$720,000.

---

<sup>1</sup> [July 20, 2021, Council Worksession Materials, Attachment 4](#)

<sup>2</sup> [February 18, 2021, Letter from Bayer to the City of Berkeley](#)

The current draft CBP allocations<sup>3</sup> are listed below:

Categories	Impact Fees	Community Benefits	Annual Total
Biotechnology + STEM CTE		300,000	300,000
Community Resiliency		100,000	100,000
Affordable Housing	50,000	100,000	150,000
Childcare	15,000		15,000
Percent for art	155,000		155,000
	<b>\$220,000</b>	<b>\$500,000</b>	<b>\$720,000</b>

**Notes:**

1. Current proposal includes an annual escalation of 2%  
 In year 2051 impact fees & community benefits would total \$1,300,000, accounting for the escalations
2. Initial offer was \$500,000 and reflected community benefits inclusive of payments to support housing, childcare and the arts with no additional impact fees

www.bayer.com/berkeley

The feedback of the ad hoc working group fall into three basic categories: (1) distributional equity of CBP allocations; (2) reviewing assumptions made in determining financial value of the Development Agreement; and (3) ensuring long-term accountability of Development Agreement responsive to local community needs.

(1) The ad hoc advisory group established a broad consensus in maintaining support for STEM education through grants to Biotech Partners and support for Career Technical Education (CTE). Increasing economic opportunity in high-wage, high-skilled jobs, and apprenticeships for Black and brown youth remains a commonly-held priority for the group. Representatives from the education sector discussed further consideration for supporting arts education through STEM education (i.e. “STEAM” education), as well as Civic Arts and festival funding. Representatives from the building trades urged consideration for skilled and trained workforce standards, including construction apprentices, as a benefit commensurate with other job-training benefits outlined in the Agreement.

<sup>3</sup> [July 14, 2021, Planning Commission presentation](#)

Regarding the CBP's proposed contribution to the Affordable Housing Trust Fund (AHTF), some working group members expressed a desire to explore workforce housing options, while others spoke of a broader impact through smaller grants to rental assistance and down payment assistance for first-time homebuyers to prevent displacement and reduce the racial wealth gap. Regarding childcare, some members put forth that these funds be distributed to community agencies or partnerships with BUSD through the General Fund. Regarding infrastructure, some members urged increased investments in traffic safety and environmental remediation, such as funding for the Bicycle Plan and Pedestrian Plan, Vision Zero, Aquatic Park, and traffic calming measures on 6<sup>th</sup> Street in particular.

Community Resiliency was generally viewed as the allocation with the most opportunity for creative and flexible funding to make transformative investments in the West Berkeley Community. Several members recommended pursuing such strategies by reestablishing the West Berkeley Fund to be overseen by a West Berkeley Community Programs Board. In the 1992 Development Agreement<sup>4</sup> with Miles (now Bayer), Exhibit G-9 included among the stipulations for Community Programs:

*To solidify its standing as a long-term resident and neighbor in West Berkeley, Miles will take steps designed to improve the quality of life in the community. Miles and the City will organize the establishment of a West Berkeley Community Programs Board, that will identify and support programs for the health and welfare of community residents. The Board will be composed of West Berkeley business and community members and City officials. The principal function of the Board will be to identify and contribute to, in time and money: community needs, programs and community service non-profit organizations. Immediate targets will be at-risk youth, the elderly and disadvantaged residents. The Board will also seek to expand the number of businesses and employers which contribute annually to the Program.*

Miles provided an initial \$30,000 payment for a consultant and agreed to ten annual payments of \$100,000.

(2) The ad hoc working group raised questions about particular data points used to calculate both the financial value of the Development Agreement as well as benefits and mitigations. There was insufficient data on annual TDM surveys stipulated in the 1992 DA to determine the potential transportation impact of additional employees.

---

<sup>4</sup> [Development Agreement by and Between the City of Berkeley and Miles Inc. for the Miles Inc. Long Range Development Program \(February 25, 1992\)](#), p.140

Some members raised questions regarding the discount rate (6.8%) provided in Bayer's assumptions used to calculate the financial value of the Development Agreement, given that interest rates on 20-year US Treasury bonds are significantly lower. However, as a multinational corporation, Bayer's definition of its weighted average cost of capital (WACC) "is based on an after-tax approach and calculated at the start of the year as the weighted average of the equity and debt cost factors. The cost of equity is determined using the capital asset pricing model (CAPM), while the debt-capital cost factor is calculated based on the average returns of ten-year Eurobonds issued by industrial companies."<sup>5</sup>

(3) The ad hoc working group did not achieve a full consensus regarding the issuance of STEM education funds through a competitive RFP process. Given Biotech Partners' regional focus on equity and diversity in STEM education, there was a strong preference among many members to renew the program's funding for a full 30-year timeline. However, exploring other partnerships through BUSD, including funding for CTE, was also favored among the group.

Some members of the working group expressed a desire to review the CBP more frequently than 10-year periods. Suggestions included community review halfway through each 10-year period, and reviving the West Berkeley Community Programs Board for this purpose.

CONTACT PERSON

Mayor Arreguín	mayor@cityofberkeley.info 510-981-7100
Councilmember Taplin	ttaplin@cityofberkeley.info 510-981-7120

---

<sup>5</sup> [Bayer Annual Report 2020](#)



Bayer's application to amend and extend its  
Development Agreement with the City of Berkeley

***Public hearing  
on community benefits***

///////  
July 2021

**Drew Johnston**  
*Vice President, Site Engineering, Berkeley*





## Our people and our patients

Bayer's quality STEM engagement in high school and community college leads young people to rewarding professional careers



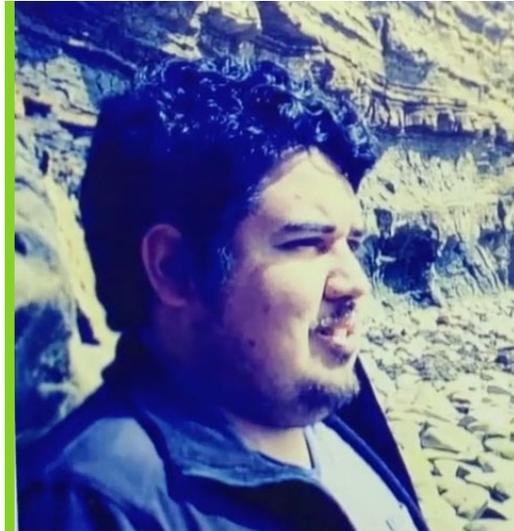
Berkeley High students in 2019



Sarmed Anwar



Lauren Rawlins



Zach Castillo



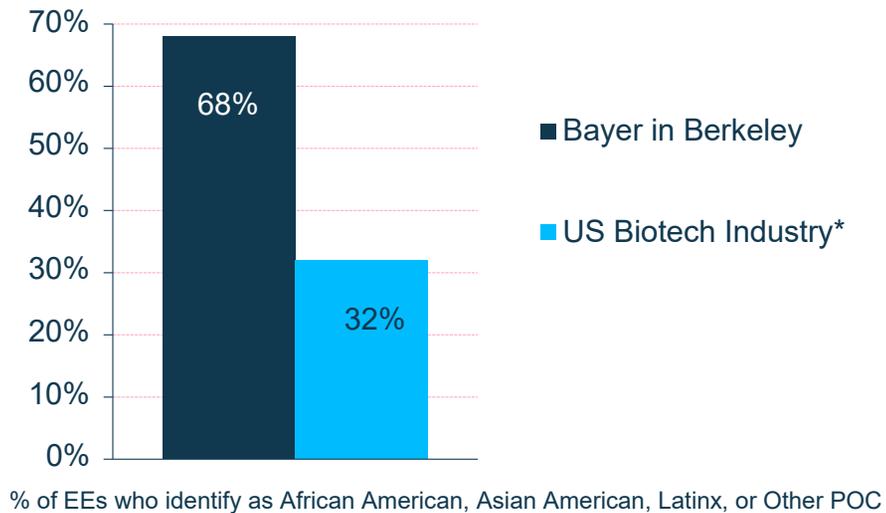
Jonathan Duddleston



# Who we are in Berkeley

# > 1,000 employees

## Racial identities



\* From the January 2020 Bio report available at [www.bio.org](http://www.bio.org)

## We Represent 40+ Countries of Origin

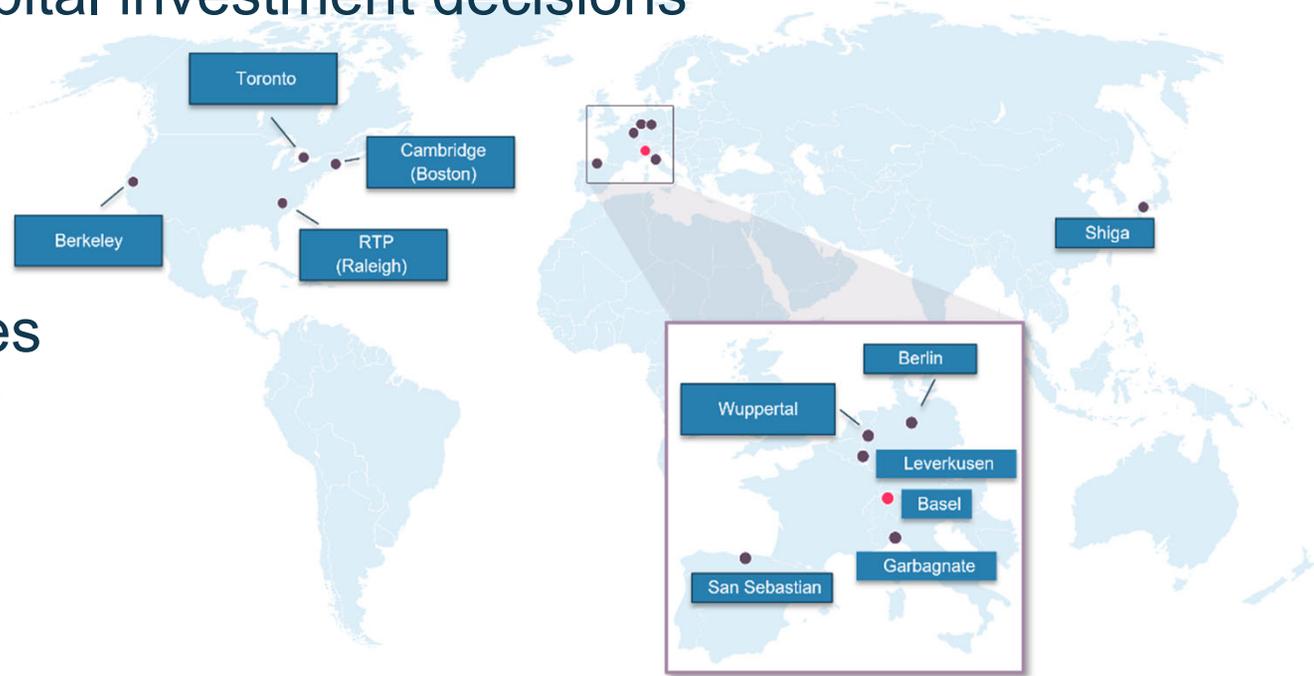


Bayer employees volunteering at the Alameda County Community Food Bank (pre-pandemic)



# How Bayer makes capital investment decisions

Berkeley competes within the Bayer global network





# Development Agreement extension

## Continue our long-term partnership

attract capital to drive community investments in Berkeley and new medicines to patients

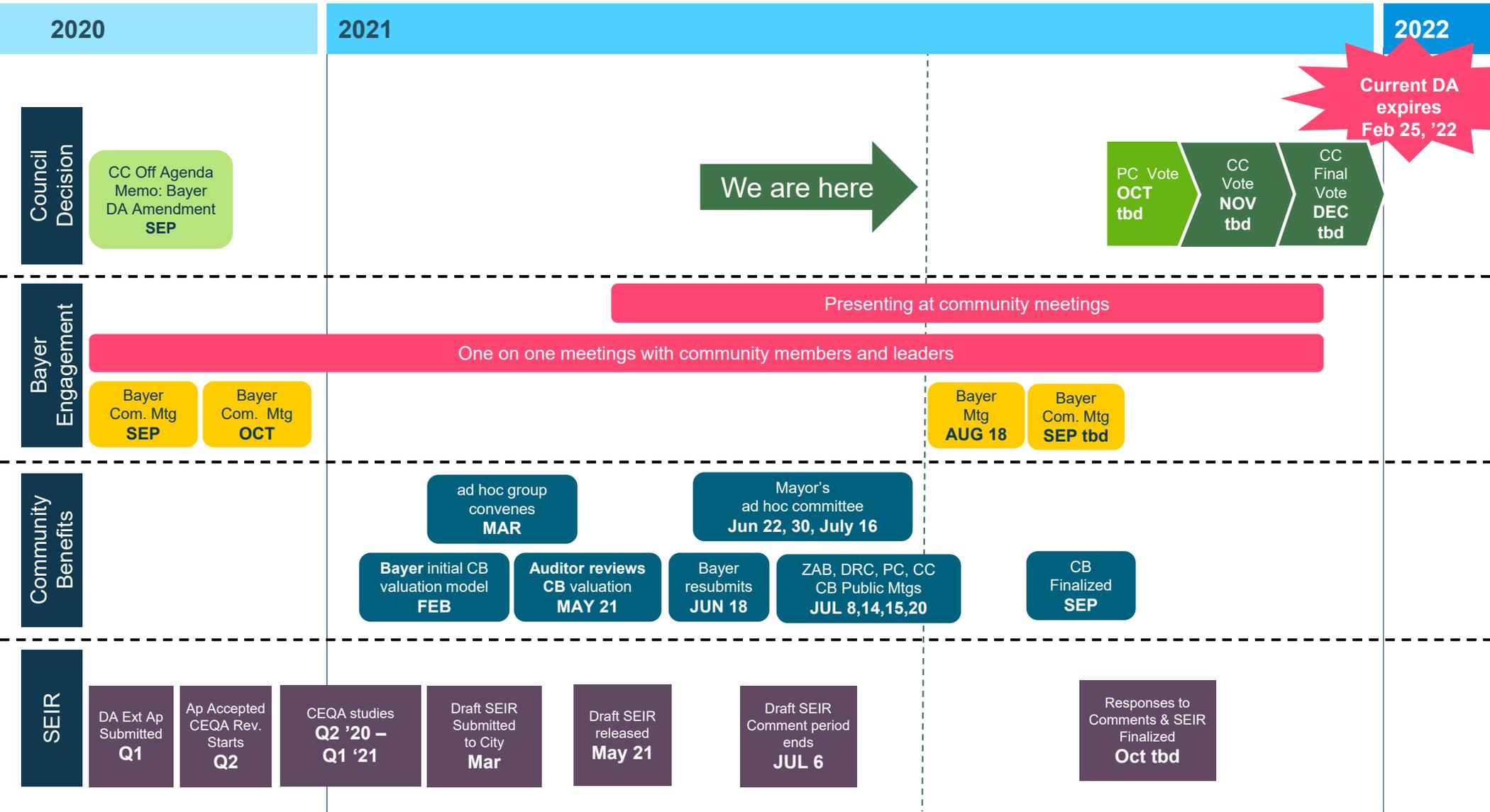
### Scope

- **Uses** Production, Lab, Warehouse, Utility, Maintenance, Admin, Parking
- **Heights Zones** 65' and 80' build height
- **Permit Approval** predictable AUP process
- **Capacity** 1.74m square feet of total development

### Key Benefits

- **Environmental Impacts** holistic review shows no significant impacts
- **Community Support** enables long-term investment in community
- **Economic Development** drives quality jobs and growing tax property tax base





**Current DA expires Feb 25, '22**

**We are here** →

Presenting at community meetings

One on one meetings with community members and leaders



# *Community benefits and development impact fees*

**Bayer proposal**

# Community investment priorities

The image shows two young girls in a science laboratory setting. They are both wearing clear safety goggles and white lab coats. The girl on the left is looking down at a beaker containing a blue liquid, while the girl on the right is looking towards the camera with a wide, joyful smile. In the background, a blue foam volcano is visible on a table, and other lab equipment like beakers and bottles are scattered around. The overall atmosphere is one of excitement and learning.

STEM Education  
Housing  
Community Resiliency

**Stability**



# Proposed program categories for community benefit investments

## STEM + Biotech Education

- Programming to drive equity outcomes
- Kindergarten to community college

## Community Resiliency

- Climate action, health equity & local economic resiliency

## Affordable Housing

- City of Berkeley's Housing Trust Fund
- Disbursed at the discretion of the City Council



# Development Agreement extension

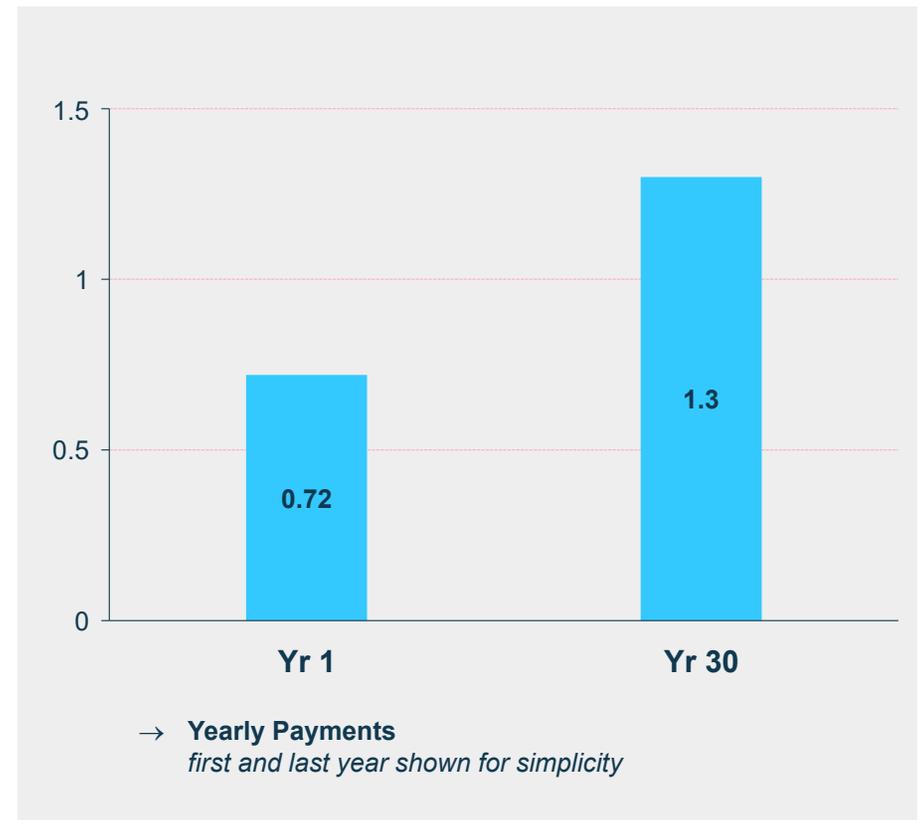
**Bayer Valuation:**  $QSY\#i\#q\#p\#h\#w\#x\#v\#k\#l\#j\#w\#/\#S\#h\#p\#l\#S\#h\#g\#l\#w\#e\#l\#w$ , **City Value:**  $v\#e\#d\#E\#D\#x\#g\#l\#j\#/\#l\#h\#v\#h\#g\#h\#h\#g\#h\#w\#/\#l\#h\#h\#o\#s\#p\#h\#w$

## Bayer Value Basis

- **Use Permit Savings** 400k USD per project
- **Timeline Surety** 1% of Permitted CapEx
- **Time Reduction** 2% of permitted CapEx
- **Discount Rate** WACC @ 6.8%
- **Buildout** full development plan assumed

## Impact Fees

- **Estimated** per project and discounted to 2021
- **Buildout** full development plan assumed





## The investments work together – *Year one of the proposal*

Categories	Impact Fees	Community Benefits	Annual Total
Biotechnology + STEM CTE		300,000	300,000
Community Resiliency		100,000	100,000
Affordable Housing	50,000	100,000	150,000
Childcare	15,000		15,000
Art ( <i>public art on private development</i> )	155,000		155,000
	<b>\$220,000</b>	<b>\$500,000</b>	<b>\$720,000</b>

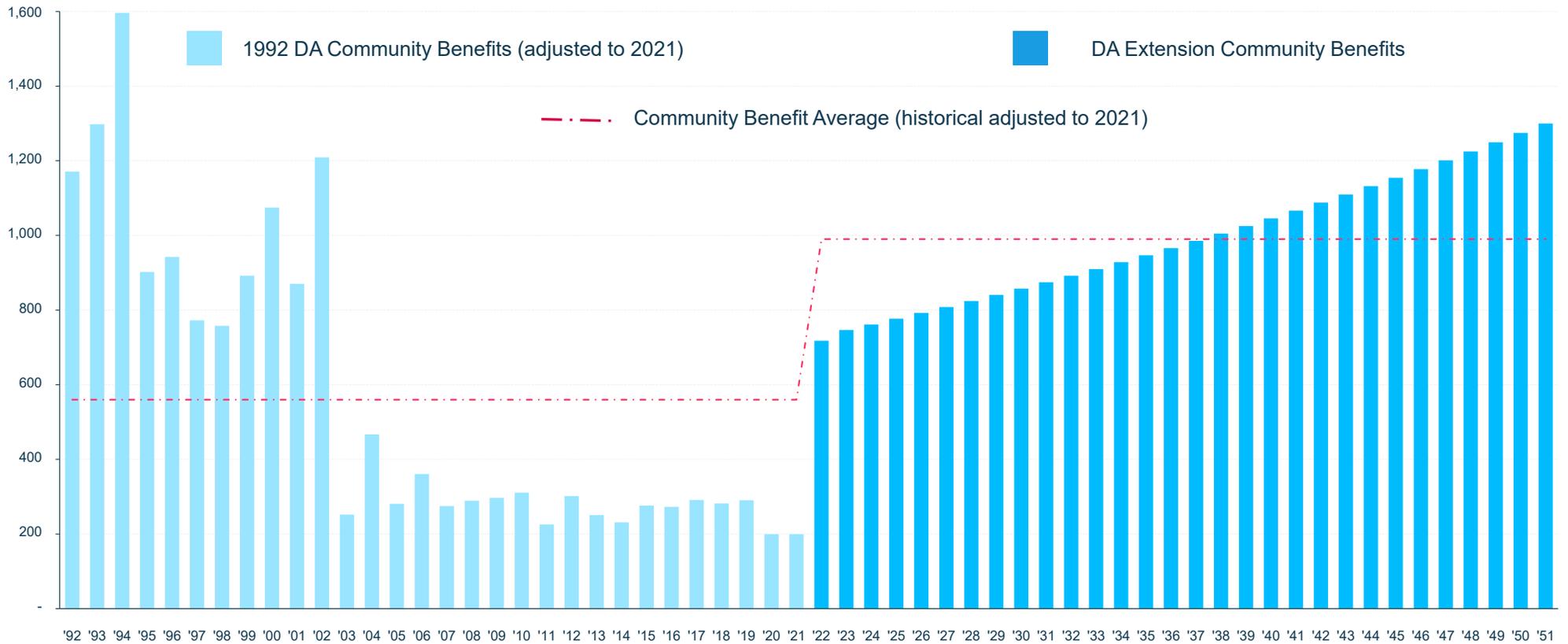
**Notes:**

1. *Current proposal includes an annual escalation of 2%  
In year 2051 impact fees & community benefits would total \$1,300,000, accounting for the escalations*
2. *Initial offer was \$500,000 and reflected community benefits inclusive of payments to support housing, childcare and the arts with no additional impact fees*



# Bayer DA annual community financial investments

Historical adjusted to 2021 dollars





*Economic impact analysis*

+

*Competitive landscape  
for biotechnology  
investments*

**Bay Area Council Economic Institute**



# Competitive landscape for biotech investments

## Reasons to invest in the Bay Area

- 1. Developed Cluster**  
Nearly 1,500 companies in nine counties
- 2. Talent**  
Second most educated population in U.S.
- 3. Investment Capital**  
39% of all U.S. venture capital
- 4. Physical Space**  
Second most laboratory space in U.S.

## Other geographies offer incentives

### Raleigh-Durham

Eli Lilly will invest \$500 million to create 462 jobs

- \$8.7 million tax rebate from state
- \$2.55 million incentive from county
- \$1.15 million in training grants

### New York City

City will invest \$1 billion over 10 years in R&D, lab and incubator facility construction

### San Diego

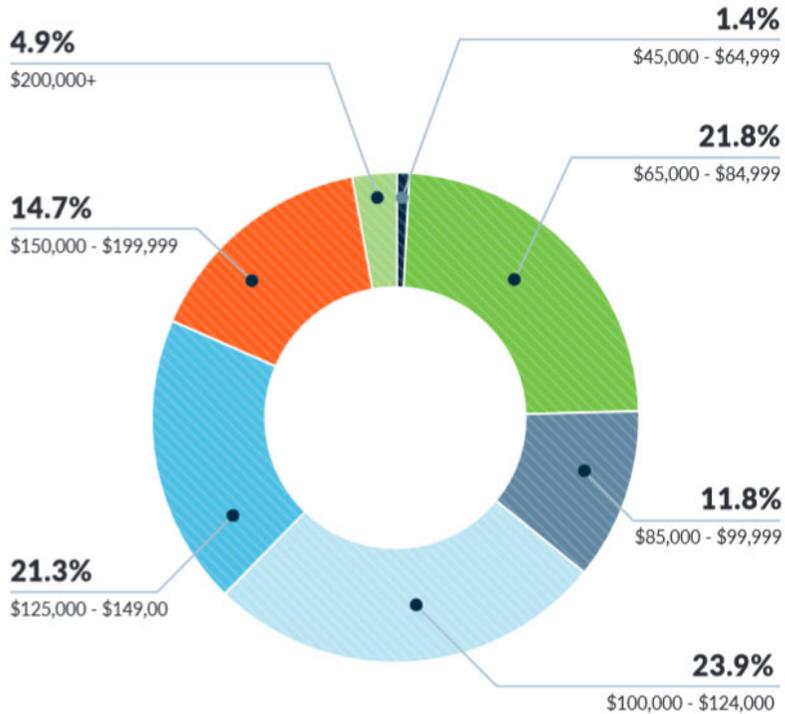
llumina received \$1.5 million tax rebate from city over 10 years to grow in San Diego

# Quality jobs drive economic impact

*-Jobs range in educational attainments*

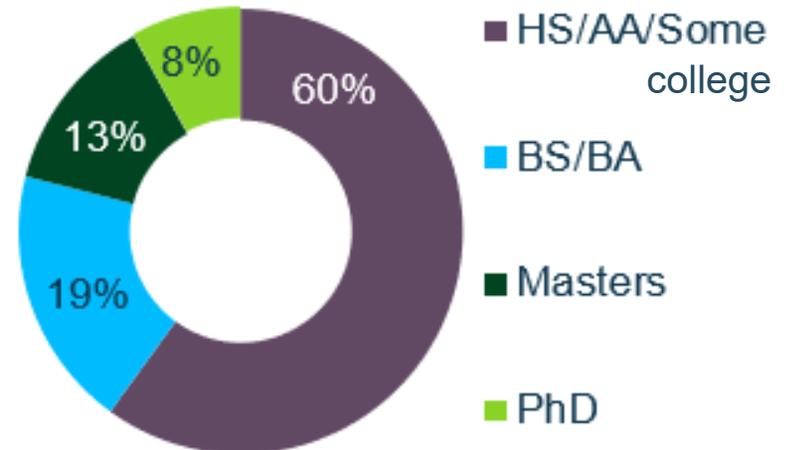
## Bayer Employee Annual Salaries | 2019

Berkeley campus



## Educational attainments | 2019

Berkeley campus



*Self reported from Bayer's human resources tracking system*

## Economic impact analysis conclusions

### Bay Area Economic Institute Study:

*Bayer Expansion would generate  
 \$613M in economic activity*

### Berkeley Economic Impact

**2020**  
 \$15 Million

**2052**  
*Projected*  
 \$29 Million  
 ↑97%



For each job created on the Bayer campus...



an average of one Bay Area job is created off the Bayer campus





# *Closing*

Conceptual development plan at 30-year build out





# Bayer's value to Berkeley extends beyond community benefits

Bayer hosted a vaccination clinic on our parking lot in West Berkeley - 2,000 people vaccinated!



## Major Hunger-Relief Investment Will Help Alleviate Growing Food Insecurity in Berkeley

Posted on May 19, 2020 by Sara Webber



## Berkeley Relief Fund Receives \$250,000 Donation from Bayer as Virtual Fundraiser Starts

JESSE ARREGUIN - MARCH 22, 2020



### Berkeley PUBLIC SCHOOLS

Excellence • Equity • Engagement • Enrichment

Bayer Fund and Wareham Development Provide more than \$500,000 in Grants for Berkeley Middle School 'On Ramp' into STEM Programs and Careers



### Global

This is Bayer / Innovation / Products / Sustainability

Friday - August 21, 2020

Science Based Targets initiative endorses climate protection targets of Bayer AG

Important step in Bayer becoming climate-neutral by 2030 / Targets integral to Board of Management remuneration



Bayer's application to amend and extend its  
Development Agreement with the City of Berkeley

**THANK YOU**



**Drew Johnston**  
*Vice President, Site Engineering, Berkeley*





# Bayer HealthCare Development Agreement Amendment Community Benefits Workshop

# Agenda

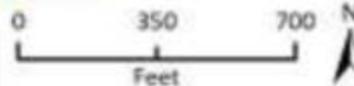
2

1. City Staff Presentation
2. Bayer Staff Presentation
3. City Council Questions & Comments,  
Public Comment

# Bayer Campus



 Project Boundary



North Properties



South Properties

# Project Description

4

- Extend the DA duration an additional 30 years until February 2052
- Add the South Properties to be covered by the DA
- Allow build-out of a conceptual development plan, which proposes to rearrange the campus layout through
  - ▣ phased demolition of nine existing buildings
  - ▣ construction of approximately twelve new buildings for production, laboratory, and administrative uses
  - ▣ replacement of surface parking with two new parking structures and new underground parking facilities
- Modify terms including use restrictions and levels of project discretion.

# Buildout

	<b>Existing</b>	<b>Existing Entitlement</b>	<b>Proposed Amendment</b>
<b>North Properties</b>	567,000 sf	1,346,000 sf	---
<b>South Properties</b>	520,000 sf	540,000 sf	---
<b>Campus Total</b>	1,087,000 sf	1,886,000 sf	1,738,000 sf

# Development Standards

Development Standard	South Campus / MM Zoning BMC 23E.76.070	Existing DA	Proposed Amendment
Max. Height (in ft.)	<b>45'</b>	<b>80'</b> for Production <b>45'</b> Other Uses	<b>80'</b> for Production <b>65'</b> other Uses
Max. FAR	<b>2</b>	<b>0.27</b> (Block VIII) to <b>2</b> (Block V)	<b>0.27</b> (Block D) to <b>1.37</b> (Block B)
Parking: Production / Warehousing	<b>1:1,000</b> sq. ft. (floor area <10K) <b>1:1,500</b> sq. ft. (floor area >10K)	Production: <b>1:1,000</b> sq. ft. Warehouse: <b>1:5,000</b> sq. ft.	No Change
Parking: Other Uses	<b>1:500</b> sq. ft.	Laboratory: <b>1.5:1,000</b> sq. ft. Admin: <b>1:500</b> sq. ft.	Laboratory: <b>1:1,000</b> sq. ft. Admin: No Change

# Discretionary Levels for New Projects

Existing Development Agreement			Proposed Amendment to Development Agreement		
Development Type	Land Use Permit	Design Review	Development Type	Land Use Permit	Design Review
			Signage not visible from the public right-of-way	Zoning Certificate	N/A
Guard stations	Zoning Certificate	Plan Check Review	Guard stations		
Demolition of buildings	Administrative Use Permit	Staff-Level Review	Demolition of buildings		
Temporary buildings (trailers or structures)	Administrative Use Permit		Temporary buildings (trailers or structures)		Plan Check Review
Temporary surface parking	Administrative Use Permit		Temporary surface parking		
All Signage	Administrative Use Permit		Signage visible from the public right-of-way	Zoning Certificate	Staff-Level Review
Buildings of less than 40,000 square feet	Administrative Use Permit		Buildings of less than 40,000 square feet		
			Buildings over 45' in height and buildings visible from the right of way		
Towers, antennae etc.	Zoning Certificate	Plan Check Review	Towers, antennae etc.	Administrative Use Permit	Design Review Committee
Buildings of 40,000 square feet or greater	Use Permit	Design Review Committee	Buildings of 40,000 square feet or greater		
			Parking Garages <sup>1</sup>		

1. Bayer is proposing that for purposes of discretionary review of a parking garage—staff for the AUP and DRC for the design review—shall have final approval for the projects described in the table above per the DA outlined processes and shall not be subject to administrative appeal.

# Bayer Community Benefits Proposal

8

## Proposed Payments

- Year 1 Payment: \$720,000
- Annual Escalation of 2%
- Year 30 Payment: \$1.3M

## Proposed Allocation

<u>Benefits Category:</u>	<u>% of Total</u>
□ STEM/Career Technical Education	60%
□ Affordable Housing	20%
□ Community Infrastructure/Resiliency Programs	20%

# Timeline and Next Steps

9

- March 30, 2020: Bayer submits application to modify the DA
- April-May-June 2020: reviewing materials, feed back on completion, revised or additional materials submitted
- July-August-September 2020: consultants on board, finalizing project description, peer review of technical reports
- October 29, 2020: NOP of Draft Subsequent EIR Published

# Timeline continued

10

- November 12, 2020: ZAB Information Item/Scoping Meeting
- November 18, 2020: Planning Commission Scoping/Preview
- May 21, 2021: NOA and Draft Subsequent EIR Published
- June 2, 2021: Draft SEIR Comment Meeting at Planning Commission
- July 6, 2021: Close of the 45-day Comment Period

# Timeline and Next Steps

- July 8, 2021: Community Benefit Workshop at ZAB
- July 14, 2021: Community Benefit Workshop at Planning Commission
- July 15, 2021: Bayer Design Guidelines/ Discretionary Level input DRC
- July 20, 2021: Community Benefit Workshop at City Council
- October 2021: Planning Commission hearing on Recommendation on SEIR and DA Amendment
- November 2021: City Council hearing on SEIR Certification and DA Amendment

# DA Feedback to Date

12

- Carefully review of assumptions and calculations
- Benefits should be front loaded
- Benefits at a level similar to others
- Housing
- STEM and BUSD programming
- Transportation Demand Management programs
- Improvements at Aquatic Park waterfront
- Native plant demonstration garden
- Improve proposed open space
- DRC advisory role



City of  
Berkeley

THANK YOU

**Benado, Tony**

---

**From:** Taplin, Terry  
**Sent:** Tuesday, July 20, 2021 5:25 PM  
**To:** Ana Vasudeo; All Council; Skjerping, Lars; Elgstrand, Stefan; Aguilar-Canabal, Diego  
**Cc:** Erin Rhoades; Julie Sinai; Wyn Skeels; Brent Stephens  
**Subject:** Re: BUSD comments re: Worksession item 2, the Bayer HealthCare LLC Development Agreement Amendment (Bayer DA)

Hi Ana,

Removing Andy Kelley as Councilmember Hahn so as to comply with the Brown Act.

Thank you for input. Getting a chance to review, I have some follow up questions. I see that the attached proposal not exceeds the amount of the current proposal's STEM benefit category, but also seems to assume no benefits going to fund either Biotech Partners or Berkeley City College's Biotechnology Program. Is this intentional? I have had the opportunity meet with Wyn Skeels and appreciated finally get to learn about the CTE Indepth. Can you tell me: how much of the BUSD general fund goes to supporting that program? How do students no longer enrolled in BUSD but still living in Berkeley access this program, and without assuming who is or isn't enrolled in BUSD, how does your proposal consider community college students, non-BUSD students, and lifelong learners?

Kind regards,

**Councilmember Terry Taplin**  
 Berkeley City Council – District 2  
 Pronouns: he/him

2180 Milvia St  
 Berkeley, CA 94704  
 (510) 981-7120

[Sign up for the District 2 Newsletter!](#)

**From:** Ana Vasudeo <anavasudeo@berkeley.net>  
**Sent:** Tuesday, July 20, 2021 5:10 PM  
**To:** All Council <council@cityofberkeley.info>; Skjerping, Lars <LSkjerping@cityofberkeley.info>; Elgstrand, Stefan <SElgstrand@cityofberkeley.info>; Kelley, Andy <AKelley@cityofberkeley.info>; Aguilar-Canabal, Diego <DAguilarCanabal@cityofberkeley.info>  
**Cc:** Erin Rhoades <erinrhoades@berkeley.net>; Julie Sinai <juliesinai@berkeley.net>; Wyn Skeels <wynskeels@berkeley.net>; Brent Stephens <brentstephens@berkeley.net>

**Subject:** BUSD comments re: Worksession item 2, the Bayer HealthCare LLC Development Agreement Amendment (Bayer DA)

**WARNING:** This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Good evening colleagues,

I hope this email finds you well. Below are comments regarding Worksession item 2, the Bayer HealthCare LLC Development Agreement Amendment (Bayer DA) which will be discussed tonight at your City Council meeting.

As some of you know, for various months I have been attending the Ad Hoc Advisory Group to the Mayor and District 2 Councilmember Regarding Bayer Development Agreement Community Benefits. I'd like to thank both Mayor Arreguin and Councilmember Taplin for inviting Berkeley Unified School District to be a part of this important group and for their leadership in engaging the community about the Bayer DA. These meetings have been informative in helping us better understand the diverse needs of our Berkeley Community.

I have been impressed to see the Advisory Group's commitment to STEM and Career Technical Education (CTE) as the top funding priority. Although we are grateful to see support for STEM and Career and Technical Education as the top item to be funded with the new Bayer DA Community Benefits Plan, we would like to see **an increased and long-term investment in BUSD's STEM and CTE programs**, particularly for students who historically do not have access to STEM/Career and Technical Education programs.

I ask that as part of the STEM and Career Technical Education community benefits package, you consider the critical need to increase long-term funding for STEM/Career Technical education starting at the middle school level.

You may know that earlier this year, the Berkeley Public Schools Fund and BUSD CTE received a grant from the national Bayer Fund to jumpstart STEM career education before high school with core programs for all students available at Berkeley's three middle schools. This one-time funding will allow us to pilot our new 6th Grade STEM Wheel Program at all 3 Middle Schools for the 21 - 22 school year only.

Early intervention in STEM is so important for all our students, particularly our students of color and students with disabilities who often do not have access to these kinds of programs as extracurricular activities. With this in mind, we believe that the right direction for the Development Agreement would be to renew ongoing support for career-connected STEM education at the middle school level so that we can provide sustained funding for all Berkeley middle school students in STEM/CTE and continue the great work that we will be able to pilot for 2021-2022.

We are not in support of the short term (3 -5 year) competitive RFP for STEM educational funds through the Bayer DA that has been discussed previously since most of BUSD's CTE program already operates on short term grant funding.

Attached is Berkeley Unified School District's proposal which outlines the ongoing long-term investment in STEM/CTE education that we would prefer to see as part of this Development Agreement.

If you would like to learn more about BUSD's STEM/CTE programs, please do not hesitate to let me know and I would be happy to meet with you and invite district representatives who can provide more detailed information about our STEM/CTE programs.

Thank you for your consideration and support,

Director Ana Vasudeo

--

Ana Vasudeo

*Pronouns: she/her/ella*

Director, Board of Education

Berkeley Unified School District

2020 Bonar St.

Berkeley, CA 94702

Email: [anavasudeo@berkeley.net](mailto:anavasudeo@berkeley.net)

Please use [anavasudeo@berkeley.net](mailto:anavasudeo@berkeley.net) for BUSD-related matters.

For political email, please use [apvasudeo@gmail.com](mailto:apvasudeo@gmail.com)

**Benado, Tony**

---

**From:** Denah S. Bookstein <denahsbookstein@gmail.com>  
**Sent:** Tuesday, July 20, 2021 5:21 PM  
**To:** City Clerk; Taplin, Terry; All Council  
**Subject:** Re: District 2 Deserves a West Berkeley Fund for Lasting Investments in our Community

**WARNING:** This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Dear Council Member Taplin,

A friend is gravely ill and I may not be able to attend the meeting tonight.

Thank you for all you are trying to do with Bayer for the benefit of the West side and greater community.

The issues I would like to mention are

- \* the community bus, which was really never available to the community, but which would be a valuable asset for the Community,
- \* the inhospitable facade presented to the Dwight Way north side of the Bayer Campus,
- \* concern about what Bayer is planning to do to ameliorate the noise, dust, toxic fumes and particulate matter generated by this massive building project ?

This pollution will not only affect my immediate neighborhood, but will affect all of Berkeley.

At an early community meeting I attended, Bayer representatives spent a lot of time extolling the features of their internal campus landscaping, for the benefit of their employees.

The landscaping proposed for the strip along Seventh, a major north/south artery, is not a place for a neighborhood stroll but will make Bayer attractive to motorists. Residents of the neighborhood will be looking at a five story wall on Dwight.

Also, Bayer said nothing about the noise and pollution our neighborhood will experience over an extended period.

Thank you for bringing these concerns to the table.

Sincerely,

Denah S. Bookstein

2430 Fifth St. Studio L  
 Berkeley CA 94710

On Tue, Jul 20, 2021 at 3:51 PM Denah S. Bookstein <[denahsbookstein@gmail.com](mailto:denahsbookstein@gmail.com)> wrote:

----- Forwarded message -----

**From:** **Taplin, Terry** <[ttaplin@cityofberkeley.info](mailto:ttaplin@cityofberkeley.info)>

**Date:** Sat, Jul 17, 2021 at 2:21 PM

**Subject:** District 2 Deserves a West Berkeley Fund for Lasting Investments in our Community

To: Aguilar-Canabal, Diego <[DAguilarCanabal@cityofberkeley.info](mailto:DAguilarCanabal@cityofberkeley.info)>

CC: Genolio, Joe <[JGenolio@cityofberkeley.info](mailto:JGenolio@cityofberkeley.info)>

Dear neighbors,

I am pleased to share that I have been hard at work with Mayor Arreguin crafting a robust package of community benefits as part of the renewal of the 30-year development agreement between the City of Berkeley and Bayer Healthcare. The original 92 development agreement, among the first of its kind, included historic investments in STEM education, childcare, affordable housing, and community resiliency. The City and Bayer are collaborating to renew and extend our partnership for the next 30 years.

To ensure a balanced and equitable relationship, it is critical that the benefits package reflect the needs of our West Berkeley Community. I am certain some of my colleagues and others across town will have plans for how the money should be spent, but I am adamant in my resolve to ensure that this agreement directly benefit us who have lived with Bayer in our neighborhood, and who will be impacted by their expansion. To that end, **I am working to resurrect one of the elements of the original agreement and to create a West Berkeley Community Advisory Board and a West Berkeley Fund to invest in programs, services benefiting young people, seniors, small businesses and the arts in West Berkeley.**

I am also working to secure renewed investments in STEM and community technical education to create economic opportunity and career pathways for our young people and lifelong learners.

**The renewal of the agreement with Bayer presents a powerful opportunity to secure resources and investment to ensure that growth in Berkeley is guided by equity and sustainability.** I am proud to represent you and wish to make your voices heard. Please join me at Tuesday's 6pm City Council work session on the Bayer DA Community Benefits Package and please submit letters by writing to [Council@cityofberkeley.info](mailto:Council@cityofberkeley.info) and copy [clerk@cityofberkeley.info](mailto:clerk@cityofberkeley.info). Please share this email with your neighbors as well.

Thank you so for your support!

Kind regards,

**Councilmember Terry Taplin**  
Berkeley City Council – District 2  
Pronouns: he/him

2180 Milvia St  
Berkeley, CA 94704  
(510) 981-7120

Sign up for the District 2 Newsletter!



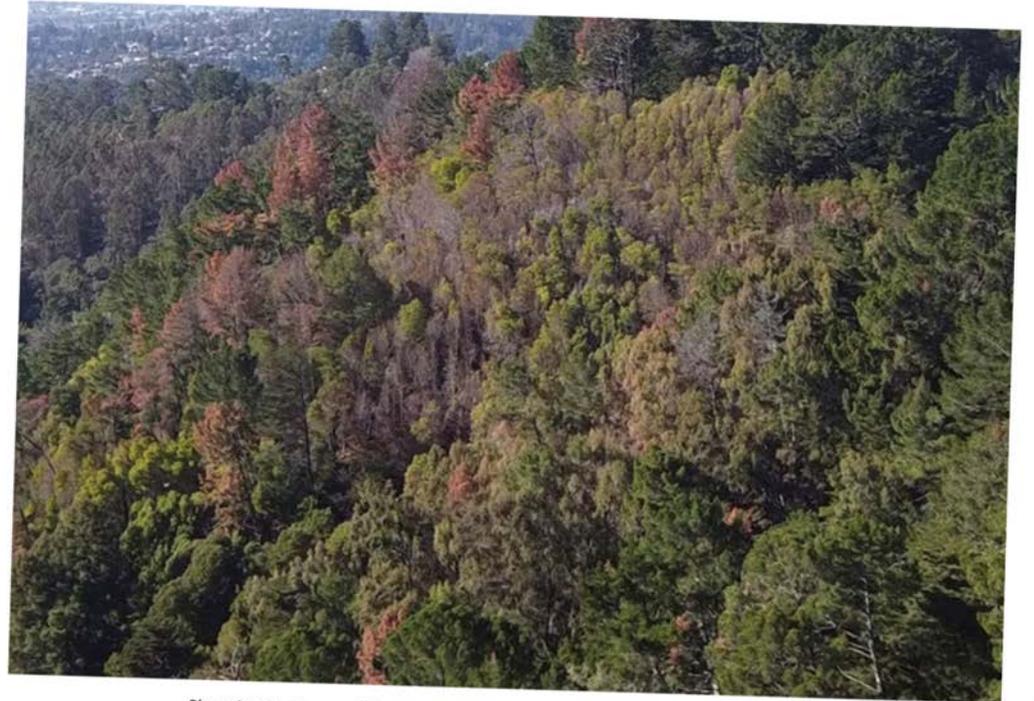
# Preparing for 2021 Wildfire Season

Department & Community Actions



# Berkeley's Changing Hazards

- Climate Change
- Changes in vegetation
- Limited resources to educate and enforce compliance



Diseased trees turning orange in the hills of Joaquin Miller Regional Park in January 2021. (Photo by John Brega)

Nature News

## **Disease Outbreak Appears to be Killing Bay Area Trees**

by *Eric Simons*

March 4, 2021



# Intersection with the Built Environment

- Narrow winding streets
  - On street parking
  - Unapproved encroachments
- Increasing population density





# The Big Picture

Wildfire Season 2021





# Preparedness & Enhanced Readiness

- Preparedness & Community Partnerships
  - Wildland-Urban Interface Division
  - Hazardous Hill Inspections
  - Community Wildfire Protection Plan
  - Evacuation Preparedness
- Operational Changes for Enhanced Readiness
  - Fire Weather Procedures
- Rethinking Community Readiness

**NATIONAL WEATHER SERVICE**

## Red Flag Warning

Published: September 25, 2020

**Dry & Windy – Strongest in Elevations Above 1,000 Feet**

- North Bay Mountains, East Bay Hills/Interior Valleys
- Saturday 9 PM PDT – Monday 8 AM PDT
- N/NE winds with local gusts 35 - 45 mph, up to 50 mph in highest elevations
- Critically low humidity
- Easier fire starts
- Potential for rapid spread of fire

**San Francisco Bay Area/Monterey**  
weather.gov/bayarea

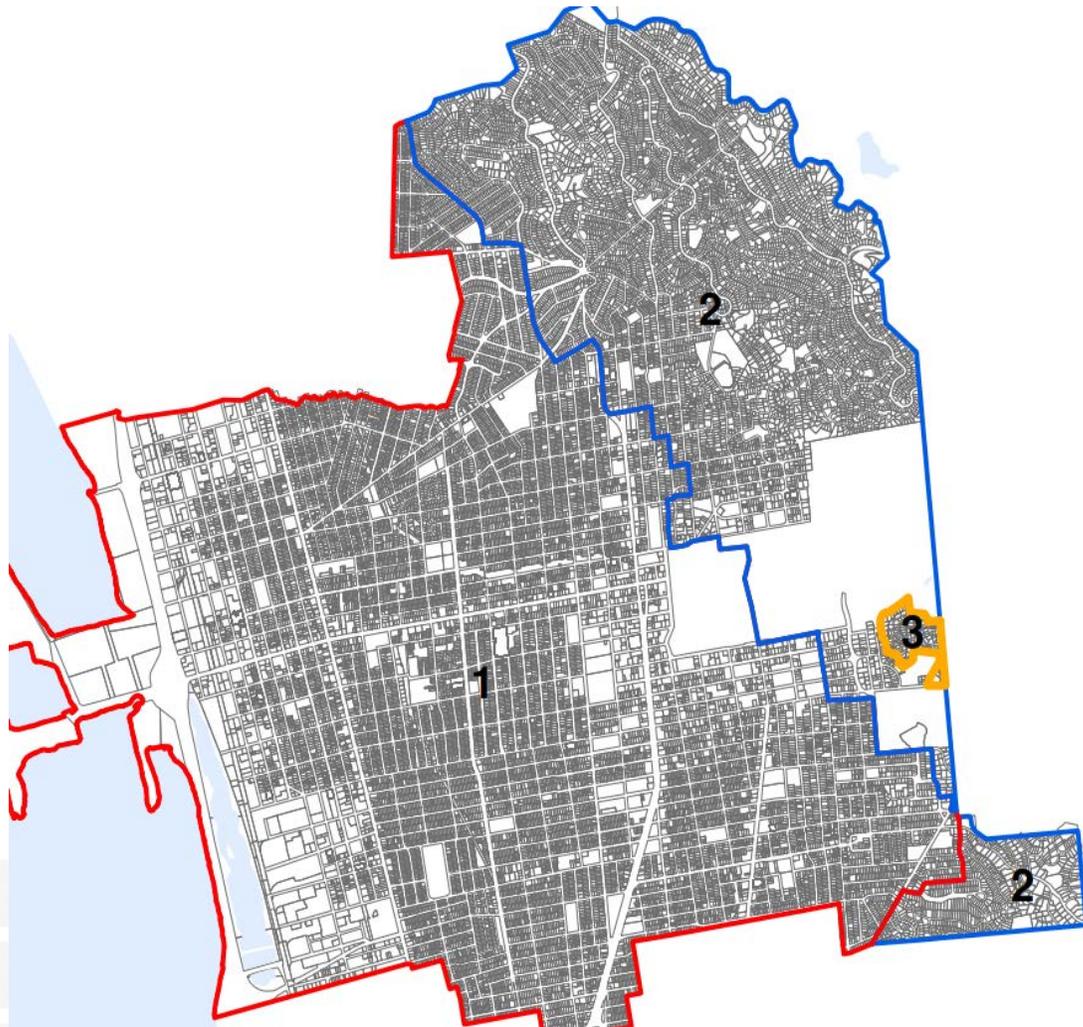


# Preparedness & Community Partnerships

Berkeley Fire Department



# Wildland-Urban Interface Division

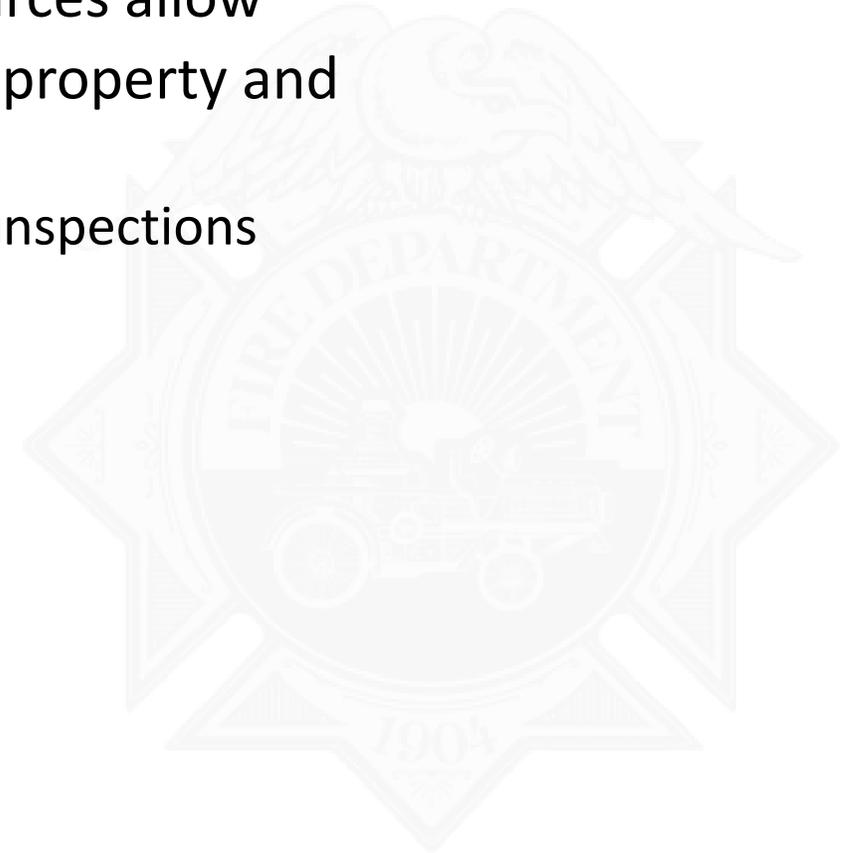


- New division funded by Measure FF
- Connects to Vision 2050 Strategy #3: Prepare a Wildfire Mitigation and Safety Plan
- Central point for programs and policies regarding Berkeley's wildland-urban interface
- Coordinates and implements vegetation management with allied agencies such as UC Berkeley and East Bay Regional Parks District
- Coordinates Safe Passages implementation plan



# Hazardous Hill Inspections: 2021 Fire Season

- Maintain Hazardous Fire Area inspections as resources allow
- Engaging community through 1-1 interaction with property and vegetation management personnel
  - Firefighters performing Hazardous Hill Patrols and inspections
  - Fire Prevention Inspectors
- Bringing back temporary retired annuitants
  - Education
  - Inspection
  - Enforcement
- The importance of Measure FF funding
- Fire Patrol





# Hazardous Hill Inspections: Long Term



- Impending State mandates for ember resistant zones around structures
  - Will first affect new structures, then existing
- State examining certificates for insurance
- Continued community and Fire Dept collaboration
  - Build increased familiarity and relationships



# Community Wildfire Protection Plan

- Collaborative effort between community members and local government regarding broader wildfire risk concerns
- Recommends strategies for vegetation management to Berkeley Fire Department, Wildland-Urban Interface Division
- Determines an implementation timeline for priority vegetation management projects



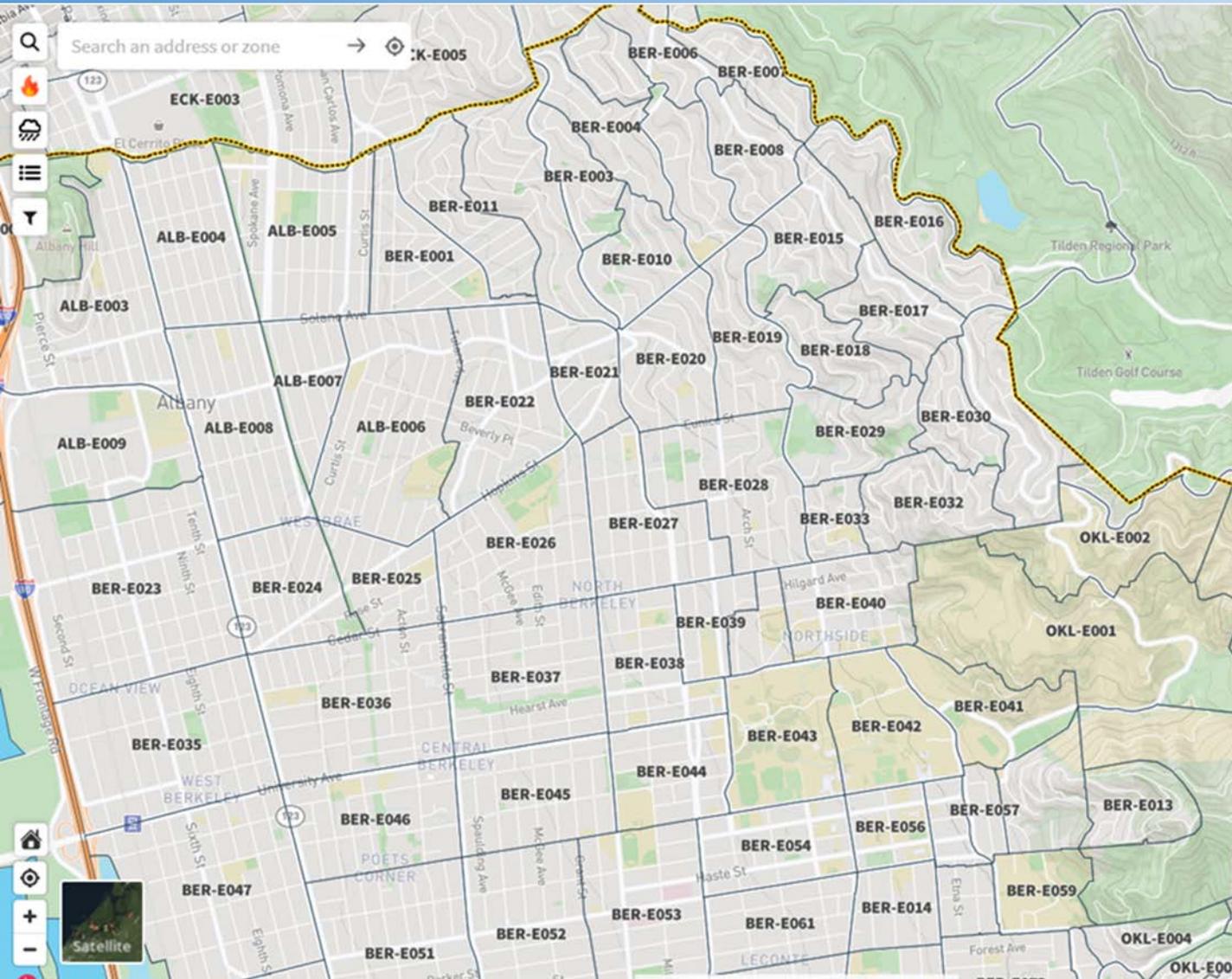
# Safe Passages

Facilitate evacuation traffic flow with:

- Vegetation Management
- Traffic control devices
- Parking restrictions
- No stopping zones



# Zonehaven



- [Community.Zonehaven.com](https://Community.Zonehaven.com)
- Speeds up communication among first responders and to the community
- Find evacuation zone and view status in real-time
- Ongoing training for first responders



# Outdoor Warning System

- Network of speakers with siren and voice capability, supported with Measure FF funds
- Phase 1 confirmed locations:
  - Berkeley Hills (North and South)
  - Berkeley Marina
  - West Berkeley
  - Downtown Berkeley
- Community partnerships:
  - UC Berkeley
  - Lawrence Berkeley National Lab
  - Zaytuna College
  - Berkeley Unified School District





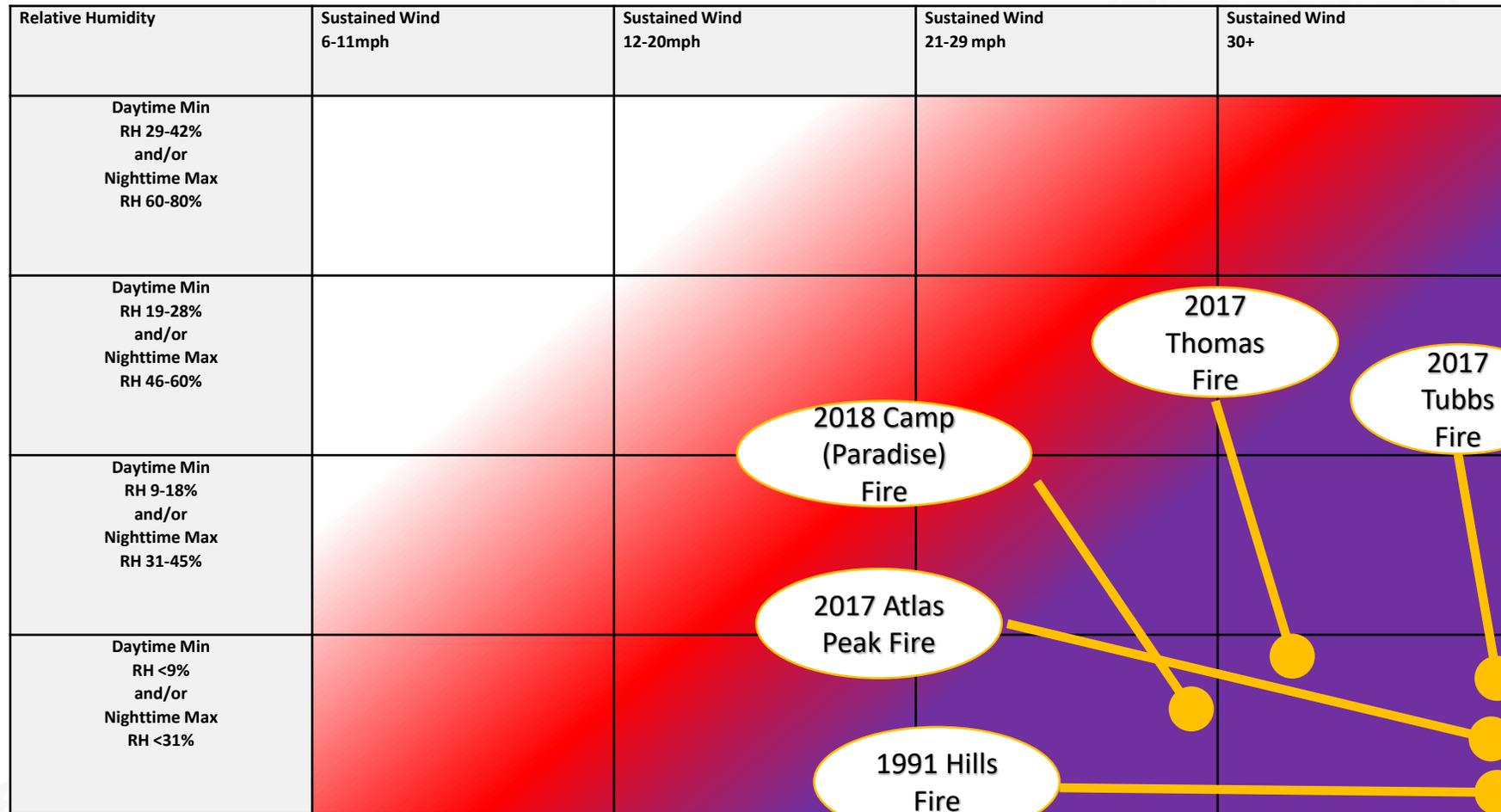
# Fire Weather: Operational Changes for Enhanced Readiness

Berkeley Fire Department





# Fire Weather Drives Response Policies



**Red Flag Weather  
(25 days in 2020)**

**Extreme Fire Weather  
(2 days in 2020)**



# Fire Weather: Monitoring & Messaging

- Weather monitoring
- Fire weather flags
- AC Alert activation
- Partner coordination
- Hills patrols



# Fire Weather: Adding Staff & Resources



- **Red Flag Warning**

- Duty Chief returns to City and facilitates department coordination and additional upstaffing

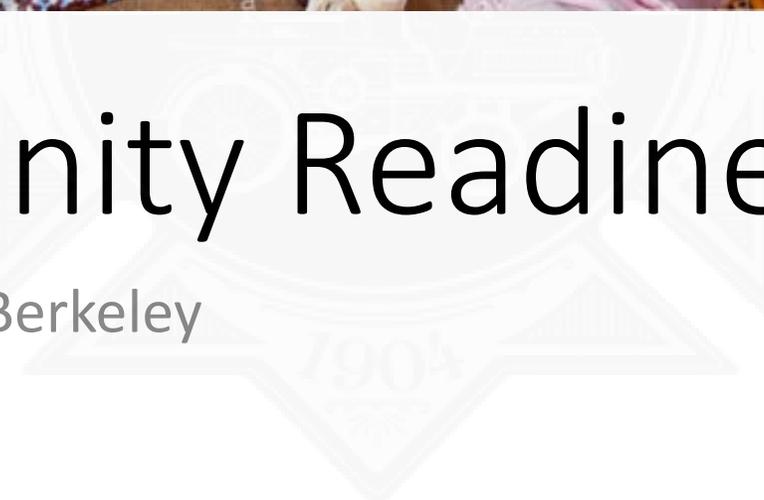
- **Extreme Fire Weather**

- Activate all Red Flag Warning procedures, and:
  - Deploy a second Battalion Chief
  - Upstaff an additional engine at Station 7
  - Additional units to support response



# Rethinking Community Readiness

A new approach to take control of wildfires in Berkeley





# Rethinking Community Readiness

[CityofBerkeley.info/Wildfire](https://www.cityofberkeley.info/Wildfire)

- Understanding fire weather
- Taking action before a fire starts



*Be connected. Be prepared. Be Berkeley.*





# Every Community Member

- Sign up for alerts and know your zone!
  - Sign up for AC Alert:
    - [www.acalert.org](http://www.acalert.org) or download the Everbridge app
  - Look up your evacuation zone:
    - [www.community.zonehaven.com](http://www.community.zonehaven.com)
- Fire Weather Planning Tool
  - Leave early during extreme fire weather
  - Get to know your neighbors
- Self-Inspection of vegetation

## Make a fire weather plan

Fires are unpredictable and conditions can change rapidly. Make a plan with your household ahead of time for what you will do during fire weather.

Download our [step-by-step guide](#) to creating your household fire weather plan. Your plan will:

- **Identify your trigger for leaving the hills**

Will you wait to evacuate after fire starts, or will you leave during periods of heightened threat?

If you live in **Fire Zone 2 or 3 (the Berkeley hills)**, the Berkeley Fire Department recommends that you leave during Extreme Fire Weather, before a fire starts.



Leaving early gives you the most control over how you will get down the hill and what you can bring. If you leave after a fire starts, you may not be able to get out with your car, so you must be prepared to evacuate on foot.

- **Decide where you will go**

Whether you plan to leave early or after a fire starts, think ahead of time about where you'll stay. Talk to friends and family who you might be able to stay with, or consider putting aside money to stay in a hotel.

In an evacuation, we will set up mass care sites for those who have no place to go, but these will take time to set up and will rarely be your most comfortable option.

# Community Based Action

1

- Neighbors & CERTs Organize
  - Fire Safe Councils

2

- Fire Safe Councils
  - Adopt FireWise Standards

3

- A Fire Adapted Community





Thank you

