



Memorandum

TO: TRANSPORTATION AND
ENVIRONMENT COMMITTEE

FROM: John Stufflebean

SUBJECT: LAS PLUMAS ECOPARK
SITE DEVELOPMENT UPDATE

DATE: 10-22-07

Approved

Seama Jha

Date

10/29/07

RECOMMENDATION

1. Accept the Conceptual Site Strategic Plan for the San José Environmental Innovation Center prepared by Business Cluster Development;
2. Direct staff to return to Council by November 2008 with the business plan for the Las Plumas facility, including: identified renovation costs and funding, selected tenants, detailed operations and maintenance expenses and funding sources; and a project implementation plan; and
3. Accept an update on the temporary Household Hazardous Waste drop-off facility.

OUTCOME

Approval of this recommendation will provide an opportunity to establish a permanent Household Hazardous Waste (HHW) facility, enhance infrastructure for the development of clean and renewable energy sources, and provide a location to showcase sustainable development. These initiatives support the Urban Environmental Accords, the City's proposed Green Vision goals # 1, 2, 3, 4, and 5, and proposed Zero Waste goals. Implementation of this recommendation will ultimately result in helping to keep HHW and construction and demolition materials out of City landfills and waterways.

BACKGROUND

On June 19, 2007, Council accepted a report on Las Plumas EcoPark and directed staff to report back to the Transportation and Environment Committee in Fall 2007 with recommendations for facility tenants and a plan for facility programming and development, including cost estimates, timeline, and financing. Programming options identified in this June report included: a permanent HHW facility, a warehouse of donated reusable building supplies, a green enterprise education center, and the Electronic Transportation Development Center, a research and apply clean energy technologies to passenger vehicles.

Following Council action, the Environmental Services Department (ESD) contracted with Business Cluster Development in July 2007, to develop a detailed conceptual plan for the specific uses of the Las Plumas facility, including a review of the various potential uses identified in an earlier study and new potential uses that have recently been identified (see attached Conceptual Site Strategic Plan).

ANALYSIS

The intent of the conceptual plan is to compliment the recommendations detailed in the master plan report, developed by San José State University's Department of Urban and Regional Planning, which identified several potential uses and tenants for the facility. The conceptual plan includes the provision for 10,000ft² of interior warehouse space to accommodate a permanent HHW drop-off facility, and approximately 30,000ft² of space to support environmental programming and education.

CONCEPTUAL SITE PLAN FOR PERMANENT SITE

An essential element recommended for the Las Plumas facility will be maximizing the use of the space in a manner that promotes environmental sustainability, including LEED design elements. In general, the conceptual plan recommends that the facility is divided as follows:

1. The back third of the building (~10,000 ft²) will be utilized for the County operated HHW drop-off and transfer.
2. The middle third of the building (~15,000 ft²) could house the Redevelopment Agency's proposed Electronic Transportation Development Center. The space would be used for prototype manufacturing, assembly, design, and display of green fleet vehicles. Although the Las Plumas facility is not within a redevelopment project area, it is very close to the Strong Neighborhoods Initiative project area. The Redevelopment Agency has not made a final decision about the appropriateness of locating the ETDC at the Las Plumas facility. If the ETDC option is determined not feasible, then a building material re-use facility would be the alternative recommendation for this portion of the building. Staff would conduct a competitive process to determine the specific building material restore operator if this alternative was implemented.
3. The front third of the building (~15,000 ft²) is currently two stories of office space. This office space would be used for training and education. Offices and workspace for environmental start-ups, ETDC, environmental non-profits, ESD staff, community groups and others would also be in this section. Staff would conduct a competitive process to determine the tenants for the non governmental occupants.

As a next step, ESD will work with Public Works to procure architectural services and develop site design documents. Concurrently, RDA will complete their feasibility determination for

ETDC siting. Staff will then conduct a competitive process to select potential tenants for the non-governmental space in the building. Selection criteria will include which proposed uses for the space compliment those outlined in the Conceptual Strategic Site plan, and align with the City's Green Vision, Urban Environmental Accords, and Zero Waste goals, and the proposer's contribution to capital improvements and on-going operations and maintenance costs.

Timeline/Key Milestone Leading to Business Plan Development:

December- June	RDA determination for ETDC
April-August	Non-Government Competitive Process
August-October	Business Plan Development

Once the evaluation team has selected potential tenants, a final business plan will be developed and included in the November 2008 Council report.

LAS PLUMAS TEMPORARY HHW FACILITY UPDATE

The Public Works Department is finalizing the site design for the temporary HHW facility which would be located directly adjacent to exterior portion of the Las Plumas building, and would be in accordance with the project elements described in the Environmental Impact Report (File # PP# 06-100). Public Works expects to release the construction bid documents in February 2008, with construction completed in the third quarter of 2008. The facility will be operated and managed by the County of Santa Clara, and is anticipated to be open for the public by late Fall 2008. The County, which is now operating temporary HHW drop-off events in San José, plans to conduct four events per month at Las Plumas. Separately, the County will accept small business and non-profit organization HHW deliveries for an additional four days per month at this facility. The design of the temporary site will enhance public and environmental safety, including improved security and storm water protection features, while assisting the City to achieve Zero Waste, pollution prevention and watershed protection goals.

EVALUATION AND FOLLOW-UP

Staff will evaluate the feasibility of the Conceptual Site Strategic Plan and complete the environmental review, identify funding and tenants, and return to Council by November 2008 with final recommendation for the permanent facility.

PUBLIC OUTREACH/INTEREST

Business Cluster Development consultants administered a series of 30 interviews with key entities, involving interested tenants, community stakeholders (Center for Training and Careers and the American Indian Education Resource Center), the County of Santa Clara, the San José Redevelopment Agency, the City Manager's Office and several City departments, including ESD, Public Works, Office of Economic Development, and Council and Mayor's Office staff. A

compendium of this outreach effort and associated findings are contained in Business Cluster Development's final report.

The criteria below do not apply to this report.

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

COORDINATION

This memo has been coordinated with the San José Redevelopment Agency; Public Works; Planning Building and Code Enforcement; Economic Development, City Attorney's Office; and the City Manager's Budget Office.

COST SUMMARY/IMPLICATIONS

Design and architectural work have not yet occurred for the permanent site, and detailed cost estimates are not yet available. Some preliminary cost estimates have been developed, by the Department of Public Works, estimating a cost for the Las Plumas facility construction retrofit at approximately \$7 million.

Staff is working to identify and evaluate possible funding sources for the capital improvements and operation and maintenance of the facility. The uses and tenants selected have a significant impact on the types of funding available. Options outlined in the June 19, 2007 Council memo included:

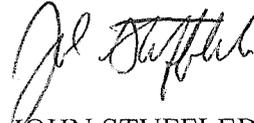
- Integrated Waste Management Funds, including monies that have not been claimed from the City's Construction and Demolition Debris Deposit program; and
- Funds from the County's Household Hazardous Waste Program.

Other possible funding sources could include State and the Federal grants and funding from the selected tenants. A complete funding plan will be included in the August 2008 report.

TRANSPORTATION AND ENVIRONMENT COMMITTEE
10-22-07
Subject: Las Plumas EcoPark Site Development Update
Page 5

CEQA

Not a project.



JOHN STUFFLEBEAN
Director, Environmental Services

Attachments:

Executive Summary Conceptual Site Strategic Plan
Conceptual Site Strategic Plan for the San José Environmental Innovation Center

For questions, please contact Jo Zientek, Deputy Director, Integrated Waste Management Division, at 408-535-8557.

**CONCEPTUAL SITE STRATEGIC PLAN
FOR THE
SAN JOSE ENVIRONMENTAL INNOVATION CENTER**

EXECUTIVE SUMMARY

Prepared for:

**City of San Jose
Environmental Services Department**

Submitted by: James Robbins & Carol Kraus Lauffer, Partners
Business Cluster Development



BUSINESS CLUSTER DEVELOPMENT

**160 North Castanya
Menlo Park, California**

October, 2007

Executive Summary

Introduction

In June, 2007, the Environmental Services Department contracted with Business Cluster Development to develop a detailed strategic plan for the specific uses of the Las Plumas facility, including a review of the various potential uses identified in an earlier study and new potential uses that have recently surfaced. Approximately 30 individuals were interviewed by Business Cluster Development, including city officials and community organizations. All individuals were asked about their needs, how they believed the Las Plumas facility might accommodate those needs, and what their expectations were about cost and availability of space. A complete list of those interviewed is included in the strategic plan. During conversations with City officials and other potential stakeholders, it became clear that an opportunity existed to develop a city-owned facility that could merge the goals of the Environmental Services Department to establish a household hazardous waste drop-off facility and to encourage diversion of materials from the landfill through reuse and recycled construction materials with the Mayor's Green Vision policy.

Thus, in addition to the Household Hazardous Waste drop-off site and an education center on diversion, the full business plan proposes the development of a state-of-the-art technology development and demonstration site for clean and renewable energy, as well as a location where community businesses in the environmental sector could be started and receive business incubation, or start-up, services. The plan also addresses potential uses by community groups that have previously expressed an interest in the Las Plumas facility. Finally, the plan identifies how the facility can utilize clean and renewable energy technology to power its own utilities and can utilize green and sustainable construction practices to retrofit the Las Plumas building into a LEED Platinum facility.

Mission Statement

The San Jose Environmental Innovation Center will be the clean tech innovation, development and demonstration facility for renewable energy, green fleet vehicles and energy efficiency technology for San Jose and Silicon Valley. It will also be a community education and demonstration center on waste diversion, green design and construction practices; a place where local businesses in the environmental sector can start; a Household Hazardous Waste drop-off site, and a LEED Platinum facility demonstrating best practices in sustainable and green building design.

Key Objectives

The key objectives identified for this project are summarized below, with their links to the Mayor's San Jose Green Vision policy also referenced:

- **A Household Hazardous Waste Drop-off Facility** for residential use will be developed at the site in partnership with the County of Santa Clara. The location will provide outside facilities for residents to drop-off hazardous materials and permanent storage space inside the building for residual hazardous materials not immediately removed.
 - *Supports the goal of diverting 100% of waste from the landfill.*
- **A Solar Demonstration Site** where commercial prototypes of new solar technologies could be tested in order to speed-up adoption of successful technology in San Jose and Silicon Valley. In addition, these solar technologies would be used to power portions of the Las Plumas facility.
 - *Supports the goal of receiving 100% of electrical power from clean and renewable energy sources.*
 - *Supports the goal of creating 25,000 clean tech jobs as the World Center of Clean Tech Innovation.*
- **An Electronic Transportation Development Center** where Silicon Valley companies can work together to design, develop, commercialize, and manufacture prototypes of advanced clean and renewable energy transportation technologies for green fleet vehicles, such as buses and trucks. The Center will house labs and prototype manufacturing space for a series of new clean vehicles.
 - *Supports the goal of ensuring 100% of the public fleet run on alternative fuel.*
 - *Supports the goal of creating 25,000 clean tech jobs as the World Center of Clean Tech Innovation.*
- **An Environmental Education and Training Center** where contractors, remodeling experts and designers can learn about green building materials, energy efficient lighting and sustainable building practices. Education programs would focus on the reuse and recycling of building materials that would otherwise go to the landfills.
 - *Supports the goal of building or retrofitting 50 million square feet of green buildings.*
 - *Supports the goal of reducing per capita energy use by 50 percent.*
 - *Supports the goal of diverting 100% of waste from the landfill.*
- **A Display Center for Green Building Materials** so that contractors, designers, and consumers can learn about and see green building material and energy efficiency products in use in the building itself or on display. The display center will support the education and training efforts in a pragmatic way where the latest recycled or green materials can be viewed prior to their use in construction projects.
 - *Supports the goal of building or retrofitting 50 million square feet of green buildings.*
 - *Supports the goal of reducing per capita energy use by 50 percent.*
 - *Supports the goal of diverting 100% of waste from the landfill.*
- **Office Space for Environmental Start-ups and Environmental Non-profits** which are related to the other uses in the building. The San Jose Environmental Business Cluster

can provide incubation, or start-up, services to local residents wishing to start environmental companies. The conference and training rooms can also serve the needs of local community groups, both during business hours and during evenings and weekends.

- *Supports the goal of creating 25,000 clean tech jobs as the World Center of Clean Tech Innovation.*
- **Storage Space for Organizations** committed to use of green building materials and practices. Such organizations need places to park trailers and trucks and store their building and construction materials onsite for short periods of time.
 - *Supports the goal of building or retrofitting 50 million square feet of green buildings.*
- **Creation of a LEED Platinum Certified Green Building** at the city-owned Las Plumas facility.
 - *Supports the goal of building or retrofitting 50 million square feet of green buildings.*
 - *Supports the goal of reducing per capita energy use by 50 percent.*
 - *Supports the goal of diverting 100% of waste from the landfill.*
 - *Supports the goal of receiving 100% of electrical power from clean and renewable energy sources.*

The Environmental Innovation Center supports a number of other City policies and strategies, including the Guiding Principles of the 2040 General Plan update, the Urban Environmental Accords and the City's Environmentally Preferable Purchasing Policy.

Facility

The facility retrofit will emphasize diversion of construction and demolition materials from the waste stream. Thus, an essential element in the fit-up of the Las Plumas facility will be maximizing the use of the space in a manner that promotes sustainability, including LEED design elements. In general, the facility will be divided approximately into thirds.

1) The back third of the building (10,000SF) will be utilized for hazardous waste drop-off, transfer, and residual storage. The existing metal shed adjoining the building and other outside space also will be utilized during the drop-off days.

2) It is recommended that the middle third of the building (15,000SF) will house the Electronic Transportation Development Center. The space will be used for prototype manufacturing, assembly, design and display of green fleet vehicles. In addition, display space for green construction materials would be located at the front end of this space, nearest the offices.

3) The front third of the building (15,000) is currently two stories of office space. The office space is old and has deteriorated badly. It is recommended that the existing office space be demolished down to the shell and that new office space be designed and built.

The retrofit would include new electrical, plumbing, HVAC, lighting, an elevator and other handicap access requirements. This new office space would be used for training and education and would include conference rooms, reception area, kitchen and bathrooms. Offices for environmental start-ups, ETDC, environmental non-profits, ESD staff, community groups and others would also be in this section and are detailed in the Plan.

Organization and Staffing Plan

The Las Plumas facility is owned by the City of San Jose and will be operated by the Environmental Services Department. ESD will provide a full-time onsite Facility Manager and will provide for building maintenance and security. Specific operating and use fees will be set in the future. It is anticipated that the LEED-certified green building will keep most operating costs to a modest level.

Budgets

Design and architectural work have not yet occurred, and detailed cost estimates are not yet possible, but some preliminary cost estimates have been developed. In Feb., 2007, cost estimates were developed for environmental engineering, lead abatement and painting of the galvanized metal ceiling and interior walls where lead remediation will be done.

The Dept. of Public Works assisted with this plan by developing a preliminary cost estimate for demolition and retrofit. This pre-design estimate could change significantly based upon actual design decisions. The estimate includes architectural, structural, plumbing, HVAC, electrical, sprinkler/fire protection, security systems, and base technology, such as Ethernet, servers, conference video equipment and phone lines. Finally, Environmental Services assisted with estimates of additional cost that might be incurred for a LEED Platinum retrofit, which is estimated to add 10% to development costs. Outdoor fit-up and landscaping costs have previously been included in the Phase 1 HHW Drop-off budget and are not included here. Structural work has not yet been fully identified or estimated, but appears minimal.

The summary budget information available at this date is summarized below and indicates an approximate cost for the Las Plumas facility construction retrofit of approximately \$7 Million.

Environmental Engineering	\$ 21,000
Lead abatement:	\$166,000
Painting	<u>\$ 81,000</u>
Subtotal	\$268,000
Demolition & Retrofit	<u>\$5,672,000</u>
Subtotal	\$5,940,000
Estimated additional cost for LEED Platinum	<u>\$594,000</u>
Total	\$6,534,000

Possible Funding Sources

Possible funding sources identified for the Environmental Innovation Center are very preliminary and significant risk was identified concerning the certainty of many of these sources of funding. There are four potential revenue sources for this project:

A) Integrated Waste Management Funds, including monies that have not been claimed from the City's Construction and Demolition Debris Deposit program. Such funds may be able to be applied to construction of facility improvements as a part of the cost of the Center education programs described herein whose purpose is to divert waste from construction, demolition and alteration projects from landfills. Funding from both State sources and the U.S. Environmental Protection Agency grants may also be available to Integrated Waste Management.

B) Funds from the County's Household Hazardous Waste Program to cover the costs related to the development of the drop-off and storage facilities at the Las Plumas facility.

C) Funds may be available from the Redevelopment Agency as they relate to the use of a portion of the Las Plumas facility for the Electronic Transportation Development Center (ETDC). Although the Las Plumas facility is not within a redevelopment project area, it is very close to the Strong Neighborhoods Initiative project area and might provide beneficial use. The Redevelopment Agency has not made a final decision about the appropriateness of locating the ETDC at the Las Plumas facility.

D) Funds from any Green Vision budget that might be developed in the future to support implementation of the objectives set forth in that policy, many of which have previously been identified as related to this project.

Conclusion

The San Jose Environmental Innovation Center can provide the City of San Jose and the local community with a premier education, training, innovation and demonstration facility that will promote green design and construction practices and encourage (1) use of solar and other renewable energy, (2) green fleet development and (3) energy efficiency. The Center can also be a hub for community activity, a resource for household hazardous waste disposal and a place where community members can receive assistance in starting environmental businesses. As a LEED Platinum facility, the project can demonstrate San Jose's commitment to best practices in environmental design and construction. Finally, the combined aspects of all of these activities will create a hub of environmental and clean tech activity that will attract both businesses and residents to participate in a network of environmental activity that will serve as a demonstration of San Jose's innovation and leadership in the clean tech and environmental sectors.

**Conceptual Site Strategic Plan
For The
San Jose Environmental Innovation Center**

Prepared for:

**City of San Jose
Environmental Services Department**

Submitted by: James Robbins & Carol Kraus Lauffer, Partners
Business Cluster Development



BUSINESS CLUSTER DEVELOPMENT

**160 North Castanya
Menlo Park, California**

October, 2007

Table of Contents

	<u>Page</u>
Introduction.....	3
Background.....	4
Opportunity.....	4
Mission Statement.....	5
Key Objectives.....	5
General Approach.....	6
Specific Proposed Uses.....	8
Facility.....	17
Organization and Staffing	19
Budget Estimate.....	19
Possible Funding Sources.....	20
Conclusion.....	21
Appendix A – Interviewee List.....	22
Appendix B – Potential Uses of Space.....	24
Appendix C – Las Plumas Site Map.....	25
Appendix D – Electronic Transportation Development Center.....	26
Appendix E – Las Plumas Floor Plan Specifications.....	29
Appendix F – Artist Renderings from SJSU Report.....	31



Introduction

This strategic plan proposes the development of the Las Plumas city-owned facility into a state-of-the-art technology development and demonstration site for clean and renewable energy, as well as a location where community businesses in the environmental sector could be started and receive business incubation, or start-up, services. The plan also addresses potential uses by community groups that have previously expressed an interest in the Las Plumas facility. Finally, the plan identifies how the facility can utilize clean and renewable energy technology to power its own utilities and should utilize green and sustainable construction practices to retrofit the Las Plumas building into a Platinum LEED facility. Each of the areas correlates to goals under the Mayor’s recently announced Green Vision, and those correlations are also noted in the plan.

Background

In June 2006, the Environmental Services Department (ESD) purchased the site of the former Las Plumas warehouse with the intent of developing an Urban EcoPark and a household hazardous waste drop-off site. The size and appropriate zoning of the site presents the City with numerous opportunities for implementing various environmental initiatives in tandem with other organizations. The intent is to develop all uses in a sustainable manner, with respect to both design and programs. In November, 2006, ESD contracted with the San Jose State University Graduate Program in Urban and Regional Development to create a master plan that would describe numerous potential uses for the site. In June, 2007, ESD contracted with Business Cluster Development to identify the actual specific uses for the Las Plumas facility and to develop a more detailed strategic plan, including a review of the potential uses identified earlier and new potential uses that have recently surfaced.

Business Cluster Development (BCD) has previously assisted the City of San Jose in establishing three technology incubators. BCD Partner, Jim Robbins, is also the Executive Director of the downtown San Jose Environmental Business Cluster, a clean and renewable energy technology commercialization and incubation program.

Approximately 30 individuals were interviewed by Business Cluster Development, including city officials and community organizations. All individuals were asked about their needs and ideas, how they believed the Las Plumas facility might accommodate those needs or ideas, and what their expectations were, if any, about cost and availability of space. A complete list of those interviewed is included as Appendix A. Every effort was made to accommodate as many potential uses as possible at the Las Plumas facility, consistent with the overall mission and objectives of the project. The potential uses of space identified during the interviews are incorporated into this plan, and a summary of the needs identified by those interviewed are summarized in Appendix B.

Finally, preliminary work has been done to determine the facility retrofit and improvements needed to prepare the building for eventual use. BCD has visited the site on numerous occasions and has worked with city officials to determine the preliminary design requirements.

Opportunity

During conversations with City officials and other potential stakeholders, it became clear that an opportunity existed to develop a city-owned facility that could merge the goals of the Environmental Services Department to establish a Household Hazardous Waste Drop-off Facility and to encourage diversion of materials from the landfill through reuse and recycled construction materials with the Mayor's recent Green Vision policy and ideas emerging from the development of that policy.

It is recommended that the Las Plumas facility be developed into a San Jose Environmental Innovation Center (EIC), a state-of-the-art technology development and demonstration site for clean and renewable energy; an environmental and community training center; and a location where local community businesses focused on the environmental sector could be started and receive business incubation, or start-up, services.

Finally, the plan identifies how the facility can utilize clean and renewable energy technology to power its own utilities and can utilize resource efficient and sustainable construction practices to retrofit the Las Plumas building into a LEED Platinum facility. The following mission statement briefly articulates this vision while the remainder of this strategic plan provides a more detailed approach.

Mission Statement

The San Jose Environmental Innovation Center will be the clean tech innovation, development and demonstration facility for renewable energy, green fleet vehicles and energy efficiency technology for San Jose and Silicon Valley. It will also be a community education and demonstration center on waste diversion, green design and construction practices; a place where local businesses in the environmental sector can start; a Household Hazardous Waste drop-off site, and a Platinum LEED facility demonstrating best practices in sustainable and green building design.

Key Objectives

The key objectives identified for this project include:

- Educating, displaying and demonstrating the use of recycled and reused “green” construction materials that can divert waste from local landfills,
- Providing a clean tech innovation center that will help the City of San Jose meet its Green Vision and Clean Tech goals,
- Creating an environmental showcase for development, display and testing of clean and renewable energy technology, with an emphasis on solar and green fleet vehicles,
- Co-locating organizations that can provide educational services to private sector and community groups on green building and sustainable practices,
- Providing assistance for local citizens starting-up environmental businesses and a place for community groups to meet,

- Creating a household hazardous waste drop-off center for residential use,
- Developing a Platinum LEED certified facility that will demonstrate the City's commitment to and vision concerning green and sustainable buildings,
- Identifying the key partnerships needed for success, and
- Creating an operational plan and facility design to support the key mission.

General Approach

The Las Plumas facility at 1608 Las Plumas Ave. is a 46,000 SF industrial building which requires substantial retrofit for most uses, including asbestos removal and lead paint abatement. Roughly, 2/3 of the space is high bay industrial/warehouse space, and the other 1/3 consists of two stories of office space at the front of the facility.

The Environmental Innovation Center project is intended to reflect the San Jose Mayor's Green Vision and the City's commitment to Clean Technology Innovation by providing a premier location for the development, demonstration and display of solar technology, clean advanced transportation technology, energy efficiency solutions and green building and construction products. The project also will integrate both community uses and environmental education and training facilities. In addition, the building itself will be renovated into a Platinum LEED certified "green building" which will be a model of sustainability throughout and which will serve as a physical demonstration of the City's commitment and capabilities at sustainable design.

The Mayor's Green Vision is a comprehensive 15-year strategy that will allow the city to "lead the nation in becoming more energy efficient, while producing and using electricity from clean renewable sources ...and reduce the carbon footprint of [San Jose] by more than half". San Jose Green Vision Press Conference, Oct. 5, 2007

The interviews identified the following primary uses, which are summarized below, along with links to the Mayor's Green Vision policies:

- **A Household hazardous Waste Drop-off Center** for residential use will be developed at the site in partnership with the County of Santa Clara. The location will provide outside facilities for residents to drop-off hazardous materials and permanent storage space inside the building for residual hazardous materials that are not immediately removed to another location.
 - *Supports the goal of diverting 100% of waste from the landfill.*
- **A Solar Demonstration Site** where commercial prototypes of new solar technologies could be tested in order to speed adoption of successful technology in San Jose and Silicon Valley. In addition, these solar technologies could be used to power portions of the Las Plumas facility.

- *Supports the City's goal of receiving 100% of electrical power from clean and renewable energy sources.*
- *Supports the City goal of creating 25,000 clean tech jobs as the World Center of Clean Tech Innovation.*
- *Supports the City's goal of reducing per capita energy use by 50 percent.*
- **An Electronic Transportation Development Center** where Silicon Valley companies can work together to design, develop, commercialize, and manufacture prototypes of advanced clean and renewable energy transportation technologies for green fleet vehicles, such as buses and trucks. The Center will house labs and prototype manufacturing space for a series of new clean vehicles.
 - *Supports the City's goal of ensuring 100% of the public fleet run on alternative fuel.*
 - *Supports the City goal of creating 25,000 clean tech jobs as the World Center of Clean Tech Innovation.*
- **An Education and Training Center** where contractors, remodeling experts and designers can learn about the latest advances in green building materials, energy efficient lighting and sustainable building practices. Education programs would focus on the ability of such groups to reuse and recycle building materials that would otherwise go to the landfills.
 - *Supports the City's goal of building or retrofitting 50 million square feet of green buildings.*
 - *Supports the City's goal of reducing per capita energy use by 50 percent.*
 - *Supports the City's goal of diverting 100% of waste from the landfill.*
- **A Display Center for Green Building Materials** so that contractors and consumers can learn about and see green building material and energy efficiency products in use in the building itself or on display. The display center will support the education training efforts in a pragmatic way where the latest recycled or green materials can be viewed prior to their use in construction projects.
 - *Supports the City's goal of building or retrofitting 50 million square feet of green buildings.*
 - *Supports the City's goal of reducing per capita energy use by 50 percent.*
 - *Supports the City's goal of diverting 100% of waste from the landfill.*
- **Office Space for Environmental Start-ups and Environmental Non-profits** which are related to the other uses in the building. The San Jose Environmental Business Cluster can provide incubation, or start-up, services to local residents wishing to start environmental companies. The conference and training rooms can also serve the needs of local community groups, both during business hours and during evenings and weekends.
 - *Supports the City goal of creating 25,000 clean tech jobs as the World Center of Clean Tech Innovation.*

- **Storage Space** for organizations committed to use of green building materials and practices. Such organizations need places to park trailers and trucks and store their building and construction materials onsite for short periods of time.
 - *Supports the City's goal of building or retrofitting 50 million square feet of green buildings.*
 - *Supports the goal of diverting 100% of waste from the landfill.*

- **Creation of a LEED Platinum State-of-the-Art Green Building** at the city-owned Las Plumas facility.
 - *Supports the City's goal of building or retrofitting 50 million square feet of green buildings.*
 - *Supports the City's goal of reducing per capita energy use by 50 percent.*
 - *Supports the goal of diverting 100% of waste from the landfill.*
 - *Supports the goal of receiving 100% of electrical power from clean and renewable energy sources.*

The Environmental Innovation Center supports a number of other City policies and strategies, including the Guiding Principles of the 2040 General Plan update, the Urban Environmental Accords and the City's Environmentally Preferable Purchasing Policy.

Specific Proposed Uses

1. Household Hazardous Waste Drop-off Center

A household hazardous waste (HHW) drop-off program operated by Santa Clara County would be established for residential users by the City of San Jose in partnership with the County of Santa Clara. The location will provide outside facilities for residents to drop-off hazardous materials and permanent storage space inside the building for those residual hazardous materials that are not immediately removed to another location. It is anticipated that 10,000-20,000 drop-offs will occur annually at the site.

Residential hazardous waste drop-off will occur 4-6 days/month, plus hours for businesses on Thursdays. While the HHW drop-off center is not expected to create any significant risk for other users of the building, the drop-offs will cause substantial vehicle traffic and activity, and public events increasing such traffic should not be scheduled by other building users on the days HHW has public drop-offs. For example, 1200-1300 vehicles typically use the site on Saturday drop-offs, and approximately 80 staff will be present.

An environmental impact report has been completed and public hearings have been held. The HHW drop-off center would provide a way for residents to dispose of unwanted household chemicals and other hazardous waste. A temporary phase 1 HHW drop-off center would initially be set-up outside the Las Plumas facility

while retrofit of the interior facility is under way. Both the temporary drop-off center (and the permanent drop-off center) would make use of a large metal shed attached to the main building.

Once the retrofit is complete, the HHW drop-off center would still receive materials on the outside of the facility, but approximately 10,000 SF of inside space would be used for temporary hazardous waste storage at the rear of the Las Plumas facility. This inside space would be physically separated from the remainder of the building by a firewall and would utilize its own separate HVAC and fire control systems, consistent with the requirements of a hazardous waste storage facility. A plan for the design of the phase 1 temporary HHW drop-off center, including drive through requirements, shipping and receiving dock, outside storage facilities and landscaping for environmental protection in case of spills has been previously prepared. A budget for the phase 1 HHW drop-off center also has been developed previously by the City.

The creation of a facility readily available to San Jose (and other county) residents and businesses is also consistent with the Mayor's Green Vision that includes a goal of diverting 100% of the city garbage away from landfills over the next 15 years. Most of the hazardous waste that is dropped-off is recycled or reused, thus reducing landfill.

2. Solar Demonstration Site

A solar demonstration site would be established where commercial prototypes of new solar technologies could be tested in order to speed adoption of successful technology in San Jose and Silicon Valley. San Jose has already started to attract some solar companies, such as SunPower and SoloPower to the City. However, many emerging solar technology companies need an initial commercial opportunity to show that their technology works. Private and public entities are reluctant to risk trying new technologies and this significantly slows adoption of the very technologies needed to combat climate change and increase availability of renewable energy sources. The City could provide such a demonstration opportunity within a controlled environment at the

The Mayor's Green Vision embraces development of clean tech innovation within San Jose, and solar technology, in particular, was identified as an area where San Jose will support technology innovation. City goals of 100,000 solar installations and installation of solar on city buildings will both be supported by development of this site. The solar demonstration site will both attract companies to locate in San Jose and will speed the adoption of new innovative technologies by allowing both public and private entities to observe technology demonstrations at the Las Plumas site and determine their applicability to commercial applications first hand. By testing their solar technology at the site, San Jose solar companies can have a competitive advantage, thus encouraging their growth and helping the City achieve its Green Vision goal of creating 25,000 jobs over the next 15 years.

The Las Plumas facility has ample space to allow photovoltaic and other solar arrays to be placed on the roof or on the grounds surrounding the facility. Such solar arrays can be connected to building electrical or hot water infrastructure and be monitored and tested. It is not anticipated that the solar demonstration facility will require significant space inside the building, probably only one room where solar energy production can be monitored. This solar demonstration facility will not only allow for technology demonstration and testing of multiple types of cutting-edge solar technologies over time, but it can be used to provide power for HVAC and lighting, as well as hot water, for the building, under appropriate circumstances. In addition, it is recommended that the large canopy being placed over the HHW outside drop-off location be fitted with solar panels.

The creation of the Solar Demonstration Site will allow help Economic Development and Redevelopment officials, as well as the Environmental Business Cluster, recruit emerging solar companies to San Jose. The development of a solar demonstration facility and conversion of much of the building to renewable energy will also support the Mayor's Green Vision goals of reducing per capita energy use by 50% and of receiving 100% of electrical power from clean and renewable energy sources.

3. Electronic Transportation Development Center

An Electronic Transportation Development Center (ETDC) would be established as a location where Silicon Valley companies can work together to design, develop, commercialize, and manufacture prototypes of advanced clean and renewable energy transportation technologies for green fleet vehicles, such as buses and trucks. The Center will house labs and prototype manufacturing space for a series of new clean vehicles. Initially, the ETDC will focus on clean and renewable energy, homeland security, and vehicle safety applications for surface vehicles. The ETDC draws on existing and emerging Silicon Valley technologies – including hardware, software, and communications solutions - to spur the growth of next-generation transportation technologies in the United States.

The ETDC is a project of the Redevelopment Agency, as well as a group of private sponsors and the U.S. Dept. of Commerce, through its Economic Development Administration. Through the ETDC, San Jose seeks to reduce dependence on oil, reduce air pollution, and improve transportation security by using Silicon Valley technologies to make vehicles cleaner, more efficient, and safer. Vehicles are the largest single source of CO₂ and addressing this problem is critical for San Jose's Green Mobility goals.

The Mayor of San Jose sent a letter to over 200 companies in early 2007 introducing the ETDC project and inviting their participation. Ninety companies responded to a survey and identified technology that could be applied to clean energy and homeland security advanced transportation goals. These companies

have been interviewed and their technologies and interest in ETDC were documented. The first project is development of a new state-of-the-art hybrid electric school bus. Additional information on the ETDC is included in Appendix D.

A physical location for Silicon Valley companies to work together and focus on solving these transportation challenges is an integral part of the ETDC vision. It is proposed that 15,000 SF of high bay space in the Las Plumas facility be utilized as a technology development and prototype manufacturing site for Silicon Valley companies to bring their technologies and adapt them for use in new generations of clean transportation vehicles. The ETDC facility will include technology labs, assembly and manufacturing space, as well as space for vehicle and technology displays, conference rooms and offices. The ETDC facility will offer the services, equipment, and physical location necessary to attract and engage Silicon Valley companies as these important national priorities are being addressed. With the cooperation of the San Jose Environmental Business Cluster, the City can also provide space downtown for new clean transportation businesses to start-up and develop successfully, leading to new business formation and employment opportunities.

The ETDC space identified at the Las Plumas facility would be used for labs and prototype manufacturing of a series of new generation prototype clean and renewable energy vehicles. The space can be used as is, except for clean-up, and some lighting and sprinkler retrofit. The necessary labs can easily be built inside the existing high bay space. An existing roll-up door should be sufficient for entrance and egress of the vehicles, or a new door can be built. Loading docks already exist. Office space needs are identified in another section.

One of the ETDC program's primary focus is supporting the City's green fleet development and policies through special projects designed to help the City develop the clean, advanced transportation vehicles it will need in the future. Examples include hybrid trucks, solar charging stations for electric vehicles, alternative fuel airport vehicles and electric hybrid buses. Inclusion of the ETDC at the Las Plumas facility helps to support the Mayor's Green Vision goals of ensuring 100% of the public fleet runs on alternative fuel and of creating 25,000 clean tech jobs.

4. Education and Training Center

An education and training center should be developed where contractors, remodeling experts and designers, as well as consumers, can be trained about the latest advances in green building materials, energy efficient lighting and sustainable building practices. The City can use the facility to provide training on such practices to help accomplish landfill diversion goals and to help increase demand for reused and recycled construction material alternatives.

A number of groups indicated interest in an education and training center. For example, the City of San Jose operates an Energy Watch program with Pacific Gas & Electric Company that provides 15-25 half-day to full-day classes per year in San Jose. At present, it does not have a permanent location for the classes, which attract 30-60 contractors per session. Also, lighting demonstration cannot be offered because the classes are held at a temporary location where the necessary lighting equipment cannot be set-up. There was also interest expressed at running similar classes for residential home-owners.

Pacific Gas & Electric Company expressed an interest in the possibility of establishing an energy efficient lighting display center in the building, and the National Association of the Remodeling Industry (NARI) also expressed interest in classroom space for teaching green building classes to remodeling professionals. They currently have to run such programs at hotels. NARI also expressed an interest in helping to develop displays of green building/remodeling materials. A few other groups related to the green building or clean and renewable sectors could be expected to have modest space needs and a desire to have office space in such a facility. Most of the programs run by these groups will help educate businesses and residents about the benefits of diverting materials from land fills.

One large conference room that could hold 75-100 people is needed. In addition, several smaller training/conference rooms are needed. A kitchen is also highly desirable. Detailed room specifications are included later in this plan. The design should emphasize flexibility and availability to multiple groups for a variety of uses. The conference and training rooms can then also serve the needs of local community groups during regular business hours, as well as during evenings and weekends when a greater community need was identified.

Both the American Indian Education Center and the Center for Training and Careers are located immediately across the street from the Las Plumas facility. Both groups have been very supportive of the environmental approach to the use of the facility. The Center for Training and Careers (CTC) conducts a variety of educational and community training courses. It has an interest in doing environmental training and in preparing students for clean tech careers. In addition, a number of community groups use CTC's facility, such as La Raza and the Hispanic Chamber of Commerce. Its current meeting and training rooms are inadequate based upon demand. Some of its programs run during regular business hours, but many occur on evenings and weekends. CTC expressed a desire to use the Las Plumas facility during both business and non-business hours. A large meeting room and a kitchen were particularly attractive to them. The room specifications identified later in this report could provide several class rooms, plus use of a large meeting room and kitchen during evenings and weekends. The American Indian Education Center was primarily interested in a Native American herb garden and some open lawn space for young children participating in its

programs, as well as a large meeting room and kitchen space for occasional use on evenings and weekends.

The conference and training space should meet the needs of these two groups, as well as some of other groups that were interviewed. These other groups expressed less frequent needs for such space. For example, Rebuilding Together may need space to hold board meetings. Our City Forest may seek to use the training facility for some of its classes.

It is recommended that an herb garden, grass area and picnic tables be established outside the fence line on the landscaped (25ft) set-back for use by the American Indian Education Center, and for others at the facility during lunch breaks. It could be established at the back of the Las Plumas facility lot, away from Las Plumas Ave. and the heaviest traffic, and almost directly across from the American Indian Education Center's facility.

An education and training center at the Environmental Innovation Center will directly support the City's Construction and Demolition Diversion Deposit Program (CDDD). About 30% of the waste that goes to landfills is construction and demolition debris. In order to encourage the recovery of such debris, the City of San Jose collects a deposit from those doing construction, demolition or remodeling work, and it refunds the deposit if the debris from the project is diverted from burial in the landfill. The primary purpose of the education and training center will be to educate contractors, remodeling professionals and homeowners about available options to divert such waste.

The education and training center will also directly support the Mayor's Green Vision goal of diverting 100% of waste away from landfills. By training the contractors, builders, remodeling professionals and local residents, the Center will also help support the Green Vision goals of building or retrofitting 50 million square feet of green buildings and reducing per capita energy use by 50 percent.

5. Display Center for Green Building Materials

A display center for green building materials should be established so that contractors, remodeling professionals and consumers can see the types of green building material and energy efficiency products needed to design, construct and remodel buildings that promote a sustainable and energy efficient environment. It is anticipated that such a center could include insulation, windows, HVAC systems, renewable energy and roofing products, green/recycled construction materials, lighting solutions, and many other green building solutions. In addition, the retrofit of the Las Plumas building itself should use such materials and ways should be developed to showcase the use of those materials in the building itself. More detail on opportunities within the facility is included in a later section.

Buildings are responsible for 40% of the energy consumption in the United States. Technology and materials are available to help reduce such energy consumption, but they are not yet in widespread use. In addition to more education, developers and contractors need to see green building materials and energy efficient products in use or on display in order to adopt those technologies. Use of recycled and reused material for construction is critical to meet waste diversion goals.

Both the National Association of the Remodeling Industry and Pacific Gas & Electric indicated interest in assisting with a display that would showcase the latest green building materials and technologies. By helping to train contractors, builders, remodeling professionals and local residents change their behaviors, the green building display center helps support the Mayor's Green Vision goals of building or retrofitting 50 million square feet of green buildings and of reducing per capita energy use by 50 percent.

6. Office Space for Environmental Start-ups and Non-Profits

Local environmental start-ups, and environmental non-profits which are synergistic with the other uses in the building, should be offered office space at the Environmental Innovation Center whenever possible. This will enhance the networking occurring in the building, support local new business formation and job creation in the environmental sector and improve community-based environmental awareness.

The San Jose Environmental Business Cluster (EBC) can provide incubation, or start-up, services to local residents wishing to start environmental companies. The Environmental Business Cluster is a nonprofit environmental and clean energy technology commercialization center located in downtown San Jose. The EBC assists clean energy and environmental start-up companies in reaching the market and becoming successful. During its 12 year history, the Environmental Business Cluster has helped more than 120 businesses commercialize and market their products and services.

The EBC can offer the following services to businesses that locate at Environmental Innovation Center and wish to start an environmental business:

- Business consultations with EBC Directors and mentors
- Access to environmental and business leaders
- Assistance in locating financing
- Networking with other entrepreneurs at the EBC
- Intern programs through San Jose State University
- Market analysis assistance
- Review of operations structure
- Business planning
- Assistance with Investor and Customer presentations
- Design of marketing/sales collateral material

- Education on diversion of construction and remodeling materials from landfills

In addition, several nonprofit groups with missions related to the proposed facility uses have indicated an interest in office space in the building. These include groups such as the National Association of the Remodeling Industry, ETDC and the Silicon Valley Habitat for Humanity organization. More specific space requirements are included in Appendix B. The support of new business formation and business incubation services for local environmental start-ups will assist the Green Vision goal of creating 25,000 clean tech jobs in San Jose, as well as offer the opportunity to train such businesses and non-profits on waste diversion to help fulfill the Green Vision goal of diverting 100% of waste from landfills.

7. Storage Space for Green Building Materials

Storage space for nonprofit organizations committed to learning how to use green building materials, such as Habitat for Humanity and Rebuilding Together Silicon Valley, should be accommodated whenever possible. Both organizations indicated a need for a place to park their tractor-trailers filled with green building and other construction materials and to store them onsite for short periods of time. While space inside the building may not be available, there seems to be adequate space on the grounds outside to provide such a service. Both organizations also are interested in training for their staff and volunteers on diversion techniques and green building practices. This activity supports the Green Vision goal of building or retrofitting 50 million square feet of green buildings and the diversion of 100% of waste from landfills.

8. Development of a LEED Platinum Certified Building

There was a high level of support for the creation of a state-of-the art LEED Platinum certified building among ESD staff, budget permitting. Design work still needs to be done, but a preliminary review indicates that the building could be developed as LEED Platinum. It is also clear that City policy would require the building to be LEED Silver at a minimum.

There is also widespread support among ESD and other City departments for making the Las Plumas facility as green and environmentally sustainable as possible. The previously mentioned SJSU report outlined many steps that could be taken. Most of those steps are still relevant and are summarized below:

- Sustainable landscaping
- Use of fuel efficient or alternative energy vehicles onsite
- Storm water management
- Use of pervious surfaces in parking lots
- Vegetated swales and bio-retention areas
- Water efficient plumbing
- Use of grey water

- Solar and daylighting techniques
- Energy efficient lighting
- Recycling and reuse
- Use of green building construction materials
- HVAC indoor environmental quality design
- Cool roof
- Native American garden

Artist's conceptual renderings from the SJSU report are also contained in Appendix F.

In addition, the following other facility retrofit ideas have been suggested during our interviews:

- Formation of a green design and retrofit team
- Use of solar demonstration technologies to power building
- Use of low-emitting materials, such as paint, carpet and composite wood
- Waste stream management
- Environmentally preferred products for cleaning and maintenance
- Solar charging stations for vehicles

Substantial design work remains to be done, but the opportunity exists to develop the Las Plumas facility in a manner that will demonstrate the City's commitment to and vision concerning green and sustainable buildings. As a green building, the structure should be designed, renovated and operated in an ecological and resource-efficient manner. The facility retrofit (and the programs within the facility) will emphasize diversion of construction and demolition materials from the waste stream by using recycled and reused "waste material" as feedstock. Thus, an essential element in the fit-up of the Las Plumas facility will be maximizing the use of the space in a manner that promotes sustainability, including the LEED design elements identified above.

To be conservative, the budget adds 10% to the construction costs in order to achieve LEED Platinum certification. However, it is not clear that the additional cost will be that significant. There is growing evidence that LEED certification is less expensive than assumed by many architects. See, "The Costs and Financial Benefits of Green Buildings", Report to California's Sustainable Building Task Force, Oct. 2003, and "The Cost of Green Revisited", Davis Langdon, July 2007. In addition, it is clear that LEED Platinum will provide substantial energy savings over the life of the building, as well as providing overall health and climate benefits.

Naturally, such an approach supports the Mayor's Green Vision goals of building or retrofitting 50 million square feet of green buildings and of reducing per capita energy use by 50 percent. It also supports the Green Vision goals of diverting

100% of waste from landfills and of receiving 100% of electrical power from clean and renewable energy sources.

Facility

The Las Plumas facility at 1608 Las Plumas Ave. is a 46,000 SF industrial building that requires substantial retrofit for most uses, including substantial lead paint abatement. Roughly, 2/3 of the space is high bay industrial/warehouse space, and the other 1/3 consists of two stories of office space at the front of the facility.

The property bordered on the west by Nipper Avenue and on the north by Las Plumas Avenue. (Site map at Appendix C) The surrounding area is primarily industrial and manufacturing, although the American Indian Education Center and the Center for Training and Careers are directly across Nipper Ave. from the facility.

Generally, the facility design proposes dividing the building approximately into thirds. The back third of the building (10,000SF) will be utilized for hazardous waste drop-off, transfer and residual storage. It will be separated from the rest of the building by a firewall and have its own HVAC, fire and security systems. Entry from the outside will be through a roll-up metal door. Otherwise, interior retrofit will be minimal. The hazardous waste drop-off facility will also include use of an attached metal shed and a new outside covered canopy area to be constructed immediately adjacent to the west wall of the main building where vehicles will pull up to off-load their hazardous waste.

It is recommended that the middle third of the building (15,000SF) house the Electronic Transportation Development Center. This program, described earlier, will utilize the existing open high bay space with minor modifications and upgrades to the HVAC and sprinkler system as needed. The space will be used for prototype manufacturing, assembly, design and display of green fleet vehicles. In addition, the ETDC will build several 20x40 foot testing labs and some small spaces for technology companies to work inside the open high bay area. The ETDC has a completed conceptual design for their facility that was completed prior to the identification of this specific site, and that design can easily be modified for this space. Finally, the ETDC will probably utilize the solar demonstration area to help test solar charging stations and other solar options as part of their clean transportation designs. In addition to the ETDC, display space for green construction and building materials would be housed at the front end of the middle third of the building, nearest to the offices. A firewall between the ETDC space and the office space is probably required.

The front third of the building is currently two stories of office space. The office space is old and has deteriorated badly. It is recommended that the existing office space be demolished down to the shell, and that new office space be designed and built. This would include new electrical, plumbing, HVAC, lighting, an elevator and any other required handicap access requirements. Much of this new office space would be used for training and education space, and would also include a large 2,500 SF meeting room

capable of handling 75-100 people, smaller conference rooms, kitchen and bathrooms on the first floor. On the second floor would be a reception area and over 20 offices for environmental start-ups, ETDC members, environmental and community groups, ESD staff, and others. The potential uses of the space by group are identified in Appendix B. The specific floor space requirements for the entire building are included in detail in Appendix E.

Some minimal structural bracing may be necessary on existing steel columns in the high bay space and in the office space. The existing sprinkler system may not be to code. Swamp coolers and heating units in ceiling are adequate if functional, but probably not energy efficient. A loading dock exists but will need to be improved or replaced. Any other special fit-up requirements would be related to LEED certification. In addition to those requirements identified during the LEED certification design, the facility manager should contract with clean and renewable energy sources for facility power, as well as use the solar demonstration technology whenever possible to help power the building.

Technical requirements for use of the building are minimal. They would include an overhead crane in the ETDC space, some minimal custom fit-up of small labs in the ETDC space, a well-designed conference area with full audio and ability to display energy efficient lighting and other similar technology, Ethernet and a kitchen that could handle service to groups up to 100 people. Some special monitoring equipment for solar feeds into the building would be required. Electrical power to some rooms/labs would need to be enhanced and new wiring may be needed, but sufficient power comes to the building already to handle all anticipated needs.

The building needs roof repairs, lead paint removal and asbestos removal. For security, the facility needs new exterior lighting, fencing with a gated entry and a new security system. Paving for parking lots and hazardous waste drop-off drive is required. Perimeter fencing is required on all sides, and a 25 foot set-back for landscaping is needed (length and width on half of perimeter only).

There were two potential uses identified in our interviews that are not being recommended for this facility. The first idea from Habitat for Humanity was for a 15,000 SF ReStore Center for collection and sale of re-used building materials, such as paint, doors, windows, etc. However, neither Habitat for Humanity, commercial builders, professional remodelers, nor other commercial groups use these materials. Customers appear limited to residential users. It appears that 90% of diverted construction and demolition materials are recycled into new products (such as paint) or are reconstituted into green construction materials (concrete, wood, etc), rather than reused in their original form, such as used doors and windows. So, the ReStore function did not appear to be the highest priority use for such a large amount of space. However, if the ETDC program does not end up being housed at the Las Plumas facility, then the ReStore facility is a viable alternative that would not change facility design or retrofit significantly, as it would use the space in a similar configuration and with fit-up requirements that are somewhat simpler than the ETDC.

The second proposal was from Our City Forest for office space and outside acreage (6,000 SF inside plus ½ acre outside). The request cannot be accommodated within the building due to their size, if the other proposed uses are approved. In addition, Our City Forest requirements were needed earlier than this building will be ready, and other options were being offered to them by the City of San Jose.

Organization and Staffing

The Las Plumas facility is owned by the City of San Jose and will be operated by the Environmental Services Department. ESD will provide a full-time onsite Facility Manager and BCD recommends that ESD provide for building maintenance and security. Each private organization occupying space at the facility will pay a pro-rata share of monthly operating expenses including all utilities, which will not be separately metered for organizations. Expectations of all private groups interviewed were that they would need to contribute to operating costs, but that no rent would be charged. However, the ultimate decision would lie with City Council. Non-resident organizations using the conference and training facilities intermittently could pay a daily use charge. Specific operating and use fees will be set in the future. It is anticipated that the LEED-certified green building will keep most operating costs to a modest level.

Budget Estimate

Design and architectural work have not yet occurred, and detailed cost estimates are not yet possible, but some preliminary cost estimates have been developed. In Feb., 2007, cost estimates were developed for environmental engineering, lead abatement, asbestos removal and painting the galvanized metal ceiling and interior walls where lead remediation will be done. Those costs are included in this budget estimate.

The Department of Public Works assisted us by developing a preliminary cost estimate for demolition and retrofit, with work estimated to be done in 18 months. The broad proposed uses from this report were used to develop the estimate of retrofit costs. It is a pre-design estimate that could change significantly based upon actual design decisions. The estimate includes architectural, structural, plumbing, HVAC, electrical, sprinkler/fire protection, security systems, and base technology, such as Ethernet, servers, conference video equipment and phone lines. All of these costs are included below. Structural work has not yet been fully identified or estimated, but according to the engineer currently doing the analysis the cost appears likely to be modest.

Finally, Environmental Services assisted with estimates of the additional cost that might be incurred for LEED Platinum retrofit, which is assumed to be a 10% additional cost. The outside fit-up costs have previously been included in the Phase 1 HHW Drop-off budget and are not included here. The summary budget information available at this date is presented below and indicates an approximate cost for the Las Plumas facility

construction retrofit of \$6.5 to \$7 Million. Once again, this is a preliminary, pre-design estimate for the purpose of providing an initial budget estimate for planning purposes.

Estimated Las Plumas Facility Retrofit Costs

Environmental Engineering	\$ 21,000
Lead abatement:	\$166,000
Painting	<u>\$ 81,000</u>
Subtotal	\$268,000
Demolition & Retrofit	<u>\$5,672,000</u>
Subtotal	\$5,940,000
Estimated additional cost for LEED Platinum(10%)	<u>\$594,000</u>
Total	<u>\$6,534,000</u>

Possible Funding Sources

Funding sources identified for the Environmental Innovation Center are very preliminary and significant risk was identified concerning the certainty of obtaining most of these sources of funding. Four potential revenue sources were identified for this project:

A) Integrated Waste Management Funds, including monies that have not been claimed from the City’s Construction and Demolition Debris Deposit program. Such funds may be able to be applied to construction of facility improvements as a part of the cost of the Center education programs described herein whose purpose is to divert waste from construction, demolition and alteration projects from landfills. Funding from both State sources and the U.S. Environmental Protection Agency grants may also be available to Integrated Waste Management.

B) Funds from the County’s Household Hazardous Waste Program to cover the costs related to the development of the drop-off and storage facilities at the Las Plumas facility.

C) Funds may be available from the Redevelopment Agency as they relate to the use of a portion of the Las Plumas facility for the Electronic Transportation Development Center (ETDC). Although the Las Plumas facility is not within a redevelopment project area, it is very close to the Strong Neighborhoods Initiative project area and might provide beneficial use. The Redevelopment Agency has not made a final decision about the appropriateness of locating the ETDC at the Las Plumas facility.

D) Funds from any Green Vision budget that might be developed in the future to support implementation of the objectives set forth in that policy, many of which have previously been identified as related to this project.

Naturally, these potential sources of funding are quite preliminary and more work needs to be done to establish the proportion of beneficial use that the Las Plumas facility will provide to each funding source. However, if you consider both floor space used, program content and outside usage of the grounds, the project divides roughly equally into three equal parts: Household Hazardous Waste; Programs for Diversion of Construction and Demolition Debris; and the Electronic Transportation Development Center. Three smaller parts of the project, with regard to space needs, are community use, the solar demonstration site and environmental start-up assistance. Two of these three uses would definitely also support implementation of the Mayor's Green Vision policies.

Conclusion

The San Jose Environmental Innovation Center can provide the City of San Jose and the local community with a premier education, training, innovation and demonstration facility that will promote green design and construction practices and encourage (1) use of solar and other renewable energy, (2) green fleet development and (3) energy efficiency. The Center can also be a hub for community activity, a resource for household hazardous waste disposal and a place where community members can receive assistance in starting environmental businesses. As a LEED Platinum facility, the project can demonstrate San Jose's commitment to best practices in environmental design and construction. Finally, the combined aspects of all of these activities will create a hub of environmental and clean tech activity that will attract both businesses and residents to participate in a network of environmental activity that will serve as a demonstration of San Jose's innovation and leadership in the clean tech and environmental sectors.

APPENDIX A

List of those interviewed by BCD:

Environmental Services Dept.

Jordan Ciprian	CDDD Program
Mary Ellen Dick	Assistant to the Director
Mike Foster	Green Bldg Mgt
Barry Hooper	Silicon Valley Energy Watch
Paul Ledesma	HHW Program Mgt
Walter Lin	HHW Program Mgt
Kerrie Romanow	Chief Deputy Director
John Stufflebean	Director
Lisa Tulee	Financial Analyst
Jo Zientek	Deputy Director

Redevelopment Agency

Julie Amato	Senior Development Officer
Richard Keit	Director, Neighborhood & Business Development
John Weis	Deputy Director

Office of Economic Development

Nancy Klein	Corporate Outreach
Collin O'Mara	Environmental Policy

Public Works

Robert Mandanici	Senior Civil Engineer
------------------	-----------------------

Mayor's Office

Jeff Jansen	Assistant to Mayor Reed
-------------	-------------------------

City Manager's Office

Deanna Santana	Deputy City Manager
----------------	---------------------

City Council

Scott Green	Chief of Staff to Councilmember Judy Chirco
Ragan Henninger	Policy Analyst to Councilmember Sam Liccardo

Santa Clara County

Rob D'Arcy	County of Santa Clara HHW
Ed Ramos	County of Santa Clara HHW

American Indian Education Center

Rene Samayoa	Executive Director
--------------	--------------------

Center for Training and Education

Rose Amador	CEO
Lori Ramos Ehrlich	Vice President
Herman Vasquez	Programs Coordinator

Silicon Valley Habitat for Humanity

Robert Freiri	Executive Director
---------------	--------------------

East Bay Habitat for Humanity

Frank Atkins	ReStore Manager
--------------	-----------------

National Association of the Remodeling Industry

Debbie Mackey	Regional President
Daniel Mackey	Regional Vice President

Pacific Gas & Electric Company

Mark Sturman	Silicon Valley Lighting Group
--------------	-------------------------------

Rebuilding Together Silicon Valley

Beverley Jackson	Executive Director
------------------	--------------------

Our City Forest

Rhonda Berry	President
--------------	-----------

APPENDIX B

LAS PLUMAS FACILITY

Potential Uses:

Shared Large Conference Room and Kitchen

Office Space

Training Rooms

High Bay Space

Outside/Roof

Outside/Landscaped area

Outside Drive/Dropoff

Outside Trailer Parking

Outside

Potential Users:

Am Indian Center
Center for Training
Misc. community groups
Environmental Services
ETDC
NARI
PG&E

NARI
ETDC
EBC—for local green start-ups

Center for Training
NARI
Environmental Services
ETDC

Hazardous Waste Program
ETDC
NARI – Green Bldg display

Solar demonstration site

Am Indian Center

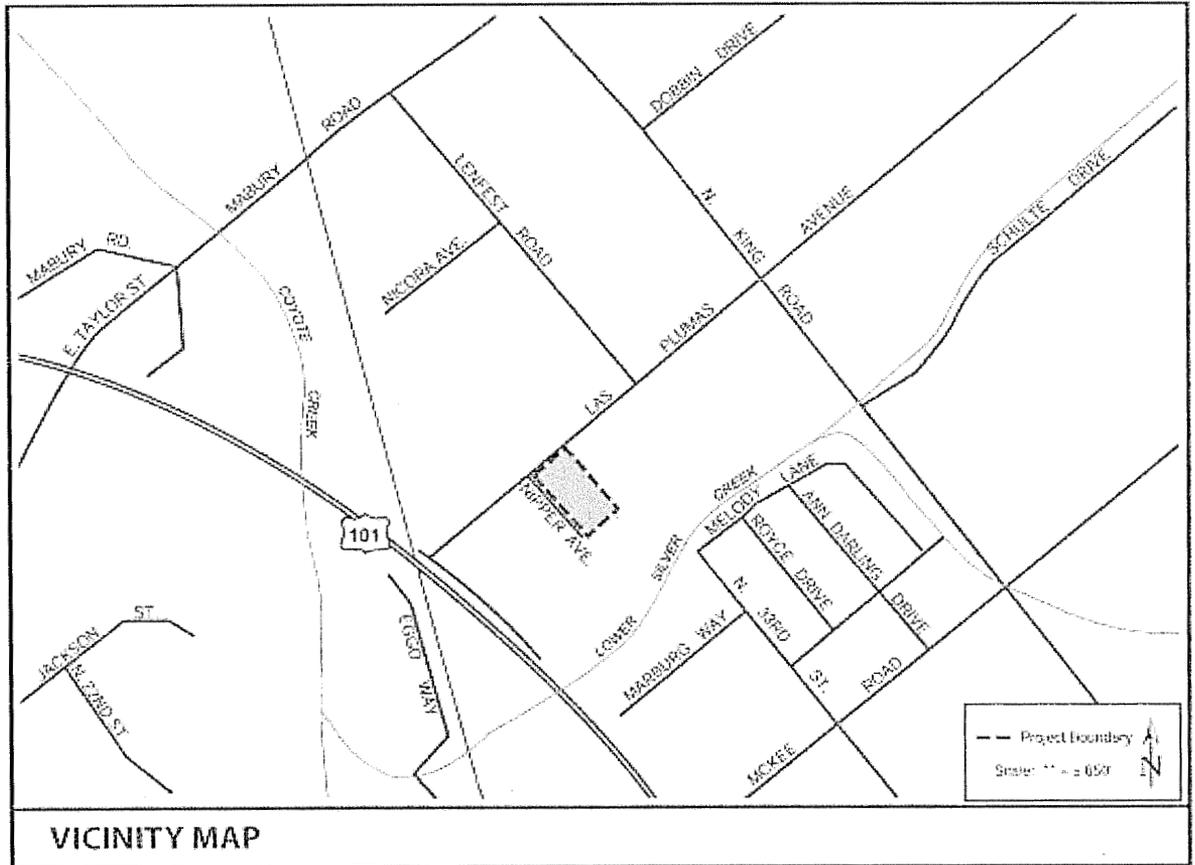
Hazardous Waste Program

Habitat for Humanity
Rebuilding Together

Habitat for Humanity—storage

APPENDIX C

LAS PLUMAS SITE MAP



APPENDIX D

San Jose Electronic Transportation Development Center

PROJECT OVERVIEW

National Priorities

In his 2007 State of the Union address, President George W. Bush called on Americans to reduce our dependence on oil and improve the fuel economy of vehicles through the development of renewable energy sources and other innovative technological solutions. As the center of America's high tech industry, Silicon Valley is uniquely positioned to play a role in addressing these national priorities.

Project Goals

The City of San José is currently planning the San Jose Electronic Transportation Development Center (ETDC), a new economic development initiative that aims to make the United States a leader in advanced transportation technology. Through the ETDC, San José seeks to reduce dependence on oil, reduce air pollution, and improve transportation security by using Silicon Valley technologies to make vehicles cleaner, more efficient, and safer.

Project Description

The ETDC will be a place where Silicon Valley companies work together to design, develop, commercialize, and manufacture prototypes of advanced transportation technologies. Initially, the ETDC will focus on clean and renewable energy, homeland security, and vehicle safety applications for surface vehicles. The ETDC draws on existing and emerging Silicon Valley technologies – including hardware, software, and communications solutions - to spur the growth of next-generation transportation technologies in the United States.

Project Sponsors

The ETDC is a public-private partnership. The planning phase of this project is funded by a \$200,000 grant from the U.S. Economic Development Administration and matching contributions from the following public, private, and non-profit sponsors:

- San Jose Redevelopment Agency
- Environmental Business Cluster
- San Jose State University Research Foundation
- Applied Materials
- Citibank
- Pacific Gas & Electric Company
- Cooley Godward Kronich LLP

Contact

San Jose Redevelopment Agency
408.535.8500
etdc@sanjoseca.gov

San Jose Electronic Transportation Development Center

Planning Phase Progress

Strategic plan

A strategic plan has been completed and is currently being updated. It details each phase of the project, including mission and goals, organizational structure, staffing, facility needs, operating and capital budgets and project phase schedules. The plan also identifies the market and manufacturing potential for the sectors and identifies the opportunities for job creation and new business formation

Engaging the Silicon Valley Community

The Mayor of San José sent a letter to over 200 companies introducing the ETDC project and inviting their participation. Ninety companies responded to a survey and identified technology that could be applied to our clean energy and homeland security advanced transportation goals. These companies have been interviewed and their technologies and interest in ETDC have been documented. Over 80 Silicon Valley technology companies have been identified that could contribute technology to the design of new clean and renewable energy vehicles and enthusiasm for the project is high.

Initial Demonstration Project Planning

The ETDC Advisory Board and management team have identified 21 technology applications that could be applied to the first technology demonstration project. Thirteen of these technology areas have been proposed for use in the development of a new state-of-the-art hybrid electric bus as the first ETDC project.

Facility Design

The ETDC team has prepared a conceptual site layout for the ETDC facility. The proposed 30,000 SF facility would provide technology labs, assembly and manufacturing space, display space and places for participating technology companies to meet and work.

Contact

San Jose Redevelopment Agency
408.535.8500
etdc@sanjoseca.gov

APPENDIX E

LAS PLUMAS FLOOR PLAN SPECIFICATION (Excel Document)

2ND FLOOR	ROOM	TYP AREA (SF)	NUMBER	NET AREA (SF)
	CONFERENCE RM - SMALL	250	1	250
	CONFERENCE RM - MEDIUM	400	1	400
	SUBTOTAL			650
	RECEPTION AREA	400	1	400
	OPEN SPACE - CUBICLES	300	1	300
	SUBTOTAL			700
	OFFICE - SMALL	150	20	3,000
	OFFICE - MEDIUM	250	8	2,000
	OFFICE - LARGE	500	1	500
	SUBTOTAL			5,500
	TRAINING ROOMS	300	3	900
	SUBTOTAL			900
	TOTAL SECOND FLOOR AREA			7,750

FIRST FLOOR	ROOM	TYP AREA (SF)	NUMBER	NET AREA (SF)
	LARGE CONFERENCE ROOM	2,500	1	2,500
	BREAK ROOM/KITCHEN	350	1	350
	COPY/MAIL ROOM	200	1	200
	LARGE LAB	1,500	1	1,500
	HVAC/FURNACE	300	1	300
	NETWORK/SERVER RM	150	1	150
	GRN BLDG MATERIALS DISPLAY	1,000	1	1,000
	COMMUNICATIONS RM	100	1	100
	RESTROOMS	300	2	600
	STORAGE	300	1	300
	ELECTRICAL ROOM	150	1	150
	JANITOR	100	1	100
	SUBTOTAL			7,250
	HHW HIGH BAY SPACE	10,000	1	10,000
	ETDC HIGH BAY SPACE	15,000	1	15,000
	SUBTOTAL			25,000

TOTAL FIRST FLOOR AREA	32,250
------------------------	--------

TOTAL NET	40,000
SHAFTS, CIRCULATION, ELEVATOR	6,000
TOTAL GROSS	46,000

APPENDIX F

ARTIST RENDERINGS FROM SJSU REPORT

