



Loma Prieta Chapter serving San Mateo, Santa Clara & San Benito Counties

September 16, 2016

John Davidson, Principle Planner,
Planning Division,
1500 Warburton Avenue,
Santa Clara, CA 95050

RE: Comments on Draft EIR for Lawrence Station Area Plan

Dear Mr. Davidson,

Thank you for providing the opportunity for the Sierra Club Loma Prieta Chapter to comment on Lawrence Station Area Plan draft environmental impact report (EIR).

We are pleased that the plan proposes to transform the underutilized site into a pedestrian-friendly, mixed-use, and transit-oriented community and to develop a linear park, pocket parks, and a trail. However, we find that the Draft EIR has raised some critical impacts that need to be thoughtfully addressed.

We hope that our comments will encourage the City of Santa Clara to re-evaluate the Lawrence Station Area Plan and the Draft EIR to bring it line with the vision and goals of the proposed project.

Importance of including Performance Metrics

We believe, it is essential to be able to measure the progress of any plan and to include methodologies to measure positive (or negative) impacts of the proposed developments in order to ensure sustainable development and enhanced quality of life in the City.

Hence, we recommend adoption, where possible, of clear performance measures in the LSAP. These measures provide a feedback loop to inform the City whether we are achieving goals and policies by tracking performance metrics such as percent reduction in single occupancy vehicles, percent coverage by tree canopy, walk score, bike score, reduced job-housing imbalance, water usage.

1. Air Quality

The draft EIR mentions that implementation of the proposed project would increase construction-period and operational emissions that will cumulatively increase certain pollutants to a considerable extent (draft EIR p. 2-7 Impact AQ-3). Also, implementation of the proposed plan would conflict with or obstruct implementation of the applicable air quality plan as it will contribute to a large increase in vehicle miles traveled. Specifically, at maximum build-out, the air pollutants resulting from transportation, energy, and other area sources such as off-street emissions would increase reactive organic gases and nitrogen oxide, worsening the air quality. This increase in net emissions might violate the BAAQMS regional significance thresholds.

Currently in the south bay, cardiovascular events, chronic lower respiratory disease and lung cancer, are among the top 5 leading causes of death among residents. Scientific studies by such reputable

organizations as the American Heart Association, World Health Organization, and The International Agency for Research on Cancer have established a causal relationship between these diseases and both short and long-term exposure to air pollution.

Recommendation:

- a. Mandatory and more robust TDM: To protect the health of residents of the City of Santa Clara, who are already significantly burdened by poor air quality, it is clearly imperative that the city incorporate **a more robust, mandatory transportation demand management** plan into the EIR. This mitigation strategy will result in reduced air pollution and is a viable strategy.
- b. Mode-share goals in transportation demand management: The transportation demand management plan must prioritize and achieve transit, pedestrian, and bicycle travel, safety and connectivity for these modes above cars, using **clearly stated and measurable goals** for shifting the mode share, and a pro-active program for meeting these goals.
- c. The program should **include third party monitoring and regular reporting** to ensure compliance, with a process and penalties for non-compliance.

2. Noise:

The draft EIR notes that future projects on the proposed site could exceed the noise standards identified in the General Plan and Santa Clara City Code. The City establishes 55 dBA as the noise level limit compatible with residential land uses and noise level exceeding 70dBA is considered incompatible with residential land uses. Current noise level at the study area location is between 70-78 dBA (draft EIR p. 4.10-5). Additionally, the existing and new streets could cause on-road vehicular noise and could expose people to excessive ground-borne noises (draft EIR p. 2-26, Impact NOI-1) raising up stress levels and reducing quality of life.

Recommendation:

We recommend that **the city use rubberized asphalt¹ as a pavement material on new streets as well as old streets, when they are upgraded, to reduce noise.**

The streets surfaced with rubberized asphalt not only reduce vehicular noise but also are cooler and skid resistant.

The use of rubberized asphalt is now fairly common in the Bay area. It was first widely used in the US by the Arizona Highway Department. It is now fairly common in the Bay Area and has been demonstrated to provide longer lasting road surface with better performance. ²

1 http://www.asphaltinstitute.org/wp-content/uploads/Thickness_Mix/Noise_Reducing_Pavements.pdf

2 [Report on Status of Rubberized Asphalt Traffic Noise Reduction](#): The conclusions of the 6-year study, in Sacramento, California, indicate that the use of rubberized asphalt on Alta Arden Expressway resulted in a 60% reduction in traffic noise energy, and a clearly perceptible decrease in traffic noise. This traffic noise attenuation from rubberized paving is similar to the results documented in several non-related studies conducted in recent years at other locations, both nationally and internationally.

Arizona DOT found that durability, especially crack resistance and a smooth-riding surface were and still are key benefits for using rubberized asphalt. The resulting reduction in tire noise is usually in the range of 4 to 6 decibels. This is a very significant reduction as a 4 decibel reduction is a 60% reduction in noise level.

3. Biological Resource:

The Draft EIR mentions that the proposed project could affect nesting birds, roosting bats, and trees (Draft EIR p. 2-14: BIO-1, BIO-3). Not mentioned is the devastating impact of building design causing unnecessary bird fatalities. To reduce the impact on biological resources, we recommend that the city in the proposed project area implement the mitigation strategies mentioned below.

Recommendations:

a. Bird Safe Design and Reflective Glass Standards

Santa Clara is on the main Pacific Flyway for bird migration- these include a great variety of birds. Millions of birds fly through the area and use the Bay Area as a rest stop on their annual migrations.

Reflective glass surfaces are confusing and detrimental to wild birds, and may cause thousands of unnecessary deaths³. Recent studies estimate that 300 million to a billion birds die each year as a result of collision with glass windows and structures⁴. This is an unnecessary toll on bird populations, a toll that can be reduced if buildings are designed or retrofitted with bird safety in mind.

Audubon Society's guidelines for Bird-Safe Design should be incorporated into the mitigation strategies in the EIR⁵.

The State of North America's Birds 2016 report provides the first-ever conservation vulnerability assessment for all 1,154 native bird species that occur in Canada, the continental United States, and Mexico⁶. The study includes several migratory bird species that are found in the area around Santa Clara. Hence, the DEIR for LSAP should incorporate bird-safe design standards as mitigation.

c. Green Infrastructure and Resilience

The LSAP area, after its full development, will lead to immense growth in population of both residents and employees, deepening the impact on environment. Hence, it is necessary to implement resilient design principles while developing this area.

Green infrastructure provides not only environmental benefits, but also economic and social benefits. Implementation of green infrastructure is a cost-effective way to convert grey-scapes to greenspaces.

We recommend green infrastructure strategies such as flood plain parks, urban storm water wetlands, and greenways ecological networks be included in the LSAP. They will provide biological benefits as they can be used to gain resiliency and help restore the ecology⁷. Therefore, they should be incorporated in the in the DEIR as mitigation for the intensification of use in this urbanized footprint and in the LSAP as resilient strategies.

3 The invisible killer causing thousands of migratory bird deaths

4 <http://www.aoucospubs.org/doi/pdf/10.1650/CONDOR-13-090.1>

5 Bird safe design guidelines should be considered for the entire City. San Francisco, San Jose, Oakland, Palo Alto, Sunnyvale has established citywide bird-safe design guidelines

6 <https://www.allaboutbirds.org/state-of-north-americas-birds-2016-more-than-one-third-in-need-of-conservationaction/>

7 <https://www.epa.gov/green-infrastructure/what-green-infrastructure>

d. Urban Trees Canopy:

Increasing urban tree canopy has numerous benefits. The good tree canopy

- reduces storm-water runoff
- improves air quality
- sequesters carbon
- provides shade
- keeps the microclimate cooler
- reduces soil-erosion
- adds immeasurably to the quality of life for city dwellers

Planting **native** trees is a high priority, over the usual street tree lists, as they are drought-tolerant and support a web of native birds, insects and small mammals.

Hence, we recommend very clear guidelines and metrics for creating a strong urban tree canopy, using native trees, in the LSAP.

e. Light pollution

Light pollution has negative impacts on wildlife and ecosystems. It also affects human health, and the darkness of the night sky⁸. The potential for significant light pollution in LSAP area should be reduced and mitigated. A project of this size needs to look at impacts on regional light pollution and reduce sky glow, glare, and light trespass especially toward the bay and wildlife flight paths. The International Dark-Sky Model Ordinance should be used as a basis for lighting requirements for the Project⁹.

The Bird-Safe Design ordinances and guidelines that are currently being considered by the City of Sunnyvale and San Jose should be considered for adoption by the City of Santa Clara and be applied especially to the LSAP study area as well as to every other new development in the City.

4. Land-use

The proposed land uses in the LSAP study area are very high density residential, high density residential, medium density residential, low density residential, public/quasi-public and park/open spaces. These densities are spread through-out the study area creating variety in physical form. But we believe that for transit-oriented development they should be placed as described follow.

Figure 4-2 on the LSAP Plan document shows that very-high density areas are located beyond the half-mile radius from transit station, whereas, medium and low density lie with-in half-mile radius. If more people live close to transit station, they are more willing to use public transit to commute.

Recommendation:

8 <http://darksky.org/light-pollution/>

9 <http://darksky.org/our-work/public-policy/mlo/>

We suggest that the **very-high density units should be located closest to the Cal-train station with lower density further away.**

Also, affordable housing should be located with-in half-mile radius as people living in these units are most likely to use public transit. This can further reduce parking demand, lowering parking requirements, in turn, making space for adding more housing units.

Transfer of development rights between parcels might be considered as a means to achieve a minimum average density over the whole area.

5. Sustainability

Climate change is evident and it is essential that new developments should be built on the principles of sustainable practices. These practices ensure economic and structural development without depleting natural resources. Hence, we recommend using the following techniques.

Recommendation:

a. **Required LEED Rating:** We recommend that the **entire study area meet LEED-ND standards and each building meet minimum LEED-Gold standards.** It will ensure effective use of energy and will ensure sustainable development of LSAP.

b. **Zero Energy:** Zero Energy buildings are those who develop enough renewable energy to meet its annual energy consumption requirements, thus reducing the use of non-renewable energy in the building sector¹⁰. Along with LEED rating, each **project should aim for zero energy use through use of solar collectors or other sustainable energy generators.**

Also, strategies for energy saving such as **motion sensor controlled street-lights** should be used in the development of LSAP.

Green roofs as stand-alone or in conjunction with solar collectors will add to the sustainability of the proposed study area.

c. **Electric Charging Stations and Zip-Cars:** Zip-car (car-share) and EV charging stations are mentioned in the plan, but it is not clear how many stations are planned for each location, nor is their adequacy for the projected increase in electric vehicle use.

- **The percent of zip-cars to be included should be clearly stated as this is critical to reducing parking spaces to one car per household. This is a very viable strategy for reducing parking**
- **EV charging percentage should be clearly included for mitigating GHG by encouraging electric cars.**

d. Water Reusability

In drought prone areas like California, it is essential that water conservation should be one the prime concerns. LSAP will add 9,145 residents to the City of Santa Clara, increasing usable water demand. Additionally, the landscaped area will require water for plant and tree survival.

10 <http://energy.gov/eere/buildings/downloads/common-definition-zero-energy-buildings>

Hence, we recommend **the re-use of storm water by providing catchment areas, rain-gardens, enhanced tree-pits, bio-swales and water infiltration strategies**¹¹.

6. Population and Housing

The LASP proposes to build 3,500 rental/for-sale residential dwelling units along with the provision of variety of housing options. It will help to reduce job-housing imbalance in the City of Santa Clara. The three applicants, the Westlake Urban LLC, Summer Hill Housing group, and True Life Companies, will build **1,364 residential dwelling units on almost half of the proposed site** in first phase of the development. We appreciate the variety of dwelling units created by the project, but we feel that the proportion of **affordable housing in the project needs to be increased**.

In phase one, which is there will be **3.66% affordable units**¹² of the total dwelling units in phase one.

Recommendation:

We recommend that the **affordable housing be 15% (preferably more) of the total build out capacity, creating 525 affordable housing units**. The breakdown of those units should reflect the **income levels in ABAG's RNHA Guidelines 2014 – 2022**.

Given that affordable housing coupled with reduced parking has been demonstrated to be the most effective strategy for meeting regional air quality and transportation goals, **availability of affordable housing along with better accessibility to Cal-train will allow individuals from lower income brackets to use alternative modes of transportation**. It will also help Cal-train, which with increased user base can improve the frequency and service to the region.

7. Transportation and Traffic

Because of the addition of 3,500 residential units, the proposed project will increase the traffic considerably. As noted in the draft EIR, addition of phase-1 and the total built-out will exacerbate the traffic conditions at intersections at peak hours (Impact TR-1), degrading the air quality, greenhouse gas (GHG) levels, noise, congestion and time spent in traffic. The plan proposes strategies to mitigate the environmental impacts caused by traffic generated due to LSAP, which are ineffective and does not provide a robust solution to reduce traffic problem. Hence, we believe that the following strategies will be more effective in reducing traffic problems.

Recommendations:

a. Transportation Demand Management

The LSAP draft EIR suggests a robust transportation demand management program. It mentions various tools to reduce auto trips such as unbundled parking, bicycle facilities, car sharing incentives,

11 Philadelphia implements Green Storm water Program that focuses on infiltration and retention using various green infrastructure tools. http://www.phillywatersheds.org/what_were_doing/green_infrastructure

New York has implemented programs to manage urban storm water run-offs
http://www.nyc.gov/html/dep/html/stormwater/combined_sewer_overflow_bmps.shtml

12 Currently, Summer Hill Housing group is providing 44 below market rate housing and True Life Companies is providing ten percent affordable housing that is 4.8 housing units.

and transit incentives, but it lacks a goal for overall trip reduction, nor does it include any TDM enforcement strategies. Currently, the drive alone rate in the bay area is very high.

The TDM Programs for the developments within LSAP should be made mandatory not only in LSAP area but, if possible, for the entire Lawrence Station Area including Sunnyvale.

We believe that the Plan should set a goal of minimum of 20% trip reduction, or more, as a basic goal and also set a clear and effective enforcement strategy.

Unbundled parking should be made mandatory for all the developments, and **transit passes and car-share membership provided to tenants.**

Reporting and third party monitoring should be regular and transparent so that progress or lack of it is clear to council.

A Phased Plan for TDM Programs allows identification of milestones for phased goals set for the development of the program. Hence, **we recommend a phased plan, as used in the San Mateo Rail Corridor plan, in which phased goals are set.** The goal would be raised as transportation infrastructure is improved. For example, when Cal-train electrification increases frequency of trains.

b. Parking Maximums to reduce parking

One of **the most effective strategies to reduce auto trips is by reducing parking** within developments. Per the draft EIR, the parking ratio proposed for residential areas is 1.8 space per multi-family unit and 2 spaces per single family unit. Total of 6,308 parking spaces for 3,500 residential units.

LSAP is a transit-oriented development and such high parking ratios **will not discourage auto use.** We recommend that MAXIMUM parking ratios for transit-oriented development should be:

- **1 space per housing units maximum for all unit types,**
- **3 spaces per 1,000 SF maximum for Retail,**
- **5 spaces per 1,000 SF maximum per restaurant.**

With these parking ratios, parking on LSAP site would reduce to 3,500 total parking spaces for residential development, 35 total parking spaces for retail, and 55 total parking spaces for restaurant development. Total of 3590 parking spaces. By reducing parking ratios, the developers could reduce construction costs by +/- \$37,000,000 (at \$30,000 per underground space). It also frees up added space for revenue producing spaces, where more housing units could be accommodated.

c. Bicycle Facilities

For bicycle use to be an essential mode of transport it is essential that bicycle facilities such as safe separated bike lanes, bike storage facilities, bike kitchens for maintenance and repair, and showers for employees should be provided. LSAP proposes to provide not only various bike facilities but also new and advanced bike routes within the study area.

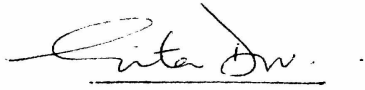
But, we believe that **bike routes connections must be considered inside as well as outside of study areas for reduction of drive-alone rates.**

As shown in figure 4-6 of LASP Plan, bike lanes are shown within the site connecting Central Expressway to Kifer, but Kifer does not show bike lanes on it for continuity. There appears to be no direct bike lane access from the site to the Cal-train station.

We recommend completing the bike routes outside the study area. Also, Bike lanes along Central Expressway should be physically separated from traffic.

We submit the above comments with the expectation that our suggestions will be considered in improving Lawrence Station Area Plan. We believe the changes will result in reduced environmental impacts and hope that together we can create a robust plan that will improve the quality of life and welfare of the residents of the City of Santa Clara.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gita Dev", is written over a horizontal line.

Gita Dev, Co-Chair

Sustainable Land Use Committee, Sierra Club Loma Prieta

CC Santa Clara Planning Commission
Rajeev Batra, Santa Clara City Manager
Lee Butler, Santa Clara Planning Director
Mike Ferreira, Chair, Sierra Club Loma Prieta
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