



# City of Palo Alto

## City Council Staff Report

(ID # 10148)

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**Report Type: Action Items**

**Meeting Date: 6/10/2019**

**Council Priority: Climate/Sustainability and Climate Action Plan**

**Summary Title: Zero Waste – New Deconstruction and Foodware Reduction Requirements**

**Title: PUBLIC HEARING: Adoption of Three Ordinances Amending Title 5 (Health and Sanitation) of the Palo Alto Municipal Code to: 1) Establish New Disposable Foodware Requirements, Including Restrictions on the use of Plastic Straws, Cutlery, Stirrers and Related Items, and Provision of Printed Receipts at Food Service Establishments; 2) Establish Regulations Related to Produce Bags at Retail Service Establishments; and 3) Require Deconstruction and Source Separation of Construction and Demolition Related Materials to Maximize Salvage and Reuse of Building Materials, and Increase Recycling and Diversion from Landfills; Adoption of a Negative Declaration for New Deconstruction Program Activities; and Finding the Disposable Foodware and Refuse Collection Ordinance to be Exempt Under California Environmental Quality Act (CEQA)**

**From: City Manager**

**Lead Department: Public Works**

### **Recommendations**

Staff recommends that Council:

1. With respect to a proposed Ordinance for Disposable Foodware and Produce Bags (Disposable Foodware Ordinance):
  - a. Find the Ordinance is exempt from California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Sections 15061(b)(3), 15307 and 15308; and
  - b. Adopt an Ordinance (Attachment A) amending Chapters 5.30 and 5.35 of Title 5 of the Palo Alto Municipal Code, to: (1) regulate the use of disposable foodware, including restricting the use of plastic straws, cutlery, beverage plugs, stirrers

and other accoutrements, and the provision of printed receipts at food service establishments, and (2) restrict the use of plastic produce and meat bags at retail service establishments including grocery stores and farmers markets; and

2. With respect to a proposed Ordinance for Refuse Collection (Refuse Collection Ordinance):
  - a. Find the Ordinance is exempt from California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Sections 15307 and 15308; and
  - b. Adopt an Ordinance (Attachment B) amending Chapter 5.20 of Title 5 of the Palo Alto Municipal Code, to restrict refuse collection bags to particular types and colors, and other clarifications to make waste sorting more effective and facilitate monitoring; and
3. With respect to a proposed Ordinance for Deconstruction and Construction Materials Management (Deconstruction Ordinance):
  - a. Adopt a Resolution (Attachment C) adopting the [Negative Declaration](#) (Attachment D) for the Ordinance for Deconstruction and Construction Materials Management as adequate and complete under the CEQA; and
  - b. Adopt an Ordinance (Attachment E) replacing Chapter 5.24 with a new Chapter 5.24 to Title 5 of the Palo Alto Municipal Code, to establish deconstruction and construction materials management requirements for demolition projects.

### **Executive Summary**

In August 2018, Council accepted the 2018 [Zero Waste Plan](#) containing 48 initiatives that will help the City meet its sustainability and climate action goals. The proposed Disposable Foodware, Deconstruction, and Refuse Collection Ordinances implement key provisions of that the Zero Waste Plan.

### **Background**

The 2018 Zero Waste Plan was developed in response to Palo Alto's [Sustainability/Climate Action Plan](#) (S/CAP) Framework adopted by Council in 2016. The S/CAP set a new goal of 95 percent of waste generated in Palo Alto to be diverted from landfills by 2030. The City's most recent [Zero Waste Plan](#) was accepted by Council in August 2018 after approximately 10 months of staff and consultant work and stakeholder engagement including community workshops, an online survey and individual feedback from community leaders. The plan contains 48 initiatives that could help the City meet its zero waste objectives. According to the Zero Waste Plan estimates, the adoption and execution of the Disposable Foodware and Deconstruction Ordinances and related actions will result in the implementation of five key short term initiatives.

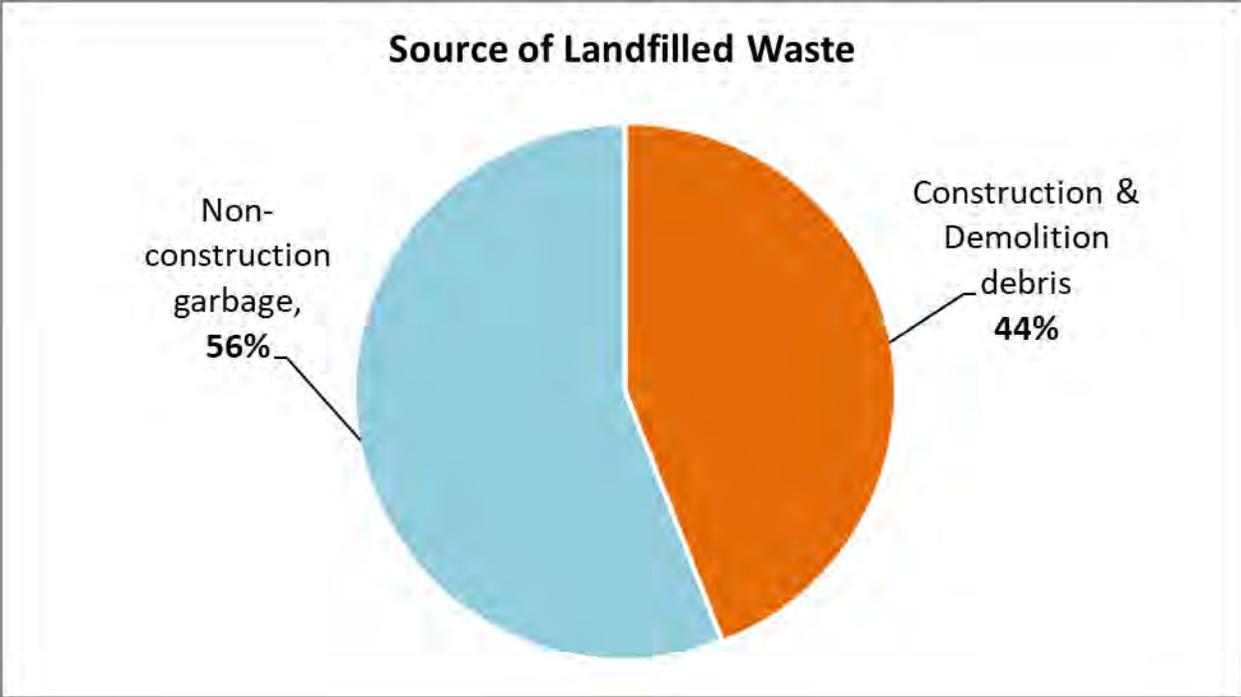
### Disposable Foodware Ordinance - Background

Disposable foodware items and single-use non-recyclable produce bags are intended to be used once and then discarded. Although most plastics are recyclable in Palo Alto, small plastic items are generally not recoverable at the sorting facility because they fall through the sort screens and end up as residuals that are landfilled. These items pose waste management challenges and can persist in the environment for many years, causing harm to wildlife and blight to waterways. Plastic discards are being found in rivers, bays, oceans, and are a litter nuisance and an environmental hazard to marine animals who often mistake pieces of plastic for food. In 2018, Girl Scout Troop #60016 teamed with the City to create a [Straw Awareness Campaign](#) to end plastic straw pollution and waste in Palo Alto. The scouts highlighted that 500 million straws are used each day in the United States and that plastic straws and stirrers are among the top 10 marine debris items found on beaches. Plastics are hard to break down and stay a long time in the environment. The United Nations Educational, Scientific and Cultural Organization (UNESCO) Intergovernmental Commission website [facts and figures on marine pollution](#) identified that more than 1 million seabirds and more than 100,000 marine animals die each year from plastic pollution. A Proceedings of the National Academy of Sciences of the United States of America (PNAS) study titled "[Threat of plastic pollution to seabirds is global, pervasive, and increasing](#)" estimates that by 2050 99 percent of all seabirds will have plastic in their digestive system.

### Deconstruction Ordinance - Background

Over 40 percent of the waste from Palo Alto disposed in landfills, about 19,000 tons, is from construction and demolition related projects (see Chart 1). This waste is produced during the process of demolition, construction, renovation, or remodels of structures, when materials are typically combined and mixed into a large debris box or self-haul truck and then transported to a processing facility and at times directly to a landfill. This material is often referred to as mixed construction and demolition debris (C&D). Mixed C&D typically includes a comingled mix of concrete, asphalt, wood, metals, gypsum wallboard, roofing material, glass, carpet, bricks, rocks, dirt, trees, stumps, vegetation, rocks, and dirt. It also includes cardboard, which is typically generated in the final stages of construction as products, such as kitchen cabinets, are delivered and installed.

### **Chart 1: Breakdown on the Source of Landfilled Materials**



Additionally, according to the [2017 Waste Characterization Study](#) of Palo Alto’s waste stream and the profile analysis on loads of mixed C&D debris delivered to the Zanker Material Processing Facility, about 92 percent of Palo Alto’s mixed C&D materials are recyclable or compostable through current programs serving the community and would yield a higher recovery if the materials could be source separated. Table 1 shows the top six material types found in mixed C&D that can be recycled to nearly 100 percent when source separated, compared to at best 80 percent recovery when processed as mixed C&D. Further, while recycling is beneficial and important, it is not necessarily the highest and best use of all materials, especially for old growth lumber and unique architectural features that can be reused.

**Table 1: Top six materials found in mixed construction and demolition waste - comparing recycling percentage (recovery) of mixed C&D to source separated materials**

Material	Estimated Percent in Mixed C&D	Mixed C&D Recycling Recovery	Recovery if Source Separated
Gypsum	54%	Recovery ranges from 71% to 80%	93%
Clean wood	23%		95%
Clean engineered wood	14%		95%
Inerts - concrete	5%		98%
Clean, flattened cardboard	4%		99%

Currently, construction and demolition projects are required to meet the City’s Green Building requirements to achieve an 80 percent diversion rate with material taken to local C&D recycling

facilities. The recovery rate of these materials ranges from 71 percent to 80 percent depending on whether the loads have higher volumes of concrete, which is a material that is easily recyclable but skews overall project recovery rates due to its heavier weight. In addition, all single-family residential projects obtaining a whole house demolition permit are required to complete a deconstruction/salvage survey provided by a third-party entity approved by the Chief Building Official. The City requires all permittees with projects valued over \$25,000 to track the weights of materials removed from project sites into Green Halo, a web-based service for waste diversion and recycling tracking. Overall, compliance with existing Green Building requirements is high, but there are still projects sending C&D materials directly for landfill disposal and there is little salvage or reuse occurring.

### **Discussion**

Five of the key short term initiatives included in the 2018 Zero Waste Plan are being incorporated into the following actions:

1. Development of a new Disposable Foodware Ordinance to reduce and restrict the usage of foodware items (mainly plastics) at food service locations with a goal of reducing plastic waste in the environment.
2. Development of a new Deconstruction and Construction Materials Management Ordinance (Deconstruction Ordinance) that would require demolition projects to use deconstruction methods (instead of demolition) and materials to be source separated to maximize the salvage of materials for reuse, to increase diversion of recyclable materials, to reduce the amount of landfilled waste, and to reduce greenhouse gases.

A scope of work to provide a new ongoing deconstruction collection program was added to the [amended and restated GreenWaste agreement](#), approved by Council in January 2019. In addition to the GreenWaste related annual ongoing expenses of \$567,000 and \$243,000 in one-time expenses, staff estimates \$118,000 of additional one-time expenses for consultant services at the Development Center to assist in outreach and education to the community and stakeholders on the new deconstruction requirements in the initial year. Staff will request Council approval for these expenses separately as part of the budget development process. Staff does not anticipate the City incurring additional expenses to implement the Disposable Foodware Ordinance; implementation will be accomplished with existing staff resources.

The adoption and implementation of both the Disposable Foodware and the Deconstruction Ordinances would have a significant effect on increasing the City's waste diversion. In the Zero Waste Plan, it is estimated that these ordinances, when fully implemented in accordance to the Zero Waste Plan, will decrease disposal in landfills by more than 8,220 tons and reduce greenhouse gas emissions (GHG) by 22,770 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>), see Table 2. These changes begin to reduce the use of disposable foodware and to become substantially more sustainable. Both ordinances will aid in achieving the City's Zero Waste and S/CAP goals.

**Table 2: Annual Waste Diversion and GHG Emission Benefits of Ordinances When Fully Implemented in Accordance to the Zero Waste Plan**

<b>Ordinance</b>	<b>Diversion Potential (Tons)</b>	<b>GHG Reduction (MTCO<sub>2</sub>e)</b>
Disposable Foodware Ordinance	290	470
Deconstruction Ordinance	7,930	22,300
<b>Total Reduction</b>	<b>8,220</b>	<b>22,770</b>

**Disposable Foodware Ordinance - Chapters 5.30 and 5.35**

This Disposable Foodware Ordinance would restrict the use of plastic straws, utensils, stirrers, drink plugs, and other small plastic food accoutrements and require these items to be compostable or reusable, and only provided to customers upon request or via a self-serve station. The Disposable Foodware Ordinance would also ban plastic produce and meat bags from grocery stores and farmers markets. If grocery stores and farmers markets provide disposable bags for meat/produce, the bags would be required to be compostable.

The above group of restrictions are Phase I of a larger Foodware Items Reduction Plan developed by Staff, which contains a Phase II and a Phase III (Attachment F). These later two Phases also implement the 2018 Zero Waste Plan accepted by Council. Phases II and III would be proposed for adoption as an Ordinance in approximately one year, after further verification and stakeholder engagement work is completed by staff.

As of March 2019, numerous cities in California have passed their own requirements limiting the use of certain plastic foodware items (see Table 3). The City and County of San Francisco, City of Berkeley, the City of Alameda, and the City of Malibu have banned the use of plastic straws and require compostable straws be provided only upon request. As of January 2019, Assembly Bill 1884, requires full-service restaurants in California to only provide straws upon request, but it exempts fast-food restaurants.

**Table 3: Summary of Other Jurisdictions' Disposable Foodware Ordinance Requirements**

Requirement/Jurisdiction	San Francisco	Berkeley	Alameda	Oakland	Santa Cruz	Malibu	Palo Alto
Prohibits single-use plastic foodware items.	X					X	X
Requires foodware items including straws to be compostable.	X		X	X <sup>1</sup>			X <sup>2</sup>
Requires single-use foodware items only upon request or in a self-serve area.	X	X	X		X	X	X
Requires disposable foodware to be acceptable in the City's composting or recycling collection program.	X	X				X	X
Single-use straws allowed only upon request.	X	X	X	X	X	X	X
Requires produce/meat bags to be compostable or reusable.							X

<sup>1</sup> If "affordable" – purchased by food vendors for same or less purchase cost than non-biodegradable alternative.

<sup>2</sup> Includes only straws, utensils, stirrers, drink plugs, food picks, and drink accoutrements.

Based on research of publicly available bulk product pricing, staff estimates that compostable foodware costs between \$0.01 to \$0.02 more per item on average. Compostable produce bags in grocery stores are estimated to cost between \$0.09 to \$0.15 per bag more than regular plastic produce bags. These costs are expected to be passed on to the consumer.

The small plastic items that would be restricted are subject to being moved by wind and rainwater and therefore are more prone to get into the environment as litter. This ordinance would reduce the amount of these small plastic items and therefore protect the City's waterways and environment. It would reduce the number of single-use plastics along roadways, keep these items out of storm drains, and it would reduce the amount of plastic waste going to the landfill. The Disposable Foodware Ordinance would also reduce the amount of contaminants in the City's green compost containers and reduce the confusion on what to do with these items by requiring them to be compostable. Requiring produce/meat bags to be compostable keeps plastic bags out of the creeks and streets, allows the produce bag to be composted, and allows the compostable produce bag to be beneficially reused at home as a compost bucket liner. Another key change proposed for Chapter 5.30 includes requiring food service establishments to provide a printed receipt only upon request.

### Disposable Foodware Ordinance - Stakeholder Engagement and Feedback

In December 2018, the City contacted stakeholders, mainly food services establishments (FSEs), located in Palo Alto for feedback on concepts for a draft ordinance. A postcard notifying FSEs of the proposed change to the ordinance with a link to an online survey were sent out to all 439 FSEs within the City. Approximately 300 in-person surveys were conducted by the Girl Scouts (Troop #60016), Gunn High School marine biology class students, a volunteer Zero Waste Block Leader, as well as GreenWaste and City staff. An additional 12 in-person surveys were conducted at grocery stores specifically to get feedback from store owners and managers regarding produce bags. For Food Service Establishments that could not be surveyed in-person, 183 emails and phone calls were made to reach out and gather feedback. Stakeholders reported they were concerned about the additional costs of switching to compostables, that it would be difficult finding compostable foodware items, and that compostable foodware items could still result in litter. The stakeholder survey findings include that about 1/3 of food service establishments already use some compostable foodware and 52 percent of respondents said it would be easy to switch to using compostable foodware. To assist FSEs in finding compostable foodware products, staff will conduct outreach and provide compostable foodware vendor information and make that information available online on the [Zero Waste website](#). Compostable foodware can be placed in the existing City's green compost containers for collection and processing as compost. Current petroleum-based foodware products do not easily breakdown and can persist for years in the environment and are harmful to wildlife. Requiring compostable foodware is the first step in transitioning FSEs from using single-use plastic (petroleum based) foodware to compostable foodware, and ultimately to reusable foodware.

On May 14, 2019, Council received input from a group of plastic use reduction advocates requesting that Council adopt, as an Ordinance, not just Phase I but Phase II as well. Staff intends to propose Phases II and III for adoption as Ordinances approximately one year from now, following feasibility verification for much of Phase II and III.

The Disposable Foodware Ordinance would go into effect January 1, 2020, to all Food Service Establishments. The produce bag requirement would go into effect July 1, 2020, to all grocery stores and farmers markets.

### **Deconstruction Ordinance - Chapter 5.24**

Since construction and demolition materials represent more than 40 percent of the total materials from Palo Alto that are disposed in landfills, their management plays a critical role in achieving the City's diversion goals. While some of this waste cannot be recycled or reused (e.g. insulation, painted or treated wood), much more of it could be reused, recycled, or composted. As a result, this waste represents a significant opportunity for diversion and recovery of materials from landfill disposal, which led to staff developing a draft deconstruction ordinance.

Deconstruction and source separation of construction and demolition related waste focuses on handling discards as resources rather than waste. It leads to highest and best use of materials (reuse), higher recovery levels, and greater recyclability of materials. Deconstruction also follows preferable waste management and zero waste hierarchy of reduce, reuse, recycle and compost, and reduces the volume and toxicity of waste in landfills.

Deconstruction involves buildings or structures being systematically taken apart thereby allowing materials to be kept unbroken and separated, making it easier to reuse and recycle. This differs from traditional demolition, where an excavator knocks down a whole building with all the materials within the structure being smashed and combined into a container. Complete demolition costs less than deconstruction primarily because it takes less time to demolish an entire building and fill containers with the mixed waste. The demolition portion of a residential project is estimated to cost in the range of \$8 to \$12 per square foot and would take a couple of days to complete the work using an excavator and a crew size of two to three people. Alternatively, the same phase of the project if deconstructed is estimated to cost in the range of \$22 to \$34 per square foot (based on two recent pilot projects that the City has performed), and would take about 10 to 15 working days to deconstruct manually utilizing a crew size of four to eight people depending on the project complexity and percentage of salvageable materials. Project costs vary widely based on factors such as building age, size, material type, presence of asbestos or lead, and location of the project. Commercial projects typically have a much wider range of possible costs and schedule needed to deconstruct a building depending on the size and the type of construction material composing the structure. It should be noted that large commercial sites have already been doing a significant amount of deconstruction and source separating the recovered materials as it saves disposal costs. Further, some of the deconstruction costs can be offset by the tax incentive of donating reusable materials and items, which could allow some projects to experience reduced disposal costs. There are also points available to deconstructed projects pursuing certification under the Leadership in Energy and Environmental Design (LEED) Rating System.

The deconstruction of a building takes several days longer than a standard demolition and would cost more for the “demolition” portion of projects, but the environmental benefits would be significant. According to the Environmental Protection Agency and the City of Portland, one of the leaders in deconstruction, up to 25 percent of materials can be reused in some residential buildings and up to 70 percent of materials can be recycled (equivalent to 95 percent diversion potential). Some recoverable materials and items that can be salvaged for reuse include the following:

- Appliances
- Cabinets
- Lumber
- Windows and doors
- Electric and plumbing fixtures
- Hardwood floors
- Architecture antiques

The Deconstruction Ordinance would require the following:

- Deconstruction of buildings and structures (instead of demolition) and source separation of materials for reuse, recycling, and reduction of disposal in landfills.
- A salvage survey listing reusable materials and items to be completed and submitted prior to demolition or building permit issuance.
- Source separation of building materials to increase recovery and recycling.
- The City's contractor, GreenWaste of Palo Alto (GreenWaste), would be the only container provider (for bins or debris boxes) at project sites. This will ensure higher recyclability and diversion and increase compliance with facilities that have higher recovery rates.
- Self-haul of materials in trucks would still be allowed, but materials would be source separated in accordance with ordinance requirements and City regulations, and materials would be taken to City approved processing facilities.
- All projects would be required to utilize the standard containers for collection of traditional recyclables in a blue recycling container (e.g., cardboard, metals, plastics), and collection of compostables in a green compostable container (e.g., trees, brush, vegetation, leftover lunches from workers).
- All materials would be delivered to City-approved recovery and processing facilities.
- Documentation to be submitted to the City showing the materials/items identified in the salvage survey were received by an approved reuse organization.

The Deconstruction Ordinance would apply, effective July 1, 2020, to all residential and commercial projects undergoing a whole structure demolition (unless the project is comprised solely of an Accessory Dwelling Unit demolition). Staff estimates that the ordinance would affect approximately 114 projects annually.

After implementation of this initial phase applicable only to whole structure demolitions, staff anticipates returning to Council to propose a phased expansion of the program to include construction, partial demolition, and remodel/renovation projects. The Ordinance does not address these later phases, and an amendment to the Ordinance would be required to implement them.

To facilitate source separation of materials from smaller projects, the [GreenWaste agreement](#) (approved by Council in January 2019) includes provisions for a new collection service with smaller bins to collect source separated deconstruction materials to accommodate smaller projects or sites with small footprints. GreenWaste will use their operations yard at the City-owned old Los Altos Treatment Plant (LTP) to consolidate source separated materials for transfer to the Zanker Material Processing Facility in San Jose.

Compliance with the Deconstruction Ordinance would be verified by City Zero Waste staff, GreenWaste drivers, supervisors, and outreach staff who are in the field already checking on other Zero Waste requirements.

### Deconstruction Ordinance - Stakeholder Engagement and Feedback

The draft concepts for the Deconstruction Ordinance and related Zero Waste Plan initiatives were presented to stakeholders between January and November 2018. The concepts shared involved a broader scope, not limited to whole building demolition projects as now proposed, and included application to construction and remodel projects that staff anticipates recommending for ordinance adoption in two later phases. The three phases are described in attachment G.

Staff advertised and conducted four public workshops and an online survey to solicit feedback from the community and stakeholders. Two of the workshops were focused specifically on the draft concepts for the Deconstruction Ordinance and were offered exclusively to approximately 1,200 contractors, developers and architects who regularly work on projects in Palo Alto. These stakeholders were also sent the initial draft ordinance concepts through direct e-mail. Overall, residents were overwhelmingly in support of initiatives and concepts, and contractors said it could be done but had concerns. A few themes emerged from the contractor stakeholders' feedback:

- A \$25,000 value threshold of projects was too low for the deconstruction, salvage and source separation requirement;
- Education and outreach on new requirements and on proper materials sorting would be critical to success;
- Standards should be created for salvage surveys and reuse organizations;
- Concern of limited space in some construction sites for source separation activities.

As a result of feedback from stakeholders, Staff modified the proposed concepts for the deconstruction ordinance, removed the later phases that would apply the ordinance to construction and renovation projects, and focusing on whole building demolitions in this initial ordinance.

### Deconstruction Ordinance - Other Jurisdictions

Deconstruction and source separation of materials for reuse and recycling is the key to achieving zero waste goals for most jurisdictions and some have begun implementing deconstruction requirements. These requirements range from simply encouraging salvage and reuse, to others that have specific deconstruction requirements. The most well-known deconstruction ordinance is from the City of Portland. It went into effect in 2016 and it applies to houses built before 1916, which represent about one-third of all their residential demolitions. Portland staff reports that the ordinance has been successful in diverting more materials to salvage and reuse, and they will be expanding their ordinance to include a greater inventory of projects. Portland also reports that the ordinance has generated employment opportunities, and deconstruction sites tend to produce less dust and noise compared to traditional demolition locations. Other cities that have followed with similar requirements include Seattle, Milwaukee, and most recently Vancouver in British Columbia. Local cities including San Francisco, Oakland, Alameda, Redwood City, and San Mateo County are also considering similar policies; however, the City's proposed Deconstruction Ordinance would

apply to the largest percentage of the cities' buildings and would achieve the highest diversion of materials from landfill disposal.

#### Deconstruction Ordinance - Technical Assistance & Outreach

Staff plans to provide extensive outreach, training, and technical assistance to both internal and external stakeholders announcing the Deconstruction Ordinance requirements to ensure all projects affected are provided with information well ahead of schedule. Outreach would be provided in the form of "how to" guides, best management practices, pamphlets, direct mailings, online documents, and training videos. Staff will also explore creating case studies of deconstruction projects to document and demonstrate the benefits to contractors, builders and property owners.

#### Refuse Collection Ordinance - Chapter 5.20

Staff is also recommending updates to Chapter 5.20, Collection, Removal and Disposal of Refuse, not specifically related to the two ordinances described above. Specifically, for bags containing refuse being put out for the City's refuse collection program by commercial facilities (not including residential dwelling units that are part of a mixed-use development or multifamily properties), blue-tinted bags must be used for recyclable materials and clear bags must be used for garbage (landfill). If bags are used for compost by either commercial or residential facilities, they must be green compostable bags. These changes will make sorting more effective and monitoring easier. The compostable bag requirement will also reduce the amount of plastic in the City generated compost. Other updates to this ordinance include the following:

- Adding new or modified definitions including a new definition for "Refuse Room" to clarify that refuse may also be stored inside a building, and modifying the definition for "Multifamily property" to three or more attached units from five or more units to conform to Planning Department's definition of "Multifamily property".
- To address the issue of cardboard boxes not being broken down, causing recycling containers to overflow and collection trucks from filling up too fast, a new requirement to break down cardboard boxes was added to Section 5.20.090.
- Section 5.20.109 was modified to ensure new container covers for public refuse containers are used during special events and returned to the City.
- Clarified self-haul exemption to restrict the use of containers to only those from the City's contracted hauler for collecting, removing and disposing of refuse so that the City can ensure refuse is properly managed and processed.
- Two new requirements in Section 5.20.120 include allowing the City or its collector access to internal and external refuse containers for inspection as well as ensuring refuse containers serviced by the City contracted hauler are accessible, easy to service, safe to service, and clear of obstructions.
- Due to increased instances of refuse containers being left out in the public right-of-way after collection service, a new requirement allowing refuse containers to stay in the public right-of-way 24 hours before or after being serviced was added to Section 5.20.130.

Updates to the Collection Ordinance would go into effect within 30 days of the second reading of the ordinance with the exception of the colored refuse bag requirement. The colored refuse bag requirement would go into effect on July 1, 2020.

## **Timeline**

### Disposable Foodware Ordinance – Timeline

The estimated schedule for the new Disposable Foodware Ordinance implementation is as follows:

- First reading (Public Hearing) - June 10, 2019
- Second reading – June 24, 2019
- Implement outreach and education – July through December 2019
- Implement new foodware requirements – January 1, 2020

### Deconstruction Ordinance – Timeline

The estimated schedule for the implementation of the new Deconstruction Ordinance is as follows:

- First reading (Public Hearing) – June 10, 2019
- Second reading – June 24, 2019
- Implement outreach, education, training of stakeholders, and conduct a soft launch (on a voluntary basis) on new requirements - July 2019 through June 2020
- Ordinance effective July 1, 2020
- Staff contemplates adoption and implementation of the Deconstruction Ordinance requirements in 3 phases. Only the first phase is included in the proposed ordinance. The next two phases will be proposed for adoption after sufficient experience with the first phase can inform the City’s draft concepts for Phase II and Phase III.

### Refuse Collection Ordinance – Timeline

The estimated schedule for the Refuse Collection Ordinance implementation is as follows:

- First reading (Public Hearing) - June 10, 2019
- Second reading – June 24, 2019
- Implement outreach and education on the colored refuse bag requirements – July 2019 through June 2020
- Implement the colored refuse bag requirements – July 1, 2020

## **Resource Impact**

### Disposable Foodware Ordinance

The new ordinance would require outreach and education to commercial customers but no additional budget requests are expected as the planned outreach and education expenditures would be funded within the existing budget by reprioritizing current outreach activities.

### Deconstruction Ordinance

To implement the Deconstruction Ordinance, an increase in annual ongoing expenses of \$567,000 for additional GreenWaste personnel and processing costs would be required. Staff is

proposing this budget change as part of the FY 2020 budget development process. Utilizing existing funds within the GreenWaste contract budget, a one-time expense of \$243,000 would be incurred for the startup of the new service in FY 2020 for the purchase of new containers, signs, and a small scale. Additionally, existing funds would be used to cover a one-time estimated expense of \$118,000 to be allocated for consultant services to provide support at the Development Center in the development and execution of an education and outreach campaign to the community and stakeholders. Outreach would include on-site education and training, guides, videos, monitoring, and support for contractors.

### **Policy Implications**

The recommended ordinance changes advance the initiatives of the [Zero Waste Plan](#) accepted by Council in August 2018, support the City's goals of 95 percent diversion by 2030 in the [S/CAP](#), and help reduce greenhouse gases.

### **Environmental Review**

These ordinances were assessed in accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the environmental regulations of the City. The subject ordinances and the Inert Debris Transfer Facility Site Permitting have been assessed in accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the environmental regulations of the City.

#### Disposable Foodware Ordinance

Under Section 15061(b)(3) of the State CEQA Guidelines, this Ordinance is exempt from the requirements of CEQA because it can be seen with certainty that reducing disposable plastic foodware items such as straws, utensils, and stirrer sticks and having compostable alternatives offered only upon request, reducing plastic bags, and other provisions of the Ordinance would not have the potential for causing a significant effect on the environment. The Ordinance is exempt from the requirements of CEQA pursuant Guidelines Section 15061(b)(3) because it can be seen with certainty that reducing the use of disposable plastic produce bags in retail service establishments in Palo Alto would not have the potential for causing a significant effect on the environment. The Ordinance is also exempt from the requirements of CEQA pursuant to CEQA Guidelines Sections 15307 and 15308 as actions taken by regulatory agencies to assure the maintenance, restoration or enhancement of natural resources. This Ordinance is intended to achieve the environmental protection initiatives of the City's code and policies, as well as state mandates for waste reduction, recycling, and composting.

#### Deconstruction Ordinance

Pursuant to Section 21092 and 21092.3 of the Public Resources Code and CEQA Guidelines Section 15072, as amended, the City prepared an Initial Study for the Deconstruction and Construction Materials Management Ordinance and Inert Debris Transfer Facility Site Permitting to evaluate the environmental impacts. The Initial Study concludes that the project would not have a significant effect on the environment. Therefore, an Initial Study/Negative

Declaration (IS/ND) was circulated on March 22, 2019 for a twenty-day review period. No comments were received during the circulation period. The final [IS/ND](#) (Attachment D) is provided for Council's review and adoption.

### Refuse Collection Ordinance

The Ordinance is exempt under CEQA Guidelines Sections 15307 and 15308, actions taken by regulatory agencies to assure the maintenance, restoration or enhancement of natural resources.

#### **Attachments:**

- Attachment A - Disposable Foodware Ordinance (Chapter 5.30 and 5.35)
- Attachment B - Refuse Collection Ordinance (Chapter 5.20)
- Attachment C - Resolution Adopting Negative Declaration for Deconstruction
- Attachment D - Negative Declaration for Deconstruction
- Attachment E - Deconstruction Ordinance (Chapter 5.24)
- Attachment F - Disposable Foodware Reduction Plan
- Attachment G - Deconstruction Ordinance Summary
- Attachment H: Exemption Request Disposable Foodware Reduction Ordinance SHC LPCH.vf
- Attachment I: Foodware Reduction- Sign on Letter to Palo Alto City Council (1) (3)

Not Yet Approved  
Ordinance No. \_\_\_\_\_

Ordinance of the Council of the City of Palo Alto Amending Title 5 of the Palo Alto Municipal Code to Establish Regulations Related to Disposable Foodware Items and Other Disposable Products at Food Service Establishments (Chapter 5.30) and to Require the Use of Compostable Produce Bags at Retail Service Establishments and Farmers Markets (Chapter 5.35)

The Council of the City of Palo Alto ORDAINS as follows:

**SECTION 1.** Findings and Declarations. The City Council finds and declares as follows:

A. Disposable foodware items and single-use non-recyclable produce bags are intended to be used once then discarded. These items pose waste management challenges and can persist in the environment for many years, causing harm to wildlife and blight to waterways. The production, use and disposal of these items have substantial environmental impacts, including environmental contamination; consumption of energy, water, and non-renewable, polluting fossil fuels; emissions of greenhouse gases; release of air and water pollutants; depletion of natural resources; litter on streets and in waterways; plastic pollution; and increased waste clean-up and management costs.

B. Plastics in waterways and oceans break down into smaller pieces that are not biodegradable. Among other hazards, plastic debris attracts and concentrates ambient pollutants in seawater and freshwater, which can transfer to fish, other seafood and salt that is eventually sold for human consumption. Disposable foodware can also contain harmful fluorinated chemicals that are linked to serious health conditions.

C. The practice of freely giving customers disposable foodware and single-use, non-recyclable produce bags encourages customers, retailers, and food vendors to pay little attention to the quantity of disposable packaging products they consume and the associated environmental impact.

D. The City of Palo Alto updated its Zero Waste Plan in 2018, with new provisions designed to help the City reach its goal of 95% diversion of materials from landfills by 2030, and 80% reduction of greenhouse gases by the same year. Disposable foodware and single-use, non-recyclable produce bags pose difficulties for composting or recycling, hampering Palo Alto from achieving zero waste.

E. Policies that promote reusable and/or compostable foodware and produce bags encourage both reuse of materials and reduction of pollutants. These twin strategies are crucial for conserving resources and protecting the environment, and integral to Palo Alto's goal of zero waste.

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**SECTION 2.** Chapter 5.30 of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**Chapter 5.30**

**Plastic Foam and Non-Recyclable Food Service Containers and Packaging Items  
Disposable Foodware Items and Other Disposable Products**

**5.30.010 Definitions.**

~~(a) "ASTM Standard" means meeting the standards of the American Society for Testing and Materials (ASTM) International Standards D6400 or D6868 for biodegradable and compostable plastics and any amendments or successor standards thereto.~~

~~(a)(b)~~ "City Facilities" refers to any real property, building, structure or vehicle owned or operated by the City of Palo Alto, its agents, departments and franchises.;

(b) "Compostable" means items deemed acceptable within the City's compost collection program as determined by the Director of Public Works and identified on the City's website.

(c) "Disposable" means items designed to be used once or a limited number of times and then discarded, whether the item is non-recyclable, Recyclable or Compostable.

~~(c)(d)~~ ~~"Disposable Food Service Container" means single-use disposable a product used by Food Service Establishments for serving or transporting prepared and ready-to-consume food or beverages. This includes but is not limited to plates, cups, bowls, lids, trays and hinged or lidded containers. This does not include single-use disposable straws, utensils, or hot cup lids;~~

~~(d)(e)~~ "Food Service Establishment" means any establishment, located or providing food within the City of Palo Alto, which provides prepared and ready to consume food or beverages, for public consumption including but not limited to any Retail Service Establishment, eating and drinking service (as defined in Title 18), takeout service (as defined in Title 18), supermarket, delicatessen, restaurant, food vendor, sales outlet, shop, cafeteria, catering truck or vehicle, cart or other sidewalk or outdoor vendor or caterer which provides prepared and ready-to-consume food or beverages, for public consumption, whether open to the general public or limited to certain members of the public (i.e., company cafeteria for employees).;

~~(e) "Non-Recyclable Plastic" means all plastics that do not meet the definition of Recyclable Plastic;~~

(f) "Foodware Item" means any item used or provided by Food Service Establishments to serve or consume food or beverages. Foodware Items include Food Service Containers, condiment cups and packets, straws, utensils (forks, spoons, sporks, knives, chopsticks), drink stirrers, beverage spill plugs, napkins, and other drink or food accoutrements.

## Not Yet Approved

~~(f)~~(g) "Plastic Foam" shall mean s blown expanded and extruded plastic foams made from polystyrene or other resins which are processed by any number of techniques including, but not limited to, fusion of monomer spheres (expanded bead plastic), injection molding, foam molding and extrusion-blown molding (extruded foam plastic). Expanded polystyrene and other plastic foam resins are generally used to make disposable cups, bowls, plates, trays, egg cartons, clamshell containers, ice chests, shipping boxes and packing materials.;

~~(g)~~(h) "Plastic Foam Products" shall mean Disposable Plastic Foam ice chests, cups, bowls, plates, clamshells, shipping boxes containers, egg cartons, packaging peanuts, packing blocks or other packaging materials that are not wholly encapsulated or encased by a more durable material. Additional Plastic Foam Products may be added by administrative regulation promulgated by the Director of Public Works ~~or his/her designee.~~;

~~(h)~~(i) "Prepared Food" means any food or beverage prepared for consumption using any cooking, packaging, or food preparation technique, including but not limited to cooking, chopping, slicing, mixing, freezing, squeezing, or brewing, and which requires no further preparation to be consumed. Prepared Food includes uncooked fruits or vegetables, "take-out" food, or food prepared to be consumed off the Food Service Establishment premises. Prepared Food does not include any uncooked meat, fish or poultry.;

(j) "Recyclable" means items deemed acceptable within the City's recycling collection program as determined by the Director of Public Works and identified on the City's website.

~~(i) "Recyclable Plastics" include any plastic which can be accepted for recycling or composting by the City's municipal recycling program. For purposes of this Chapter, Recyclable Plastic does not include any expanded Plastic Foam labeled with recycling symbol #6, or any other Plastic Foam made with other plastic resins;~~

~~(j)~~(k) "Retail Service Establishment" shall have the same meaning as Retail Service as defined in Title 18 of this Code.

(l) "Reusable Foodware" means a Foodware Item made of durable materials and designed to be used repeatedly with a useful life greater than one year.

### **5.30.020 Prohibition on the use of expanded plastic foam products and non-recyclable plastic.**

(a) Except as provided by Section 5.30.030, Food Service Establishments are prohibited from providing Prepared Food in Disposable Food Service Containers made from Plastic Foam or other ~~N~~non-~~R~~recyclable ~~P~~plastic.;

(b) Except as provided by Section 5.30.030, Retail Service Establishments are prohibited from selling, leasing or otherwise providing Plastic Foam Products.;

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(c) Except as provided by section 5.30.030, all City facilities and vendors at City sponsored events or City owned facilities are prohibited from using Disposable Food Service Containers, packaging or other products made from Plastic Foam or Non-Recyclable Plastic;

(d) Nothing in this Ordinance ~~Section~~ shall be interpreted to restrict the use or sale of any form of fiber or paper disposable food service container, or the use of any form of biodegradable or plastic food service container meeting ASTM Standards or other products authorized by Administrative Regulation.

**5.30.025 Limitation on the use of Disposable Foodware Items and other Disposable products.**

Effective January 1, 2020:

(a) Food Service Establishments are prohibited from providing the following Disposable Foodware Items:

1. Plastic straws
2. Plastic utensils (e.g., forks, knives, spoons, sporks, chopsticks)
3. Plastic drink stirrers, drink plugs, and other drink accoutrements such as novelty cocktail accessories
4. Plastic food picks and toothpicks

(b) Food Service Establishments, City Facilities, and vendors at City-sponsored events shall provide the following Foodware Items only if they are Reusable or Compostable:

1. Straws
2. Utensils (e.g., forks, knives, spoons, sporks, chopsticks)
3. Drink stirrers, drink plugs, and other drink accoutrements such as novelty cocktail accessories
4. Food picks and toothpicks

(c) Food Service Establishments shall provide permitted Disposable Foodware Items, [other than Food Service Containers](#), only upon customer request or at a self-serve station.

(d) Food Service Establishments shall provide a printed receipt only at the request of the customer.

**5.30.030 Exemptions.**

(a) The following exemptions shall apply:

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(i) Foods prepared or packaged outside the City of Palo Alto are exempt from the provisions of this Chapter. Purveyors of food prepared or packaged outside the City of Palo Alto are encouraged to follow the provisions of this Chapter.

(ii) The Director of Public Works, ~~or his/her designee,~~ may exempt a Food Service Establishment, Retail Service Establishment or City Facility/vendor from the requirements of this Chapter for a period of up to one year, if the applicant for such exemption can demonstrate that the conditions of this Chapter would cause an undue hardship. An "undue hardship" includes, but is not limited to situations unique to the applicant where there are no reasonable alternatives to Plastic Foam Products or Non-recyclable Plastic Disposable Food Service Containers and compliance with this Chapter would cause significant economic hardship to that applicant, or cause them to be deprived of a legally protected right.

(iii) A Food Service Establishment, Retail Service Establishment or City Facility/vendor seeking an exemption application shall include all information necessary for the City to make its decision, including but not limited to documentation showing the factual support for the claimed exemption. The Director may require the applicant to provide additional information to permit the Director to determine facts regarding the exemption application.

(iv) Emergency Supplies and Service Procurement. City Facilities, Food Service Establishments, Retail Service Establishments, City contractors and vendors doing business with the City shall be exempt from the provisions of this Chapter, in a situation deemed by the City Manager to be an emergency for the immediate preservation of the public peace, health or safety.

#### **5.30.040 Reserved Operative dates.**

~~All Food Service Establishment, Retail Service Establishments and City facilities and vendors must comply with the requirements of this Chapter by March 1, 2016.~~

#### **5.30.050 Severability.**

If any provision or clause of this Chapter is held to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect other provisions of this Chapter, and clauses of this Chapter are declared to be severable.

#### **5.30.060 Enforcement and penalties.**

(a) The Director of Public Works ~~or his or her designee~~ shall have primary responsibility for enforcement of this Chapter. The Director of Public Works ~~or his or her designee~~ is authorized to promulgate regulations and to take any and all other actions reasonable and necessary to enforce this Chapter, including, but not limited to, entering the premises of any Food Provider

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Service Establishment to verify compliance and the types of Recyclable and eCompostable Foodware items acceptable in the City's collection program.

(b) Anyone violating or failing to comply with any of the requirements of this Chapter shall be guilty of an infraction as set forth in Chapter 1.08 of the Palo Alto Municipal Code.

(c) Anyone violating or failing to comply with any of the requirements of this Chapter shall be subject to an administrative penalty or administrative compliance order as set forth in Chapters 1.12 and 1.16 of the Palo Alto Municipal Code.

(d) The remedies and penalties provided in this Section are cumulative and not exclusive.

### **5.30.070 Construction.**

This Chapter is intended to be a proper exercise of the City's police power, to operate only upon its own officers, agents, employees and facilities and other persons acting within its boundaries, and not to regulate inter-city or interstate commerce. It shall be construed in accordance with that intent.

**SECTION 3.** Section 5.35.010 of Chapter 5.35 (Retail and Food Service Establishment Checkout Bag Requirements) of Title 5 (Health and Sanitation) of the Palo Alto Municipal Code is hereby amended to read as follows:

### **5.35.010 Definitions.**

The following words and phrases, whenever used in this Chapter, shall be construed as defined in this Section:

(a) "Checkout Bag" means a bag that is provided by a Retail Service Establishment at the checkstand, cash register, point of sale or other point of departure for the purpose of transporting food or merchandise out of the establishment. Checkout Bags do not include Produce Bags or Product Bags as defined in this Chapter.

(b) "Compostable Produce Bags" means paper bags and bags made of plastic-like material if the material meets the ASTM Standard Specifications for compostability D6400 or D6868, or the product is Biodegradable Products Institute (BPI) certified, or is considered acceptable within the City's compost collection program.

~~(b)~~(c) "Food Service Establishment" means any establishment, located or providing food within the City of Palo Alto, which provides prepared and ready-to-consume food or beverages, for public consumption including but not limited to any Retail Service Establishment, eating and drinking service (as defined in ~~Chapter~~ Title 18), takeout service (as defined in ~~Chapter~~ Title 18), supermarket, delicatessen, restaurant, food vendor, sales outlet, shop, cafeteria, catering truck or vehicle, cart or other sidewalk or outdoor vendor or caterer which provides prepared and

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ready-to-consume food or beverages, for public consumption, whether open to the general public or limited to certain members of the public (i.e., company cafeteria for employees).

~~(e)(d)~~ "Produce ~~or product~~ Bag" means: any bag without handles provided to a customer to carry produce, meats, bulk food, or other food items to the point of sale inside a store and protects food or merchandise from being damaged or contaminated by other food or merchandise when items are placed together in a Reusable bag or Recyclable Paper Checkout Bag.

- ~~i. Any bag without handles provided to a customer to carry produce meats, bulk food, or other food items to the point of sale inside a store;~~
- ~~ii. To hold prescription medication dispensed from a pharmacy;~~
- ~~iii. To protect food or merchandise from being damaged or contaminated by other food or merchandise when items are placed together in a reusable bag or recyclable paper checkout bag;~~
- ~~iv. A bag without handles that is designed to be placed over articles of clothing on a hanger.~~

(e) "Product Bag" means a bag provided to a customer to protect merchandise from being damaged or contaminated by other merchandise when items are placed together in a Reusable Bag or Recyclable Paper Checkout Bag; a bag to hold prescription medication dispensed from a pharmacy; or a bag without handles that is designed to be placed over articles of clothing on a hanger.

~~(d)(f)~~ "Recyclable Paper Checkout Bag" means a paper bag that meets one of the following criteria:

- i. Pre-approved standard. A paper bag that meets all of the following requirements:
  1. Contains no old growth fiber;
  2. Is 100% recyclable overall and contains a minimum of 40% post-consumer recycled content;
  3. Displays the word "Recyclable" on the outside of the bag; and
  4. The manufacturer, the location (country) where manufactured and the percentage of post-consumer recycled content in an easy-to-read size font.
- ii. Alternative materials. The Director of Public Works ~~or his or her designee~~ is authorized to approve alternate materials or testing methods meeting this Section's requirements provided that the Director ~~or designee~~ finds that the proposed materials or testing standards satisfactorily comply with the intent, quality and effectiveness in order to meet the purposes of this Chapter. The particulars of any approval made by the ~~director of public works or his or her designee~~ Director under this subsection shall be entered upon the records of the Public Works Department and a signed copy shall be furnished to the applicant.

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iii. Alternative standard. Any other published uniform recyclable paper bag standard as approved by the Director of Public Works ~~or his or her designee.~~

~~(e)~~(g) "Retail Service Establishment" means any establishment providing retail sale, rental, service, processing, or repair of items primarily intended for consumer or household use, including but not limited to the following: groceries, meat, vegetables, dairy products, baked goods, candy, and other food products; liquor and bottled goods, household cleaning and maintenance products; drugs, cards, and stationery, notions, books, tobacco products, cosmetics, and specialty items; flowers, plants, hobby materials, toys, household pets and supplies, and handcrafted items; apparel, jewelry, fabrics, and like items; cameras, photography services, household electronic equipment, records, sporting equipment, kitchen utensils, home furnishing and appliances, art supplies and framing, arts and antiques, paint and wallpaper, carpeting and floor covering, interior decorating services, office supplies, musical instruments, hardware and homeware, and garden supplies; bicycles; mopeds and automotive parts and accessories (excluding service and installation); cookie shops, ice cream stores and delicatessens.

~~(f)~~(h) "Reusable Checkout Bag" shall mean a bag with handles that is specifically designed and manufactured for multiple reuse which can be washed or wiped clean and meets all of the following criteria:

i. Bags with a capacity of 15 liters or greater must meet all of the following requirements:

1. To confirm durability, bags must meet EcoLogo ATP-001 standards (including future amendments or any successor legislation):
  - a. Capacity test - minimum of 15 liters.
  - b. Dynamic test - minimum of 5 sets of 300 cycles (1,500 cycles total).
2. To confirm bag thickness of 2.25 mils thick or greater, bags will be measured according to ASTM D6988-08 or ISO 4593:1993 or ISO 4591:1992 standards (for embossed film) (including future amendments or any successor legislation).
3. To confirm the absence of heavy metals causing environmental hazards upon entering the solid waste stream, state methods are to be used for preparing and for testing samples of each unique bag component following the Model Toxics in Packaging Legislation; and
4. Is either:
  - a. Labeled in an easy-to-read sized font with the name of the manufacturer, the country of origin where manufactured, the material from which it is

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manufactured, the percentage of post-consumer recycled content, and a statement that the bag does not contain heavy metals; or

b. As an alternative, information about the manufacturer, the country of origin where manufactured, the material from which the bag is manufactured, the percentage of post-consumer recycled content, and a statement that the bag does not contain heavy metals can be provided through the reporting requirements set forth under Section 5.35.030(d).

ii. Reusable Bags ~~that~~ with a capacity of less than 15 liters must meet all of the following requirements:

1. Is 2.25 mils thick or greater as measured according to ASTM D6988-08 or ISO 4593:1993 or ISO 4591:1992 standards (for embossed film) (including future amendments or any successor legislation).

2. To confirm the absence of heavy metals causing environmental hazards upon entering the solid waste stream, state methods are to be used for preparing and for testing samples of each unique bag component following the Model Toxics in Packaging Legislation; and

3. Is either:

a. Labeled in an easy-to-read sized font with the name of the manufacturer, the country of origin where manufactured, the material from which it is manufactured, the percentage of post-consumer recycled content, and a statement that the bag does not contain heavy metals; or

b. As an alternative, information about the manufacturer, the country of origin where manufactured, the material from which the bag is manufactured, the percentage of post-consumer recycled content, and a statement that the bag does not contain heavy metals can be provided through the reporting requirements set forth under Section 5.35.030(d).

iii. Alternative materials. The Director of Public Works ~~or his or her designee~~ is authorized to approve alternate materials or testing methods meeting this section's requirements provided that the Director ~~or the designee~~ finds that the proposed materials or testing standards satisfactorily complies with the intent, quality and effectiveness in order to meet the purposes of this Chapter. The particulars of any approval made by the Director under this subsection shall be entered upon the records of the ~~public works department~~ Public Works Department and a signed copy shall be furnished to the applicant.

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iv. Alternative standard. Any other published uniform bag standard as approved by the Director of Public Works ~~or his or her designee.~~

~~(e)~~(i) "Single-use Plastic Checkout Bag" means any bag made predominately of plastic derived from natural gas, petroleum or a biologically-based source, such as corn or other plant sources, which is provided to a customer at the point of sale which does not meet the definition of a Reusable Checkout Bag.

**SECTION 4.** Section 5.35.020 of Chapter 5.35 (Retail and Food Service Establishment Checkout Bag Requirements) of Title 5 (Health and Sanitation) of the Palo Alto Municipal Code is hereby amended to read as follows:

**5.35.020 Types of checkout bags permitted at retail service and food service establishments.**

(a) Retail Service Establishments within the city of Palo Alto shall provide or make available to a customer only Reusable Bags or Recyclable Paper Checkout Bags for the purpose of carrying away goods or other materials from the point of sale, subject to the terms of this Chapter.

i. Single-use Plastic Bags exempt from the Chapter include those integral to the packaging of the product, ~~produce or~~ Product Bags, newspaper bags, door-hanger bags, or bags sold in packages containing multiple bags intended for use as garbage, pet waste or yard waste bags.

ii. Food Service Establishments within retail stores must comply with those requirements listed under Section 5.35.020(b) below.

iii. Effective January 1, 2020, Farmers markets shall only may provide Compostable Produce or product Bags to hold produce, meats, bulk food or bulk other food items. Single-use Plastic Checkout Bags, Produce Bags or Product Bags shall not be provided by farmers markets for produce or meats. charges for these bags are not required at farmers markets unless checkout bags used to hold produce or product bags are provided.

(b) Effective November 1, 2013, Food Service Establishments shall provide or make available to a customer only Recyclable Paper Checkout Bags or Reusable Bags, at their discretion, for the purpose of carrying away goods or other materials from the point of sale, subject to the terms of this Chapter.

i. Produce or Product Bags without handles may be used at Food Service Establishments to hold containers of food items that are free liquids such as soups or stews that might be susceptible to spilling.

(c) The City of Palo Alto encourages, but does not require in-store public education and encouragement to customers about the use of Reusable Bags. In-store education for Retail

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Service [Establishments](http://www.cityofpaloalto.org/plastics) and Food Service Establishments is available at [www.cityofpaloalto.org/plastics](http://www.cityofpaloalto.org/plastics).

(d) Nothing in this Chapter prohibits customers from using bags of any type that they bring to the establishment themselves or from carrying away goods that are not placed in a bag at point of sale, in lieu of using bags provided by the establishment.

(e) A Retail Service or Food Service Establishment may provide a Reusable Bag at no charge if it is distributed as part of an infrequent and limited time promotion. Infrequent and limited time promotions shall not exceed a total of 14 days in any consecutive 12 month period.

**SECTION 5.** Chapter 5.35 (Retail and Food Service Establishment Checkout Bag Requirements) of Title 5 (Health and Sanitation) of the Palo Alto Municipal Code is hereby amended to add a new Section 5.35.035 to read as follows:

**5.35.035 Use of Compostable Produce Bags at Retail Service Establishments.**

Effective January 1, 2020, Retail Service Establishments shall only provide Compostable Produce Bags to carry produce, meats, bulk food, or other food items to point-of-sale within the store.

**SECTION 6.** Chapter 5.35 (Retail and Food Service Establishment Checkout Bag Requirements) of Title 5 (Health and Sanitation) of the Palo Alto Municipal Code is hereby amended to delete Section 5.35.040 as follows:

**5.35.040 Reserved ~~Delayed implementation for food service establishments.~~**

~~All food service establishments shall comply with the requirements of Section 5.35.020 of this Chapter beginning November 1, 2013.~~

**SECTION 7.** If any section, subsection, clause or phrase of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portion or sections of the Ordinance. The Council hereby declares that it should have adopted the Ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

**SECTION 8.** The Council finds that this Ordinance is exempt from the provisions of the California Environmental Quality Act ("CEQA"), pursuant to CEQA Guidelines Section 15308, Actions by Regulatory Agencies for Protection of the Environment. This exemption applies to actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. The Ordinance is also exempt from CEQA pursuant to Guidelines Section 15061(b)(3) because it can be seen with certainty that there is no possibility that the Ordinance will have a significant effect on the environment.

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**SECTION 9.** This Ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

APPROVED AS TO FORM:

APPROVED:

\_\_\_\_\_  
Assistant City Attorney

\_\_\_\_\_  
City Manager

\_\_\_\_\_  
Director of Public Works

Not Yet Approved

Ordinance No. \_\_\_\_\_

Ordinance of the Council of the City of Palo Alto Amending Sections 5.20.010 (Definitions), 5.20.020 (Declaration of Policy), 5.20.030 (Discarding of Refuse), 5.20.090 (Collection and Ownership of Recycled Materials), 5.20.100 (Collection and Ownership of Compostable Materials), 5.20.105 (Contamination of Containers), 5.20.109 (Requirements for Special Events), 5.20.110 (Exclusions), 5.20.120 (Refuse Containers), 5.20.130 (Maintenance and Placement of Containers) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) of the Palo Alto Municipal Code

The Council of the City of Palo Alto does ORDAIN as follows:

**SECTION 1.** Section 5.20.010 (Definitions) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.010 Definitions.**

Within and limited to this Chapter, the following words and phrases shall be construed as defined in this section, unless the context indicates otherwise.

(1) "Bin" means a detachable refuse container used in connection with commercial premises with a 1 to 8 cubic yard capacity, equipped with a lid, and designed for mechanical pick-up by collection vehicles.

(2) "Box" means a wheeled or sledded container or compactor, generally 7 to 50 cubic yards in size, suitable for the storage and collection of commercial solid waste or recyclable materials.

(3) "Cart" means a wheeled receptacle equipped with a lid, and designed for mechanical pick-up by collection vehicles.

(4) "City" means the government of the City of Palo Alto, defined in Section 1.04.050(1) of the municipal code, with a principal place of business at 250 Hamilton Avenue, Palo Alto, County of Santa Clara.

(5) "City manager" means the person referred to in Section 2.08.140 of the municipal code, or designee.

(6) "Collection agreement" means a contract with the City for the collection of refuse pursuant to Section 5.20.040.

(7) "Collector" means one or more persons authorized by Section 5.20.040 to provide the collection, processing and disposal of refuse pursuant to one or more written contracts with the City.

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(8) "Commercial business owner" means any person holding or occupying, alone or with others, commercial premises, whether or not the person holds the title or is the record owner of the commercial premise.

(9) "Commercial premises" means any occupied real property in Palo Alto, except property occupied by federal, state or local government agencies which do not consent to their inclusion, and except residential premises as defined in subsection (3331) hereof, and shall include, without limitation, any wholesale or retail establishments, restaurant and food service establishment, bar, store, shop, shopping center, office, industrial establishment, manufacturing establishment, service station, repair, research and development establishment, professional, services, sports or recreational facility, any place or premise where an animal is maintained or sheltered, construction or demolition site, a multiple dwelling that is not a residential premise, and any other commercial or industrial business facility, structure, site, or other establishment in Palo Alto.

(10) "Compostable materials" means organic materials designated by the City as approved for collection and processing, including, without limitation, yard trimmings, food scraps, soiled paper and compostable plastics, but excluding animal manure, sewage sludge, and human biological wastes.

(11) "Composting" means the controlled, biological decomposition of organic materials into humus for use as a soil amendment, conditioner or fertilizer or for any other similar use or purpose.

(12) "Construction and/or demolition site" means any real property in Palo Alto, at which a building or structure, or any portion thereof, is being constructed, assembled, erected or demolished, and during which construction or demolition waste which must be removed from the property.

(13) "Construction and/or demolition waste" means any waste generated as the result of construction or demolition work, including, without limitation, discarded packaging or containers and waste construction materials, whether brought on-site for fabrication or used in construction or resulting from demolition, excluding liquid waste and hazardous waste.

(14) "Container" means any bin, box, cart, compactor, drop box, roll-off box, or receptacle, used for the storage of solid waste, recyclable materials, compostable materials or other materials designated by the City for collection by the collector.

(15) "Director" means the person referred to in Section 2.08.190 of the Municipal Code, or the director's designee.

(16) "Disposal or processing facility" means a landfill facility, a recycling facility, a composting facility or a solid waste transfer or processing station.

(17) "EPA" means the federal Environmental Protection Agency or successor agency.

(18) "Food service establishment" means any establishment, located or providing food within Palo Alto, which provides prepared and ready-to-consume food or beverages, for public

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consumption, including, but not limited to, any retail service establishment, eating and drinking service (as defined in Chapter 18.23), takeout service (as defined in Chapter 18.23), supermarket, delicatessen, restaurant, food vendor, sales outlet, shop, cafeteria, catering truck or vehicle, cart or other sidewalk or outdoor vendor or caterer which provides prepared and ready-to-consume food or beverages, for public consumption.

(19) "Hazardous waste" means waste defined as hazardous by Public Resources Code section 40141, as it now exists or may be amended, namely, a waste or combination of wastes, which due to its quantity, concentration, or physical, chemical or infectious characteristics, may do either of the following: (i) cause or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; (ii) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed. "Hazardous waste" includes extremely hazardous waste and acutely hazardous waste, and any other waste as may hereafter from time to time be designated as hazardous by the EPA or other agency of the United States Government, or by the California Legislature or any agency of the State of California empowered by law to classify or designate waste as hazardous, extremely hazardous or acutely hazardous.

(20) "Home composting" means the controlled decomposition of organic material, including, without limitation, yard trimmings and kitchen scraps, into humus by any person owning or occupying any place or premises in Palo Alto.

(21) "Manure" means the waste droppings of any animal.

(22) "Multifamily property" means any residential premise with ~~three~~ five or more attached units with shared service.

(23) "Organic wastes" means "compostable materials."

(24) "Person" means any individual, or entity referred to in Section 1.04.050(5) of the Municipal Code and including any general partnership, limited partnership, limited liability partnership, or limited liability company.

(25) "Place or premises" means every residential premises and commercial premises, including any structure, apparatus, or portion thereof occupied or operated by any person and situated on an integral parcel of land undivided by a public street, highway, or railway.

(26) "Public solid waste or recycling receptacles" means any container for the collection of solid waste, recyclable materials or compostable materials that are both located on public property and intended for use by the general public.

(27) "Recyclable materials" means materials designated by the City as suitable for collection and transport to a material recovery facility for processing into a recycled content product, including, without limitation, newspaper, paper, cans, corrugated cardboard, glass and certain types of plastic, and metals.

## Not Yet Approved

(28) "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. This term does not include transformation as that term is defined in Public Resources Code section 40180.

(29) "Refuse" means and includes compostable materials, recyclable materials and solid waste.

(30) "Refuse Room" means a room(s) located inside a building in which refuse containers are maintained and refuse is collected. Refuse rooms are typically located at the end of a hallway or on the ground level, but may be in other locations.

~~(310)~~ "Refuse service" means the weekly or other periodic collection, processing and disposal of materials properly deposited in the collector-provided containers for solid waste, as well as weekly collection and processing of recyclable materials and weekly collection and processing of compostable materials.

~~(321)~~ "Residential householder" means any person owning or occupying residential premises in Palo Alto.

~~(332)~~ "Residential premises" means any residential dwelling unit in Palo Alto, including, without limitation, a multiple unit residential complex, such as a rental housing project, condominium, apartment house, mixed condominium and rental housing, and a mobile home park, except any multiple dwelling which, with the prior written approval of the Director, receives commercial bin service.

~~(343)~~ "Salvage" means the controlled removal of construction or demolition debris/material from a permitted building, construction, or demolition site for the purpose of recycling, reuse, or storage for later recycling or reuse. Examples include air conditioning and heating systems, columns, balustrades, fountains, gazebos, molding, mantels, pavers, planters, quoins, stair treads, trim, wall caps, bath tubs, bricks, cabinetry, carpet, doors, ceiling fans, lighting fixtures, electrical panel boxes, fencing, fireplaces, flooring materials of wood, marble, stone or tile, furnaces, plate glass, wall mirrors, door knobs, door brackets, door hinges, marble, iron work, metal balconies, structural steel, plumbing fixtures, refrigerators, rock, roofing materials, siding materials, sinks, stairs, stone, stoves, toilets, windows, wood fencing, lumber and plywood.

~~(354)~~ "Solid waste" means solid and semisolid wastes, generated in or upon, related to the occupancy of, remaining in or emanating from residential premises or commercial premises, including garbage, trash, rubbish, ashes, industrial wastes, manure, animal carcasses, solid or semisolid wastes, and other solid and semisolid wastes. "Solid waste" shall not include liquid wastes or sewage, abandoned vehicles, hazardous waste, recyclable materials or compostable materials.

~~(365)~~ "Solid waste enterprise" shall mean any person regularly engaged in the business of providing solid waste, recyclable materials or compostable materials handling services.

## Not Yet Approved

(376) "Source separated single recyclable materials" means recyclable materials that are separated from other recyclable materials or solid waste and placed in separate containers according to type or category of materials and directly marketed as a single commodity.

(387) "Yard trimmings" means plant trimmings generated from the maintenance or alteration of public, commercial premises or residential premises landscapes, including, without limitation, grass cuttings, yard clippings, leaves, tree trimmings, pruning, brush and weeds, excepting those materials which are prohibited under written rules and regulations promulgated by the Director.

**SECTION 2.** Section 5.20.020 (Declaration of Policy) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.020 Declaration of policy.**

(a) The accumulation, collection, removal and disposal of refuse must be controlled by the City for the protection of the public health, safety and welfare. The Council finds that to give practical effect to this policy a comprehensive system for the periodic collection, removal and disposal of refuse from all places or premises is essential and benefits all occupants of places or premises. All occupants of places or premises shall be liable for refuse collection charges established by the Council for the collection, removal and disposal of refuse.

(b) The City complies with the applicable provisions of the California Integrated Waste Management Act, as amended, codified in the Public Resources Code section 40000 et seq. The law requires that, by and after January 1, 2000, fifty percent (50%) of the solid waste generated must be diverted through some source reduction, recycling, and composting activities.

(c) The City also complies with the 75 percent recycling goal included as part of AB 341 Mandatory Commercial Recycling Law, adopted on October 6, 2011, which includes modifications to the Public Resources Code.

(d) ~~In addition, the City complies with AB 1826, which amended the law in 2014, imposes the organic waste recycling requirements under AB 1826, with a mandate that will begin~~ which became effective on April 1, 2016.

(e) In 2016, SB 1383 established methane emissions reduction targets to reduce statewide emissions of short-lived climate pollutants including, establishing a 50 percent reduction of disposed organic waste from 2014 levels by 2020 and a 75 percent reduction by 2025; and the target to reduce 20 percent of disposed edible food by 2025. ~~Further, in~~ Also in 2016, the ~~C~~eity established sustainability and climate action goals of an 80 percent% reduction in greenhouse gases and 95 percent% diversion of materials from landfills by 2030.

(f) The City may adopt, implement, and enforce requirements, rules and regulations for local compostable materials and local recyclable materials that are more stringent or comprehensive than California law.

## Not Yet Approved

**SECTION 3.** Section 5.20.030 (Discarding of Refuse) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows

**5.20.030 Discarding of refuse.**

(a) No person shall throw, drop, leave, place, keep, accumulate, or otherwise dispose of any refuse upon private property either with or without the intent to later remove the same from that place or premises, or upon any street, public right-of-way, sidewalk, gutter, stream, or creek, or the banks thereof, or any public place or public property.

(b) All persons shall separate their refuse according to its characterization as solid waste, compostable materials, or recyclable materials, and place each type of refuse in a separate container designated for disposal of that type of refuse. No person may mix any type of refuse, or deposit refuse of one type in a collection container designated for refuse of another type, except as otherwise provided in this Chapter. This does not prohibit the placement of refuse in public solid waste or recycling receptacles, or in containers for collection in accordance with the provisions of this Chapter. This section does not prohibit any person from engaging in home composting. Administrative citations or any other enforcement actions will not apply to this paragraph for a person occupying a residential premise.

(c) Effective July 1, 2020, any person occupying a commercial premises, not including multiple dwellings, who uses bags to collect and discard refuse, whether placed for collection inside or outside a container, shall ensure that the refuse contents of the bags are clearly visible. When bags are used, garbage shall be collected in clear plastic bags and recyclable materials shall be collected in blue-tinted plastic bags.

(d) Effective July 1, 2020, all persons who use bags to collect compostable materials, whether placed for collection inside or outside a container, shall use green-tinted compostable bags such that the contents are clearly visible.

**SECTION 4.** Section 5.20.090 (Collection and Ownership of Recyclable Materials) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.090 Collection and ownership of recyclable materials.**

(a) All persons owning or occupying any place or premises where recyclable materials are created, produced or accumulated shall subscribe and pay for this type of refuse services and shall subscribe and pay for a number of containers sufficient to hold all recyclable materials created, produced or accumulated at the place or premises during a one-week period, unless a different frequency collection schedule has been approved or directed pursuant to this Chapter.

(b) Recyclable materials placed for curbside collection in or outside of a container shall become the property of the collector at the time of placement at the curb or other designated location for collection in or outside of the container. The collector shall have the exclusive right

## Not Yet Approved

to collect the recyclable materials, unless the collection agreement specifies a different arrangement.

(c) The disposal of solid waste and compostable materials in containers designated for the collection of recyclable materials is prohibited. Recyclable materials that are placed in a recyclable materials container for collection by the collector must be free of solid waste and compostable materials.

(d) Cardboard boxes shall be broken down flat before being placed into recyclables containers to allow for adequate space to contain the recyclable materials.

**SECTION 5.** Section 5.20.100 (Collection and Ownership of Compostable Materials) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.100 Collection and ownership of compostable materials.**

(a) All persons owning or occupying any place or premises where compostable materials are created, produced or accumulated shall subscribe and pay for this type of refuse services and shall subscribe and pay for a number of containers sufficient to hold all compostable materials created, produced or accumulated at the place or premises during a one-week period, unless a different frequency collection schedule has been approved or directed pursuant to this Chapter.

(b) Compostable materials placed for curbside collection in a container shall become the property of the collector at the time of placement at the curb or other designated location for collection of the container.

~~(c) On or after April 1, 2016, all commercial premises at which 8 cubic yards or more of solid waste refuse service is subscribed per week, multifamily properties, and food service establishments shall subscribe and pay for a number of containers sufficient to hold compostable materials created, produced or accumulated at or on the places or premises during a one-week period, unless a different frequency collection schedule has been approved or directed pursuant to this chapter.~~

~~(d) On or after January 1, 2017, all commercial premises where 2 cubic yards or more of solid waste refuse service is subscribed per week, shall subscribe and pay for a number of containers sufficient to hold compostable materials created, produced or accumulated at or on the place or premises during a one-week period, unless a different frequency collection schedule has been approved or directed pursuant to this chapter.~~

~~(e) On or after January 1, 2018, A~~ all commercial premises at which solid waste refuse service is subscribed, shall subscribe and pay for a number of containers sufficient to hold compostable materials created, produced or accumulated at or on the place or premises during a one-week period, unless a different frequency collection schedule has been approved or directed pursuant to this Chapter.

## Not Yet Approved

(d) The City may direct the collector to audit individual solid waste streams generated at commercial premises to determine the owner, occupant or tenant's compliance with this section.

**SECTION 6.** Section 5.20.105 (Contamination of Containers) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.105 Contamination of containers.**

(a) No person subscribing to refuse service shall dispose or permit the disposal of solid waste in a container designated for the collection of recyclable materials or compostable materials. The person shall remove any solid waste deposited in the recyclable materials and compostable materials containers before the collection of the recyclable materials and compostable containers occurring that week.

(1) The collector will notify any person who occupies commercial premises whenever the City or the collector determines the recyclable materials or compostable materials container of that person is contaminated with solid waste and the waste must be removed. After the person removes the solid waste from the recyclable materials and compostable materials container, the collector will return to the commercial premises to service the container or containers and the person occupying the commercial premises will be charged a "return trip" fee specified in the refuse rate schedules.

(2) If the person occupying the commercial premises does not remove the waste from the recyclable materials and compostable materials containers by the scheduled pick-up date, the containers will be serviced at the next business day and the person occupying the commercial premises will be charged both an "extra solid waste pick-up" fee and a "return trip" fee in addition to the refuse charges that apply to the level of service subscribed by the person occupying the commercial premises. The extra solid waste pick-up fee shall be determined according to the size of the contaminated recyclable materials or compostable materials container and the established rates approved by the City.

(3) The fees outlined in [Section 5.20.105 \(a\)\(1\) - \(2\)](#) will also apply if a person occupying a commercial premises places recyclable materials in containers designated for compostable materials or compostable materials in containers designated for recyclable materials.

(4) ~~On or after July 1, 2021, if~~ if a person occupying a commercial premises places recyclable materials and/or compostable materials in containers designated for solid waste, the person will be subject to a "contamination" fee.

(5) A person occupying residential premises will not be subject to a "return trip" fee, an "extra solid waste pick-up" fee, a "contamination" fee, an administrative citation or any other enforcement action. A multifamily property will not be subject to a "return

## Not Yet Approved

trip" fee or an "extra solid waste pick-up" fee if owners or managers of the multifamily property can demonstrate compliance with Section 5.20.108 to the satisfaction of the Director.

(b) No person shall dispose of commercial grease or cooking oil in a compostable materials container.

**SECTION 7.** Section 5.20.109 (Requirements for Special Events) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.109 Requirements for special events.**

(a) The promoter or coordinator of a special event held in Palo Alto must provide a level of refuse service sufficient to contain the refuse generated at the special event.

(b) The promoter or coordinator shall provide containers at appropriate locations at the special event to facilitate the source separation of solid waste, compostable materials, and recyclable materials by event employees, vendors, and attendees.

(c) The three types of containers shall:

(1) Be appropriate in number and size with respect to the quantity of solid waste, compostable materials, and recyclable materials anticipated to be generated at the property or premises;

(2) Bear appropriate signage and be color-coded – blue containers for recyclable materials, green containers for compostable materials, and black containers for solid waste – to identify the type of refuse to be contained and meet any additional design criteria established by the City; and

(3) Be placed together as a waste station to provide equally convenient access to users.

(d) If the promoter or coordinator determines that vendor booths at the special event will require refuse containers, the vendors shall receive from the promoter or coordinator a set of refuse containers that bear appropriate signage and are color-coded to identify the type of waste to be contained.

(e) The use of public solid waste, recycling or composting receptacles at special events is prohibited. The promoter or coordinator shall remove or cover all public solid waste, recycling or composting receptacles to prevent their use during the special event. [If covers for receptacles are utilized, the promoter or coordinator shall return them to the City after the special event.](#)

## Not Yet Approved

**SECTION 8.** Section 5.20.110 (Exclusions) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.110 Exclusions.**

(a) Residential Householder Exclusion. No provision of this Chapter shall prevent a residential householder from collecting and disposing of occasional loads of solid waste generated at the residential premise, composting at home, or selling, donating or disposing of recyclable or compostable materials generated at the residential premise. The containers provided by the collector may not be used for activities authorized by this paragraph. Notwithstanding the foregoing, no residential householder shall employ or engage any solid waste enterprise, other than the collector to haul or transport solid waste, recyclable materials, or compostable materials to a disposal or processing facility. No residential householder may collect or dispose of solid waste generated at a location that is not the residential premise.

(b) Gardener's Exclusion. No provision of this Chapter shall bar a gardener, tree trimmer or other person engaged in a similar trade from collecting and disposing of yard trimmings not containing other solid waste whenever the collection and disposal are incidental to providing the gardening, tree trimming or similar services.

(c) Commercial Source Separated Recyclable Materials and Compostable Materials.

(1) Commercial business owners shall retain the right to donate or sell recyclable materials and compostable materials, or to pay fees for services to solid waste enterprises other than the collector for the collection of particular recyclable materials and compostable materials, so long as all recyclable materials and compostable materials collected are source separated single recyclable materials and compostable materials. Recyclable materials and compostable materials collected pursuant to this paragraph (c) shall be transported to a recyclable materials and compostable materials facility achieving a diversion rate of 90 percent and where not more than 10 percent of the materials are disposed of in a landfill.

(2) Commercial business owners shall demonstrate compliance with the provisions of this paragraph (c) at the request of the Director.

(3) The City may require any recycler, junk dealer or other enterprise engaged in the business of buying and marketing recyclable materials and compostable materials to provide the City with information pertaining to the collection and the amount of recyclable materials and compostable materials collected from within Palo Alto's territorial limits.

(d) Collection of Source Separated Single Recyclable Materials. No provision of this Chapter shall prevent a recycler, junk dealer or other enterprise engaged in the business of buying and marketing source separated single recyclable materials in the stream of commerce and which buys such materials for marketing and not for disposition in a landfill or transfer

## Not Yet Approved

station (as defined in Public Resources Code Section 40200), from buying recyclable materials for monetary or other valuable consideration. A recycler, junk dealer or enterprise which buys recyclable materials shall not be prohibited from removing and transporting those materials to a destination for marketing in the stream of commerce.

(e) Renovation, Rebuilding, Repairs. No provision of this Chapter shall prevent a commercial business owner from arranging for any worn, spent, or defective equipment, or part thereof, used in the commercial business and requiring renovation, rebuilding, recharging, regeneration or repair, to be picked up, renovated, rebuilt, recharged, regenerated or otherwise restored and repaired and returned to that commercial business owner. Any person engaged in the business of renovating, rebuilding, recharging, regenerating, or otherwise restoring or repairing the equipment or part thereof, is not prohibited from transporting the same from or returning it to the commercial business, or from removing, transporting or disposing of the equipment, or part thereof, replaced in connection with an equipment repair or service contract.

(f) Contractors' Exclusions. In addition to the authority granted by paragraph (c) of this Section 5.20.110, no provision of this Chapter shall prevent a licensed contractor under contract for the [deconstruction](#), demolition or reconstruction of a building, structure, pavement, or concrete installation from marketing any saleable [or donation](#) items salvaged from the [deconstruction](#), demolition or reconstruction, or from causing the salvageable items or construction or demolition waste to be removed and transported from the place or premises at which such waste is generated, pursuant to the provisions of the demolition or construction contract, subject to the following:

(1) The collection, removal and disposal activity shall be performed only by the licensed contractor under contract for the construction, [deconstruction](#) or demolition work that generated the salvageable items or by regularly employed personnel carried on the licensed contractor's payroll records as an employee.

(2) All vehicles used to facilitate the collection, removal and disposal activities shall be owned by or under the exclusive control of the licensed contractor and shall meet all of the requirements of this Chapter and all other laws, statutes, rules, regulations and ordinances of the state of California and the City. All vehicles shall be subject to inspection by and the approval of the Director from time to time.

[\(3\) The placement and use of a container, other than a container provided by the collector, shall be prohibited, whether placed on the ground, on a vehicle, or any other place.](#)

(g) ~~Reinforced~~ Concrete Exclusion. In addition to the authority granted by paragraph (f) of this Section 5.20.110, nothing in this Chapter shall prevent a commercial/industrial business owner, residential householder, or licensed contractor from using a solid waste enterprise other than the collector to dispose of ~~reinforced~~ concrete.

## Not Yet Approved

(h) Document Destruction Service. No provision of this Chapter shall prevent any person engaged in the business of destroying or disposing of secret, confidential or sensitive documents from transporting or disposing of those documents, provided the transport and disposal of the documents are incidental to the document destruction or disposal service.

(i) Self-Haul Exclusion. In addition to the authority granted by paragraph (a) of this Section 5.20.110, nothing in this Chapter shall prevent a commercial business owner or residential householder from, on a regular basis, collecting, transporting and disposing of solid waste generated at the place or premise, in lieu of availing themselves of the services of the collector. No residential householder or commercial business owner shall employ or engage any solid waste enterprise, other than the collector, to haul or transport the solid waste to a disposal or processing facility. Any residential householder or commercial business owner who pursuant to this paragraph ~~(h)~~ seeks to on a regular basis collect, transport and dispose of solid waste generated at the place or premise, shall first obtain approval of the Director, and must comply with any written rules and regulations established by the Director ~~the procedures applicable to self-hauling that are adopted by resolution.~~

(j) General Requirement. In all cases where the right to an exclusion pursuant to this Section 5.20.110 is exercised, disposal shall be made at a disposal or processing facility that meets all applicable regulatory requirements. Any disposal by a person exempted under this section shall not be relieved of any obligation or liability imposed by this Chapter or any other ordinance, resolution, rule or regulation for the payment of the minimum solid waste and recyclable materials disposal rates imposed pursuant to this Chapter or any other applicable rates or fees. ~~Notwithstanding the foregoing, any person with a valid self haul permit obtained pursuant to paragraph (h), and who does not use the solid waste collection services offered by the collector, shall be exempt from the payment of the solid waste collection rates imposed for use of the services provided by the collector.~~

(k) Backhauling Compostable Materials. A commercial business may opt out of the compostable materials service levels required by this Chapter, provided that business verifies to the satisfaction of the Director that all compostable materials generated on-site will be transported to a central facility to be later composted or otherwise recycled at a 90 percent rate and not placed in a landfill.

(l) Space Limitations for Existing Structures. The Director may grant a written exemption for any existing commercial business structure that lacks sufficient storage space for compostable materials or recyclable materials from all or portions of this section in accordance with the written rules and regulations established by the Director. The Director, in cases where space constraints are determined to exist, shall also evaluate the feasibility of shared container usage by contiguous businesses or multifamily property structures.

(m) De Minimis Exception. The Director may waive any of the requirements of this section if documentation satisfactory to the Director, based upon rules and regulations, is provided to establish that the materials in any type of container, on an on-going basis is incidental to any other materials originating from that collection location.

## Not Yet Approved

**SECTION 9.** Section 5.20.120 (Refuse Containers) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.120 Refuse containers.**

(a) All types of refuse containers shall be kept in a sanitary condition with the lids closed except whenever they are being loaded or unloaded.

(b) Refuse containers suitable for residential places or premises shall be provided by the collector or the City. Any container shall be of a size based upon the subscription service level requested by the person responsible for the payment of charges therefor or as may be required by this Chapter. Any container shall not be loaded with more than the quantity of materials that either can fit in the container with its lid closed or is in excess of the weight limit marked on the container, when the lid is closed. All containers for use at commercial premises shall be provided by or approved by the collector, except for industry-approved grease or cooking oil tallow containers that shall be provided by a designated tallow hauler.

(c) Refuse containers shall be collected by the collector whenever the containers are placed in a refuse solid waste enclosure or at the authorized collection area. Collection may be made at another location upon approval of the Director, based upon the subscription service level requested.

(d) All commercial property owners and commercial business owners shall provide access to the City or the collector for the inspection of internal and external refuse containers and enclosures. The Director shall be authorized to conduct inspections of commercial premises, as permitted by law, to ensure compliance with this Chapter, including this Section.

(e) Commercial property owners and commercial business owners shall ensure that all refuse containers and refuse enclosures are accessible and easily serviceable by the collector. Service vehicles shall have a safe and clear passage and access to refuse enclosures to provide for the efficient service to customers.

**SECTION 10.** Section 5.20.130 (Maintenance and Placement of Containers) of Chapter 5.20 (Collection, Removal and Disposal of Refuse) of Title 5 (Health and Sanitation) is hereby amended to read as follows:

**5.20.130 Maintenance and placement of containers.**

(a) The commercial business owners and residential householder shall maintain their containers at their places and premises and the areas where the containers are located in good, usable, clean and sanitary condition, and shall ensure that the lids on the container are kept closed and shall ensure that there is no litter underneath or surrounding the containers. No refuse shall be placed outside of the container. Containers shall be maintained by the commercial business owners and residential householders in a manner that will prevent leakage, spillage and the emission of odors. Commercial premises sharing receptacles placed outside of retail areas, must also share equally in the responsibility of emptying the receptacles

Not Yet Approved

so that they do not overflow and maintaining the area around the receptacles so that it is free of loose litter.

(b) The location or placement of containers at any place or premise shall be subject to the approval of the Director. Every commercial business owner shall provide a location at the commercial premises for the containers they use.

(c) Any collection agreement may provide for the rental of containers approved by the collector to customers. The collector shall be responsible for maintenance of the rental containers by keeping the containers in good and sanitary condition (ordinary wear and tear excepted) and shall repaint the containers at a frequency as determined by the Director. The collector and the renter shall determine and agree upon the placement of the containers to minimize traffic, aesthetics and other potential effects that may be associated with their placement.

(d) Where a container is not rented from the collector but is rented from another solid waste enterprise and approved by the City, the renter shall ensure that the container meets the standards of quality and maintenance applicable to the containers supplied by the collector. The renter shall procure the written standards or rules and regulations of the collector prior to renting from another solid waste enterprise.

(e) Any containers of a one cubic yard or greater size shall be identified with the name and telephone number of the collector or other solid waste enterprise servicing the container. The container shall be identified by the type of materials that can be deposited in the container.

(f) Containers shall remain on private property and not in the public right-of-way except as necessary to accommodate scheduled collection. Containers are permitted in the public right-of-way only during the day preceding the day of scheduled collection and terminating the day following such collection.

**SECTION 11.** If any section, subsection, clause or phrase of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portion or sections of the Ordinance. The Council hereby declares that it should have adopted the Ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

**SECTION 12.** The Council finds that this project is exempt from the provisions of the California Environmental Quality Act (“CEQA”), pursuant to Section 15061 of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that the ordinance will have a significant effect on the environment.

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Not Yet Approved

**SECTION 13.** This Ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

APPROVED AS TO FORM:

APPROVED:

\_\_\_\_\_  
Assistant City Attorney

\_\_\_\_\_  
City Manager

\_\_\_\_\_  
Director of Public Works

Not Yet Adopted

Resolution No. \_\_\_\_\_

Resolution of the Council of the City of Palo Alto Adopting the Negative Declaration for the Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Facility Site Permitting Project, in Accordance with CEQA

## R E C I T A L S

A. Prior to the adoption of this Resolution, the City of Palo Alto prepared an Initial Study and approved for circulation a Negative Declaration for the Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Facility Site Permitting Project (the “Initial Study/ Negative Declaration”) all in accordance with the requirements of the California Environmental Quality Act of 1970, together with state and local guidelines implementing said Act, all as amended to date (collectively “CEQA”).

B. The Initial Study/Negative Declaration evaluated potential environmental impacts associated with the adoption of an ordinance and implementation of a program that would require construction and demolition projects to use deconstruction methods and source separate construction materials to maximize the salvage of materials for reuse and increase the diversion of recyclable materials, reducing the amount of landfilled waste. The program would also include the use of an inert debris transfer facility to consolidate materials generated in Palo Alto for offsite transfer. A more detailed description is set forth in the Negative Declaration.

C. The draft Initial Study/ Negative Declaration was made available for public comment from March 22, 2019 through April 11, 2019.

D. The City of Palo Alto considered the comments received during the public review period and prepared a final Initial Study/ Negative Declaration.

E. The Initial Study/ Negative Declaration concluded that implementation of the Project could not have a significant effect on the environment.

F. The City of Palo Alto is the lead agency on the Project, and the City Council is the decision-making body for the proposed approval of the Project.

G. The City Council has reviewed and considered the Initial Study/ Negative Declaration for the Project, together with comments received on the Initial Study/ Negative Declaration, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA.

Not Yet Adopted

H. The Initial Study/ Negative Declaration for the Project are on file in the Department of Public Works, located at 250 Hamilton Avenue, 6<sup>th</sup> Floor, Palo Alto, CA 94301 are available for inspection by any interested person at that location and are, by this reference, incorporated into this Resolution as if fully set forth herein.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF PALO ALTO HEREBY RESOLVES:

SECTION 1. THE CITY COUNCIL does hereby make the following findings: (1) it has independently reviewed and analyzed the Initial Study/ Negative Declaration and other information in the record and has considered the information contained therein, prior to acting upon or approving the Project, (2) the Initial Study/ Negative Declaration prepared for the Project has been completed in compliance with CEQA and is consistent with state and local guidelines implementing CEQA, and (3) the Initial Study/ Negative Declaration represents the independent judgment and analysis of the City of Palo Alto, as lead agency for the Project. The City Council designates the Director of Public Works, at 250 Hamilton Avenue, 6<sup>th</sup> Floor, Palo Alto, CA 94301, as the custodian of documents and records of proceedings on which this decision is based.

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Not Yet Adopted

SECTION 2. THE CITY COUNCIL does hereby find that based upon the entire record of proceedings before it and all information received that there is no substantial evidence that the Project will or could have a significant effect on the environment and does hereby adopt the Negative Declaration. The Initial Study/ Negative Declaration is available for viewing at City of Palo Alto City Hall, 6th Floor – Public Works Department, 250 Hamilton Avenue, Palo Alto, CA 94301.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

APPROVED AS TO FORM:

\_\_\_\_\_  
Assistant City Attorney

\_\_\_\_\_  
City Manager

\_\_\_\_\_  
Director of Planning and Community Environment

\_\_\_\_\_  
Director of Public Works



## FINAL INITIAL STUDY ♦ NEGATIVE DECLARATION

### Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Facility Site Permitting

**PREPARED BY** City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, California 94301  
Contact: Claire Hodgkins, AICP, Planner

**PREPARED WITH THE  
ASSISTANCE OF** Sophia Mitchell & Associates, LLC  
P.O. Box 1700  
Gualala, CA 95445

**REPORT DATE** April 2019

*This report printed on 100% post-consumer recycled content and process chlorine-free paper.*

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# INITIAL STUDY

## 1. PROJECT TITLE

Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Facility Site Permitting

## 2. LEAD AGENCY NAME AND ADDRESS

City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, California 94301

## 3. CONTACT PERSON AND PHONE NUMBER

Claire Hodgkins, AICP, Planner  
(650) 329-2116

## 4. PROJECT LOCATION

The Deconstruction/Construction Materials Management would apply to the entire City of Palo Alto (City), which is located in Santa Clara County. The inert debris facility permitting is for a portion of the former Los Altos Treatment Plant (LATP) which is located at 1237 San Antonio Road in the City (APN # 116-01-013 and 116-01-047).

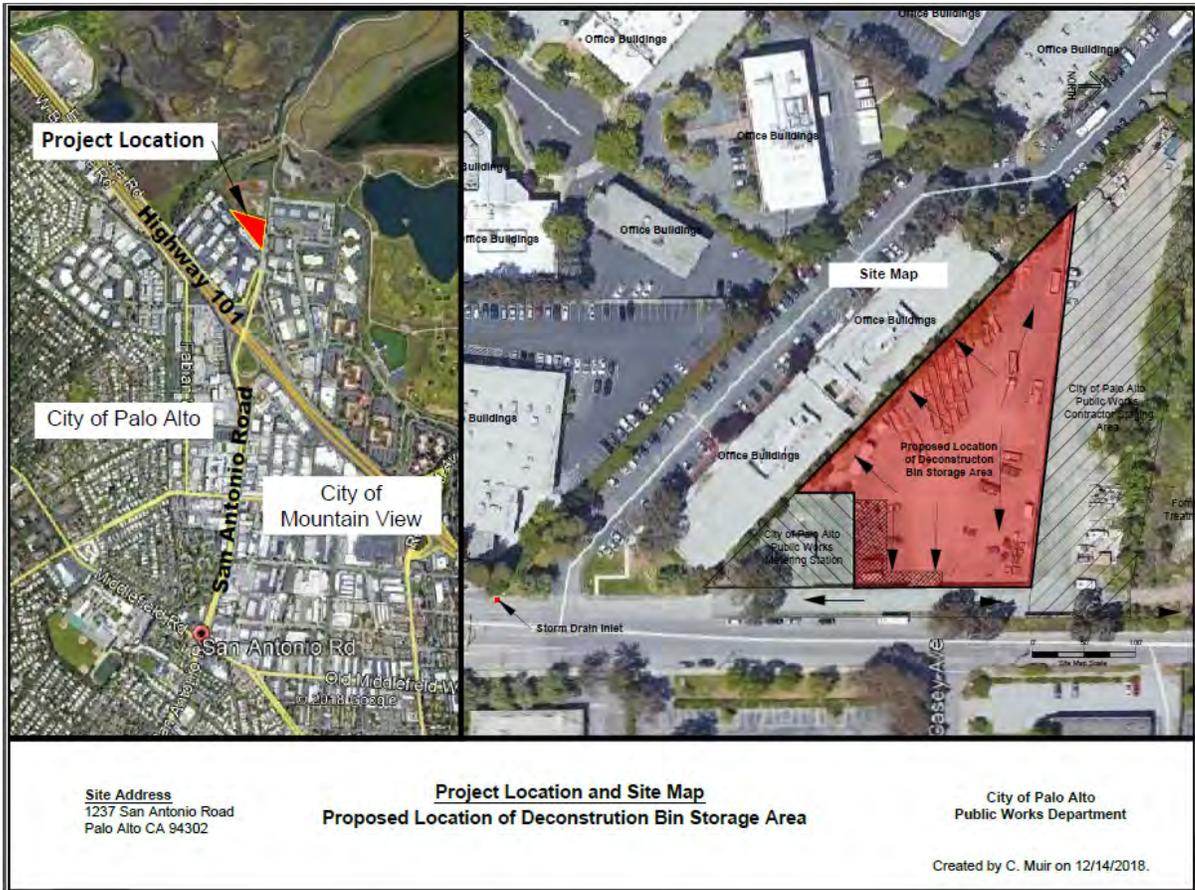
## 5. PROJECT SPONSOR'S NAME AND ADDRESS

City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, California 94301

## 6. EXISTING SETTING

The proposed inert debris facility (LATP consolidation site) is 1.16 acres of a larger 13.26-acre site. The area proposed for use is paved. The area of the larger site directly north of the LATP consolidation site is used as a contractor rental area where contractors can stage their equipment and construction materials for City projects. The northern most acreage of the LATP consists of open space, dilapidated buildings and old sewage ponds – now considered wetlands. The properties adjacent to the LATP site are commercial businesses. On the east, there are two roads, one that leads into the contractor rental area of the larger site and the other is San Antonio Road. Commercial businesses are on the far side of San Antonio Road. Figure 1 shows the proposed LATP consolidation site.

**Figure 1 Proposed Materials Consolidation Site**



## 7. COMPREHENSIVE PLAN DESIGNATION

The proposed LAMP consolidation site has a land use designation of Major Institution/Special Facility according to the City of Palo Alto’s Comprehensive Plan.

As described in the Comprehensive Plan, the Major Institution/Special Facility land use designation describes areas that are for institutional, academic, governmental and community service uses and lands that are either publicly owned or operated as non-profit organizations.

## 8. ZONING

The proposed LAMP consolidation site has a zoning designation of PF(D), Public Facilities District. This designation is designed to accommodate governmental, public utility, educational, community service, or recreational facilities. Within the PF District, Public/Quasi-Public Facility uses are permitted, which includes all facilities owned or leased, and operated or used, by the City of Palo Alto, the County of Santa Clara, the State of California, the government of the United States, the Palo Alto Unified School

District, or any other governmental agency, or leased by any such agency to another party.

## 9. DESCRIPTION OF PROJECT

The proposed project is the adoption of a new Deconstruction/Construction Materials Management Ordinance (Ordinance) and the approval of an inert debris transfer facility to consolidate materials for offsite transfer for the City of Palo Alto (City). The Ordinance will result in changes to Chapter 5.24 of the City's Municipal Code.

### **Deconstruction/Construction Materials Management Ordinance**

The proposed Deconstruction/Construction Materials Management Ordinance (Ordinance) addresses construction materials management, with the primary goals of increasing: 1) salvage of materials for reuse; 2) recovery of more materials (higher diversion from landfill disposal); and 3) the quality of recyclable materials for all construction related projects. The Ordinance would require construction projects to use deconstruction methods of structure removal (instead of demolition) and the construction-related waste would be required to be source separated into categories in separate bins, boxes or truck trailers<sup>1</sup>.

### **Existing C&D Materials Management**

Over the last several years, construction related waste constituted approximately 40 percent of all of the waste that was disposed in landfills by all entities from the City. The City has approved waste diversion goals of 90 percent diversion of solid waste from the landfill by 2021 and 95 percent diversion by 2030.

Currently, Construction and Demolition (C&D) projects are required to meet the City's Green Building requirements to achieve an 80 percent diversion rate with material currently taken to local C&D recycling facilities, including the Zanker Materials Processing Facility (Zanker) in San Jose. All single-family residential projects obtaining a whole house demolition permit are required to complete a deconstruction/salvage survey provided by a third-party entity approved by the Chief Building Official. Additionally, the City requires that all permittees with projects valued over \$25,000 are required to track the weights of materials removed from project sites in Green Halo.<sup>2</sup>

---

<sup>1</sup> Source separated materials means recyclable materials that are separated from other recyclable materials or solid waste and placed in separate containers according to type or category of materials and directly marketed as a single commodity.

<sup>2</sup> Green Halo is a web-based service for waste diversion and recycling tracking.

***Proposed Construction-Related Material Management***

Under the proposed Ordinance, the following initial conceptual changes and/or expansion related to construction materials management would occur within a phased implementation plan:

- All single family residential dwelling units and commercial applicants shall obtain salvage surveys on construction projects valued at \$50,000 or more.
- Contractors shall ensure that all items indicated on the salvage survey are properly salvaged and certified by City-approved salvage facilities.
- All projects where structures are being partially or fully removed and where materials are generated shall be deconstructed (not demolished, except for concrete and pavement).
- Materials generated during deconstruction activities shall be source separated by contractors (as approved by City) and delivered to City-approved materials recovery facilities.
- During construction, contractors shall sort and separate all materials in accordance with the City's Zero Waste program requirements and sort materials in appropriate containers.
- Contractor shall utilize the City's contractor, GreenWaste of Palo Alto (GreenWaste), to haul all materials if using containers/debris boxes. Contractors can continue to self-haul material by using trucks but must still source separate materials in accordance with City 's new requirements (above) and deliver materials to City-approved materials recovery facilities.
- Contractors for all projects over \$25,000 shall ensure that the following data is inputted in Green Halo: 1) the salvaged and reused inventory and their ultimate disposition and 2) the weights and types of all source separated materials generated at their site and where these materials were delivered.

The source separated construction related material would be collected by GreenWaste of Palo Alto (GreenWaste) from the generation site in large debris boxes (7, 15, 20, 30 and 40 cubic yards) as is the current practice, or in smaller bins (2, 3 or 4 cubic yards) on an on-call basis. The recycle, compost, and landfill drop boxes/bins would be differentiated from each other with unique, color-coded signage identifying the material type they are meant to contain. Materials to be source separated include, but are not limited to steel, glass, brick, concrete, asphalt, roofing material, pipe, gypsum,

sheetrock, lumber, wood, pallets, rocks, sand, soil, clean cardboard, paper, plastic, carpet, wood scrap, and metal scrap. It is expected that up to 7,500 tons of material could be diverted from the landfill each year through implementation of the Ordinance.

### **Transfer Operation and LATP Transfer Location Description**

GreenWaste would deliver the smaller bins of source separated material from the generation site directly to the LATP transfer location at 1237 San Antonio Road. Currently materials from the generation sites go directly to the Zanker facility. The project adds an interim consolidation point at the LATP prior to transfer to the Zanker facility for the material from generators that are generating smaller amounts of debris that do not warrant larger debris boxes. Generators that utilize the larger debris boxes will continue to have their material taken directly to the Zanker facility.

The smaller bins would be weighed on a portable scale and emptied into typically 40 cubic yard sized boxes staged at the LATP site. Once the debris boxes are full, they would be hauled to the Zanker or related facility. The LATP consolidation site would not receive putrescible (likely to decay), hazardous, or liquid wastes.

The LATP consolidation site is owned by the City and would be considered as a Construction and Demolition/Inert Debris Recycling Center. It would be the southernmost 1.16 acres of a larger 13.26-acre site (Figure 1).

The area of the larger (13.26 acre) site directly north of the LATP consolidation site is currently used as a contractor rental area where contractors can stage their equipment and construction materials for City projects. The northern most acreage of the LATP consists of open space, dilapidated buildings and old sewage ponds – now considered wetlands. The properties adjacent to the LATP site are commercial businesses. On the east, there are two roads, one that leads into the contractor rental area of the larger site and the other is San Antonio Road. Commercial businesses are on the far side of San Antonio Road.

No chipping, grinding or other processing would be completed at the LATP. The maximum timeframe the inert materials would be stored would be a maximum of 30 days. Public access to the LATP site will not be allowed. The 1.16 acre consolidation site is currently used as the GreenWaste storage yard and is already completely secured by fencing and locked gates.

GreenWaste would operate the LATP transfer site. As stated above, debris boxes will be staged at the site to consolidate the materials. GreenWaste will collect the smaller sized bins full of material from construction sites, bring them to the LATP consolidation site, weigh the material, and transfer the material in them into the larger debris boxes. The

LATP consolidation site would operate Monday through Friday from 6:00 AM to 3:00 PM.

**Table 1** summarizes the anticipated amount of throughput at the LATP consolidation site and the associated number of truck trips with implementation of the Ordinance.

**Table 1. LATP Throughput under Proposed Ordinance**

Item	Tons	Cubic Yards	Trips
<b>Incoming: Construction Related Waste to LATP</b>			
Per Year	7,000 tons	48,500 cys	6,063 trips <sup>(1)</sup>
Average Per Day (260 days)	27 tons	187 cys	23 trips <sup>(2)</sup>
<b>Outgoing: Consolidated Boxes to Zanker Facility</b>			
Per Year	7,000 tons	48,500 cys	1,617 trips
Average Per Day (260 days)	27 tons	187 cys	6 trips <sup>(3)</sup>

Notes:

- (1) The scat truck can take two bins at a time.
- (2) Assume 4 cubic yard sized. During busy season four bins at a time could be delivered on flatbed trucks.
- (3) Assume 30 cubic yard sized boxes.

As shown in Table 1, incoming trips of bins from the generation sites to LATP would be 6,063 trips/year or 23 trip/day. Outgoing trips of the consolidated boxes to the Zanker facility would be 1,617 trips /year or 6 trips/day. It is important to note that not all of these would be new trips since materials are currently being collected from the generation sites and taken to Zanker facility. Current trips and the net change with implementation of the Ordinance are discussed in the Trip Generation section of this project description.

**Trip Generation**

Implementation of the Ordinance would result in an increase in trip generation for both vehicles and trucks.

***Trip Generation from Materials Salvage*** - For each individual deconstruction project the following number of trips would be generated for salvage of reusable materials:

- One vehicular trip for a salvage inspector and
- One truck trip for taking materials to the salvage yard located at The Reuse People in Oakland, CA or another not yet specified facility.

It is expected that an average of 926 construction and/or demolition projects per year would have to comply with the Ordinance. This number was determined based upon the three-year average of permit applications received from 2015 through 2017. When applying the deconstruction trip generation assumptions for each project, as noted above, this would result in 926 vehicular trips per year for salvage inspectors, 926 truck trips per year for taking materials to salvage yards. A one-way trip length of 28 miles from the City to the salvage yard (Reuse People) in Oakland is assumed for this analysis.

**Trip Generation from Source Separated Materials** - Table 1 presented the anticipated number of trips generated by implementation of the Deconstruction/Construction Materials Management Ordinance as it relates to the transport of bins from the generation sites to the LTP consolidation site and then to the Zanker facility. It is estimated that half of the material generated will be in large debris boxes not requiring consolidation and therefore will go directly to an approved processing facility.

It is important to note that not all of these would be new trips since materials are currently being collected from the generation sites and taken to the Zanker facility. Implementation of the Ordinance would 1) result in additional trips from the delivery and collection of more bins for source separation to and from the generation sites, and 2) result in the interim rerouting of some of the collected C&D material to the LTP for consolidation before being taken to the Zanker facility. **Table 2** provides information on the number of trips under the current operations and the number of trips under the proposed Ordinance.

As shown in Table 2, the current handling of construction generated waste results in approximately 12 trips/day for a total of 168 miles. Implementation of the Ordinance is expected to generate 35 trips/day for a total of 225 miles. Therefore, the net increase between current and proposed operations would be 23 trips and approximately 57 additional miles of truck travel.

**Table 2. Comparison of Current and Proposed Construction-Related Waste Transport**

Item	Distance <sup>(1)</sup>	Trips/Year Trips/Day
<b>CURRENT OPERATIONS</b>		
Construction Related Waste to Zanker Facility	14 miles	3,233 trips/year 12 trips/day
Total Miles Current Operations	45,262 miles per year 168 miles/day	
<b>OPERATIONS UNDER PROPOSED ORDINANCE</b>		
Construction Related Waste to LTP	3 miles	6,063 trips/year

## INITIAL STUDY

		23 trips/day
Consolidated Boxes from LAMP to Zanker Facility	12 miles	1,617 trips/year 6 trips/day
Construction Related Waste Direct from Generator to Zanker Facility	14 miles	1,617 trips/year 6 trips/day
Total Trips Per Day Under Proposed Ordinance		35 trips/day
Net Change in Trips Per Day		23 trips/day
Total Miles Per Day Under Proposed Ordinance	225 miles/day	
Net Change in Miles Per Day	57 miles/day	

Note: (1) Average miles derived from the approximate center of the City at Oregon Expressway and Middlefield Road to LAMP facility or Zanker Facility except those from the LAMP facility to the Zanker facility.

## 10. SURROUNDING LAND USES

The area of the larger site directly north of the LAMP consolidation site is used as a contractor rental area where contractors can stage their equipment and construction materials for City projects. The northern most acreage of the LAMP consists of open space, dilapidated buildings and old sewage ponds – now considered wetlands. The properties adjacent to the LAMP site are developed. To the south are light industrial/office buildings. To the west and northwest, on the opposite side of San Antonio Road are additional light industrial/office buildings.

## 11. OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

The LAMP consolidation site would be considered as a Construction and Demolition/Inert Debris Recycling Center. Approval for this designation has come from the County of Santa Clara Department of Environmental Health (DEH) Solid Waste Program which is certified as the Local Enforcement Agency (LEA) by the California Department of Resources, Recycling and Recovery (CalRecycle). The LEA regulates solid waste facilities to ensure compliance with state minimum standards. The LEA would be a Responsible Agency under the California Environmental Quality Act (CEQA) for the project.

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture and Forest Resources   | <input type="checkbox"/> Air Quality               |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural and Tribal Resources      | <input type="checkbox"/> Geology and Soils         |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials    | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use and Planning    | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                     |
| <input type="checkbox"/> Population and Housing   | <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                |
| <input type="checkbox"/> Transportation           | <input type="checkbox"/> Tribal Cultural Resources          | <input type="checkbox"/> Energy                    |
| <input type="checkbox"/> Wildfire                 | <input type="checkbox"/> Mandatory Findings of Significance |  |

## DETERMINATION

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
 \_\_\_\_\_  
 Signature  
 CLARE HOPKINS, ACCP  
 \_\_\_\_\_  
 Printed Name

8-14-19  
 \_\_\_\_\_  
 Date  
 PLANNER  
 \_\_\_\_\_  
 Title

## ENVIRONMENTAL CHECKLIST

### 1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project have any of the following impacts:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. <i>Have a substantial adverse effect on a scenic vista?</i>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. <i>Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</i>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. <i>In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with the applicable zoning and other regulations governing scenic quality?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. <i>Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?</i>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. <i>Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?</i>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

a. *Have a substantial adverse effect on a scenic vista?*

#### Proposed Ordinance

The proposed Ordinance will require additional materials separation at construction and deconstruction sites. This could result in the placement of additional materials collection bins at construction sites and some of these sites could be located along scenic routes, view corridors or near primary gateways in the City. Since these additional bins would be placed within active construction/deconstruction zones, and for a short duration, it is not

anticipated they would result in a noticeable visual change compared to the concurrent construction/ deconstruction activities. Impacts would be less than significant.

### **LATP Consolidation Site**

The area of the larger site directly north of the proposed LATP consolidation site is used as a contractor rental area where contractors can stage their equipment and construction materials for City projects. The northern most acreage of the proposed LATP consolidation site consists of open space, dilapidated buildings and old sewage ponds – now considered wetlands.

The properties adjacent to the LATP site are developed. To the south are light industrial/ office buildings. To the west and northwest, on the opposite side of San Antonio Road are additional light industrial/office buildings.

The site is not identified as being along a major view corridor, scenic route, or near a primary gateway, as shown on Map L-4 of the adopted Comprehensive Plan. Proposed consolidation and temporary storage activities at the proposed LATP site would occur behind a fenced area in an existing storage yard that is already fenced, and would not be visible from a public street. There would be no visible change from offsite locations. Impacts would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

*b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

There are no Officially Designated State Scenic Highways in Palo Alto. A very small segment of Interstate 280 passes through the City (north of Page Mill Road), and that segment is eligible for listing as a State Scenic Highway but is not officially designated.

### **Proposed Ordinance**

The proposed Ordinance will require additional materials separation at construction and deconstruction sites. This could result in the placement of additional materials collection bins at construction sites and some of these sites could be located along scenic routes, view corridors or near primary gateways in the City. Since these additional bins would be placed within active construction/deconstruction zones, it is not anticipated they would result in a noticeable visual change compared to the concurrent construction/ deconstruction activities. However, all construction sites are required to have perimeter fencing for safety. Though the fencing may be of any type, fencing with visual screening is used on most sites for increased site security. Therefore, bins on construction sites would not typically be visible from the public right-of-way. Impacts would be less than significant.

### **LATP Consolidation Site**

The proposed LATP consolidation site is not identified as being adjacent to a scenic corridor in the adopted Comprehensive Plan. The closest state highway to the project site is US Highway 101, which is located approximately 0.2 miles south of the project site. US Highway 101 in Santa Clara is not identified as an Officially Designated State Scenic Highway or an eligible State Scenic Highway by Caltrans. Proposed materials consolidation and temporary storage activities will occur within already paved areas at the site and would not result in

any impact to trees rock outcroppings or historic buildings. No impact is identified for this issue area.

**LESS THAN SIGNIFICANT IMPACT**

- c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with the applicable zoning and other regulations governing scenic quality?*

**Proposed Ordinance**

The proposed Ordinance would apply to all areas within the City, both urbanized and non-urbanized. The proposed Ordinance will require additional materials separation at construction and deconstruction sites. This could result in the temporary placement of additional materials collection bins at active construction site throughout the City. Since these additional bins would be placed within active construction/ deconstruction zones and for a short duration, it is not anticipated they would result in a substantial degradation to the visual character or quality of the sites. Impacts would be less than significant.

**LATP Consolidation Site**

The proposed LATP Consolidation site is located in an urbanized portion of the City. The site is not identified as being along a major view corridor, scenic route or near a primary gateway, as shown on Map L-4 of the adopted Comprehensive Plan. The proposed use of construction/deconstruction materials consolidation and temporary storage would be consistent with the uses allowed under the Public Facilities District designation. No conflict with zoning or other regulations governing scenic quality would occur.

**LESS THAN SIGNIFICANT IMPACT**

- d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

**Proposed Ordinance**

The proposed Ordinance would not create any new sources of substantial light or glare. The proposed Ordinance addresses the management of deconstruction and construction materials. Implementation of the proposed Ordinance would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views and no impact is identified.

**LATP Consolidation Site**

The proposed LATP consolidation site already has lighting for safety and security. No new lighting is proposed. Additionally, no new structures or other equipment is proposed at the LATP consolidation site which would create a new source of lighting or glare. No impact is identified for this issue area.

**NO IMPACT**

ENVIRONMENTAL CHECKLIST  
AESTHETICS

*e. Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?*

**Proposed Ordinance**

The proposed Ordinance would not result in any conditions which would result in substantial shadow to public open spaces. No impact is identified for this issue area.

**LATP Consolidation Site**

The proposed LATP consolidation site will not result in the building of any structures, so there would not be any potential to shadow public spaces. No impact is identified for this issue area.

**No IMPACT**

## 2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project have any of the following impacts:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. Conflict with existing zoning for agricultural use or a Williamson Act contract?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>c. Conflict with existing zoning for or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>d. Result in the loss of forest land or conversion of forest land to non-forest use?</p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- 
- a. Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public

ENVIRONMENTAL CHECKLIST  
AGRICULTURE AND FORESTRY RESOURCES

*Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

**Proposed Ordinance**

The proposed Ordinance addresses the management of deconstruction and construction materials to reduce the amount of materials that go to the landfill. As such, the proposed Ordinance would have no impact with respect to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use; conflict with existing agricultural zoning or Williamson Act contracts; result in the loss of forest land or conversion of forest land to non-forest use; or other conversion of farmland to non-agricultural use.

**LATP Consolidation Site**

The proposed LATP consolidation site is located on Urban and Built-Up Land, per the Department of Conservation's Important Farmland Finder (DOC 2016). The site is not identified as any farmland type, it is not enrolled in Williamson Act contracts, and it does not support forest land or resources. The site is not located on or adjacent to agricultural land or forest land and the proposed project would not involve any development that could result in the conversion of farmland to non-agricultural uses. The proposed LATP consolidation site is currently used for storage and staging of construction materials for contractors for City projects. For these reasons, the project would have no impact with respect to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use; conflict with existing agricultural zoning or Williamson Act contracts; result in the loss of forest land or conversion of forest land to non-forest use; or other conversion of farmland to non-agricultural use.

**No IMPACT**

### 3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project have any of the following impacts:

a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emission (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### AIR QUALITY STANDARDS AND ATTAINMENT

The proposed Ordinance would apply to the entire City. The proposed LAMP consolidation site is located at 1237 San Antonio Road. The Bay Area Air Quality Management District (BAAQMD) regulates air quality emissions within the City.

#### AIR QUALITY MANAGEMENT

The Bay Area 2017 Clean Air Plan (CAP) provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the CAP was to update the most recent ozone plan, the 2010 Clean Air Plan, to comply with state air quality planning requirements as codified in the California Health & Safety Code. Although steady progress in reducing ozone levels in the Bay Area has been made, the region continues to be designated as non-attainment for both the one-hour and eight-hour state ozone standards. In addition, emissions of ozone precursors in the Bay Area contribute to air quality problems in neighboring air basins. Under these circumstances, state law requires the CAP to include all feasible measures to reduce emissions of ozone precursors and reduce transport of ozone precursors to neighboring air basins (BAAQMD 2017).

In 2006, the U.S. Environmental Protection Agency (EPA) tightened the national 24-hour PM<sub>2.5</sub> standard regarding short-term exposure to fine particulate matter from 65 µg/m<sup>3</sup> (micro-grams per cubic meter) to 35 µg/m<sup>3</sup>. Based on air quality monitoring data for years 2006-2008 showing that the region was slightly above the standard, U.S. EPA designated the

Bay Area as non-attainment for the 24-hour national standard in December 2008. This triggered the requirement for the Bay Area to prepare a State Implementation Plan (SIP) submittal to demonstrate how the region would attain the standard. However, data for both the 2008-2010 and the 2009-2011 cycles showed that Bay Area PM<sub>2.5</sub> levels currently meet the standard. On October 29, 2012, the U.S. EPA issued a proposed rule-making to determine that the Bay Area now attains the 24-hour PM<sub>2.5</sub> national standard. Based on this, the Bay Area is required to prepare an abbreviated SIP submittal which includes an emission inventory for primary (directly-emitted) PM<sub>2.5</sub>, as well as precursor pollutants that contribute to formation of secondary PM in the atmosphere; and amendments to the BAAQMD New Source Review (NSR) to address PM<sub>2.5</sub> (adopted December 2012).<sup>3</sup> However, key SIP requirements to demonstrate how a region will achieve the standard (i.e. the requirement to develop a plan to attain the standard) will be suspended as long as monitoring data continues to show that the Bay Area attains the standard.

In addition to preparing the “abbreviated” SIP submittal, the BAAQMD has prepared a report entitled “Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area” (2012). The report will help to guide the BAAQMD’s on-going efforts to analyze and reduce PM in the Bay Area in order to better protect public health. The Bay Area will continue to be designated as “non-attainment” for the national 24-hour PM<sub>2.5</sub> standard until such time as the Air District elects to submit a “redesignation request” and a “maintenance plan” to the U.S. EPA, and the U.S. EPA approves the proposed redesignation.

#### AIR EMISSION THRESHOLDS

The BAAQMD May 2017 CEQA Air Quality Guidelines include revisions made to the 2010 Guidelines, addressing the California Supreme Court’s 2015 opinion in the *Cal. Bldg. Indus. Ass’n vs. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369 (BAAQMD 2017a). For this Initial Study, the City of Palo Alto has determined that the BAAQMD’s significance thresholds in the updated May 2017 BAAQMD CEQA Guidelines for project operations in the Basin are the most appropriate thresholds for use in determining air quality impacts of the proposed project. Table 1 presents the significance thresholds for construction and operational-related criteria air pollutant and precursor emissions being used for the purposes of this analysis. These represent the levels at which a project’s individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin’s existing air quality conditions. For the purposes of this analysis, the proposed project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 1.<sup>4</sup>

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<sup>3</sup> PM is made up of particles that are emitted directly, such as soot and fugitive dust, as well as secondary particles that are formed in the atmosphere from chemical reactions involving precursor pollutants such as oxides of nitrogen (NOx), sulfur oxides (SOx), volatile organic compounds (VOC), and ammonia (NH<sub>3</sub>).

<sup>4</sup> Note the thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> apply to construction exhaust emissions only.

**Table 1 BAAQMD Air Quality Thresholds of Significance**

Pollutant/ Precursor	Construction-Related Thresholds		Operation-Related Thresholds	
	Average Daily Emissions (pounds per day)	Average Daily Emissions (pounds per day)	Average Daily Emissions (pounds per day)	Maximum Annual Emissions (tons per year)
ROG	54	54	54	10
NOX	54	54	54	10
PM10	82 (exhaust)	82	82	15
PM2.5	54 (exhaust)	54	54	10

Notes: ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM<sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.

Source: Table 2-1, BAAQMD 2017b.

In addition, a significant air quality impact would occur if the project design or project construction does not incorporate control measures recommended by the BAAQMD to control emissions during construction (as listed in Table 8-1 of the BAAQMD CEQA Guidelines).

### IMPACT ANALYSIS

- a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*
- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

### Construction Emissions

The project will not result in any construction emissions since no construction is proposed at the LAMP consolidation site. Construction and/or deconstruction activities that would occur at the generator sites would have already been analyzed for potential environmental impacts, including any air quality impact. The proposed Ordinance addresses the debris generated by construction and deconstruction projects that would have already been approved.

### Operational Emissions

Operational emissions from the project would be primarily from vehicular emissions. Some dust emissions may be created when bins are consolidated into larger boxes at the LAMP site.

Emissions were modeled via CalEEMod and the model was modified by manually adjusting vehicular trips to 100 percent trucks. The calculated operational daily emissions are

identified in **Table 4** and yearly emissions are shown in **Table 5** and shown in Appendix A to the air quality technical memorandum (LDN 2019).

**Table 4 Expected Daily Operational Air Quality Emissions**

	ROG	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
Summer Scenario				
Operational Emission Estimates (Lb/Day)	0.081	1.815	0.023	0.062
BAAQMD Thresholds	54	54	54	82
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Winter Scenario				
Operational Estimates (Lb/Day)	0.088	1.840	0.023	0.062
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: LDN 2019

**Table 5 Expected Yearly Operational Air Quality Emissions**

	ROG	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
Annual Scenario				
Operational Emission Estimates (Ton/Year)	0.011	0.238	0.003	0.008
BAAQMD Thresholds (Ton/Year)	10	10	10	15
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: LDN 2019

Based upon the conclusions presented in Tables 4 and 5, the daily and annual operations of the deconstruction/construction materials management and inert debris transfer facility activities are anticipated to produce air quality emissions well below BAAQMD thresholds. Impacts would be less than significant.

The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. All daily and annual operational emission would be well below BAAQMD screening thresholds.

**CALIFORNIA AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE**

To ensure safe levels of local CO emissions, CAAQS sets the following thresholds for CO:

- ◆ 9.0 ppm (8-hour average)
- ◆ 20.0 ppm (1-hour average)

BAAQMD provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed CO thresholds. If the following criteria are met, a project would result in a less than significant impact related to local CO concentrations:

ENVIRONMENTAL CHECKLIST  
AIR QUALITY

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Analysis of the proposed project's traffic impacts (Section 16) indicates that the proposed project meets all three criteria listed above. As a result, the project would have a less than significant impact related to local CO concentrations.

As the project would be in compliance with BAAQMD criteria pollutant thresholds, and CAAQS CO thresholds, the project would not result in individually or cumulatively significant impacts to air quality.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

Sensitive receptors, such as hospitals, schools, daycare facilities, elderly housing and convalescent facilities, could be located near proposed construction and deconstruction sites, since these projects could occur in all areas of the City. The sorting of construction materials at generator sites and the pick-up and delivery of sorting bins would not result in the generation of substantial pollutant concentrations. There are no sensitive receptors adjacent to the proposed LAMP consolidation site. Further the activities proposed at the LAMP site (consolidation and temporary storage of inert construction debris) are not a type to generate substantial pollutant concentrations. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project result in other emission (such as those leading to odors) adversely affecting a substantial number of people?*

Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes. The proposed project, which includes implementation of a construction materials management program and a consolidation site at the former LAMP site for inert materials consolidation and storage, would not result in activities which could result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people. The LAMP consolidation site would not receive putrescible (likely to decay), hazardous, or liquid wastes. No impact is identified for this issue area.

**NO IMPACT**

# 4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>a. <i>Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</i></p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. <i>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>c. <i>Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>d. <i>Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>e. <i>Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?</i></p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>f. <i>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

ENVIRONMENTAL CHECKLIST  
BIOLOGICAL RESOURCES

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*
- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*
- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Proposed Ordinance**

The proposed Ordinance applies to the entire City and within the City there are sensitive biological resources including sensitive habitats, sensitive species, riparian areas, state and federally protected wetlands, and/or wildlife corridors or nursery sites.

The proposed Ordinance addresses materials separation for construction/deconstruction projects. While there is a possibility that future construction/deconstruction activities could impact sensitive biological resources, such projects would be subject to review and approval by City staff and would be subject to their own environmental review and mitigation (if sensitive biological resources are present). The proposed Ordinance does not directly or indirectly impact sensitive biological resources, rather it addresses the management and disposition of materials from debris generated by construction/deconstruction activities. Therefore, no impact is identified for this issue area.

**LATP Consolidation Site**

The proposed LATP consolidation site is located in an urbanized area of Palo Alto, and has been graded and paved for the existing construction staging and equipment storage uses that already occur on the site. There are no sensitive resources on the proposed consolidation site.

The addition of construction and deconstruction debris consolidation and temporary storage of these materials would not result in any impacts to habitat or species protected by CDFW or USFWS, riparian habitat or other sensitive natural communities, state or federally protected wetlands, nor would it interfere substantially with the movement of any native resident or migratory fish or wildlife species, wildlife corridors, or wildlife nursery site. No impact is identified.

**No IMPACT**

ENVIRONMENTAL CHECKLIST  
BIOLOGICAL RESOURCES

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?*

According to the City's CEQA thresholds, a significant impact would occur if the project would conflict with the City's Tree Preservation Ordinance. The purpose of the City of Palo Alto Tree Preservation Ordinance (PAMC Chapter 8.10) is to promote the health, safety, welfare, and quality property within the city, and the establishment of standards for removal, maintenance, and planting of trees. In establishing these procedures and standards, it is the City's intent to encourage the preservation of trees.

**Proposed Ordinance**

The proposed Ordinance addresses materials separation for construction/deconstruction projects. While there is a possibility that future construction/deconstruction activities could impact trees, such projects would be subject to review and approval by City staff and would be subject to their own environmental review. The proposed Ordinance does not directly or indirectly impact trees, rather it addresses the management and disposition of debris materials generated from construction/deconstruction activities. Therefore, no impact is identified for this issue area.

**LATP Consolidation Site**

The activities proposed at the LATP consolidation site would occur within already developed/paved areas and would not result in any impact to trees.

**No IMPACT**

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The proposed project would not occur within an approved Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CDFW 2017). No impact would occur.

**No IMPACT**

# 5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either:				
1. A site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. A resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL CHECKLIST  
CULTURAL RESOURCES

- a. *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*
- b. *Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*
- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*
- d.1. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- d.2. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

**Proposed Ordinance**

The proposed Ordinance addresses materials separation for construction/deconstruction projects. While there is a possibility that future construction/deconstruction activities could be located on sites that contain historical resources, archaeological resources, tribal cultural resources or could encounter human remains interred outside of formal cemeteries, such projects would be subject to review and approval by City staff and would be subject to their own environmental review. The implementation of the Ordinance does not increase the potential for impacting these types of resources. Any inadvertent finds of human remains would be handled in a manner consistent with California Health and Safety Code Section 7050.5.

The proposed Ordinance does not directly or indirectly impact historical resources, archaeological resources, or tribal cultural resources, rather it addresses the management and disposition of debris materials from construction/deconstruction activities.

**LATP Consolidation Site**

The proposed LATP consolidation site is already developed and paved. The proposed site is not identified as containing any cultural or historic resources in Map L-5 in the City's adopted Comprehensive Plan. The consolidation and temporary storage of construction/deconstruction debris would occur within paved areas and would not result in any impact to historical resources, archaeological resources, or tribal cultural resources.

**No IMPACT**

## 6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. *Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:*

1. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

2. *Strong seismic ground shaking?*

3. *Seismic-related ground failure, including liquefaction?*

4. *Landslides?*

5. *Expansive Soils?*

b. *Result in substantial soil erosion or loss of topsoil?*

c. *Be located on a geologic unit or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?*

d. *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

ENVIRONMENTAL CHECKLIST  
GEOLOGY AND SOILS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e. <i>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a1. *Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The proposed LAMP consolidation site is not located in an area that has been identified as having a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map (Santa Clara County 2019). The nearest known active fault is the San Andreas Fault, which is approximately eight miles west of the site. As a result, the proposed consolidation site would not be subject to ground rupture. No impact would occur.

**NO IMPACT**

a2. *Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

As with much of the Bay Area region, the City is susceptible to strong seismic ground shaking in the event of a major earthquake. Nearby active faults include the San Andreas Fault. The project, which includes the implementation of an Ordinance addressing construction and deconstruction materials management and the use of a portion of the LAMP site to consolidate and temporarily store these materials, would not expose people or structures to substantial adverse effects from seismic ground shaking. No development or construction of structures is proposed to be built as part of the project.

**NO IMPACT**

a3. *Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction is a condition that occurs when unconsolidated, saturated soils change to a near-liquid state during groundshaking.

According to Map S-3 (Liquefaction Risk) in the Comprehensive Plan, the proposed LAMP consolidation site is located in an area with a very high risk for liquefaction. No construction or development is proposed at the site. Proposed activities at the LAMP site would be the consolidation and short-term storage of construction and deconstruction debris. This would not be characterized as a use that would expose people or structures to potential

substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a4. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

Earthquakes can trigger landslides that may cause injuries and damage. The proposed LAMP consolidation site is located on a level piece of property in a lower-elevation portion of the City. No construction or development is proposed at the LAMP consolidation site. The proposed use includes the consolidation and short-term storage of construction and deconstruction debris. This would not be characterized as a use that would expose people or structure to potential substantial adverse effects from landslides. The project would not increase the risk of exposure of people or structures to adverse effects involving landslides.

**NO IMPACT**

*a.5 Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving expansive soils?*

Per Map S-4 (Geotechnical Hazards) in the City's Comprehensive Plan, the LAMP consolidation site is not identified as being located in an area with expansive soils. The consolidation and temporary storage of construction/deconstruction debris would not result in the exposure of people or structure to adverse effects due to expansive soils. No impact is identified for this issue area.

**NO IMPACT**

*b. Would the project result in substantial soil erosion or loss of topsoil?*

The proposed LAMP consolidation site would not require any ground disturbance or other activities which could result in a substantial erosion or loss of top soil. The consolidation of construction/deconstruction debris materials and temporary storage of the bins and boxes would occur within paved areas. No impact is identified for this issue area.

**NO IMPACT**

*c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

The project does not propose any construction or activities that could result in disturbance of unstable soils thereby causing on- or off-site landslide, lateral spread, subsidence, liquefaction or collapse. The proposed use at the LAMP site includes the consolidation and short-term storage of construction and deconstruction debris materials.

**NO IMPACT**

**ENVIRONMENTAL CHECKLIST  
GEOLOGY AND SOILS**

- d. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The proposed project would not require the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

**NO IMPACT**

- e. *Would the project directly or indirectly destroy a unique paleontological resource or unique geologic feature?*

The proposed Ordinance addresses materials separation for construction/deconstruction debris. While there is a possibility that future construction/deconstruction activities could be located on sites that contain unique paleontological or geologic features, such projects would be subject to review and approval by City staff and would be subject to their own environmental review. The proposed Ordinance does not directly or indirectly destroy a unique paleontological resources or unique geologic feature, rather it addresses the management and disposition of materials from construction/deconstruction activities.

The proposed LATP consolidation site is developed and paved. There would not be any ground disturbing activities at the site. Consolidation and temporary storage facilities would occur within paved areas and would not have the potential to directly or indirectly destroy unique paleontological resources or unique geologic features. No impact would occur.

**NO IMPACT**

## 7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>a. <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i></p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. <i>Conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases?</i></p>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs), gases that trap heat in the atmosphere, analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas CH<sub>4</sub> results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>) (Cal EPA 2015).

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat trapping effect of GHGs, Earth’s surface would be about 34° C cooler (Cal EPA 2015). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute

incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

In late 2015, the California Supreme Court's Newhall Ranch decision confirmed that there are multiple potential pathways for evaluating GHG emissions consistent with CEQA, depending on the circumstances of a given project (Center for Biological Diversity v. Department of Fish and Wildlife (2015) 62 Cal. 4th 204). The decision also identified the need to analyze both near term and post-2020 emissions, as applicable, stating that an "EIR taking a goal-consistency approach to CEQA significance may in the near future need to consider the project's effects on meeting longer term emissions reduction targets." While not legally binding on local land use agencies, SB 32 extends the statewide AB 32 reduction goal, requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030, and Executive Order S-03-05 has set forth a long-term reduction target to reduce GHG emissions in California by 80 percent below 1990 levels by the year 2050.

While the State has adopted the AB 32 Scoping Plan and multiple regulations to achieve the AB 32 year 2020 target, there is no currently adopted State plan to meet post-2020 GHG reduction goals. ARB is currently working to update the Scoping Plan to provide a framework for achieving the 2030 target set forth by SB 32 (ARB 2015). As a result, State reduction strategies cannot be applied to the project to achieve long-term reductions. Achieving these long-term GHG reduction policies will require State and federal plans and policies for achieving post-2020 reduction goals. Placing the entire burden of meeting long-term reduction targets on local government or individual new development projects would be disproportionate and likely ineffective.

Given the recent legislative attention and judicial action regarding post-2020 goals and the scientific evidence that additional GHG reductions are needed through the year 2050, the Association of Environmental Professionals' (AEP) Climate Change Committee published a white paper in 2015 recommending that CEQA analyses for most land use development projects may continue to rely on current adopted thresholds for the immediate future (AEP 2015). As such, for project GHG impacts, this analysis evaluates future conditions based on consistency with the BAAQMD recommended threshold of 1,100 MT CO<sub>2</sub>e.

#### ZEROWASTE PLANNING

The proposed Ordinance is one of several initiatives that are included in the City's Zero Waste Plan update. In November 2016, the City Council approved the Sustainability and Climate Action Plan Framework, Principles & Guidelines which identified a goal of 90 percent diversion of solid waste from landfills by 2021 and a 95 percent waste diversion rate by 2030. Diversion includes all waste prevention, reuse, recycling and composting activities that "divert" materials from landfills.

Based upon City calculations included in the Zero Waste Plan update, implementation of an ordinance that emphasizes deconstruction instead of demolition and source separation of

construction (the proposed Ordinance), is expected to result in a GHG reduction of 8,580 MTCO<sub>2</sub>e per year.

### CONSTRUCTION EMISSIONS

No construction emissions are anticipated for the project. Construction and deconstruction materials, and their associated emissions would already be generated at project sites. The proposed Ordinance addresses the source separation and management of the generated debris. The proposed Ordinance would not result in any new construction or demolition activities. No construction would be required to implement the Ordinance or the proposed LAMP consolidation site. Therefore, the GHG analysis focuses on operational emissions.

### OPERATIONAL EMISSIONS

Operational emissions for the project would be associated with vehicle and truck trips. This includes trips associated with materials salvage, delivery of bins to the generator sites, pick up and transport of bins to the LAMP site for consolidation, and then transport of consolidated materials to the Zanker facility. In some instances, separated materials may go directly from the generator sites to the Zanker facility. Trip generation and trip distance assumptions are detailed in the Table 2 of the project description section of this document.

### IMPACT ANALYSIS

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

GHG emissions associated with operational emissions from the proposed project were estimated using CalEEMod. To be conservative, CalEEMod was modified to manually adjust vehicular trip to 100 percent trucks. Modeling output is included as Attachment A of the air quality memorandum prepared for the project (LDN 2019).

The expected emissions will be 67.3519 MTCO<sub>2</sub>e per year (LDN 2019). This is below the 1,100 MT MTCO<sub>2</sub>e per year threshold recommended by BAAQMD. Additionally, this calculation does not consider the GHG emissions reductions that would be realized by decreasing the amount of construction and deconstruction debris material going to the landfill. As previously stated, implementation of the proposed Ordinance could reduce GHG emissions up to 8,580 MTCO<sub>2</sub>e per year. Thus, the project would result in a net benefit with regard to GHG emissions. The project would result in an overall reduction of GHG emissions by achieving higher landfill diversion rates as contemplated in the City's Sustainability and Climate Action Plan Framework, Principles & Guidelines, which sets a goal of 90 percent diversion of solid waste from the landfill by 2021 and 95 percent diversion rate by 2030. No impact is identified for this issue area.

### **No IMPACT**

## 8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. <i>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</i>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. <i>Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</i>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. <i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?</i>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. <i>Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</i>                            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. <i>For a project within and airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. <i>Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</i>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**ENVIRONMENTAL CHECKLIST  
HAZARDS AND HAZARDOUS MATERIALS**

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Proposed Ordinance**

The project addresses the collection and handling of construction and deconstruction project debris. These are inert, non-hazardous materials. While some of the deconstruction projects could generate hazardous materials (e.g., lead-based paint, asbestos-containing materials), these materials would be handled in accordance with existing regulations and would not be included in the materials sorted and collected under the proposed Ordinance.

GreenWaste, the firm that currently handles waste collection in the City, has procedures in place regarding the collection of waste and materials and they would also be used for the construction/deconstruction debris collection. This includes outreach, signage and driver load checks.

Implementation of the proposed Ordinance would not create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be less than significant.

**LATP Consolidation Site**

As noted above, the materials that would be collected from construction/deconstruction sites would be non-hazardous. In the event that hazardous materials inadvertently come to the LATP site from the construction/deconstruction site, materials would be stored in a secure location until they could be properly disposed using a hazardous waste disposal contractor. There will not be any consolidation or temporary storage of hazardous materials at the LATP consolidation site. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

**Proposed Ordinance**

The project addresses the collection and handling of construction and deconstruction project debris. These are inert, non-hazardous materials. While some of the construction/deconstruction projects could be located within 0.25 mile of an existing or proposed school, the project does not result in any increased risk associated with hazardous materials. Deconstruction projects would be required to adhere to existing regulations regarding the handling of hazardous materials (e.g., lead-based paint, asbestos-containing material) and impacts would be less than significant.

**LATP Consolidation Site**

**ENVIRONMENTAL CHECKLIST  
HAZARDS AND HAZARDOUS MATERIALS**

The closest school to the proposed LAMP consolidation site is Palo Verde Elementary school, which is located approximately one mile to the west. As noted above, the materials that would be collected from construction/deconstruction sites would be non-hazardous. There will not be any consolidation or temporary storage of hazardous materials at the LAMP consolidation site.

**LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site or from location on listed hazardous material sites compiled pursuant to Government Code Section 65962.5?*

The proposed consolidation site is a smaller portion of a larger site that was associated with the former Los Altos Treatment Plant. A search on the Department of Toxic Substance Control's (DTSC) EnviroStor database identified the former Los Altos Treatment Plant as a Clean Up Program site. Per DTSC's information, a case was opened in 1990 and site assessments were conducted in 2008 and 2013. The site investigation history from the EnviroStor site is as follows:

*"Several investigations have taken place, most recently in 2007. Soluble lead (17 mg/l), reactive sulfide (1200 mg/kg), chromium (540 mg/kg), cobalt (220 mg/kg), copper (610 mg/kg), nickel (500 mg/kg), zinc (860 mg/kg) and arsenic (6.4 mg/kg) have been detected above PRGs/CHHSLs. Reactive sulfide is currently "trapped" in the sludge below the water in the former wastewater treatment ponds. When disturbed, this sludge releases hydrogen sulfide gas that has been detected at levels immediately dangerous to life and health (IDLH). Water in Pond 5 has been found to contain values of arsenic, cobalt, copper, nickel selenium, vanadium and zinc above Estuary Habitat environmental screening level (ESL) concentration limits. No exceedances were found in groundwater sampled at the Site."*

Proposed consolidation and storage activities would occur on paved surfaces that are already used for storage (see Figure 1). This area is located in the southwest corner of the larger LAMP site. There would not be any disturbance to the areas of concern noted in the DTSC database description. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- e. *For a project within and airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

The Palo Alto Airport of Santa Clara County (PAO) is located approximately two miles north of the proposed LAMP consolidation site. The proposed consolidation site is located just outside of the airport influence area (SCALUC 2016). The use of the site to consolidate and store construction and deconstruction debris would not result in any increase in safety hazards for people working on the site.

**NO IMPACT**

**ENVIRONMENTAL CHECKLIST  
HAZARDS AND HAZARDOUS MATERIALS**

*f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed Ordinance addresses the handling of construction and deconstruction debris. It would not result in any condition that would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Similarly, the consolidation and temporary storage of construction and deconstruction debris at the LATP site would not result in an impact to emergency response or evacuation plans. No impact is identified for this issue area.

**NO IMPACT**

# 9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| <p>a. <i>Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <p>b. <i>Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>c. <i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?</i></p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>d. <i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would substantially increase the rate of surface runoff in a manner which would result in flooding on- or offsite?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>e. <i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</i></p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

ENVIRONMENTAL CHECKLIST  
HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f. <i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. <i>In flood hazard, tsunami, or seiche zones, risk release or pollutants due to project inundation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. <i>Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. <i>Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</i>				

The proposed project would not introduce any uses which would result in an increase in demand of groundwater supplies or interfere with groundwater recharge. The project is the implementation of an ordinance addressing construction/deconstruction debris management and the consolidation and storing of the materials at the LATP site prior to transport to the Zanker facility. No impact is identified for this issue area.

**NO IMPACT**

- b. *Would the project violate any water quality standards or waste discharge requirements?*
- c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- d. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would substantially increase the rate of surface runoff in a manner which would result in flooding on- or off-site?*
- e. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would create or contribute runoff*

*water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

- f. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The proposed project does not introduce any activities or uses that would result in an increased water quality or hydrology impact. Proposed storage and consolidation activities at the LAMP site would be on an existing paved area. Storage bins and boxes that contain materials waiting to be transferred to the Zanker facility would be covered when there is rain so that there is not a potential for runoff from the stored materials.

The proposed Ordinance does not result in any new paving or placement of impervious surfaces, nor would there be any alteration of drainage patterns. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- g. *In flood hazards, tsunami, or seiche zones, would the project release of pollutants due to project inundation?*

**Proposed Ordinance**

The proposed Ordinance applies to the entire City and within the City there are areas within regulated floodways or areas that could be subject to flood hazards, including inundation areas. The proposed Ordinance addresses materials separation for construction/deconstruction projects. This would not result in any increase in the potential for release of pollutants due to inundation. Construction and deconstruction debris would already be generated at sites, the Ordinance addresses how those materials are sorted and stored.

**LAMP Consolidation Site**

According to Map S-5 (100 Year Flood Zones) of the Comprehensive Plan, the proposed LAMP consolidation site is identified as being subject to a 100-year flood. Temporary storage of construction/deconstruction materials would be in metal bins and boxes. In the event of significant rain events where there is a potential for flooding, the materials would be transferred to the Zanker facility in advance of any flooding. The project does not result in any increase in potential for release of pollutants due to site inundation.

**NO IMPACT**

- h. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project does not propose any uses or activities that would result in the potential for conflict with or obstruction of implementation of a water quality control plan or sustainable groundwater management plan. There would not be any use of groundwater for the project. No impact is identified for this issue area.

**NO IMPACT**

## 10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. <i>Physically divide an established community?</i>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. <i>Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a. *Would the project physically divide an established community?*

### Proposed Ordinance

The proposed Ordinance would address the handling of construction/deconstruction debris; it would not result in any development or activities which could divide an established community. No impact is identified for this issue area.

### LATP Consolidation Site

The proposed LATP consolidation site would occur on City-owned property that is already used for storage. The LATP site is located in a developed portion of the City in the vicinity of light industrial/office uses. Activities at the consolidation site, which consist of construction/deconstruction materials consolidation and temporary storage, would not physically divide an established community. No impact is identified for this issue area.

### NO IMPACT

b. *Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

### Proposed Ordinance

The proposed Ordinance would introduce new requirements for some construction or deconstruction projects. No conflicts with existing land use plans, policies or regulations adopted for the purpose of avoiding or mitigating environmental effects would occur. Implementation of the Ordinance helps the City get closer to achieving their landfill diversion rates and also reducing GHG emissions, as contemplated in the City's Sustainability and Climate Action Plan Framework, Principles & Guidelines.

### **LATP Consolidation Site**

The proposed LATP consolidation site has a land use designation of Major Institution/Special Facility according to the City's Comprehensive Plan. As described in the Comprehensive Plan, the Major Institution/Special Facility describes areas that are for institutional, academic, governmental and community service uses and lands that are either publicly owned or operated as non-profit organizations. The City owns the site and it is currently used for storage of equipment and supplies for contractors working on City projects. The proposed use would be similar to what is already occurring on the site and is an allowable use under the Comprehensive Plan designation.

The proposed LATP consolidation site has a zoning designation of PF(D), Public Facilities District. This designation is designed to accommodate governmental, public utility, educational, community service or recreational facilities. As mentioned above, the City owns the site and it is currently used for storage of equipment and supplies for contractors working on City projects. The proposed use would be similar to what is already occurring on the site and is an allowable use under the current zoning designation.

The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

#### **NO IMPACT**

*c. Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?*

The proposed project would not occur within an approved Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CDFW 2017). No impact would occur.

#### **NO IMPACT**

# 11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</p>                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- 
- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

**LATP Consolidation Site**

The proposed LATP consolidation site and surrounding properties are part of an urbanized area with no current oil or gas extraction. According to the Natural Environment Element of the City’s Comprehensive Plan, there are no policies relating to mineral resources because Palo Alto does not contain any mineral deposits of regional significance (City of Palo Alto Comprehensive Plan, 2007). No mineral resource activities would be altered or displaced by the proposed project. No impact would occur.

**NO IMPACT**

## 12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| <p>a. <i>Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established by the local general plan or noise ordinance, or applicable standards of other agencies?</i></p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>b. <i>Generate excessive groundborne vibration or groundborne noise levels?</i></p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>c. <i>For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</i></p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If the physical intensity of a sound is doubled, the sound level increases by 3 dBA, regardless of the initial sound level. For example, 60 dBA plus 60 dBA equals 63 dBA. Where ambient noise levels are high in comparison to a new noise source, the change in noise level would be less than 3 dBA. For example, when 70 dBA ambient noise levels are combined with a 60 dBA noise source the resulting noise level equals 70.4 dBA.

ENVIRONMENTAL CHECKLIST  
NOISE

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), ground attenuation of about 1.5 dBA per doubling of distance normally occurs. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

#### REGULATORY SETTING

The City's Comprehensive Plan Natural Environment Element includes goals and policies related to noise. This element establishes land use compatibility categories for community noise exposure (see Table ). For schools, noise levels up to 60 dBA Ldn are identified as normally acceptable and noise levels between 60 and 75 dBA Ldn are identified as conditionally acceptable.

**Table 6 Palo Alto Land Use Compatibility for Community Noise Environments**

Land Use Category	Exterior Noise Exposure Ldn or CNEL or dB		
	Normally Acceptable	Conditionally Acceptable	Unacceptable
Residential, Hotel and Motels	50-60	60-75	75+
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	50-65	65-80	80+
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches	50-60	60-75	75+
Office Buildings, Business Commercial, and Professional	50-70	70-80	80+
Auditoriums, Concert Halls, and Amphitheatres	N/A	50-75	75+
Industrial, Manufacturing, Utilities, and Agriculture	50-70	75+	N/A

Source: City of Palo Alto Comprehensive Plan Update Noise Draft Existing Conditions Report, August 29, 2014

The PAMC regulates noise primarily through the Noise Ordinance, which comprises Chapter 9.10 of the Code, under Title 9, Public Peace, Morals and Safety. The Municipal Code contains additional specific and general provisions relating to noise. Per PAMC Section 9.10.030 noise can be generated by any land use that is more than 6 dBA above the local ambient noise level at a residential property.

The Municipal Code also addresses construction-related noise in Section 9.10.060(b) for non-residential property and 9.10.060(c) for residential property. Construction, alteration and repair activities are allowed Monday through Friday from 8 AM to 6 PM and on Saturday from 9 AM to 6 PM. No construction activities are permitted on Sundays and holidays.

**IMPACT ANALYSIS**

- a. *Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established by the local general plan or noise ordinance, or applicable standards of other agencies?*

**Proposed Ordinance**

The proposed Ordinance addresses construction/deconstruction materials management and would apply to projects throughout the City that meet a certain project value threshold (\$25,000). With implementation of the Ordinance, construction and deconstruction debris sorting would be required at more sites throughout the City. The site type and the

neighboring property type would vary from construction project to construction project, as would the existing ambient noise condition at each site.

Debris handling would be a part of any construction/deconstruction project, but under the Ordinance, debris would need to be systematically sorted into specific bins on site to better facilitate recycling and landfill diversion. The increased sorting requirements are not expected to result in any significant noise increase at the project site. This is because debris handling activities would already be occurring at construction/deconstruction sites, the only difference is how the debris materials are sorted and stored.

Since these activities would be construction-related, they would be required to comply with the City's Municipal Code, Section 9.10.060, as it relates to construction noise. Construction, alteration and repair activities are allowed Monday through Friday from 8 AM to 6 PM and on Saturday from 9 AM to 6 PM. No construction activities are permitted on Sundays and holidays. Compliance with the Municipal Code would reduce potential conflicts between construction/deconstruction activities and adjacent properties. Bin delivery and pick up would occur on an as-needed basis and would be during typical business hours, Monday through Saturday.

The current handling of construction-generated waste results in approximately 12 trips/day for GreenWaste. Implementation of the Ordinance is expected to generate 35 trips/day, for a net increase of 23 trips/day. These trips would be to and from the LATP consolidation site and would be dispersed throughout the City, depending on the location of the construction site. This small number of trips would not be enough to represent a doubling of traffic on any roadways in the City and would not result in a significant vehicle/truck-related noise impact. Impacts would be less than significant.

#### **LATP Consolidation Site**

Bins and boxes would be stored at the LATP consolidation site. This includes empty bins and boxes waiting to be delivered to construction/deconstruction sites and also filled bins and boxes that are being consolidated before being taken to the Zanker facility in San Jose.

The LATP site is located in an urbanized portion of the City adjacent to lands zoned as light industrial. For these areas, 50 to 70 dB Ldn is normally acceptable, up to 85 dB Ldn is conditionally acceptable. The LATP site is also influenced from noise from US Highway 101 (Bayshore Freeway), which is located approximately 0.2 miles away.

Consolidation activities would be intermittent and are not expected to result in sounds levels that would not exceed the threshold for acceptable noise levels on and off the project site. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. Would the project generate excessive groundborne vibration or groundborne noise levels?*

### **Proposed Ordinance**

The proposed Ordinance addresses construction/deconstruction materials management and would apply to projects throughout the City that meet a certain project value threshold (\$25,000). With implementation of the Ordinance, construction and demolition debris sorting would be required at more sites throughout the City. The site type and the neighboring property type would vary from construction project to construction project.

Construction and deconstruction activities have the potential to generate groundborne vibration and groundborne noise. Debris handling would be a part of any construction/deconstruction project, but under the Ordinance, debris would need to be systematically sorted into specific bins on site to better facilitate salvage, recycling and landfill diversion. The increase in debris sorting requirements is not expected to result in any significant increase related to groundborne vibration and groundborne noise. This is because debris handling activities would already be occurring at construction/deconstruction sites, the only difference is how the debris materials are sorted and stored.

### **LATP Consolidation Site**

There are already existing storage and construction staging activities occurring on the LATP site by contractors and City staff that are working on City projects. Activities proposed at the LATP consolidation site would consist of bin and box storage, preparing bins and boxes for delivery to construction/deconstruction sites, and consolidating materials in the bins and boxes once they are returned to the LATP site. There will also be temporary storage of consolidated materials for up to 30 days before materials are transferred to the Zanker facility in San Jose. None of these activities would be of a type that would generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The Palo Alto Airport of Santa Clara County (PAO) is located approximately two miles north of the proposed LATP consolidation site. The proposed consolidation site is located just outside of the airport influence area (SCALUC 2016). Additionally, as shown on Map N-5 (Existing Noise Contours), the proposed LATP consolidation site is more influenced by noise from Highway 101 (Bayshore Freeway) than from the airport. The airport's noise contours do not extend to the proposed consolidation site. Employees at the consolidation site would not be exposed to excessive noise levels and no impact is identified for this issue area.

### **No IMPACT**

## 13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

a. *Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

b. *Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere?*

c. *Create a substantial imbalance between employed residents and jobs?*

a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would not induce substantial unplanned growth either directly or indirectly. The proposed Ordinance addresses construction/deconstruction debris material management in the City. The proposed LAMP consolidation site would be located within an existing City-owned area that is adequately serviced by infrastructure. No new homes or businesses would be constructed due to the project. No impact is identified for this issue area.

**NO IMPACT**

b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project would not displace any people or housing. The proposed Ordinance addresses construction/deconstruction materials management in the City. The proposed LAMP consolidation site would be located within an existing City-owned area and would not result in any displacement of people or housing. No impact is identified for this issue area.

**NO IMPACT**

c. *Would the project create a substantial imbalance between employed residents and jobs?*

The proposed project would not result in a substantial imbalance between employed residents and jobs. The proposed Ordinance addresses construction/deconstruction

**ENVIRONMENTAL CHECKLIST  
POPULATION AND HOUSING**

material management in the City. The proposed LATP consolidation site activities would consolidate materials and temporarily store them before transport to the Zanker facility. The project could generate up to two jobs, however this would not be an amount that would result in a substantial imbalance. No impact is identified for this issue area.

**No IMPACT**

## 14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

a. <i>Result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. <i>Result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. <i>Result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. <i>Result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. <i>Result in an adverse physical impact from the construction of additional library facilities in order to maintain acceptable performance standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?*

The proposed Ordinance and LAMP consolidation site are not activities which would result in the generation of student. The project would not require the construction of schools and would not result in any adverse physical impact from the construction of additional school facilities. No impact is identified for this issue area.

**NO IMPACT**

ENVIRONMENTAL CHECKLIST  
PUBLIC SERVICES

- b. Would the project result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?*

The City of Palo Alto Fire Department (PAFD) provides fire protection, fire suppression, paramedic ambulance service, search and rescue, fire prevention inspections/permits, public fire education programs, emergency preparedness planning, and other services based on community needs. The closest fire station to the proposed LAMP consolidation site is Fire Station 4 (Mitchell Park) at 3600 Middlefield Road. The proposed Ordinance and proposed LAMP consolidation site are not activities which would result in an increase in demand for fire protection services. The project would not result in any adverse physical impact due to the construction of fire protection facilities. No impact is identified for this issue area.

**NO IMPACT**

- d. Would the project result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards?*

The Palo Alto Police Department (PAPD) provides police protection. The closest police station to the proposed LAMP consolidation site is located at 275 Forest Avenue. The proposed Ordinance and proposed LAMP consolidation site are not activities which would result in an increase in demand for police services. The LAMP site is secured behind a fence and gate. The project would not result in any adverse physical impact due to the construction of police protection facilities. No impact is identified for this issue area.

**NO IMPACT**

- e. Would the project result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards?*

Refer to Section 14, *Recreation*.

**NO IMPACT**

- f. Would the project result in an adverse physical impact from the construction of additional library facilities in order to maintain acceptable performance standards?*

The Palo Alto City Library (PACL) provides library services. The closest library branch to the proposed LAMP consolidation site is Mitchell Park Library located at 3700 Middlefield Road. The proposed Ordinance and proposed LAMP consolidation site are not activities which would result in an increase in library service, nor would they result in any adverse physical impact due to the construction of additional library facilities. No impact is identified for this issue area.

**NO IMPACT**

## 15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The City of Palo Alto owns and operates approximately 36 parks and preserves, comprising about 162 acres of urban parks and 4,000 acres of open space (City of Palo Alto, 2015). The recreation area closest to the proposed LAMP consolidation site is the Baylands Nature Preserve. This is a 1,940-acre area of undisturbed marshland with 15 miles of multi-use trails. One of the trail access points is at the end of terminus of San Antonio Road.

The proposed Ordinance and the proposed LAMP consolidation site activities would not result in the increase in use of existing neighborhood, regional parks or other facilities as it does not increase demand for these facilities. The project would not require the construction or expanding recreational facilities which could have an adverse physical effect on the environment. No impact is identified for this issue area.

**NO IMPACT**

# 16 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Cause an intersection to drop below its level of service standard, or if it is already substandard level of service, deteriorate by more than a specified amount?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Neither a traffic impact assessment nor a focused traffic analysis was prepared for the project since the project will generate less than 50 net new weekday (AM or PM Peak hour) or weekend peak hour trips. The Santa Clara Valley Transit Authority's Transportation Impact Guidelines require an analysis if a project is anticipated to generate 100 or more net new weekday (AM or PM Peak hour trips). To be conservative, the City of Palo Alto requires a focused traffic analysis that quantifies potential project impacts for projects generating more than 50 trips per peak hour.

## ROADWAY NETWORK

The proposed Ordinance would apply citywide; therefore, truck traffic associated with debris bin or box delivery to construction/deconstruction sites, and trips associated with salvage assessments and salvage materials collection, could be on any street in the City.

Trucks delivering bins would originate from the LAMP consolidation site located at 1237 San Antonio Road. The trucks with smaller debris bins would return to the LAMP consolidation site. The trucks with larger boxes would proceed directly to the Zanker facility in San Jose.

The following provides a description of the circulation network in the vicinity of the LAMP consolidation site.

- ◆ **San Antonio Road** - Within the City, San Antonio Road runs between Alma Road/Central Expressway in the south and terminates at the Baylands Nature Preserve trailhead parking area in the north. San Antonio Road also provides access to northbound US Route 101 (Bayshore Freeway) via ramps.
- ◆ **East Bayshore Road** - Within the City, East Bayshore Road runs between San Antonio Road in the south and the point at which it crosses San Francisquito Creek in the north. East Bayshore Road continues into the City of East Palo Alto.
- ◆ **Bayshore Parkway** – Bayshore Parkway runs from the City boundary at San Antonio Road in the north to Rengstorff Avenue in the City of Mountain View south.

## ***STUDY METHODOLOGY AND THRESHOLDS***

### ***LEVEL-OF-SERVICE METHODOLOGY***

Level of service (LOS) is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from A to F, with LOS A indicating no congestion, and LOS F indicating unacceptable congestion and delay. For this study, LOS describes the operating conditions for signalized and unsignalized intersections.

The Highway Capacity Manual (HCM) is a standard reference published by the Transportation Research Board (TRB) and contains specific criteria and methods for assessing LOS.

### ***SIGNALIZED INTERSECTIONS***

Per City of Palo Alto standards, a project generating increased motor vehicle traffic is considered to have a significant impact:

- ◆ If intersection operations degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- ◆ If the critical delay increases by more than four seconds and the volume-to-capacity (V/C) ratio increases by 0.01 or more at intersections with unacceptable operations (LOS E or F).

### ***UNSIGNALIZED INTERSECTIONS***

LOS D is used as the minimum acceptable operation level at unsignalized intersections. Project-generated increases in traffic are considered to have a significant impact if intersection operations degrade to LOS E or F from acceptable operations and the intersection satisfies a peak hour signal warrant from the California Manual on Uniform Traffic Control Devices.

The City of Palo Alto considers a significant impact to be satisfactorily mitigated when an implemented measure would restore LOS to baseline conditions or better.

### **CMP INTERSECTIONS**

A project-generated increase in traffic is considered to have a significant impact on Congestion Management Plan (CMP) intersections:

- ◆ If intersection operations degrade from an acceptable level (LOS E or better) to an unacceptable level (LOS F)
- ◆ If the critical delay increases by more than four seconds and the V/C ratio increases by 0.01 or more at intersection with unacceptable operations (LOS F)

### **PEDESTRIAN AND BICYCLE IMPACT CRITERIA**

The City of Palo Alto Comprehensive Plan describes related policies necessary to ensure that pedestrian and bicycle facilities are safe and effective for City residents. Based on the Comprehensive Plan, significant impacts to these facilities would occur when a project or an element of a project:

- ◆ Creates a hazardous condition that currently does not exist for pedestrians and bicyclists, or otherwise interferes with pedestrian or bicycle accessibility to the site and adjoining areas
- ◆ Conflicts with an existing or planned pedestrian or bicycle facility
- ◆ Conflicts with policies related to bicycle and pedestrian activity adopted by the City of Palo Alto, Santa Clara County, Valley Transportation Authority (VTA), or California Department of Transportation (Caltrans) for their respective facilities in the study area

### **TRANSIT IMPACT CRITERIA**

Significant impacts to transit service would occur if the project or any part of the project:

- ◆ Creates demand for public transit services above the capacity which is provided or planned
- ◆ Disrupts existing transit services or facilities including disruptions caused by proposed project driveways on transit streets, impacts to transit stops/shelters, and impacts to transit operations from traffic improvements proposed or resulting from a project
- ◆ Conflicts with an existing or planned transit facility
- ◆ Conflicts with transit policies adopted by the City of Palo Alto, Santa Clara County, VTA, or Caltrans for their respective facilities in the study area

### **EXISTING INTERSECTION CONDITIONS**

The closest intersection to the LATP consolidation is the signalized intersection at San Antonio Road/Bayshore Parkway – East Bayshore Road, located approximately 400 feet south of the site entrance. [Recent observations of the intersection during peak periods show that the intersection generally operates at acceptable conditions \(LOS D or better\).](#)

### **TRIP GENERATION**

**Construction/Deconstruction Material Hauling** - Table 2 in the project description presented the existing and proposed trips as it relates to the hauling of

construction/deconstruction materials. Under the proposed Ordinance, it is expected that there would be 23 new truck trips/day to bring construction and deconstruction waste to the LAMP site for consolidation. Assuming an 8-hour workday, this represents approximately three additional trips per hour.

**Salvage Activities** - Implementation of the Ordinance will also generate an additional six trips per day associated with salvage inspection and salvage materials transport (three trips for the salvage inspector and three trips for the salvage material haul trucks). The three salvage inspector trips would be dispersed throughout the City, depending on the location of the specific construction/deconstruction project. Salvaged materials suitable for reuse would be transported to Reuse People in Oakland. In total this represents less than one additional trip per hour.

#### IMPACT ANALYSIS

*a. Would the project conflict with an applicable plan, ordinance or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities?*

**Pedestrian and Bicycle Facilities** - The project does not create any hazardous condition that currently does not exist for pedestrians and bicyclists, or otherwise interfere with pedestrian or bicycle accessibility to the site and adjoining areas. The project does not conflict with an existing or planned pedestrian or bicycle facility, nor does it conflict with policies related to bicycle and pedestrian activity adopted by the City of Palo Alto, Santa Clara County, Valley Transportation Authority (VTA), or California Department of Transportation (Caltrans) for their respective facilities in the study area.

**Transit Facilities** - The project would not create a demand for public transit services above the capacity which is provided or planned, would not disrupt existing transit services or facilities including disruptions caused by proposed project driveways on transit streets, impacts to transit stops/shelters, would not conflict with an existing or planned transit facility, nor would it conflict with transit policies adopted by the City of Palo Alto, Santa Clara County, VTA, or Caltrans for their respective facilities in the study area.

**Roadway Facilities** - For roadway and intersections, analysis is provided in transportation threshold "c", below. The analysis concluded that the project would not result in a significant increase in delay at the studied intersection. Impacts would be less than significant.

#### LESS THAN SIGNIFICANT IMPACT

*b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

Section 15064.3(b) of the CEQA Guidelines provide criteria for analyzing transportation impacts for land use projects and transportation projects. The proposed Ordinance does not fit specifically within either of these categories. The proposed siting of a debris transfer facility (the LAMP consolidation site) could be considered a land use project, though it is not resulting in any physical development.

ENVIRONMENTAL CHECKLIST  
TRANSPORTATION

The Governor's Office of Planning and Research released a Technical Advisory on Evaluating Transportation Impact in CEQA in December 2018 to provide recommendations regarding assessment of vehicle miles traveled (VMT), threshold of significance, and mitigation measures.

Page 12 of the Technical Advisory (OPR 2018) provides screening thresholds for small projects and states that "... projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

The project is anticipated to generate 29 new trips per day. This is due to an increase of 23 trips per day associated with hauling of sorted construction/deconstruction debris materials and the addition of six trips per day associated with salvage inspection and transport (three trips for inspection, three trips for transport). The total addition of 29 trips per day is well below the 110 trip per day screening threshold identified in OPR's technical advisory. Impacts would be less than significant.

With regard to VMT increase, the addition of interim trips to consolidate materials at the LATP site is anticipated to result in a 57-mile (one-way)/ 114-mile (round trip) increase per day (Table 2). Salvage inspector trips and salvage material haul trucks are expected to be 28 miles (one-way, Palo Alto to Oakland)/ 56 miles (round trip). Assuming three inspector trips and three haul truck trips per day, this represents 336 additional miles per day. When combined with the trips to consolidate materials at the LATP, the project would result in a total VMT increase of 450 miles per day.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project cause an intersection to drop below its level of service standard, or if it is already substandard level of service, deteriorate by more than a specified amount?*

The proposed project is anticipated to generate approximately three peak hour trips, or less than one additional one trip every 20 minutes at the San Antonio Road/Bayshore Parkway-East Bayshore Road intersection. This is less than the threshold to warrant a formal analysis (10 trips per lane per hour), and is not anticipated to trigger a potentially significant operational impact. Recent observations of the intersection during peak periods show that the intersection generally operates at acceptable conditions (LOS D or better), and would not degrade to LOS E or F with the proposed project. Impacts would be less than significant.

Other trips associated with implementation of the Ordinance would be scattered throughout the City and would not bring a consistent number of trips to a specific location on a regular basis, such as those that will be coming to and leaving the LATP consolidation site. Therefore, no additional analysis of other intersections in the City was conducted.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

The project does not propose any changes to the geometric design of roadways and intersection, nor does it propose uses that would be incompatible. No impact is identified for this issue area.

**NO IMPACT**

**ENVIRONMENTAL CHECKLIST  
TRANSPORTATION**

*e. Would the project result in inadequate emergency access?*

The proposed project would not result in inadequate emergency access. There would not be any changes to the existing access at the proposed LATP consolidation site. Bin and boxes for consolidation materials, both at the individual construction sites and at the LATP site, would be located in a manner so as to still allow adequate movement for emergency vehicles. No impact is identified for this issue area.

**NO IMPACT**

## 17 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>a. <i>Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</i></p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. <i>Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>c. <i>Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</i></p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>d. <i>Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, other otherwise impair the attainment of solid waste reduction goals?</i></p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>a. <i>Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</i></p> |                          |                          |                          |                                     |

The proposed project would not introduce any uses which would result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities. The project is the implementation of an Ordinance addressing construction/deconstruction debris management and the consolidation and storing of the materials at the LATP site prior to transport to the Zanker facility. No impact is identified for this issue area.

**NO IMPACT**

ENVIRONMENTAL CHECKLIST  
UTILITIES AND SERVICE SYSTEMS

- b. *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The proposed project would not introduce any uses which would result in an increase in demand on water supplies or water service. The project is the implementation of an Ordinance addressing construction/deconstruction debris management and the consolidation and storing of the materials at the LATP site prior to transport to the Zanker facility. No impact is identified for this issue area.

**NO IMPACT**

- c. *Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The proposed project would not introduce any uses which would result in an increase in demand on wastewater treatment services. The project is the implementation of an Ordinance addressing construction/deconstruction debris management and the consolidation and storing of the materials at the LATP site prior to transport to the Zanker facility. No impact is identified for this issue area.

**NO IMPACT**

- d. *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, other otherwise impair the attainment of solid waste reduction goals?*

Currently, the City contracts with GreenWaste of Palo Alto for collection of garbage, recycling, and composting services in the City and with Waste Management Inc. to use the Kirby Canyon Landfill for waste disposal. As of July 31, 2015, the Kirby Canyon Landfill has a remaining capacity of roughly 36,400,000 cubic yards. The daily permitted capacity of Kirby Canyon Landfill is up to 2,600 tons per day (CalRecycle, 2015).

Through implementation of the proposed Ordinance, a greater amount of construction and deconstruction materials would be diverted from the landfill. There would also be a greater emphasis on salvaging materials for reuse. It is expected that up to 7,500 tons of material could be diverted from the landfill each year through implementation of the Ordinance. This has the benefit of decreasing the overall amount of material going to the Kirby Canyon Landfill and also assists the City in achieving higher diversion rates as contemplated in the City's Sustainability and Climate Action Plan Framework, Principles & Guidelines, which sets a goal of 90 percent diversion of solid waste from the landfill by 2021 and 95 percent diversion by 2030.

**NO IMPACT**

## 18 Energy Conservation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts?

a. *Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

b. *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

a. *Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The project does not propose any uses of activities that would result in environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources.

Implementation of the proposed Ordinance would capture more items for salvage/reuse and for recycling. Increase the amount of materials for salvage has the potential to reduce energy consumption since there may be a reduction in the amount of new materials that are proposed.

**LESS THAN SIGNIFICANT IMPACT**

b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The project does not propose any uses or activities that would conflict with or obstruct with state or local plans for renewable energy or energy efficiency.

**NO IMPACT**

## 19 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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If located in or near state responsibility areas or lands classified as very high fire hazard severity zone, would the project:

a. *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b. *Due to slope, prevailing winds, or other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or uncontrolled spread of wildfire?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c. *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d. *Expose people or structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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a. *Substantially impair an adopted emergency response plan or evacuation plan?*

The proposed project does not result in any use or activity which would substantially impair an adopted emergency response plan or evacuation plan. Bins and boxes at the construction/deconstruction site would be located in a way so as to not block any traffic or impede access for emergency responds vehicles. No impact is identified for this issue area.

**No IMPACT**

b. *Due to slope, prevailing winds, or other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or uncontrolled spread of wildfire?*

### **Proposed Ordinance**

According to Map S-8 (Wildfire Hazard Zones) of the Comprehensive Plan, wildfire risk in the City ranges from low to extreme, depending on the level of development and the level of vegetation cover. The proposed Ordinance would apply to the entire City. However, the Ordinance, which addresses the management of construction and deconstruction debris would not result in any increase in risk related to wildfire.

### **LATP Consolidation Site**

According to Map S-8 (Wildfire Hazard Zones) of the Comprehensive Plan, the LATP consolidation site has a low risk for wildfire. The consolidation and temporary storage of construction and deconstruction debris is not expected to significantly increase risks related to wildfire, as the site is located in a developed area and materials would be stored in non-combustible bins on paved areas.

### **NO IMPACT**

- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Implementation of the project will not require the installation or maintenance of any infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment. The only equipment to be installed will be a portable scale at the proposed LATP consolidation site. There would not be any increase in fire risk associated with the installation and operation of the scale. No impact is identified for this issue area.

### **NO IMPACT**

- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?*

The proposed Ordinance addresses the management of construction and deconstruction debris. Proposed activities at the LATP consolidation site include construction and deconstruction debris materials consolidation and temporary storage. These would not be characterized as activities which would result in an increase for exposure of people or structure to significant risk as a result of runoff, post-fire slope instability or drainage changes.

### **NO IMPACT**

## 20 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

a. *Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

b. *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

a. *Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The project's potential to impact biological, cultural and historical resources was analyzed in this document. The analysis concluded that there would either be no impact or that impacts would be less than significant. The project does not result in any vegetation or habitat removal, nor does it require any ground disturbing activities. Impact would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Based upon the analysis presented in Sections 1 through 18 of this document, implementation of the proposed Ordinance would not result in any significant impacts and no mitigation would be required. Given the dispersed nature of the future construction and deconstruction sites and the temporary nature of the consolidation activities at a given site, it is unlikely that the project would contribute to a significant cumulative impact.

**LESS THAN SIGNIFICANT IMPACT**

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The project’s potential to impact human beings was analyzed within several of the environmental topics, including air quality, greenhouse gas, hazards/hazardous materials, noise, and public/services and utilities. The analysis concluded that there would either be no impact or that impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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## **APPENDIX A**

### Air Quality Memorandum

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***www.ldnconsulting.net***

**phone 760-473-1253**  
**fax 760-689-4943**

February 28, 2019

Sophia Hahl Mitchell  
Sophia Mitchell & Associates  
PO BOX 1700  
Gualala, CA 95445

**RE: Palo Alto Zero Waste Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Facility Air Quality Screening Letter**

The purpose of this air quality screening letter is to identify potential impacts, if any, from the adoption of a new Deconstruction/Construction Materials Management Ordinance (Ordinance) and the approval of an inert debris transfer facility to process construction and demolition (C&D) materials at the former Los Altos Treatment Plant (LATP) in the City of Palo Alto (City). The proposed project is located in The Bay Area Air Quality Management District (BAAQMD) regulates air quality emissions within the City of Palo Alto.

***Deconstruction/Construction Materials Management Ordinance***

The proposed ordinance addresses construction materials management, with the primary goals of increasing: 1) salvage of materials for reuse; 2) recovery of more materials (higher diversion from landfill disposal); and 3) increasing the quality of recyclable materials for all construction related projects. The Ordinance would require construction projects to use deconstruction methods of structure removal (instead of demolition) and the construction-related waste would be required to be source separated into categories in separate bins, boxes or truck trailers.

***Existing C&D Materials Management***

Over the last several years, construction related waste constituted approximately 40 percent of all of the waste that was disposed in landfills by all entities from the City. The City has approved waste diversion goals of 90 percent diversion of solid waste from the landfill by 2021 and 95 percent diversion by 2030.

Currently, C&D projects are required to meet the City's Green Building requirements to achieve an 80 percent diversion rate with material currently taken to local C&D recycling facilities, including the Zanker Materials Processing Facility located in San Jose. All single-family residential projects obtaining a whole house demolition permit are required to complete a deconstruction/salvage survey provided by a third-party entity approved by the Chief Building

Official. Additionally, the City requires that all permittees with projects valued over \$25,000 are required to track the weights of materials removed from project sites in Green Halo.<sup>1</sup>

### ***Proposed Construction-Related Material Management***

Under the proposed Ordinance, the following initial conceptual changes and/or expansion related to construction materials management would occur within a phased implementation plan:

- Contractors shall obtain salvage surveys on all construction projects valued at \$50,000 or more (both residential and commercial).
- Contractors shall ensure that all items indicated on the salvage survey are properly salvaged and certified by City-approved salvage facilities.
- All projects where structures are being partially or fully removed and where materials are generated shall be deconstructed (not demolished, except for concrete and pavement).
- Materials generated during deconstruction activities shall be source separated by contractors (as approved by City), and delivered to City-approved materials recovery facilities.
- During construction, contractors shall sort and separate all materials in accordance with the City's Zero Waste program requirements and sort materials in appropriate containers.
- Contractor shall utilize the City's contractor, GreenWaste of Palo Alto (GreenWaste), to haul all materials if using containers/debris boxes. Contractors can continue to self-haul material by using trucks, but must still source separate materials in accordance with City's new requirements (above) and deliver materials to City-approved materials recovery facilities.
- Contractors for all projects over \$25,000 shall ensure that the following data is inputted in Green Halo: 1) the salvaged and reused inventory and their ultimate disposition and 2) the weights and types of all source separated materials generated at their site and where these materials were delivered.

The source separated construction related material would be collected by GreenWaste of Palo Alto (GreenWaste) from the generation site in large debris boxes (7, 15, 20, 30 and 40 cubic yards) as is the current practice, or in smaller bins (2, 3 or 4 cubic yards) on an on-call basis. The recycle, compost, and landfill drop boxes/bins would be differentiated from each other with unique, color-coded signage identifying the material type they are meant to contain. Up to seven different material type categories could be utilized to separate the following: concrete, wood waste, sheetrock, asphalt shingles, carpet, ceiling tiles, and other demolition materials. It is expected that up to 7,500 tons of material could be diverted from the landfill each year through implementation of the Ordinance.

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<sup>1</sup> Green Halo is a web-based service for waste diversion and recycling tracking.

### ***Transfer Operation and LAMP Transfer Location Description***

GreenWaste would deliver the smaller bins of source separated material from the generation site directly to the LAMP transfer location at 1237 San Antonio Road which is shown in the project vicinity map in Figure 1. Currently materials from the generation sites go directly to the Zanker facility. The project adds an interim consolidation point at the LAMP prior to transfer to the Zanker facility for the material from generators that cannot accommodate the larger debris boxes. Generators that utilize the larger debris boxes will continue to have their material taken directly to the Zanker facility.

The smaller bins would be weighed on a portable scale and emptied into typically 40 cubic yard sized boxes staged at the LAMP site. Once the debris boxes are full, they would be hauled to the Zanker or related facility. The LAMP consolidation site would not receive putrescible (likely to decay), hazardous, or liquid wastes.

No chipping, grinding or other processing would be completed at the LAMP. The maximum timeframe the inert materials would be stored would be a maximum of 30 days. Public access to the LAMP site will not be allowed. The site is the GreenWaste storage yard and is completely secured by fencing and locked gates.

GreenWaste would operate the LAMP transfer site. As stated above, debris boxes will be staged at the site to consolidate the materials and GreenWaste will collect the smaller sized bins full of material from construction sites, bring them to the LAMP consolidation site, weigh the material and transfer the material in them into the debris boxes. The LAMP consolidation site would operate Monday through Friday, 6 AM to 3 PM. An aerial site showing the source separation location is shown in Figure 2.

#### **Trip Generation Assumptions – Materials Salvage**

Trip generation from materials salvage for each individual deconstruction project is expected to generate 926 vehicle trips per year (3.56 trips per day) associated with the salvage inspector and 926 truck trips per year (3.56 trips per day) associated with the hauling of the salvage materials to a reuse center. Vehicle miles traveled associated with the salvage activities are assumed 28 miles one-way (Palo Alto to Oakland) for both the salvage inspector and the salvage material haul truck.

#### **Trip Generation Assumptions – Materials Consolidation**

Trips generated by implementation of the Deconstruction/ Construction Materials Management Ordinance relates to the transport of bins from the generation sites to the LAMP consolidation site and then to the Zanker facility. It is estimated that half of the material generated will be in

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large debris boxes not requiring consolidation and therefore will go directly to an approved processing facility.

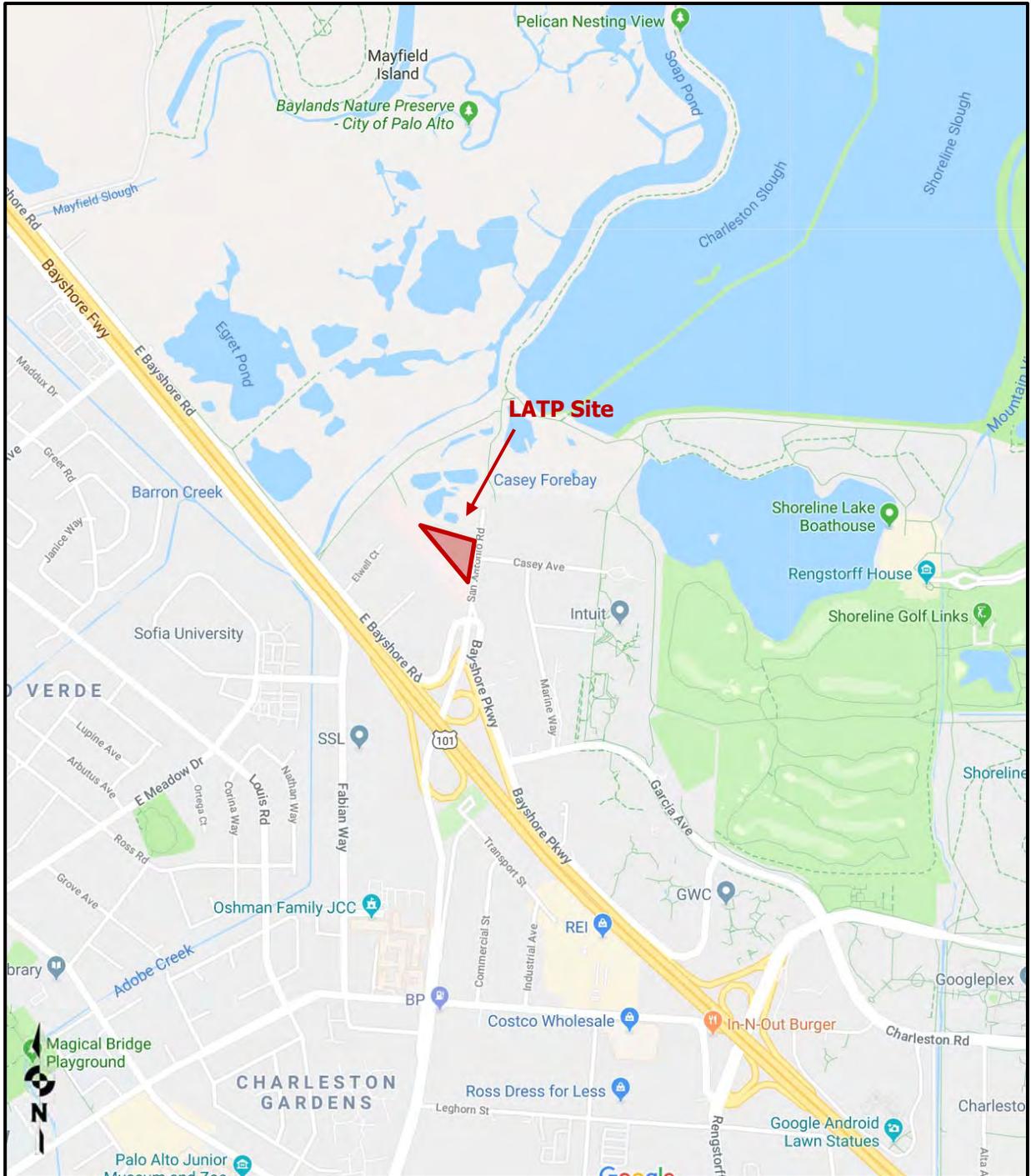
Implementation of the Ordinance would 1) result in additional trips from the delivery and collection of more bins for source separation to and from the generation sites, and 2) result in the interim rerouting of some of the collected C&D material to the LATP for consolidation before being taken to the Zanker facility.

The current handling of construction generated waste results in approximately 12 trips/day for a total of 168 miles. Implementation of the Ordinance is expected to generate 35 trips/day for a total of 225 miles.

Therefore, the net increase between current and proposed operations would be 23 trips/day and approximately 57 additional miles of truck travel per day. Based on discussions with the project applicant operations would be expected 260 days per year. Given this, the project action would generate 14,820 additional truck miles traveled per year.

Air quality impacts related to daily operations were calculated using the latest CalEEMod 2016.3.2 air quality and GHG model, which was developed by BREEZE Software in collaboration with South Coast Air Quality Management District (SCAQMD) in 2018. The City of Palo Alto recognizes the CalEEMod Version 2016.3.2 as an acceptable model for projects of this nature.

**Figure 1: Project Vicinity Map**



Source: (Google, 2018)

**Figure 2: Source Separation Location – LAMP site**



Source: (Google Earth, 2019)

Air quality screening criteria for the City of Palo Alto utilize BAAQMD Air Quality Thresholds (BAAQMD, 2017). The screening thresholds for construction and daily operations are shown in Table 1.

**Table 1: Operational Screening Thresholds for Criteria Pollutants BAAQMD**

Pollutant	Total Emissions	
	(Pounds per Day)	Tons/Year
Respirable Particulate Matter (PM <sub>10</sub> )	82	15
Respirable Particulate Matter (PM <sub>2.5</sub> )	54	10
Nitrogen Oxide (NO <sub>x</sub> )	54	10
Reactive Organic Gases (ROG)	54	10

**Project Related Operational Emissions**

As previously discussed, operational emissions are primarily from vehicular emissions. Additional emissions may be generated in the form of particulate matter dust as materials are consolidated from the smaller bins to the larger boxes. These emissions would be minimal since the City will utilize best available dust control measures such as wetting the materials or minimizing work whenever wind speeds exceed 15 mile per hour. CalEEMod was modified manually adjusting vehicular trips to 100 percent trucks using a 2020 operational year. The calculated operational daily emissions are identified in Table 2 and yearly emissions are shown in Table 3 and shown in **Attachment A** to this report.

**Table 2: Expected Daily Operational Air Quality Emissions**

	ROG	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
Summer Scenario				
Operational Emission Estimates (Lb/Day)	0.081	1.815	0.023	0.062
BAAQMD Thresholds	54	54	54	82
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Winter Scenario				
Operational Estimates (Lb/Day)	0.088	1.840	0.023	0.062
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Daily pollutant generation calculated within CalEEMod 2016.3.2				

**Table 3: Expected Yearly Operational Air Quality Emissions**

	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	<b>PM<sub>10</sub></b>
Annual Scenario				
Operational Emission Estimates (Ton/Year)	0.011	0.238	0.003	0.008
BAAQMD Thresholds (Ton/Year)	10	10	10	15
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Winter Scenario				
Daily pollutant generation calculated within CalEEMod 2016.3.2				

Based upon the findings for the proposed Project, the daily and annual operations of the deconstruction/construction materials management ordinance and inert debris transfer facility activities are anticipated to produce air quality emissions well below BAAQMD thresholds. Therefore, less than significant impacts are expected and no further analysis is required. If you have any questions, please do not hesitate to contact me directly at (760) 473-1253.

Sincerely,  
 Ldn Consulting, Inc.

Jeremy Loudon

**Attachments:** Attachment A: CalEEMod Output

**Sources:**

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Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

**Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac  
Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	13.26	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	5			<b>Operational Year</b>	2020
<b>Utility Company</b>	City of Palo Alto Public Utilities				
<b>CO2 Intensity (lb/MW hr)</b>	354.26	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Project Site Acreage 13.26 acres
- Construction Phase - Truck trips only no construction
- Off-road Equipment - zero'd out so that construction emissions are zero
- Trips and VMT - zero'd out... no construction emissions
- Vehicle Trips - 100 percent trucks assumed
- Construction Off-road Equipment Mitigation -
- Fleet Mix - 100 percent trucks

## Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	150	0
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3710e-003	0.00
tblFleetMix	MCY	5.9420e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	8.1200e-004	0.00
tblFleetMix	MHD	0.02	1.00
tblFleetMix	OBUS	2.5450e-003	0.00
tblFleetMix	SBUS	8.7700e-004	0.00
tblFleetMix	UBUS	2.4420e-003	0.00
tblLandUse	LotAcreage	0.00	13.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	CC_TL	7.30	1.00
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	57.00





Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0813	1.8152	0.9732	1.7400e-003	0.0556	6.1300e-003	0.0617	0.0167	5.8600e-003	0.0225		179.1024	179.1024	0.0109		179.3753
<b>Total</b>	<b>0.0813</b>	<b>1.8152</b>	<b>0.9733</b>	<b>1.7400e-003</b>	<b>0.0556</b>	<b>6.1300e-003</b>	<b>0.0617</b>	<b>0.0167</b>	<b>5.8600e-003</b>	<b>0.0225</b>		<b>179.1026</b>	<b>179.1026</b>	<b>0.0109</b>	<b>0.0000</b>	<b>179.3756</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0813	1.8152	0.9732	1.7400e-003	0.0556	6.1300e-003	0.0617	0.0167	5.8600e-003	0.0225		179.1024	179.1024	0.0109		179.3753
<b>Total</b>	<b>0.0813</b>	<b>1.8152</b>	<b>0.9733</b>	<b>1.7400e-003</b>	<b>0.0556</b>	<b>6.1300e-003</b>	<b>0.0617</b>	<b>0.0167</b>	<b>5.8600e-003</b>	<b>0.0225</b>		<b>179.1026</b>	<b>179.1026</b>	<b>0.0109</b>	<b>0.0000</b>	<b>179.3756</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Paving	Paving	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Rollers	1	0.00	80	0.38

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Paving	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

**3.2 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>							

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

**3.2 Paving - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>							

**4.0 Operational Detail - Mobile**

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Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

### 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

**Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac  
Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	13.26	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	5			<b>Operational Year</b>	2020
<b>Utility Company</b>	City of Palo Alto Public Utilities				
<b>CO2 Intensity (lb/MW hr)</b>	354.26	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Project Site Acreage 13.26 acres  
 Construction Phase - Truck trips only no construction  
 Off-road Equipment - zero'd out so that construction emissions are zero  
 Trips and VMT - zero'd out... no construction emissions  
 Vehicle Trips - 100 percent trucks assumed  
 Construction Off-road Equipment Mitigation -  
 Fleet Mix - 100 percent trucks

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Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	150	0
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3710e-003	0.00
tblFleetMix	MCY	5.9420e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	8.1200e-004	0.00
tblFleetMix	MHD	0.02	1.00
tblFleetMix	OBUS	2.5450e-003	0.00
tblFleetMix	SBUS	8.7700e-004	0.00
tblFleetMix	UBUS	2.4420e-003	0.00
tblLandUse	LotAcreage	0.00	13.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	CC_TL	7.30	1.00
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	57.00





Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0883	1.8400	1.1591	1.7100e-003	0.0556	6.2700e-003	0.0618	0.0167	6.0000e-003	0.0226		176.4140	176.4140	0.0122		176.7184
<b>Total</b>	<b>0.0883</b>	<b>1.8400</b>	<b>1.1592</b>	<b>1.7100e-003</b>	<b>0.0556</b>	<b>6.2700e-003</b>	<b>0.0618</b>	<b>0.0167</b>	<b>6.0000e-003</b>	<b>0.0226</b>		<b>176.4142</b>	<b>176.4142</b>	<b>0.0122</b>	<b>0.0000</b>	<b>176.7186</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0883	1.8400	1.1591	1.7100e-003	0.0556	6.2700e-003	0.0618	0.0167	6.0000e-003	0.0226		176.4140	176.4140	0.0122		176.7184
<b>Total</b>	<b>0.0883</b>	<b>1.8400</b>	<b>1.1592</b>	<b>1.7100e-003</b>	<b>0.0556</b>	<b>6.2700e-003</b>	<b>0.0618</b>	<b>0.0167</b>	<b>6.0000e-003</b>	<b>0.0226</b>		<b>176.4142</b>	<b>176.4142</b>	<b>0.0122</b>	<b>0.0000</b>	<b>176.7186</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Paving	Paving	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Rollers	1	0.00	80	0.38

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Paving	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

**3.2 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>							

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

**3.2 Paving - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>							

**4.0 Operational Detail - Mobile**

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Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

## Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac  
Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	13.26	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	5			<b>Operational Year</b>	2020
<b>Utility Company</b>	City of Palo Alto Public Utilities				
<b>CO2 Intensity (lb/MW hr)</b>	354.26	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Project Site Acreage 13.26 acres  
 Construction Phase - Truck trips only no construction  
 Off-road Equipment - zero'd out so that construction emissions are zero  
 Trips and VMT - zero'd out... no construction emissions  
 Vehicle Trips - 100 percent trucks assumed  
 Construction Off-road Equipment Mitigation -  
 Fleet Mix - 100 percent trucks

## Palo Alto - Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Fac - Bay Area AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	150	0
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3710e-003	0.00
tblFleetMix	MCY	5.9420e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	8.1200e-004	0.00
tblFleetMix	MHD	0.02	1.00
tblFleetMix	OBUS	2.5450e-003	0.00
tblFleetMix	SBUS	8.7700e-004	0.00
tblFleetMix	UBUS	2.4420e-003	0.00
tblLandUse	LotAcreage	0.00	13.26
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	CC_TL	7.30	1.00
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	57.00



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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0110	0.2380	0.1389	2.2000e-004	7.0100e-003	8.0000e-004	7.8100e-003	2.1100e-003	7.7000e-004	2.8800e-003	0.0000	20.9620	20.9620	1.3700e-003	0.0000	20.9961
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0110</b>	<b>0.2380</b>	<b>0.1389</b>	<b>2.2000e-004</b>	<b>7.0100e-003</b>	<b>8.0000e-004</b>	<b>7.8100e-003</b>	<b>2.1100e-003</b>	<b>7.7000e-004</b>	<b>2.8800e-003</b>	<b>0.0000</b>	<b>20.9620</b>	<b>20.9620</b>	<b>1.3700e-003</b>	<b>0.0000</b>	<b>20.9962</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0110	0.2380	0.1389	2.2000e-004	7.0100e-003	8.0000e-004	7.8100e-003	2.1100e-003	7.7000e-004	2.8800e-003	0.0000	20.9620	20.9620	1.3700e-003	0.0000	20.9961
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0110</b>	<b>0.2380</b>	<b>0.1389</b>	<b>2.2000e-004</b>	<b>7.0100e-003</b>	<b>8.0000e-004</b>	<b>7.8100e-003</b>	<b>2.1100e-003</b>	<b>7.7000e-004</b>	<b>2.8800e-003</b>	<b>0.0000</b>	<b>20.9620</b>	<b>20.9620</b>	<b>1.3700e-003</b>	<b>0.0000</b>	<b>20.9962</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Paving	Paving	1/1/2020	1/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

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**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Rollers	1	0.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Paving	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



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**3.2 Paving - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>							

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**4.0 Operational Detail - Mobile**

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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## NEGATIVE DECLARATION

<b>CIRCULATION PERIOD</b>	3/22/2019 to 4/11/2019
<b>PROJECT NAME</b>	Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Facility Site Permitting
<b>PROJECT LOCATION</b>	The Deconstruction/Construction Materials Management would apply to the entire City of Palo Alto (City), which is located in Santa Clara County. The inert debris transfer facility is located at 1237 San Antonio Road, Palo Alto, California 94303 (APN # 116-01-013 and 116-01-047).
<b>PROJECT PROPONENT</b>	City of Palo Alto 250 Hamilton Avenue Palo Alto, California 94301
<b>CITY CONTACT</b>	Claire Hodgkins, AICP, Planner City of Palo Alto, 250 Hamilton Avenue, Ground Floor Palo Alto, CA 94301 Phone: 650-329-2116 Fax: 650-329-2240 Email: <a href="mailto:Claire.Hodgkins@cityofpaloalto.org">Claire.Hodgkins@cityofpaloalto.org</a>
<b>PROJECT DESCRIPTION</b>	The proposed project is the adoption of a new Deconstruction/Construction Materials Management Ordinance (Ordinance) and the approval of an inert debris transfer facility to consolidate materials for offsite transfer for the City of Palo Alto (City). The Ordinance will result in changes to Chapter 5.24 of the City's Municipal Code.

**DETERMINATION**

In accordance with the City of Palo Alto's procedures for compliance with the California Environmental Quality Act (CEQA), the City has conducted an Initial Study to determine whether the proposed project could have a significant effect on the environment. On the basis of that study, the City makes the following determination:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION is hereby adopted.
- Although the project, as proposed, could have a significant effect on the environment, there will not be a significant effect on the environment in this case because mitigation measures have been added to the project and, therefore, a MITIGATED NEGATIVE DECLARATION is hereby adopted.

The attached initial study incorporates all relevant information regarding the potential environmental effects of the project and confirms the determination that an EIR is not required for the project.

*Sophia Hill* <sup>FD</sup> *CLARE HODGKINS, Planner* *3/18/19*  
Signature (Project Planner) Title Date

Adopted by City Council, Attested by  
Director of Planning + Community Environment  
(signed after ND has been approved)

Title Date



## NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION

Pursuant to Section 21092 and 21092.3 of the Public Resources Code and CEQA Guidelines Section 15072, as amended to date, this notice is to advise you that the City of Palo Alto has prepared an Initial Study on the following project to evaluate the environmental impacts of the project identified below. The Initial Study concludes that the project described below would not have a significant effect on the environment, and therefore, the City proposes to adopt a Negative Declaration (ND). The purpose of this notice is to inform the public of the City's intent to adopt a ND for the project, and to provide an opportunity for public comments on the draft ND/Initial Study.

**TO: AGENCIES,  
ORGANIZATION, +  
INTERESTED PARTIES**

The City of Palo Alto requests comments and concerns from agencies, organizations and interested parties regarding the environmental issues associated with construction and operation of the proposed project.

**PROJECT TITLE**

Deconstruction/Construction Materials Management Ordinance and Inert Debris Transfer Facility Site Permitting

**PROJECT APPLICANT**

City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, California 94301

**PROJECT LOCATION**

The Deconstruction/Construction Materials Management would apply to the entire City of Palo Alto (City), which is located in Santa Clara County. The inert debris transfer facility is located at 1237 San Antonio Road, Palo Alto, California 94303 (APN # 116-01-013 and 116-01-047).

**PROJECT DESCRIPTION**

The proposed project is the adoption of a new Deconstruction/Construction Materials Management Ordinance (Ordinance) and the approval of an inert debris transfer facility to consolidate materials for offsite transfer for the City of Palo Alto (City). The Ordinance will result in changes to Chapter 5.24 of the City's Municipal Code.

**PUBLIC REVIEW PERIOD**

This NOI and the Draft Initial Study and Negative Declaration are available for public review and comment pursuant to Section 21092 and 21092.3 of the Public Resources Code and CEQA Guidelines Section 15072. The comment period begins on Friday, March 22, 2019 and ends on Thursday, April 11, 2019.

This NOI and the Draft Initial Study and Negative Declaration may be reviewed at the following locations in Palo Alto: Planning and Community Environment office (250 Hamilton Avenue), Downtown Library (270 Forest Avenue, Palo Alto, CA 94301), or Rinconda Library (1213 Newell Road, Palo Alto, CA 94303). It may also be viewed online at:

<https://www.cityofpaloalto.org/news/displaynews.asp?NewsID=4538&Target%20ID=319>

**PUBLIC HEARING**

The City Council is anticipated to consider the project as part of its regularly scheduled meeting on May 20, 2019. The meeting will start at 5:00 PM and will be held at the City of Palo Alto Council Chambers, located in City Hall at 250 Hamilton Avenue. The meeting agenda will be posted to the City Council's website. Interested parties should check the City Council agenda on the City's website to confirm the meeting time, date, and location:

[https://www.cityofpaloalto.org/gov/depts/cou/council\\_agendas.asp](https://www.cityofpaloalto.org/gov/depts/cou/council_agendas.asp)

**COMMENTS**

Please send comments by mail or e-mail, before on April 11, 2019, to:

Claire Hodgkins, AICP, Planner  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301  
[Claire.Hodgkins@cityofpaloalto.org](mailto:Claire.Hodgkins@cityofpaloalto.org)

If you require additional project information, please contact Claire Hodgkins at (650) 329-2116

 **FR CLAIRE HODGKINS, PLANNER** **3/18/19**  
*Signature (Public Agency)* *Title* *Date*

Not Yet Approved

Ordinance No. \_\_\_\_\_

Ordinance of the Council of the City of Palo Alto Amending Title 5 of the Palo Alto Municipal Code to Repeal Chapter 5.24 (Construction and Demolition Debris Diversion Facilities) and Add a New Chapter 5.24, Entitled Deconstruction and Construction Materials Management, to Establish Regulations Related to the Management of Deconstruction and Construction Debris and Materials

The Council of the City of Palo Alto ORDAINS as follows:

SECTION 1. Findings and Declarations. The City Council finds and declares as follows:

A. The process of demolition, construction, renovation and remodel of buildings and structures generates significant amounts of waste that is either disposed in landfills or combined into a mixed waste that then has to be processed and sorted. The disposal and burial of waste in landfills leads to an increase in greenhouse gas emissions, increase in carbon emissions, and substantial environmental impacts associated with building removal.

B. The practice of freely allowing project applicants, developers and contractors to combine the materials generated at construction and demolition sites into a mixed waste product encourages them to pay little attention to the quantity of the waste created from each construction and demolition project, the amount of waste that is disposed in landfills and the associated environmental impact. There is an opportunity to augment regulations to improve the effectiveness of reuse and recycling of construction site materials generated on projects within Palo Alto.

C. The deconstruction and source separation of construction and demolition related waste leads to handling discards as resources, not waste. It leads to highest and best use of materials, higher recovery levels, and greater recyclability of materials. Deconstruction also follows the waste management and zero waste hierarchy of reduce, reuse, recycle, and compost, and reduces the volume and toxicity of waste and materials.

D. The City of Palo Alto updated its Zero Waste Plan in 2018, with new provisions designed to help the City reach its goal of 95% diversion of materials from landfills by 2030, and 80% reduction of greenhouse gases by the same year. Waste from construction and demolition related activities represent over 40% of the waste from Palo Alto that is disposed in landfills, hampering Palo Alto from achieving zero waste.

E. Policies that promote deconstruction methods instead of demolition, and require materials to be source separated to maximize the salvage of building materials for reuse and to increase higher level of diversion of recyclable and compostable materials, will reduce the amount of landfilled waste, increase recovery of materials and reduce greenhouse

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gas emissions. These strategies are crucial for conserving resources and protecting the environment, and integral to Palo Alto's goal of zero waste.

SECTION 2. Chapter 5.24 of Title 5 (Construction and Demolition Debris Diversion Facilities) is hereby repealed and replaced in its entirety with a new Chapter 5.24 to read as follows:

**Chapter 5.24  
Deconstruction and Construction Materials Management**

Sections:

- 5.24.010 Purpose
- 5.24.020 Definitions
- 5.24.030 Applicability
- 5.24.040 Salvage survey and reuse required
- 5.24.050 Deconstruction and source separation of materials
- 5.24.060 Material collection
- 5.24.070 No unauthorized containers
- 5.24.080 Exclusions
- 5.24.090 Administration by City Manager
- 5.24.100 Enforcement and penalties

**5.24.010 Purpose**

The accumulation, collection, removal and disposal of waste associated with construction, deconstruction and demolition activities must be controlled for the protection of the public health, safety and welfare, and the natural environment. State law addresses this need through the California Integrated Waste Management Act of 1989 and the California Green Building Code, which requires local governments to require fifty percent of construction debris be diverted from the landfill, and Senate Bill 1374, which requires annual reporting to the state on progress made in the diversion of construction related materials, including information on programs and ordinances implemented and quantitative data, where available. Required minimum diversion rates by project type are covered under the California Green Building Code and the City's local amendments in Title 16, Building Regulations, of this code. In 2016, the City adopted sustainability, waste diversion and climate action goals of 80% reduction in greenhouse gases and 95% diversion of materials from landfills by 2030. The City may adopt, implement, and enforce requirements, rules and regulations for local reuse and recycling of materials that are more stringent or comprehensive than California law, and this Chapter establishes local requirements to further both state law and the City's adopted policies.

This Chapter's goals are to implement best practice methods for separation, handling, and delivery of deconstruction and construction site materials to maximize the salvage of building materials for reuse, to reduce the amount of construction and deconstruction related materials

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disposed in landfills and to establish deconstruction and source separation requirements. The requirements of this Chapter are in addition to, the requirement in Chapter 16.14 of this code to achieve a specified diversion of materials generated from an applicable construction project.

**5.24.020 Definitions**

For purposes of this Chapter, terms defined in Chapter 5.20 shall have the same meanings in this Chapter 5.24. The following terms shall have the ascribed definition for the purposes of applying the criteria of this Chapter and other chapters as referenced.

- a. "Approved facility" means a reuse, recycling, composting, or materials recovery facility which the Director has determined can accept diverted materials, has obtained all applicable federal, state and local permits, and is in full compliance with all applicable regulations for reuse, recycling, composting, and/or materials recovery.
- b. "Applicant" means (a) any individual, firm, limited liability company, association, partnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever who applies to the City for, or who is issued, the applicable permits to undertake a construction, remodeling, or demolition project within Palo Alto, and (b) the owner of the real property that is subject to the permit.
- c. "Construction and demolition debris" or "construction and deconstruction materials" means (1) discarded materials generally considered to be non-water soluble and non-hazardous in nature (as defined by California Code of Regulations, Title 22, § 66261.3 et seq.), including but not limited to, metal, glass, brick, concrete, porcelain, ceramics, asphalt, pipe, gypsum wallboard, and lumber from the construction or destruction of a structure as part of a construction or demolition project or from the renovation of a structure and/or landscaping, including rocks, soil, trees, and other vegetative matter that normally results from land clearing, landscaping and development operations for a construction project; and (2) remnants of new materials, including but not limited to, cardboard, paper, plastic, wood, glass and metal from any construction, renovation and/or landscape project.
- d. "Contractor" means any person or entity holding, or required to hold, a contractor's license under the laws of the State of California, and who performs any construction, deconstruction, demolition, remodeling, renovation, or landscaping service relating to buildings or accessory structures in the city.
- e. "Covered project" means any project that is required to comply with the provisions of this Chapter 5.24, as described in Section 5.24.030.

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- f. "Deconstruction" means the systematic and careful dismantling of a structure, typically in the opposite order it was constructed, in order to maximize the salvage of materials and parts for reuse and recycling.
- g. "Demolition" means the partial or complete destroying, tearing down, dismantling or wrecking of any building or structure.
- h. "Diversion" means any activity, including recycling, source reduction, reuse, deconstruction, or salvaging of materials, which causes materials to be diverted from disposal in landfills and instead puts the material to use as the same or different usable product.
- i. "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new or reconstituted products which meet the quality standards necessary to be used in the marketplace. This term does not include transformation as that term is defined in Public Resources Code section 40180.
- j. "Reuse" means further or repeated use of materials or items, including sale or donation of items, but not including recycling.
- k. "Reuse organization" means an organization approved by the City to provide salvage surveys and accept materials or items for reuse.
- l. "Salvage" means the controlled removal of items and material from a building, construction, or demolition site for the purpose of on- or off-site reuse, or storage for later reuse. Examples of items that may be salvaged include air conditioning and heating systems, columns, balustrades, fountains, gazebos, molding, mantels, pavers, planters, quoins, stair treads, trim, wall caps, bath tubs, bricks, cabinetry, carpet, doors, ceiling fans, lighting fixtures, electrical panel boxes, fencing, fireplaces, flooring materials of wood, marble, stone or tile, furnaces, plate glass, wall mirrors, door knobs, door brackets, door hinges, marble, iron work, metal balconies, structural steel, plumbing fixtures, refrigerators, rock, roofing materials, siding materials, sinks, stairs, stone, stoves, toilets, windows, wood fencing, lumber and plywood.
- m. "Source separated single recyclable materials" means recyclable materials that are separated from other recyclable materials or solid waste and placed in separate containers according to type or category of materials and directly marketed as a single commodity.

**5.24.030 Applicability**

This Chapter shall be applicable to all residential and commercial projects that include a whole structure demolition requiring a demolition permit. However, this Chapter shall not apply to those projects comprised solely of the demolition of an accessory dwelling unit, or to any project for which the completed demolition permit application was submitted to the City prior to July 1, 2020.

**5.24.040 Salvage survey and reuse required**

- a. All applicants and other persons who undertake a covered project shall complete a salvage survey provided by a reuse organization or other third party approved by the City, prior to the issuance of a demolition permit. The survey shall itemize the materials and items eligible for salvage and reuse and the estimated weights.
- b. Upon completion of the deconstruction and source separation of materials, the applicant or person responsible for the covered project shall ensure the items listed on the salvage survey are delivered to, collected by or received by, and certified by a reuse organization or other third party approved by the City, and shall submit to the City proof of delivery of salvage items in accordance with City regulations.

**5.24.050 Deconstruction and source separation of materials**

- a. All applicants and other persons who undertake a covered project where materials can be recycled or composted shall deconstruct buildings and structures in a manner to divert the maximum feasible amount of materials and debris from disposal in landfills. All construction and deconstruction materials shall be source separated. Materials to be source separated for recycling include, but are not limited to, steel, glass, brick, concrete, asphalt, roofing material, pipe, gypsum, sheetrock, lumber, wood, pallets, rocks, sand, soil, clean cardboard, paper, plastic, carpet, wood and metal scraps. Materials to be composted include, but are not limited to, trees, shrubs, plant cuttings, food scraps, and other material as designated by the City.
- b. All persons undertaking a covered project shall submit proof of reuse, recycling and composting in accordance with City regulations.
- c. The City, or its collector at City's direction, shall be authorized to inspect, upon reasonable notice, and audit individual waste streams generated at covered projects to determine compliance with this Section.

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**5.24.060 Material collection**

Projects using a container provided by the City's collector pursuant to the provisions of Chapter 5.20 shall be deemed to have complied with the requirement to take construction and deconstruction related waste and source separated materials to an approved facility. Persons using any other method of collection shall dispose of such debris at an approved facility in accordance with City regulations.

**5.24.070 No unauthorized containers**

No person other than the City's collector may place containers within Palo Alto.

**5.24.080 Exclusions**

The provisions of this Chapter shall not apply to the following:

- a. **Dangerous Structures.** Any building or structure that has been determined to be dangerous, structurally unsafe or otherwise hazardous to human life, and is required to be abated by demolition.
- b. **No Suitable Materials.** Any building or structure that does not have materials that are suitable for reuse, recycling, or compost, as determined by the Director of Public Works. Materials unsuitable for reuse, recycling, or compost include insulation, painted or treated wood, rubber, and non-recyclable plastics.
- c. **De Minimus Exception.** The Director of Public Works may waive any of the requirements of this Chapter if documentation satisfactory to the Director is provided to establish that the materials are not reusable, recyclable or compostable, the materials are incidental in quantity, or providing appropriate containers at the particular site would be unduly difficult.

**5.24.090 Administration by City Manager**

- a. The City Manager shall adopt written rules and regulations, not inconsistent with this Chapter, as may be necessary for the proper administration and enforcement of this Chapter.
- b. The City Manager shall resolve all disputes concerning the administration or enforcement of this Chapter, and his or her decision shall be final.

**5.24.100 Enforcement and penalties**

- a. The Director of Public Works shall have primary responsibility for enforcement of this Chapter. The Director of Public Works is authorized to take any and all other actions

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reasonable and necessary to enforce this Chapter.

- b. Violation of any provision of this Chapter shall be subject to the provisions and penalties set forth in Title 1 of the Municipal Code unless otherwise specified.
- c. The remedies and penalties provided in this Section are cumulative and not exclusive.

SECTION 3. If any section, subsection, clause or phrase of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portion or sections of the Ordinance. The Council hereby declares that it should have adopted the Ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

SECTION 4. The potential environmental impacts of this Ordinance were evaluated in an Initial Study/Negative Declaration (IS/ND) prepared in accordance with the California Environmental Quality Act ("CEQA"), which IS/ND the Council considered and adopted by separate resolution prior to taking action to approve this Ordinance.

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SECTION 5. This Ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

APPROVED AS TO FORM:

APPROVED:

\_\_\_\_\_  
Assistant City Attorney

\_\_\_\_\_  
City Manager

\_\_\_\_\_  
Director of Public Works

# DISPOSABLE FOODWARE REDUCTION PLAN

## Zero Waste Palo Alto

The goal of the Disposable Foodware Reduction Plan is to reduce the amount of single-use, disposable foodware generated in Palo Alto, encourage the use of reusable foodware, and to ensure that single-use disposable items that are effectively recovered are either recycled or composted. The plan has a phased approach beginning with straws and other small single-use disposable plastics.

### PHASE I - 2019

#### BAN

1. Single-use disposable foodware items.
  - a. Plastic straws.
  - b. Plastic utensils.
  - c. Plastic drink stirrers.
  - d. Plastic drink plugs.
  - e. Plastic food and drink picks.
  - f. Plastic drink accoutrements.

2. Plastic produce bags.

#### REQUIRE

1. Banned foodware, if offered, must be compostable or reusable.
2. All disposable foodware must be acceptable in the City's collection program.
3. Disposable foodware must be offered only upon request or via self-serve station.
4. Businesses to provide receipts only upon request.
5. Produce and meat bags must be reusable or compostable.

### PHASE II - 2021

#### BAN

1. All disposable plastic foodware.
2. Disposable foodware for dine-in.
3. Use of fluorinated compounds in compostable foodware.

#### REQUIRE

1. Any remaining disposable single-use foodware must be compostable and acceptable in the City's compost collection program.
2. Charge for non-reusable cups and containers.
3. Reusable foodware for dine-in.
4. All new construction and tenant improvements for food service establishments required to install a dishwasher.

### PHASE III - 2025

#### BAN

1. Single-use disposable foodware for take-out.

#### REQUIRE

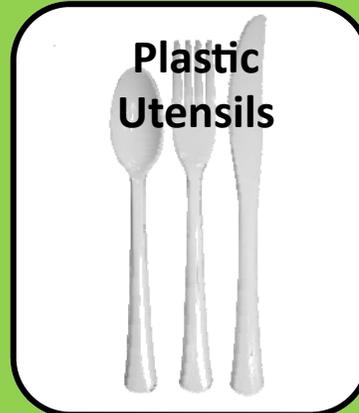
1. All food service establishments must have a dishwasher or sign-up for a dishwasher service, or sign-up for a reusable foodware service program.
2. Reusable foodware for take-out.

**For more information contact Zero Waste Palo Alto at:**  
(650) 496-5910 or zerowaste@cityofpaloalto.org

# DISPOSABLE FOODWARE REDUCTION PLAN

## PHASE I - 2019

### BANNED FOODWARE



### OTHER REQUIREMENTS

Foodware Items Must Be Reusable Or Compostable

Must Be Accepted In City's Collection Program

Disposable Foodware & Receipts Only Upon Request

## Deconstruction & Construction Materials Management (Deconstruction Ordinance – Chapter 5.24)

Phases	Deconstruction Phases Summary	Number of Estimated Projects
Phase 1 - effective July 2020	Salvage survey, reuse and source separation on residential and commercial projects required to obtain permits for complete demolition	114
Phase 2 - effective ~January 2022	Salvage survey, reuse and source separation on all projects valued at \$100,000 or more	334
Phase 3 - effective ~January 2023	Lower threshold to \$50,000 or more	138

### **1) SALVAGE SURVEY AND REUSE**

Currently - Only residential whole house demolition permits are required to complete a salvage survey. Permittees are not required to salvage materials on the survey.

**NEW:** Salvage surveys will be required on all projects within each phase; survey and certification on materials and items accepted to be conducted by City approved reuse organizations.

### **2) DECONSTRUCTION AND SOURCE SEPARATION**

Currently – Demolition is allowed, and construction related waste can be mixed. All projects that are \$25,000 or more in value are required to submit a debris management plan to the City and contractors must input weights into Green Halo to track the project tonnage with a goal of achieving 80% diversion for each project.

**NEW:** Deconstruction and source separation will be required on all projects within each phase. Materials must be source separated and delivered to City approved materials recovery facilities.

### **3) GREENWASTE AS THE APPROVED COLLECTOR**

Currently - Contractors are allowed to use any waste hauler for collection of source separated material in debris boxes.

**NEW:** Contractors will utilize GreenWaste to haul all materials if using containers (bins or debris boxes) at project sites. Contractors can continue to self-haul material by using trucks but must still source separate materials in accordance with City requirements and deliver materials to City approved processing facilities.



May 23, 2019

Phil Bobel  
Assistant Director  
City of Palo Alto Public Works Department  
250 Hamilton Avenue  
Palo Alto, California 94301

**RE: Letter to Request Exemption in Disposable Foodware Reduction Ordinance for Hospitals When Necessary for the Delivery of Patient Care Services**

Dear Assistant Director Bobel:

Thank you for discussing the City of Palo Alto's Foodware Reduction Plan and the Phase I Ordinance scheduled to be considered by the City Council on June 10, 2019 with Jon Cowan and Diana Bautista.

Based on this discussion and extensively reviewing what is available regarding the ordinance, we respectfully request an exemption for hospitals when necessary for the delivery of patient care services.

Both of our organizations have prioritized environmental sustainability for more than two decades. We moved to green cleaning supplies in the early 2000's and at the same time increased our onsite recycling. We have been using compostable plates and silverware in our cafeterias for some time. And last, but definitely not least, Lucile Packard Children's Hospital's new main hospital received LEED platinum status. We remain committed to continuously improving and adding to our sustainability efforts.

While we have already voluntarily achieved much of what is to be included in the draft ordinance, we have also identified examples where we will not be able to meet the requirements of the ordinance based on patient care or related needs or regulatory requirements. For example, plastic is currently required to properly care for certain of our patients. Changes to foodware can be complicated in a hospital environment, as all potential changes must be evaluated for patient impact, workplace violence risk, as well as compliance with multiple state and federal health care regulations. For example, our Food Services departments assess patient impact on an ongoing basis. As another example, our Environmental Health & Safety departments assess utensils for workplace violence risk from emergency department or psychiatric unit patients.

To elaborate:

- Paper straws have been tried but do not currently work for patients who need to bend them or to drink more slowly due to their compromised health.

- Plastic supplies may be required as part of the 96-hour emergency supplies regulators require hospitals to maintain. Plastic supplies may also be required to continue to serve patients during power outages that impact dishwashers.
- We believe replacing biodegradable utensils with compostable units may be feasible, but would need to receive certification from our Environmental Health & Safety that this change is safe for our patients and staff.
- Out-of-city vendors may deliver produce or meat in plastic bags or other materials as part of the large-scale operations required to support hospitals.

The examples above are intended to be illustrative but not exhaustive for the feasibility for hospitals to comply with the blanket prohibitions we understand are in the ordinance.

We are committed to continue to work collaboratively regarding disposable foodware reduction, but we believe that the unique operating requirements for hospitals necessitate an exemption to accommodate the delivery of patient care services. Such a tailored exemption will allow for an ongoing dialogue with city staff so that feasible changes can be implemented rather than changes that would harm our patients.

Thank you for your consideration.

Sincerely,



Nancy Olson, Chief Government  
& Community Relations Officer  
Stanford Health Care



Sherri R. Sager, Chief Government  
& Community Relations Officer  
Lucile Packard Children's Hospital Stanford

cc: Brad Eggleston, Director of Public Works, City of Palo Alto  
Ed Shikada, City Manager, City of Palo Alto

May 14,  
2019

Mayor Eric Filseth Members of the City  
Council of Palo Alto City of Palo Alto, Office  
of the City Clerk 250 Hamilton Ave. Palo  
Alto, CA 94301 Submitted via:  
[city.council@cityofpaloalto.org](mailto:city.council@cityofpaloalto.org)

Re: Support for Disposable Foodware Reduction Plan Policy with Strong Request to Include  
Additional Provisions that Strengthen the Measure

Dear Mayor Filseth and Members of the City Council of Palo Alto:

The undersigned write in general support of the proposed Zero Waste plan and policy regarding single-use disposable foodware items. However, we urge the Council to incorporate various provisions anticipated in the City's Zero Waste Plan but not included in the proposed policy.

We applaud the Council for considering a measure to reduce single-use foodware and City Staff for developing a comprehensive plan that considers the safety and health of consumers and the needs of local business to address some of the key challenges of managing litter and solid waste. Prioritizing the reduction of single-use foodware is important because these are products that:

- are used in a matter of minutes but can persist in the environment for thousands of years (if made from nonbiodegradable plastic),
- contain a variety of toxic chemicals that migrate into food and beverages and impact human health,
- are easily littered, requiring significant city resources to remove from streets and storm drains,
- overwhelm the City's waste management system, and are a significant cost to manage,
- are unsustainable in terms of the resources use in their production, the pollution associated with their disposal, and the climate impacts associated with their consumption.

City staff have conducted a commendable scoping process gaining public input on a proposed plan to address the reduction of single-use foodware. We agree with the framework adopted but not the delay in addressing items listed in phases II and III. We strongly urge the Council to adopt a comprehensive foodware reduction policy at this time that incorporates the first two phases into the proposed current policy, with a phased-in implementation approach. We agree with the proposal that the ordinance immediately:

- (1) ban single-use plastic straws, utensils, stirrers, plugs, picks and other drink accoutrements, and require that if offered they be compostable or reusable;
- (2) Ensure these items are acceptable in the City's collection program;
- (3) Ensure these items are available only upon request or at a self-serve station;
- (4) Require that businesses provide receipts only upon request;
- (5) Require that produce and meat bags be reusable or compostable.

However, the items in Phase II of the Plan should also be incorporated as follows.

**Banning the use of PFAS compounds should not be delayed- it should be immediate.** This class of chemicals is among the greatest threats to human health. They are highly persistent and those that have been studied are carcinogenic and endocrine disrupting at extremely low levels, plus they easily migrate from packaging into food and beverages. There are alternatives that are safer. Other cities, including San Francisco, Berkeley, and the State of Washington, have already banned the use of these chemicals in foodware.

**All the other measures in Phase II should be incorporated into the ordinance with a two year timeline from the date of the ordinance's adoption. This includes the following:**

- **A 25 cent customer charge for single-use take-out cups.** Like single-use grocery bags, there is an easy-to-adopt reusable, Bring Your Own (BYO), alternative. Many people already bring their own reusable cup. A charge would encourage a significant change in behavior. Like grocery bag charges, which have resulted in 80% transition to reusables, a charge on cups would significantly decrease the waste associated with take-out beverages, which is estimated to be 13% of the street litter on Bay Area streets. The City<sup>1</sup> of Berkeley already enacted a similar measure with a one year timeline.
- **A charge on single-use take-out foodware.** As the City of Berkeley recognized, BYO

food containers are more challenging for customers and for businesses to adapt to. Customers need to have access to reusable containers on deposit when and where they make their take-out food order, plus convenient drop off locations for the dirty containers. More time is needed for third party reusable container programs to scale in

<sup>1</sup> Clean Water Action's *Taking Out the Trash* 2011 Survey.

<https://www.mercurynews.com/2011/06/19/survey-pinpoints-sources-of-trash-in-san-francisco-bay/>

<http://www.cleanwater.org/files/smeyer@cleanwater.org/FINAL%20TOTT%20Report.pdf>

the Bay Area. This ordinance could, like the Berkeley ordinance, direct the City to provide grant resources and technical assistance to help scale such programs.

- **Reusable foodware for dine-in.** The Zero Waste Plan signals making this requirement effective within two years (2021). We urge that the City Council include this measure in phase 1, with a two year date of implementation (effective 2021). Including this measure in the ordinance puts local food businesses on notice that they will need to comply and gives them time to prepare to do so. It also signals that the City Council is serious about reducing single-use disposable foodware. This is exactly what the City of Berkeley did in their ordinance.

- **New construction food service must demonstrate adequate dishwashing capacity.** the Zero Waste Plan signals making this requirement effective within two years (2021). We urge that the City Council include this measure in the proposed ordinance with a two year date of implementation (effective 2021). Including this measure in the ordinance puts local food businesses on notice that they will need to comply and gives them time to prepare to do so.

### **Add a policy focused on reducing waste from online food ordering as part of Phase 1.**

- **OPT IN -requirement.** Add a requirement that online food ordering businesses have an “opt in” disposable accessory policy. This would mandate that when a customer places a food order through Doordash, Caviar, Postmates or other online apps, they have to REQUEST single-use items like utensils and napkins. While some online apps allow customers to refuse these items, we believe the default should not be to provide them.

Reducing single-use products in food service settings is not only good for the environment and saving the City money spent on cleanup and waste management. It's good for business, as demonstrated by *ReThink Disposable*, a program being implemented by Clean Water Fund in

partnership with the City. Participating businesses are saving thousands of dollars per year when<sup>2</sup> they implement measures to reduce single-use packaging and transition to reusable food service.

Thank you for considering this important measure. We urge you to make these changes and enact a single-use foodware reduction policy as soon as possible.

Please see our signature page for those signing this

letter. <sup>2</sup>[www.rethinkdisposable.org](http://www.rethinkdisposable.org)