

County of Santa Clara

Department of Planning and Development
Planning Office

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STAFF REPORT
Zoning Administration
February 7, 2019
Public Hearing Item #5

Staff Contact: Valerie Negrete
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File: 11206-18ASA (Z-Best Compost Facility) Architecture and Site Approval

Summary: Architecture and Site Approval (ASA) for an existing 10,000 square foot canopy overhang attached to an existing processing building, with a 361,000-gallon water supply tank and 80 square foot fire equipment building.

Owner: Zanker Resource Mgmt.

Gen. Plan Designation: Agricultural Large-Scale

Applicant: John Doyle, Zanker Resource Mgmt.

Lot Size: 20 Acres (-028) & 136 Acres (-029)

Present Land Use: Composting Facility

Zoning: A-40Ac

Address: 980 Highway 25, Gilroy

APN: 841-37-028 & 029

Supervisory District: #1

RECOMMENDED ACTIONS

- A. Accept the use of prior California Environmental Quality Act (CEQA) document, Attachment A.
- B. Grant Architectural & Site Approval (ASA), subject to Conditions of Approval outlined in Attachment B.

ATTACHMENTS INCLUDED

Attachment A – Proposed CEQA Determination – Use of Prior CEQA
Attachment A1 – Adopted Mitigated Negative Declaration dated November 2012
Attachment B – Proposed Conditions of Approval
Attachment B1- Prior Use Permit and ASA Conditions of Approval
Attachment C – Location & Vicinity Map
Attachment D – Proposed Plans

PROJECT DESCRIPTION

The proposed project involves a request for the legalization of an attached 10,000 square foot canopy, a 361,000- gallon water tank and 80 square foot fire equipment shed within an existing compost processing facility, commonly referred to as Z-Best. The height of the existing building is 35 feet, as measured from existing finished grade, and the canopy addition is 22 feet high along the rear of the building. The property is relatively flat in the location of the proposed additions.

In 1997, the Planning Commission approved a Use Permit for the construction and operation of a composting facility to process green waste and agricultural waste on 77-acres of the 157-acre property. The Planning Commission approved a modification to the Use Permit, ASA and Grading Approval to allow an expansion of the operation in 2012. This approval allowed for expanded processing operations, a new employee parking area, fire access lanes, additional hours and employees, and an expansion of compost into Area 2. (See Attachment B1)

This project will not affect current site operations. No changes to parking, employees, traffic, or on-site capacity is proposed with this project.

REASONS FOR RECOMMENDATIONS

A. Environmental Review and Determination (CEQA)

The proposed project is in conformance with the 2012 Initial Study and adopted Mitigated Negative Declaration (MND) and creates no new or additional significant environmental impacts beyond those analyzed in the Initial Study/MND, adopted by the Planning Commission December 6, 2012. The 2012 Initial Study analyzed an expansion to the compost facility including the subject processing building. The proposed legalization of a 10,000 square foot canopy addition with associated water tank and 80 square foot fire equipment shed would fall within the scope of work analyzed within the 2012 Initial Study/MND.

B. Architectural and Site Approval (ASA)

The Zoning Administrator may approve an Architecture and Site Approval application if able to make all applicable findings listed in §5.40.040 of the County Zoning Ordinance. Listed below are the individual findings in **bold**, with a discussion following in plain text.

1. **Adequate traffic safety, on-site circulation, parking and loading areas, and insignificant effect of the development on traffic movement in the area;**

Traffic will not increase with this proposal. No increase in the number of truck or employee trips are proposed. Pursuant to the existing Use Permit, a total of 60 employees are permitted on-site and no changes to personnel are proposed as part of this project. Adequate parking is provided on-site, and as required with the 2012 expansion project and Use Permit. The project will not impact traffic levels beyond

what was analyzed in the adopted Mitigated Negative Declaration. (See Attachment A1)

2. Appearance of proposed site development and structures, including signs, will not be detrimental to the character of the surrounding neighborhood or zoning district;

The surrounding area includes large, rural residential properties and agricultural uses. The processing building, situated 300 feet to the rear of the office, is not visible from Highway 25, nor is the 10,000 square foot addition. The overall height of the processing building is 35 feet and is not proposed to change as a result of the proposed project.

The proposed 360,000-gallon water tank would be situated 600 feet away from Highway 25 and will provide fire protection to the processing building. The approximate height of the tank is proposed to be 25 feet as measured from finished grade.

Both the addition and water tank will not be visible from Highway 25. There are no new signs proposed.

3. Appearance and continued maintenance of proposed landscaping will not be detrimental to the character of the surrounding neighborhood or zoning district;

Prior conditions of approval require landscaping along the site frontage, including a landscape berm along Highway 25 (former ASA Condition of Approval No. 4). In order to ensure landscaping is maintained as required, a condition of approval for landscaping is included with this ASA Approval (See condition 11). No additional landscaping is required in order to ensure the project proposed is required for this project approval. Therefore, staff finds the proposal to be consistent with the character and surrounding area.

4. No significant, unmitigated adverse public health, safety and environmental effects of proposed development;

The approved Initial Study/MND, which is being proposed for this project as a Prior Use of CEQA, analyzed the environmental impacts of the compost facility. The proposed canopy addition and associated water tank are within the scope of development analyzed in the 2012 Initial Study. The environmental document analyzed various types of hazards associated with the composting operation including oil, antifreeze and household waste material, as well as non-waste hazardous materials, including fuel, oils, solvents and other liquids. Further, waste materials are either placed in a storage locker on the west side of the operations building or in drums located on the south side of the office/shop building. The facility currently maintains a Hazardous Materials Business Plan detailing the type, quantity of, storage location of, and management practices regarding all hazardous materials on-site.

As conditioned, the prior CEQA analysis concluded that the compost facility would not result in any significant environmental impact as it relates to public health, safety and environmental effects. This project was reviewed with respect to all applicable regulations for public health and safety, and no issues were found to exist. The prior CEQA analysis concluded that with the conditions and mitigations applied to the project, the project would not result in any significant environmental impacts (See Attachment A).

5. No adverse effect of the development on flood control, storm drainage, and surface water drainage;

The proposed project will not have any significant impact to flood control, storm drainage, and surface water drainage as the proposal was reviewed by Land Development Engineering. Site runoff is controlled by the existing southern sediment basin. Runoff from the additional impervious surface is conditioned to be adequately managed and treated as required through the conditions of approval.

6. Adequate existing and proposed fire protection improvements to serve the development;

The proposed project was reviewed by the County Fire Marshal and further conditioned to clearly show fire lanes of at least 30 feet in width to accommodate emergency vehicles. Prior to issuance of building permits for the canopy and water tank, the applicant must demonstrate fire protection measures and improvements, outlined in Attachment B.

7. No significant increase in noise levels;

There will be no significant increase in noise levels because operations remain the same as existing conditions and no increase to the existing ambient noise levels will occur as a result of the proposed project. As a part of the requirements for the existing Use Permit, a noise complaint/response tracking program was implemented. In compliance with the County Noise Ordinance, construction was to be limited to daytime hours. No new nighttime outdoor operations are allowed. As an ongoing Condition of Approval, the project shall comply with County Noise Ordinance (prior Condition No. 10 of the Use Permit). As proposed, the project will not result in a significant increase in noise levels in the area.

8. Conformance with zoning standards, unless such standards are expressly eligible for modification by the Zoning Administrator as specified in the Zoning Ordinance;

The proposed project satisfies all of the required zoning standards as stipulated in the County Zoning Ordinance. The zoning district for subject parcel is A-40ac, which requires minimum front, side and rear setbacks of 30, 30, and 30, respectively. The

water tank will be situated over 50 feet from the side property line. The processing building is located approximately 530 feet from Highway 25, towards the middle of the composting facility. The project complies with the minimum required setbacks established for the zoning district. No proposed modification to these standards is required.

9. **Conformance with the general plan and any applicable area or specific plan, or, where applicable, city general plan conformance for property located within a city's urban service area; and**

The General Plan designation for subject parcel is Agriculture: Large Scale. The project does not conflict with the General Plan as the property is approved to operate as a composting facility through an approved Use Permit. The site has operated as a composting facility since 1997.

10. **Substantial conformance with the adopted "Guidelines for Architecture and Site Approval" and any other applicable guidelines adopted by the County.**

The proposal will be required to adhere to all Conditions of Approval required by other agencies and the Zoning Administrator. The intent of the "*Guidelines for Architecture and Site Approval*" is to "*secure the general purposes of the zoning ordinance and the General Plan and to maintain the character and integrity of the neighborhood by promoting excellence of development, preventing undue traffic hazards or congestion, and encouraging the most appropriate development and use of land in harmony with the neighborhood.*" The proposal is in harmony with the existing utility infrastructure, and there is no significant environmental effect on traffic, or congestion, noise, or odor the proposal secures such general purposes.

BACKGROUND

On June 5, 1997, the Planning Commission granted a Use Permit to establish a composting facility on 77 acres of the 157-acre property. Two years later, on August 5, 1999, an expansion of the composting facility was approved by the Planning Commission. The 1999 approval included the allowance of food waste, and mulch green-waste material to be added to the composting process, along with an expansion of 50-acres within the existing 77-acre permitted composting area. In addition, the site was allowed expanded tonnage and traffic to the site to permitted levels of 500 to 1,500 tons per day, and a peak of 2,500 tons per day 10 to 15 days per year.

Over the next several years, Z-Best needed to increase operational efficiencies, and in 2005, Z-Best applied for a modification of the Use Permit to expand final processing and finishing operations. On December 6, 2012, the County Planning Commission approved an expansion of the compost facility which included the existing processing building. Today, the composting operation has an operating capacity of 360,000 cubic yards per year.

Sometime in 2014, the canopy to the processing building was constructed. Throughout the facility, no further improvements were made. Z-Best applied for an ASA permit to legalize the canopy and associated water tank on February 7, 2018. The application was deemed incomplete, and a subsequent resubmittal was applied for on October 15, 2018 and deemed complete on December 15, 2018. A public notice was mailed to all properties within a 300-foot radius on February 7, 2019.

STAFF REPORT REVIEW

Prepared by: Valerie Negrete, Associate Planner

Reviewed by: Leza Mikhail, Zoning Administrator

Attachment A

Proposed CEQA Determination – Use of Prior CEQA

County of Santa Clara

Department of Planning and Development
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USE OF A PRIOR CEQA DOCUMENT MITIGATED NEGATIVE DECLARATION

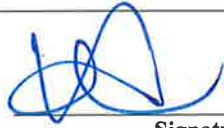
Pursuant to Section 15162 of the CEQA Guidelines, the County of Santa Clara has determined that the project described below is pursuant to or in furtherance of a Mitigated Negative Declaration which has been previously adopted and does not involve new significant impacts beyond those analyzed in the previous Mitigated Negative Declaration.

Record Number	APN(s)	Date
PLN11206-18A	841-374-028 & 029	February 7, 2019
Project Name	Project Type	
Z-Best Compost Facility	Commercial / Industrial	
Owner	Applicant	
Zanker Resource Management (Mmgt.)	John Doyle	
Project Location		
980 Highway 25, Gilroy		
Project Description		
The proposed project is for an Architecture and Site Approval application to request retroactively a 10,000 square foot addition to a maintenance building, and related 361,000-gallon water tank for fire protection and an 80 square foot fire equipment shed. The site is an existing compost processing facility approved on June 21, 1997 (File No. 6498-97P) and modified on December 6, 2012 (File No. 6498-08P).		
Background and Summary of Findings		

Per the California Environmental Quality Act (CEQA) of 1970 (as amended), all development permits processed by the County Planning Division which require discretionary approval are subject to environmental review. A new Negative Declaration or EIR is not required if a previous CEQA document has been prepared and adopted or certified which adequately address all the possible environmental impacts of the proposed project and (a) no substantial changes are proposed in the project which will result in new significant environmental effects, (b) no substantial changes have occurred with respect to the circumstances under which will result in the identification of new significant impacts, or (c) no new information is available which shows that the project will have new significant impacts or mitigation measures and alternatives which were previously found to be infeasible would now in fact be feasible (CEQA Guidelines 15162).

The Planning Division evaluated the project described above and has determined that none of the circumstances exist which would require additional environmental review. The proposed canopy addition and associated water tank are within the scope of development analyzed in the 2012 Initial Study. Both are located in previously disturbed areas of the site and will not be visible from Highway 25. No increase in traffic, noise, odor, processing or use is proposed with this project. No additional hazards will be stored within this building that were not already analyzed within the adopted Initial Study. As such the environmental impacts of the project have been adequately evaluated in the Mitigated Negative Declaration adopted by the Planning Commission on December 6, 2012, and that no further environmental review is required under the California Environmental Quality Act.

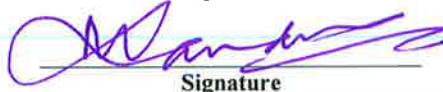
Prepared by:
Valerie Negrete, Associate Planner



Signature

1/31/19
Date

Approved by:
Manira Sandhir, Principle Planner



Signature

1/31/19
Date

Attachment A1

Adopted Mitigated Negative Declaration
dated June 2009



**Initial Study/
Mitigated Negative Declaration**

**Z-Best Composting Facility
Expansion Project**

Santa Clara County Planning Office
70 W. Hedding St., E. Wing, 7th Floor
San Jose, CA 95110
Contact: Colleen Oda
(408) 299-5797

November 2012

Purpose of This Document

This initial study/mitigated negative declaration (IS/MND) is a public document that assesses the environmental effects of the Zanker Road Resource Management Limited's (ZRRML) Z-Best Composting Facility Expansion Project, as required by the California Environmental Quality Act (CEQA) and in compliance with the State CEQA Guidelines (14 California Code of Regulations 15000 et seq.). It serves as an informational document to be used in the local planning and decision-making process; it does not recommend approval or denial of the project.

Santa Clara County, the state lead agency under CEQA, must evaluate the environmental impacts of the project when considering whether to approve the project. Santa Clara County has prepared this IS/MND for the project because all impacts resulting from the project that are considered significant would be reduced to a less-than-significant level by implementing mitigation measures.

Scope of This Document

This document evaluates the project's impacts on the following resource topics:

- aesthetics,
- agricultural resources,
- air quality,
- biological resources,
- cultural resources,
- geology and soils,
- hazards and hazardous materials,
- hydrology and water quality,
- land use planning,
- noise,

- population and housing,
- public services,
- recreation,
- transportation/traffic, and
- utilities and service systems.

Impact Terminology

The following terminology is used in this document to describe the levels of significance of the impacts that would result from the project.

- The project is considered to have *no impact* if the analysis concludes that the project would not affect a particular resource topic.
- An impact is considered *less than significant* if the analysis concludes that the project would cause no substantial adverse change to the environment and that impacts would not require mitigation.
- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that the proposed project would cause no substantial adverse change to the environment with the inclusion of mitigation measures to which the applicant has agreed.
- An impact is considered *significant* if the analysis concludes that the proposed project would cause a substantial adverse change to the environment that could not be mitigated by the inclusion of mitigation measures to which the applicant has agreed.

Organization of This Document

The content and format of this document, described below, are designed to meet the requirements of CEQA:

- Chapter 1, *Introduction*, identifies the purpose, scope, terminology, and organization of this document.
- Chapter 2, *Project Description*, identifies the location and background of the project; describes the project in detail; identifies the best management practices included as part of the project; and identifies permits, approvals, and public involvement procedures.
- Chapter 3, *Environmental Checklist*, presents the checklist responses for each resource topic. This section identifies the environmental setting, project impacts on each resource, a brief explanation for the determination of project impacts, and any mitigation measures to which the applicant has agreed.

- Chapter 4, *References Cited*, identifies all printed references and personal communications cited in this document.

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Acronyms and Abbreviations

IS/MND	Initial study/mitigated negative declaration
PM10	[particulates 10 microns or less in diameter]
CFR	Code of Federal Regulations
FR	Federal Register
CCR	California Code of Regulations
μohms/cm	microohms per centimeter
ABAG	Association of Bay Area Governments
ADT	Average Daily Traffic
ARB	California Air Resources Board
ASA	Architectural & Site Approval
ASTM	American Society for Testing and Materials
ATCM	airborne toxic control measure
BAAQMD	Bay Area Air Quality Management District
BAT	best available technology
BMPs	Best management practices
CAAQS	California ambient air quality standards
CCO	co-collected organics
CDF	California Department of Forestry
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
cfs	cubic feet per second
CGS	California Geological Survey
CHRIS	California Historical Resources Information system
CIWMB	California Integrated Waste Management Board
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
County	Santa Clara County
CWA	Clean Water Act
dB	Decibel
dBA	A-Weighted Decibel
DFG	California Department of Fish and Game
DFG	California Department of Fish and Game
DPM	diesel particulate matter
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
EC	Electromagnetic Conductivity
EIP	Engineered Inert Pad
EPA	U.S. Environmental Protection Agency

ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency's
FHWA	Federal Highway Administration
FIRMS	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FWARG	Far Western Anthropological Studies Group
g/bhp-hr	grams per brake horsepower-hour
G5	George 5
General Low Threat Permit	General Permit for Discharges with Low Threat to Water Quality
General Permit	NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity
HMBP	Hazardous Materials Business Plan
IRIS	integrated risk information system
LAFCO	Local Agency Formation Commission
L _{dn}	Day-Night Level
LEA	Local Enforcement Agency
L _{eq}	Equivalent Sound Level
L _{max} and L _{min}	Maximum and Minimum Sound Levels
LOS	Level of Service
L _{xx}	Exceedance Sound Level
MEI	Maximally Exposed Individual
mg/L	milligrams per liter
mgd	million gallons per day
mph	miles per hour
MRZs	Mineral Resource Zones
MSW	Mixed solid waste
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NO ₂	nitrogen dioxide
NOI	Notice of Intent
NOX	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWIC	Northwest Information Center
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OIMP	Odor Impact Minimization Plan
PM ₁₀	particulate matter 10 microns in diameter or less
PM _{2.5}	particulates 2.5 microns or less in diameter
ppd	pounds per day
RCSI	Report of Composting Site Information
RCSI	Report of Composting Site Information
ROG	reactive organic gasses
RWQCB	Regional Water Quality Control Board
SFBAAB	San Francisco Bay Area Air Basin
SMARA	Surface Mining and Reclamation Act of 1975
SNARLS	suggested no adverse response levels
SO ₂	sulfur dioxide
SR	State Route
SSCCFD	South Santa Clara County Fire District
SWFP	Solid Waste Facility Permit

SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TOC	Total Organic Carbon
TPD	Tons per day
TPD	tons per day
tpy	tons per year
TSS	Total Suspended Solids
UBC/CBC	Uniform Building Code/California Building Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
vpd	vehicles per day
WDR	Waste Discharge Requirements
Z-Best	Z-Best Composting Facility
ZRRML	Zanker Road Resource Management Limited's

Chapter 2

Project Description

Project Location

The project site is located in southern Santa Clara County (County), approximately 5 miles southeast of the City of Gilroy, near the San Benito County line (see Figure 2-1). The 157-acre site is bound by State Route (SR) 25 to the north and active agricultural land (row crops) on all other sides. The southeastern corner of the project site is immediately adjacent to the Pajaro River. Access to the site is from SR 25.

Purpose and Need

The primary purpose of the proposed project is to increase operational efficiencies at the 157-acre Z-Best facility. These operational efficiencies would occur through the expansion of final processing and finishing operations into 28 acres on an 80-acre parcel adjacent to current operations (Area 2), as well as through improvements to existing composting operations on the 77-acre Area 1. Expansion into Area 2 would spread the current operation over a larger area (expansion of 28 acres) – 105 acres total, while maintaining the same volume of composted materials. The additional acreage in Area 2 is necessary to accommodate final processing and compost finishing equipment to create a more efficient operation. Expansion into Phase 2 would be phased as necessary to accommodate expansion over a 2–10 year period. All of the proposed changes can be seen in the Z-Best Facility Site Plan (Appendix A).

Project Background

In 1997, Zanker Road Resource Management Ltd. (ZRRML) acquired the 157-acre two-parcel project site for operation of a composting facility—Z-Best Composting Facility (Z-Best). Green waste would arrive at Z-Best source-separated and would then be processed, composted in elongated windrows, cured, and sold as finished compost from this location. An IS/MND was prepared for the project (Thomas Reid Associates, May 1997), and Z-Best began accepting and processing the permitted average of 500 tons per day (TPD) of green waste and agricultural waste on 77 acres (Area 1) of the project site under a Santa Clara County Use Permit (No. 6498-81-11-97P, obtained June 5, 1997) and a Standardized Solid Waste Facility Permit (obtained September 15, 1997).

In 1999, another IS/MND was prepared for the expansion of the Z-Best facility. The expansion activities included the following.

- Expanding the permissible waste streams (from an average of 500 TPD to an average of 1,500 TPD).
- Utilization of new composting methods (compressed windrows and enclosed aerated static pile, or 'CTI in-vessel system') in addition to the elongated windrow method.
- Construction of a 20,000-square foot processing building; increasing the types of materials to include mixed solid waste (MSW) (such as post-consumer food waste, dewatered grease trap screenings, and construction and demolition materials).
- Expanding the hours of operation to allow for work inside the processing building until 10:00 p.m. Monday through Saturday.
- Addition of the ability to mulch green material for sale, without composting the feedstock; and expansion of the existing all-weather composting pad using incoming construction and demolition material.

The IS/MND was adopted by the Santa Clara County Planning Commission on August 5, 1999, a new Use Permit was issued (No. 6498-81-11-98P), and Z-Best subsequently obtained a full solid waste facility permit (SWFP) on November 23, 1999.

In 2002, Z-Best prepared an application to the Department of Environmental Health, Solid Waste Program. Local Enforcement Agency (LEA) of Santa Clara County is to amend the Report of Composting Site Information (RCSI) to describe minor technical changes at the site since 1999 (the RCSI is the document referenced in the SWFP and IS/MND that describes site operations in detail). Specifically, Z-Best had installed a mechanical sorting system in the 20,000-square foot processing building to remove contaminants from the incoming MSW loads. MSW is organic waste with a non-organic trash component, commonly attributed to restaurants; this non-organic trash must be separated out before composting. Previously, the MSW had been hand-sorted, and the addition of the mechanical system enabled Z-Best to utilize a more efficient sorting process, resulting in less contamination in the final product and an increase in worker safety. The LEA found that this change at the site would not negatively impact the environment and a new CEQA review was not required. Therefore, on January 17, 2003, the LEA prepared Addendum No. 1 to the 1999 IS/MND to describe this change at the facility.

The LEA completed a statutorily-mandated Five-Year Permit Review Report of the facility on November 23, 2004. During this review, the County found that other changes that had been implemented at the site since the issuance of the SWFP may not be consistent with the 1999 IS/MND for the expansion of the facility. Specific issues the County identified include the following.

- The receipt of ‘targeted source’ mixed solid waste, which results in more non-compostable waste materials needing to be processed and transferred from the site after sorting, instead of ‘source-separated’ mixed solid waste.
- A peak of up to 42 persons frequenting the site per day instead of 10 to 25 persons.
- The addition of compost processing equipment (a permanently mounted 12 by 60-foot Trommel compost screener and two portable Trommel screeners).
- The addition of other structures (a 33-foot-high litter control fence, a 40-foot-high wind barrier fence, and a ‘Push’ structure) to mitigate the offsite blowing of dust and litter.

To address changes that were implemented at the site since 1999 and to evaluate impacts related to the proposed 80-acre expansion of the facility into Area 2, the County hired an environmental consultant - Jones & Stokes, now known as ICF to prepare the Public Draft Initial Study for the project in August 2006 and Response to Public Comments on the Initial Study in November and December 2006. Concerns regarding odor and vectors were raised during the 30-day public review period and during the public hearing at the February 1, 2007 Planning Commission meeting.

To further evaluate significant odor impacts on surrounding land uses from the proposed expansion, Jones & Stokes/ICF prepared a *Final Odor Emission Technical Report* on November 9, 2007. Based on recommendations in the report, the Z-Best expansion plan was subsequently revised so that uses proposed for Area 2 would involve only low odor-causing materials. Other emission reduction measures recommended in the report would also be implemented as part of the new expansion plan.

The scope of the project has been reduced to avoid significant floodplain/drainage impacts of the project. The site is located in a Federal Emergency Management Agency (FEMA) mapped Floodplain zone A, and also in the 100 –year Soap Lake flood zone. As shown on revised site plans, the expansion entails 28 acres. The proposed 28 acre expansion area will be filled to elevations above the calculated Base Flood Elevation (BFE) – 8 feet above the BFE. All of the operational changes that have occurred since the adoption of the 1999 IS/MND are considered part of the proposed project that will be evaluated in this document.

Project Characteristics

ZRRML is proposing to expand its Z-Best facility while maintaining the current permit conditions for incoming material and piles of composting, with traffic

loads, and storage capacity. Existing, permitted composting activities occur on 77 acres (Area 1) of the 157-acre property (see Figure 2-1). The proposed expansion would include operational improvements to Area 1 and would utilize 28 acres of the remaining 80 acres (Area 2) of the property for final storage of finished compost and equipment. As described above under *Project Background*, certain existing operational improvements were found to have not been addressed in the existing 1999 IS/MND and 2003 Addendum No. 1, and are therefore analyzed retroactively in this IS/MND to ensure CEQA compliance.

Under the proposed expansion plan, Z-Best would not increase the amount of traffic, the incoming tons of material, or the total on-site storage capacity beyond current permitted limits. No windrowing of raw compost feedstock would occur on Area 2. Area 2 would have a maximum capacity of 100,000 cubic yards of finished material. Table 2-1 below summarizes the existing and proposed Permit Conditions for Z-Best.

Table 2-1. Summary of Operational Capacity Changes

Condition	Existing	Proposed
Facility Acreage	77	105
Daily Tonnage	1,500	1,500
Total Permitted On-site Capacity (cubic yards)	576,000	576,000
Permitted On-site Capacity (cubic yards) compostable material	450,000	450,000
Average existing on-site use (cubic yards) compostable material	360,000	360,000
Average Daily Traffic (ADT)	356	356
Number of Employees	45	60
Hours of Operation		
Overall Facility	6am-6pm	24/7
Material Receiving	24/7	24/7
Processing Building	6am-10pm	24/7
Screening and Turning	24/7	24/7

Previously Implemented Changes

Area 1

Targeted Source MSW

The 1999 IS/MND and Use Permit for the facility considered that the operation would primarily handle MSW from post-consumer, ‘source-separated’ (separated at the source of collection) residential and restaurant waste. Z-Best is now currently receiving mixed MSW from multi-family sources for use in composting, which is different from source-separated waste, since it requires sorting after it reaches the facility. This has resulted in a higher percentage of non-compostable materials in the feedstock, creating the need for mechanical sorting lines. Thus, there is more processing of targeted source MSW at the site than anticipated when the 1999 IS/MND was approved and there now exists the need to transport the sorted materials for disposal or recycling elsewhere. The 1999 IS/MND states that the amount of non-compostable waste materials needing to be removed from the site after sorting, based on a mixed solid waste inflow of 700 tons per day (TPD), would be a residual amount of up to 12.5 percent or 88 TPD. This percentage is now anticipated to be around 30 percent or 280 TPD, due to the processing of non source-separated MSW waste. This would result in the permitting of the facility as both a composting facility and a transfer/processing facility. Regulations that pertain to transfer/processing facilities shall be incorporated into the project. However, it is primarily a composting facility. Solid Waste Facility Permit conditions are to be added such that the processing building could not operate independent of the composting operations.

In 2002, Z-Best installed a mechanical sorting system within the existing processing building. This sort-line equipment is utilized to remove contaminants from the incoming MSW feedstock loads, and is manned during all times of operation. The sorting process produces recyclable materials such as metal, cardboard, glass, and plastics, and a small percentage of non-compostable refuse, as well as removal of occasional household hazardous waste materials. Before processing, a load screening is completed to prevent the receipt of unacceptable materials, including household hazardous waste. If the load check finds any form of household hazardous material, the material is separated and stored for proper disposal and recorded for review by the Hazardous Material Compliance Division of the Santa Clara County Department of Environmental Health. Random loads are checked in detail for all types of household hazardous materials. Most transfer loads are also checked at the transfer facility of origin. Any household hazardous materials are handled and disposed of by trained personnel in accordance with applicable State and County laws and regulations.

Additionally, after the composting process is complete, multiple screening processes are utilized over several months to further remove unwanted material from the compost and to continue the breakdown of organic materials. The product processing system consists of a double screening process with the first cut to a 1-inch screen size (an 830 model portable Trommel screen) and, when

necessary, after further composting and screening, the final cut to a $\frac{1}{8}$ -inch screen size (an 833 model portable McCloskey Trommel screen).

‘Push’ Structure

In 2005, Z-Best constructed an approximately 1,400-square-foot concrete structure adjacent to the processing building to contain litter from the mechanical sorting system and the compost processing screening area. The structure is approximately 15 feet high with only three walls (one side is open for debris to be pushed in from the processing building), and is covered with a metal roof to protect the residuals from rain and winds.

Dust and Litter Screens

A 33-foot-high litter control fence and a 40-foot high wind barrier fence have been erected at the site subsequent to the 1999 IS/MND and Amendment No. 1. These site elements have not been previously analyzed under CEQA. The litter control fence, placed in order to reduce the dust and litter blown offsite, is located along the northern perimeter of the site along the SR 25 right-of-way. The wind barrier fence is located in Area 1 between the existing tipping, grinding, and screening area and the compost curing windrows to the south. Both fences are made of high strength, UV treated polyester netting, with 3,500 lb. rope sewn in vertically, horizontally, and around the perimeter of each panel and supported by anti-corrosion coated steel poles. Screening is always curtailed when the winds pick up and blow toward the highway.

Increased Number of Persons at Site

The number of persons including employees and service trucks frequenting the site per day has risen from the 10–25 identified in the 1999 IS/MND to up to 48 persons at present; currently there are 45 employees and an average of 3 visitors a day to the facility.

Septic System

The proposed project includes coverage of a septic tank with an engineered mound soil absorption disposal system installed in July 2006. The mound system design is in full compliance with the 1980 State Water Resources Control Board (SWRCB) *Guidelines for Mound Systems* and the 1989 SWRCB *Guidelines for the Design, Installation, and Operation of Mound Sewage Disposal Systems*.

Proposed Changes

The proposed project would include the following new activities within the existing 77 acre Area 1.

- Expand all operations to 24 hours per day, 7 days per week.
- New asphalt/concrete employee parking lot.

- Asphalt entrance to scale, existing parking lot, and exit lane.
- Tire washer for truck exit.
- Widen all existing fire access lanes from 12 feet to 20 feet.
- Increase number of employees to 60.

The proposed project would expand the permitted area by 28 acres in Area 2 for the following:

- 28 acre all weather operations pad, constructed in three phases, on which the following activities would occur.
 - Compost and mulch (compost overs) storage in 15,000 – 20,000 cubic yard stockpiles for compost, and 2,000 cubic yard stockpiles for mulch.
 - Compost sterilization placed in 5,000 cubic yard piles covered with breathable tarps with blowers attached to pipes to push air through the piles to generate heat for 24- 48 hours for sterilization.
 - Compost blending area for the mixing of compost with various additives to create enhanced products. Compost from sterilization area placed in windrows blended in bucket loader or compost turner with additives. Larger quantities may be blended using a trommel screen or other equipment.
 - Secondary compost screening. Stored compost may be rescreened using a trommel screen to create ultrafine compost and other such specialty products.
 - Bagging plant and storage of palletized bags. Finished compost will be transferred to the bagging plant to be packaged for retail sale. Finished bags will be palletized and stored on site until delivery to vendor.
 - Mulch processing and colorization. Mulch of mainly wood chips and other woody material may be grinded and screened further to size material appropriately for shipping out for orders of mulch.
 - Storage area for sand, gypsum, lime, soil, humate, and other additives.
 - Equipment storage and parking area.
- Sedimentation and flood protection basin.
- Litter fence around front perimeter.
- Tree berm along front perimeter.
- Setback area from SR 25 and eastern site boundary.
- Pajaro River Bank Reconstruction Area.

Area 1

Hours of Operation

All operations would be increased to 24 hours per day, 7 days per week. Operations to turn and screen compost currently are allowed up to 24 hours per day, 7 days per week, depending on wind patterns and wind speed. Currently Z-Best is permitted to operate 6:00 am to 6:00 pm, 7 days a week with additional hours of 6:00 am to 10:00 pm within the processing building to receive feedstock when a load check employee is available, or to screen and turn during specified contingencies (i.e. calm winds). Functionally, this means that all proposed operations outside of the processing facility have been allowed to occur under existing conditions, but that the frequency of nighttime operations would likely increase under the proposed projects to match 24 hour operations in the processing facility.

New Employee Parking Lot and Asphalt Entrance/Exit

Currently, the only on-site parking consists of 24 spaces approved under the 1999 IS/MND, immediately to the north of the shop office. The proposed new parking lot would include the creation of 36 additional spaces in a single lot located along the western edge of the property to the southwest of the shop office. The proposed parking area would consist of compacted Class II base rock with asphalt surfacing and a wheel stop perimeter border of 4 by 4-foot pressure treated wood. In addition, asphalt surfacing would be applied to the entrance of the weight scale and exit lane.

Increased Number of Persons at Site

Persons frequenting the site would be increased from 42 per day up to a maximum of 60 employees and visitors, with 39 current employees and 55 projected with the expansion over the next 10 years. The full number of 55 employees is unlikely to be on-site at the same time except potentially for shift changes under the proposed 24-hour expansion of operations in the processing building.

Traffic Count Adjustments

The total number of vehicles per day (vpd), assuming 1,500 tons per day (TPD) average permitted capacities, is not expected to change under the proposed project and therefore would not exceed the 178 vpd (equivalent to an average daily traffic [ADT] of 356) stated in the 1999 IS/MND.

However, it is anticipated that the amount of daily employee traffic would increase relative to the traffic count projections stated in the 1999 IS/MND, while the amount of daily visitor and self-haul traffic would likely fall short of these projections. To address this disparity, assumptions regarding daily traffic as modeled 35 vpd from the Self-Haul category and 5 vpd from the Visitor category and add them to the Employees category, thereby increasing the anticipated daily

employee traffic at the site from 15 vpd to 55 vpd. This adjustment reflects the amount of employee, visitor, and self-haul traffic that would realistically be expected to occur on a daily basis under proposed conditions. All other traffic at the site is expected to remain consistent with the traffic count projections stated in the 1999 IS/MND.

Area 2

Pending issuance of a Use Permit and a revised Solid Waste Facility and Transfer/Processing Permit, 28 acres of Area 2 would be equipped with an all-weather surface for storage of finished compost, equipment storage, and associated processing operations. No windrowing of raw compost feedstock would occur on Area 2. Area 2 would have a maximum capacity of 100,000 cubic yards of finished material.

The composting process would continue to operate as permitted. Expansion of operations into Area 2 would expand the operations area, but would not expand the composting capacity of the facility. The facility would continue to treat its permitted limit of 450,000 tons per year of compostable material. An average of 360,000 tons per year is currently stored and processed on-site. With an additional 28 acres proposed for the expansion area, 100,000 tons of material from Area 1 would be transported to Area 2.

Additionally, the most recent compostable material handling regulations adopted by the California Integrated Waste Management Board (CIWMB), effective April 4, 2003, have a series of definition changes and regulatory requirements. The new regulations are incorporated into the expansion plan to allow for the storage of approximately 130,000 cubic yards of finished compost, in addition to the existing permitted capacity of 500,000 cubic yards of active compost, curing compost, feedstock, additives, and ground material. However, the total storage capacity permitted is still 576,000 cubic yards.¹ Prior to adopting the new regulations, the CIWMB did not require that finished compost be included in the facility's overall storage capacity. Operational capacity changes from 1999 to the existing entitlements are described above in Table 2-1.

Activities proposed under the project requiring further detail and/or explanation to complete the environmental analysis are described in the following sections.

Compost and Mulch Storage

Compost would be transported from the primary screening location in Area 1 to Area 2, where it would be stored in 15,000–20,000 cubic yard stockpiles. All compost brought to Area 2 would be screened in Area 1 and unfinished compost mulch would be in the second curing phase (61–90 days old), and municipal solid waste composting would be in the second curing phase (over 60 days old) as

¹ In particular, the permitted storage capacity is not 500,000 cubic yards of active compost (permitted) plus 130,000 cubic yards of finished compost (allowed by new CIWMB regulations), or 630,000 cubic yards, but rather is still the existing permitted 450,000 cubic yards of compost.

described in the Jones & Stokes *Final Odor Emission Technical Report* for Z-Best (Table 2-2).

From the stockpiles, compost may be loaded out as finished product or transferred to another Area 2 operation for further processing. Additional processing may include sterilization, blending, secondary screening or bagging. All of these processes are described in further detail below.

Mulch consists of oversize material or ‘overs’ from the green material compost screening process. Its primary component is wood chips and woody material. Mulch would be placed in 2,000 cubic yard piles with 50 foot separation and stored for load-out or further processing as described below.

Table 2-2. Odor Relative Contribution and Potential Characteristics in comparison to Proposed Project

Odor Sources and Area Sources	Relative Odor Contribution (%)	Potential Odor Characteristics	Existing Area 1	Proposed Area 2
Yard Waste Storage	1.00	Woody	Yes	No
Recycle Storage	1.00	Woody	Yes	No
Food Waste Storage	2.00	Pungent	Yes	No
Composting Windrows 0 -6 days old	30.00	Stinky, sulfurous, fishy, ammonia	Yes	No
Composting Windrows 7 - 11 days old	10.00	Stinky, sulfurous	Yes	No
Composting Windrows 12-27 days old	40.00	Earthy, mulch	Yes	No
Curing Windrows 28-61 days old	11.00	Earthy, soil-like	Yes	No
Curing Windrows 61-90 days old	3.00	Earthy, soil-like	Yes	Yes
<i>Volume Sources</i>	(<2 all sources combined)			
Grinding Operations	<1	Woody	Yes	Yes
Feedstock Tipping	<1	Stinky	Yes	No
Feedstock Mixing	<1	Stinky	Yes	Yes
Compost Windrow Building	<1	Stinky	Yes	No
Compost Windrow Turning	<1	Ammonia, sulfurous	Yes	No
Compost Windrow Teardown	<1	Mulch	Yes	No
Curing Windrow Turning	<1	Mulch, woody	Yes	Yes
Curing Windrow Teardown	<1	Earthy, soil-like	Yes	Yes
Screening	<1	Woody, mulch	Yes	Yes
Product Loadout	<1	Earthy, soil-like	Yes	Yes
<i>Total Inputs</i>	100%			
Source: Tetra Tech, Inc. (Formerly E&A Environmental Consultants, Inc.).				

Compost Sterilization

Due to increased focus on food and product safety, it may become necessary in the future to sterilize finished compost prior to product load-out. To accomplish this, Z-Best has developed a system to use compost's own heat-generating capability to achieve pathogen reduction temperatures.

Compost in the sterilization area would be placed in 5000 cubic yard piles that are 40 feet wide at the base and 250 feet long. Each pile would have two 5' perforated air pipes 15 feet apart running the length of the pile. The piles would

be covered with breathable tarps. Blowers would be attached to the pipes to push air through the pile and generate heat. After about 24–48 hours, when the temperatures throughout the pile would have reached a minimum of 131 degrees Fahrenheit, the blowers would be removed. The pile would be stored under the tarp until final load-out to prevent recontamination. The process may be repeated if a pile is stored for several weeks or more.

Blending

The blending area would be used to create custom blends of compost and various additives for agricultural and landscape customers. Compost would be brought from the stockpile or sterilization area and placed in a small windrow. The prescribed amount of additive would be placed along the top of the windrow. The windrow would then be blended using a bucket loader or compost turner. Larger quantities may be blended using a trommel screen or other suitable equipment.

Potential additives include soil, sand, gypsum, lime, sulfur, urea, and humate. Material Safety Data Sheet (MSDS) forms (where available) for these additives are included in Appendix B. Additives would be stored in bags or in watered stockpiles in Area 2. The County of Santa Clara Hazardous Materials Compliance Division will be contacted for an updated hazardous materials storage business plan for additions or adjustments to the regulated chemicals used for this process.

Secondary Compost Screening

Stored compost may be rescreened using a trommel screen to create specialty products such as ultrafine compost ($1/8$ -inch minus) for top dressing applications.

Mulch Processing

Mulch consists of oversize material or ‘overs’ from the compost screening process. Its primary component is wood chips and woody material. To create marketable products, the mulch may undergo a variety of processes. These processes include additional grinding and screening to size material to certain specifications, water separation to remove rocks and other inerts, air separation to remove plastic, and dyeing to achieve desired colors. The dyeing process and chemicals will be identified as previously stated under the updated Hazardous Materials Business Plan.

Bagging

Finished compost and mulch would be transferred to the bagging plant to be packaged for retail sale. Finished bags would be palletized and stored on site until delivery to vendor. A brochure and specifications for a typical bagging machine are included as Appendix C.

New Equipment

In addition to the new bagging plant, operations described for Area 2 (mixing, mulch screening and colorization, secondary compost screening etc.) will require some new additional equipment similar in function as currently exist in Area 1. In addition to rolling stock for material handling, Z-Best will purchase additional trommel screens, a chip dyeing unit, soil mixers, a grinder, and a water separator. Specifications for all new equipment can be found in Appendix C.

Pajaro River Reconstruction Area

The Pajaro River Reconstruction Area provides a potential flood conservation easement for the future ability to restore the bank by removing materials that may have encroached upon the floodplain, and to plant riparian vegetation for erosion control, as suggested in the Pajaro River Watershed Study. Past agricultural development may have encroached upon the capacity of the channel, and removed past riparian vegetation. The Reconstruction Area could be placed into a flood conservation easement up to the elevation of 140 feet for potential reconstruction and reinstallation of riparian vegetation and clearing of the channel capacity, should the Santa Clara Valley Water District, require a flood conservation easement in the future.

Project Construction

Construction Phasing

Z-Best proposes to complete the expansion over a 2–10 year period, as economics and market forces dictate. Expansion would be phased as follows:

Phase 1:

- Construction of existing facility improvements. (paving, tire wash, etc.).
- Construction of Area 2 Environmental Measures. (grading and construction of flood protection features including detention basin, 40 ft. wide litter fence, and landscaping)
- Construction of all weather operations pad for north 10 acres
- Operation changes to begin after completion of Phase 1

Phase 2:

- Construction of next 9 acres all weather operations pad.
- Addition of 10,000 sq. ft. bagging plant.

Phase 3:

- Construction of final 9 acres all weather operations pad

Equipment and Construction Methods

Construction of the proposed project would involve various types of equipment, including air compressors, backhoes, bulldozers, excavators/shovels, generators, graders, mowers, loaders, and scrapers. Portions of the project site would be graded, while other portions would be lightly bladed or mowed. Excavated materials would be stockpiled adjacent to the excavations and protected from soil erosion using erosion and sediment control measures included in construction specifications, and described below under *Environmental Measures*. Because construction would occur in an area closed to the public, no road closures or other traffic controls would be necessary. Access to the project area would be restricted to landowners and Z-Best employees during construction.

Construction equipment, materials, and construction employee parking would be staged within the privately owned property site. Access to the site would be through SR 25 and ZRRML-owned access roads from SR 25 to the project site. Use of these roads would be allowed under the landowner's existing easement. No paving, widening, or other improvements of the access road would occur. The typical crew size on-site at any one time would be five to ten people.

Project Operations

The following sections discuss the operational processing and composting of green waste and MSW feedstock. This includes a discussion of existing operational measures included in the applicants existing Odor Impact Minimization Plan (OIMP). An updated OIMP will be prepared for this project expansion to include any operational changes to the existing processes and these proposed changes in the Area 2.

Green Material

“Green Material” is defined in 14 CCR §17852(v) as any plant material that is separated at the point of generation, contains no greater than 1 percent of physical contaminants by weight, and meets the requirements of section 17868.5. Green material includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products and construction and demolition of wood waste. Green material does not include food material, biosolids, mixed solid waste, materials processed from co-mingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.

Material Receiving

The feedstock materials for the composting operation, which include green material and agricultural material, are delivered to the facility by truck. Pre-processed materials are delivered in 50-foot-long walking floor trailers and are deposited directly into windrows for the beginning of the composting process. Other materials that are not preprocessed are processed through a screening system and/or grinder before being sent directly to the windrows for composting.

Incoming feedstock can arrive with odors. The term green material is used to describe a wide variety of feedstock that arrive at the compost facility. The character and composition of the green material may vary considerably by time of year and source. Stockpiles of woody materials like chipped brushy material or wood chips can be used to increase the porosity of the processed material prior to placing it in a windrow. Expediting the time between arrival of feedstock and the time it is processed and the time between when it is processed and placed into a windrow can also reduce emissions.

Material Processing/Grinding

Z-Best moves processed material into a windrow within 4 hours of receipt or sooner if directed by the LEA. Processed materials sitting too long after grinding can generate intermediate breakdown products if they are not moved expeditiously into a windrow. Z-Best's processing/handling methods ensure first in, first out-processing to prevent odors developing in feedstock allowed to sit around without being processed. A system of ensuring first in, first out processing shall be incorporated into the OIMP and implemented with expansion of the facility

Mixing/Materials Handling

Green material would be processed in a portable horizontal grinder within the boundary of the compost operations area, or deposited directly into the windrows. A front-end loader would be used to feed the material into the grinder. Trapezoid-shaped windrows would then be created.

Z-Best's operations require mixing to achieve specific benchmarks throughout the composting process to reduce odors, including:

- Moisture content of initial windrow mix shall be between 40 and 60 percent as verified through on-site testing.
- A C:N (Carbon:Nitrogen) ratio is above 30 to 1 in initial mix.
- Operator shall verify that initial mix porosity is between 40 and 60 percent;
- Operator shall ensure inner core windrow temperatures of core with minimum temperatures of 131 degrees Fahrenheit for at least 15 days and 5 turnings to

mix the windrows to facilitate pathogen and vector reduction during the composting process and will be monitored daily for temperatures.

Composting

Green material is moved into open elongated windrows designed to be approximately 20 feet wide, 8 feet high, and 375 feet in length during the composting phase. Elongated windrows are separated by a 12-foot-wide access road for windrow loading, monitoring, watering, and turning.

The temperature and moisture of the windrow materials would be monitored and controlled, and the windrows turned on a regular basis so that the composting process is maintained. New materials would subsequently be added to the newest side to lengthen the windrow. Windrows would be turned by rolling the oldest edge of the windrow and then the next oldest material by using a turning machine called a Scarab, which flails the material from the bottom as it slowly drives over the windrow. Windrows would be turned to meet the time and temperature requirements, wind permitting, for a period of 12 weeks.

Water would be added as necessary to the compost piles to maintain the appropriate composting moisture and dust control conditions. A water truck would be used to spray water while driving down the pathways between the piles. The frequency of spray irrigation would vary with the season. The water truck would also be used to mitigate dust generation. The process of turning windrows provides sufficient oxygen to sustain the biological activity and keep the material at a temperature of 131 degrees Fahrenheit, or higher, for a period of 15 days or longer, which ensures thorough pathogen destruction. There will be a minimum of five turnings of the windrow during a 15-day period during which readings such as temperature and oxygen content are monitored and documented. When the desired level of decomposition has been achieved, the compost materials would be moved to the curing areas for a 6-week period or left in place until shipment from the site.

Using the elongated windrow method, the total composting time would be approximately 10 to 14 weeks.

Curing

After the compost process is completed, the material would be cured up to 6 weeks either in place or moved to a separate curing pile. The finished product would then be screened and shipped directly off site or stored in the expansion area for eventual sale.

Municipal Solid Waste (MSW)

Mixed municipal solid wastes are defined in 14 CCR §17852(y) as any material that is part of the municipal solid waste stream, and is mixed with or contains nonorganics, processed industrial materials, or plastics. The mixed solid waste

materials that would be received at the Z Best Composting Facility would come from commercial refuse collection facilities. Usually it is received presorted and grounded and is loaded directly into the bagging machines. Otherwise, transfer trucks deliver the loads into the building for sorting and grinding.

Material Receiving

MSW is initially received at the processing building. The building is fitted with a conveyor system to a manual sort line for removal of undesirable contaminants and inert material, followed by a chute to a coarse grinder of a 6'-10" minus product size.

Incoming MSW feedstock arrives in the Transfer/Processing Building in transfer trailers with or without presorting and grinding. Unsorted material is tipped using walking floor trailers near to the conveyor belt where a claw excavator can load the feedstock into the processing line. Sorted and pre-ground material is tipped directly into the piles for movement by truck to the bagging machines. The material received in the building is rotated and moved out into the aerated windrow within a period not to exceed 48 hours. The building is cleaned daily and all material is removed for bagging. To prevent vectors, any stockpile area is completely cleared from the walls and bunker sides for cleaning and inspection. In order to minimize odors, the facility is fitted with a misting system including a deodorizing additive that is operated continuously during processing and daily building cleaning.

Some incoming feedstock is more odiferous than others. The operator must make daily decisions about specific feedstock loads. Loads that are deemed particularly odiferous should be scheduled for priority processing (i.e. within 1 hour of receipt), re-direction or refusal. Re-directing loads should be considered the preferred action during periods of stagnant air conditions. All materials can be removed for other disposal at a landfill if it is determined to be the source of an odor problem.

Material Processing/Grinding

Only material that has not been previously sorted and ground will be placed by transfer trailer or other approved vehicle inside the building for MSW receiving. A claw excavator is used to place the waste into the hopper for the sort line conveyor. All unsorted material is sorted prior to grinding.

Z-Best moves processed material into a windrow within 48 hours of receipt or sooner if directed by the LEA. Processed materials sitting too long after grinding can generate intermediate breakdown products if they are not moved expeditiously into a windrow. Z-Best's processing/handling methods ensure first in, first out-processing to prevent odors developing in feedstock allowed to sit around without being processed. A system of ensuring first in, first out processing shall be incorporated into the OIMP and implemented with expansion of the facility. However usually the material is conveyed directly into the bagging machine.

Mixing/Materials Handling

The process liquids in the CTI feedstock mixing area, which are necessary for the CTI system, would be absorbed as all the materials are combined. Materials are mixed with previously composted overs or mulch before loading into the bagging runner truck. If necessary, additional wood chip or green material would be used to absorb residual free liquids on the concrete slab floor. This material would then be introduced as feedstock material in the CTI system.

Moisture content of the mixed feedstock material would be monitored and adjusted through the addition of additional water, or through drying of the feedstock material that is too moist for an effective composting process. Drying of the feedstock material would be accomplished by adding additional dry feedstock material to the mixing process.

Z-Best's operations require mixing to achieve specific benchmarks throughout the composting process to reduce odors, including:

- Moisture content of initial windrow mix shall be between 40 and 60 percent as verified through on-site testing.
- A C:N (Carbon:Nitrogen) ratio is above 30 to 1 in initial mix.
- Operator shall verify that initial mix porosity is between 40 and 60 percent;
- Operator shall ensure inner core CTI temperatures of core with minimum temperatures of 131 degrees Fahrenheit for at least 3 days to facilitate pathogen and vector reduction during the composting process and will be monitored Daily

Composting

The CTI enclosed-vessel composting system provides a method to aerobically decompose organic waste material, including aeration, compaction of the organic material, and continual percolation of moisture released therefrom in a collapsible, portable bag container, to provide beneficial soil amendments and fertilizers.

A truck-mounted mixer would be used to transport the feedstock material to the water source, as necessary, and then to the bagging machine. Should an odor problem occur during transport to the bagging machine, ZRRML would mitigate the odor problem by either tarping the load, adding an odor-reducing agent, which is compatible with the composting process, or use other appropriate methods for reducing odor.

The feedstock would be placed into a bagging machine that fills an elongated, thermoplastic laminated plastic composting bag with an 8-mil thickness. Two air vent pipes would be installed to assist the aerobic decomposition process. The entire composting process would take place inside of the elongated thermoplastic bag. The bags would be 12 feet in diameter and 200 feet in length, with an

effective length of 185 feet when filled. The bagger would be fed from a truck onto a feed table, conveyor, or into a hopper, which feeds material to the compaction unit on the bagger. Compaction pressure would be controlled by adjusting the breaking resistance on the wheels or backstop cable drum, depending on the model being used.

Bags, each capable of holding up to 600 tons of feedstock material, would be placed in rows separated by a 5-foot aisle. Electric blowers would be placed in aisles and would provide aeration through a system of perforated pipes installed along the base of each bag. With this system, blowers provide the aeration. Turning of the organic material as with other composting processes would not be necessary. At full-scale operation, the number of bags may increase up to 50 bags with 2 blowers for each bag. The specific configuration of the power supply to the blowers would be determined during the building permit phase of the project.

In the CTI system, blowers provide aeration through the perforated pipe, which supplies a uniform airflow to the full length of the bag, thereby aiding the composting process and preventing development of anaerobic conditions and associated odor problems. A blower for each bag would deliver the required air to support the composting process, which would be controlled by a manually set timer. In the CTI system, microbial growth and the resulting temperature is controlled by adjusting or increasing the amount of oxygen available.

Excess air, carbon dioxide, and moisture would be vented through openings made along the top spine of the bag and each one is covered with fly screening taped into place. The composting material within each bag acts to a significant degree as its own biofilter, contributing further to effective odor control. Additional venting would be provided as needed, with additional openings being made. If at a later time a vent is no longer needed, it would be sealed with tape. When the compost has been determined to reach the desired maturity, the matrix would be checked for moisture. Several different methods may be used to determine the moisture. These include use of a core sampler, or by making an inspection opening large enough to be able to dig into the matrix to check the moisture content.

The operator would use declining temperatures of a compost mass as a good indicator of the maturity of composting material in each CTI bag. Each bag would be allowed to compost for a minimum of 14 weeks.

Curing

At the completion of the composting cycle the composted material is removed from the bag and placed into an adjacent windrow for curing and drying for about a week. Following the week out of the bag, the materials are transported to the primary screening area. Compost product would be sampled at a frequency of one composite of 12 samples for each 5,000 cubic yards of finished product.

Removal of mature compost from a bag would be accomplished with a claw excavator after the bag has been sliced along the lower portion of each side

and peeled back. The composted material would be removed from between and over the aeration piping until the pipe is free to be pulled to the next use area. The bag would be cut into manageable sections and rolled or folded for storage until it is recycled with other film plastics.

Screening

The composed material would then be screened. The material is taken to the primary screening area where most of the plastic separation occurs and is stockpiled in the bunker building. The under below 3" are stockpiled for further curing in stockpiles and eventual final screening stage. Particle sizes larger than 0.5 inches would either be reintroduced to the composting process or directed to a suitable disposal facility. The composted material would be screened to remove oversized, non-composted wood materials and non-compostable materials such as plastics, glass, etc.

The oversized, noncomposted wood materials would either be sold as mulch, or mixed with virgin feedstock for return to the composting process. Non-compostable materials would be transported for disposal to an appropriate disposal facility. Following the screening process, the finished compost material would be moved directly to a stockpile location for wholesale and retail sales.

Environmental Measures

Environmental measures are methods, measures, or practices that avoid, reduce, or minimize a project's adverse effects on various environmental resources. They can be applied before, during, or after construction of the project to reduce or eliminate potential environmental effects. The following environmental measures would be implemented as part of the proposed project. ZRRML would ensure that these measures are included in the project bid specifications, as appropriate.

Measures to Minimize Effects of Construction-Related Noise

1. The working day for construction activities will be between 7:00 a.m. and 5:00 p.m. Construction will not be allowed on Saturdays, Sundays, or holidays.
2. Construction equipment will have appropriate mufflers, intake silencers, and noise control features and will be properly maintained and equipped with exhaust mufflers that meet state standards.
3. Vehicles and other gas- or diesel-powered equipment will be prohibited from unnecessary warming up, idling, and engine revving.
4. Stationary equipment (e.g., generators) is enclosed in a noise-attenuating structure.

Erosion Control Measures to Protect Water Quality

Subject to requirements of Section 402 of the federal Clean Water Act (CWA), and the National Pollutant Discharge Elimination System (NPDES) permitting process, all construction projects that disturb more than one acre of land are required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The construction footprint for the proposed project is large enough that a SWPPP is required. No grading is permitted on the project site until a grading plan and SWPPP have been reviewed by the County, in accordance with the Santa Clara County Grading Ordinance (C12-400-C12-599).

To minimize the mobilization of sediment to the Pajaro River and other water bodies, the following erosion- and sediment-control measures will be included in the SWPPP to be included in the construction specifications, based on standard County measures and standard dust-reduction measures.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattles, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Prohibit the placement of earth or organic material where it may be directly carried into a stream, swale, ditch, marsh, pond, or body of standing water.
- Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or ditches: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
- Conduct dewatering activities according to the provisions of the SWPPP. Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.

ZRRML and/or its contractors will implement a monitoring program to verify effectiveness of the best management practices (BMPs) implemented as part of the SWPPP. The monitoring program will begin at the outset of construction and terminate upon completion of the project.

As part of obtaining coverage under the NPDES General Construction Permit, ZRRML and/or its contractor(s) will also develop and implement a spill prevention and control plan to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction of the project. The plan will be completed before any construction activities begin. The plan will require that hazardous and potentially hazardous substances stored on-site be kept in securely closed containers located away from drainage courses, storm drains, and areas where stormwater is allowed to infiltrate. It will also stipulate

procedures, such as the use of spill containment pans, to minimize hazard during on-site fueling and servicing of construction equipment. If a spill is reportable, the contractor's superintendent will notify the Santa Clara County Environmental Health Department and the California Department of Toxic Substances Control (DTSC).

If during construction, an appreciable spill has occurred and results determine that project activities have adversely affected groundwater quality, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the County and/or its contractors will select and implement measures to control contamination, with a performance standard stipulating that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the County.

Construction will be monitored by County personnel to ensure that contractors are adhering to all provisions for the protection of water quality. In addition, the County will shut down the construction site in the event of noncompliance.

Dust and Odor Control Measures to Protect Air Quality

To control dust emissions generated during construction of the proposed project, the following Bay Area Air Quality Management District (BAAQMD) basic and enhanced control measures for construction emissions of particulate matter 10 microns in diameter or less (PM10) must be implemented.

- Install a tire washer at the facilities truck exit.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Water all active construction areas at least twice daily
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more)

- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- No vehicle shall exceed 10 miles per hour speed limit within the construction site
- The construction site entrance shall be posted with visible speed limit signs
- All construction vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering public roadways
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.

The proposed project shall also continue to comply with the odor control features and commitments identified in the facility's original 1999 IS/MND, which are presented below, and will remain in effect.

- Odor emissions from the green material feedstock shall be minimized through proper management of the windrows and storage piles in terms of time, temperature, moisture, turning to maintain aerobic conditions, and proper carbon-to-nitrogen ratio to reduce ammonia levels. A monitoring program shall be in place as required by regulations to track the composting process so that operational adjustments can be made if necessary.
- Maintain windrows in an aerobic condition through regular aeration and mixing
- Maintain windrow moisture content between 45 and 60 percent.
- Maintain windrow temperatures of at least 131 degrees Fahrenheit throughout the pathogen reduction period.
- Windrows shall be turned five times over a 15-day period during pathogen reduction phase.
- Odor control within the processing building shall be achieved through enclosure of the building, controlled venting, elimination of feedstock that are problematic for effective odor management and processing of mixed solid waste (MSW) into bags within 48 hours of receipt. Operable doors along the sides of the building shall provide flexibility to both enhance as well as restrict airflow through the structure. Accessible areas where waste has been allowed to accumulate shall be cleaned daily to control odors, while a wood chip or green material shall be used to absorb residual free liquids on the concrete slab floor, which shall then be introduced as feedstock material into the CTI system. The processing building will also employ and maintain the existing overhead misting system to minimize odors and control dust within the processing building.
- If an odor problem (i.e. triggers an odor complaint) results from the use of the truck-mounted mixer, the project applicant shall either tarp the load, add an

odor-reducing agent that is compatible with the composting process, or use other appropriate methods for odor abatement.

- Use of best management practices to minimize the creation of nuisance odors. This will include the use of an on-site windsock and anemometer to guide facility operations (i.e., when the prevailing wind is towards the north at speeds greater than 20 miles per hour, the operator shall not turn the windrows).
- Regulation and monitoring of nuisance odor conditions by the County of Santa Clara Department of Environmental Health.
- Odors from the compost facility shall be considered excessive if they are detected at objectionable levels by an inspector at area residences.
- Progressive response to handling of citizen complaints with follow-up regulatory actions by the County of Santa Clara Department of Environmental Health, if necessary, that may include limiting throughput, obtaining additional equipment, temporarily ceasing operation, removal and disposal of the organic material emitting the odor, or other appropriate measures.
- Placement and maintenance of buffer zones and exterior landscaping, which may further mitigate odor impacts.
- A contingency plan in the event of mechanical equipment breakdowns to minimize disruptions to facility operations which could result in the accumulation of untreated or unprocessed feedstock and associated odors.
- An emergency portable generator available onsite as a backup for the CTI system in the event of a disruption to the facility's power supply.
- All incoming feedstock, including MSW, shall be processed within 48 hours of receipt and placed into either windrows or bags associated with the composting process. Manure, as an additive, shall be limited to 15 percent of the total mass of feedstock going into a windrow, shall be incorporated into windrows within 24 hours of receipt, and shall be prohibited during the wet season months, as defined by the County of Santa Clara Department of Environmental Health.
- The project applicant shall secure a revised SWFP and operate under the conditions set forth therein.
- The project applicant shall properly manage the windrows and storage piles in terms of time, temperature, moisture, turning to maintain aerobic conditions, and proper carbon-to-nitrogen ratio to reduce ammonia levels. A monitoring program shall be in place as required by regulations to track the composting processes so that operational adjustments can be made if necessary.
- In the event of an equipment breakdown that could affect routine feedstock processing or composting processes, the project applicant shall, under the direction of the County of Santa Clara Department of Environmental Health, implement appropriate contingency measures that include, but shall not be

limited to, mobilization of backup equipment or redirecting incoming mixed solid waste to an alternate disposal site.

- In the event windrows are saturated by flooding, windrows shall be aerated as quickly as possible after the flood waters have receded.
- The site will be inspected regularly and any areas where water is observed to pond should be regraded for proper drainage.

Vector Control Measures to Minimize Human Hazards

Z-Best has worked with the County LEA to identify and eradicate fly breeding areas. New protocols have been implemented that have eliminated significant vectors at the site. These protocols primarily include increased composting temperatures that fully eradicate fly breeding in compost windrows.

Fire Control Measures to Minimize use of Public Services

All past fires at Z-Best have been in the mulch stockpiles. The most effective way to control fires in piles of this kind is to keep them as small as possible with maximum separation. The expansion into Area 2 gives Z-Best the capability to place all mulch in 1000 cubic yard or less stockpiles with 50 foot separation between piles. Area 2 will also have additional fire hydrants adjacent to stockpile areas. All surrounding weeds and grass will be kept mowed to 4 feet or less to prevent fires from spreading to other properties. In the event of a fire, Z-Best has a Fire Response Plan which is included as Appendix D.

Required Approvals and Permits

The CEQA lead agency is Santa Clara County. The County Planning Commission will determine whether or not to adopt the IS/MND and approve the Santa Clara County Use Permit and Architectural and Site Approval (ASA) for the proposed expansion. Additionally, the following approvals and permits will be required for the Z-Best Facility upon project approval:

- A County of Santa Clara Grading Permit issued by the County Land Development Engineering Office.
- A Solid Waste Facility Revised Permit would need to be issued by the LEA and concurred upon by the California Integrated Waste Management Board.
- A NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit). The project applicant must submit a Notice of Intent (NOI) to the RWQCB to be covered by the General Permit prior to the beginning of construction. The General Permit requires the preparation and implementation of a SWPPP, which must be prepared before construction begins.

- A permit to operate from the Bay Area Air Quality Management District (BAAQMD)..
- A Domestic Water Supply Permit from the California State Department of Health Services

The project also requires a Conditional Waiver from Waste Discharge Requirements for Certain Composting Operations from the State Integrated Waste Management Board. This permit was issued for the project on March 6, 2006 (Waiver Resolution No. R3-2006-0013) with additional permit conditions required by the County of Santa Clara Department of Environmental Health (issued on October 17, 2005).

Public Involvement

The County will publish a NOI to adopt the IS/MND pursuant to State CEQA Guidelines Section 15072 and will circulate the IS/MND for a 30-day public and agency review pursuant to CEQA Guidelines Section 15105(b). After the close of the review period, public and agency comments will be evaluated to determine whether they raise any issues that would require substantial revisions and recirculation of the IS/MND.

Chapter 3

Environmental Checklist

The environmental factors checked below would be potentially affected by this project, involving at least one impact as indicated by the checklist on the following pages.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input checked="" type="checkbox"/> Public Services |
| <input type="checkbox"/> Resources / Recreation | <input type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Utilities / Service Systems |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | <input type="checkbox"/> None |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of 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 in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially 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.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

Signature

Date

Printed name

For

A. AESTHETICS					
WOULD THE PROJECT:	IMPACT				SOURCES
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2,3,4, 6a,17f
b) Substantially damage scenic resources along a designated scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3, 6a, 17f
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,4
e) If subject to ASA, be generally in non-compliance with the Guidelines for Architecture and Site Approval?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11
f) If within a Design Review Zoning District for purposes of viewshed protection (d, -d1, -d2), conflict with applicable General Plan policies or Zoning Ordinance provisions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3,4,12

Setting

The project site is located in an area that is dominated by agricultural land uses at the southern end of the Santa Clara Valley. The 157-acre site is surrounded by active agricultural lands that are dominated by row crops. Agricultural uses on and within the general vicinity of the project site have removed most native vegetation, with the exception of a few areas bordering the Pajaro River, which runs along the southeast corner of the project area.

SR 25, which is a heavily used commuter roadway that connects the City of Hollister to Highway 101, runs along the northern boundary of the site. Apart from this roadway, the project site is bordered by agricultural and agricultural-related industrial land uses, including expansive fields and warehouses. In addition, rural residences are scattered throughout the agricultural area.

Lighting within the vicinity of the project area is minimal at night, including intermittent safety lighting on buildings and small amounts of light emanating from local residences. Lights from passing cars on SR 25 are also present. In addition, lighting from the project site includes safety lighting on buildings and temporary lighting that is used infrequently for nighttime deliveries and processing. These lights face south, away from SR 25, minimizing effects on adjacent land uses.

Discussion of Impacts

a) The project site is not located in an area that has been designated as a scenic vista. Agricultural fields and industrial buildings that support agricultural production dominate the landscape within the vicinity of the project area, and the project site complements these land uses. Grading plans show that the pad for the 28 acre expansion area will be raised approximately 8 ft. However proposed landscaping tree berm will minimize the visibility of this area. Implementation of the project would increase the overall capacity of the site to handle composting operations and would increase the amount of equipment on the site, but would not change the overall character of the site, or impede views of scenic vistas on or within the vicinity of the project area. Because there would not be substantial changes in the overall appearance and use of the site that would be visible, this impact is considered less than significant.

b) The project site is located along SR 25, which is not designated as a scenic highway by any local, State or Federal agency, including the County. The project site is not visible from the nearest scenic highway, Bloomfield Road, located north of the site. Therefore, implementation of the project would have no impact on scenic resources along a scenic highway.

c) Implementation of the project would not increase the composting production that would occur within the project site within the existing permitted limits. The additional 28 acres of the site that are currently leased for agricultural production would be used for the storage of finished compost and creation of mulch materials moving approximately up to 100,000 cubic yards of finished product from Area 1 to Area 2. In addition, the facility would increase operating hours to 24 hours a day, 7 days a week, increasing the number of employees that travel to and from the site to a maximum of 60 per day, and would include a new employee parking lot southwest of the shop office with 36 spaces and a resurfaced entrance/exit lane in the vicinity of the weight scale. The expansion of the facility also includes several existing features that were constructed subsequent to the 1999 IS/MND and the Amendment No. 1, including an additional push structure located adjacent to the processing building and the litter control and wind barrier fences located along the northern boundary of the project site. Although there would be changes to the project site as a result of project implementation, the overall character and visual integrity of the site would be preserved as the overall function of the site would remain the same.

The addition of structures and lighting on-site would be clustered among the existing buildings, and lighting measures, as described below, would be implemented to reduce additional light and glare from escaping the project area. These measures would also reduce the overall visibility of the litter and wind barrier fences located along SR 25. Furthermore, additional structures that would be constructed as a result of project implementation would use complimentary materials to preserve the overall integrity of the site. Through the implementation of these project features and measures, the visual character and quality of the site would be preserved and largely unchanged. Therefore, this impact is considered less than significant.

d) Implementation of the proposed project would not significantly increase light within the project site, or the amount of light that would spill over to adjacent land uses. Expansion of the proposed facilities and the increase in hours of operation to 24 hours a

day, 7 days a week would increase the overall demand for light at the site. However, the majority of light that would be added as a result of project implementation would be contained within the processing building. Additional temporary lighting may also be necessary to ensure worker safety throughout nighttime working conditions. To provide adequate lighting for these activities, portable lights would be used and erected for individual operations. These lights would face to the south, away from SR 25 and adjacent rural residences. Additional permanent lighting would be required for increased nighttime deliveries and general nighttime operations that would be required on-site.

Implementation of the proposed vegetative screening buffer would reduce visual impacts on wildlife in the adjacent Pajaro River Riparian Corridor (Discussed in greater detail under Biological Resources).

Existing structures constructed subsequent to the 1999 IS/MND do not significantly increase the amount of glare radiating from the site. The existing push structure and wind barrier and litter control fence are located within an area that supports existing large structures, and are constructed with compatible materials, minimizing glare from the new buildings. The proposed parking lot would increase the number of cars that are parked on-site that may minimally increase glare to adjacent land uses. However, existing structures, fencing, and vegetation would minimize any additional glare, and the effects of the additional vehicles would be minimal. Designing a vegetative buffer along the perimeter of the site that borders SR 25 would minimize additional glare and light, and visibility of the new expansion pad area that may be produced as a result of project implementation. As shown on grading plans, the pad for the 28 acre compost/mulch area will be raised approximately 8 ft. With implementation of the landscaping plan, this impact is considered less than significant.

Construction activities on-site would temporarily increase glare from the site as sunlight reflects from the metal surfaces of construction equipment. However, this increase in glare would be temporary in nature, and would not substantially add to glare that currently escapes the project site as a result of the large-scale machinery that is used in everyday operations. Therefore, this impact is considered less than significant.

e, f) Implementation of the proposed project would not result in any significant impacts to the visual quality of the site. The site is not within a Design Review district (-d1 or -d2). Implementation of the proposed vegetative screening buffer is incorporated into proposed Landscaping Plans to be evaluated as part of the ASA guidelines for approval. With the below lighting plan approval, there are no significant visual lighting issues.

Mitigation

A landscaping plan shall be submitted for approval prior to final grading permit issuance. Landscaping shall be designed to screen visibility of the 8 ft. raised compost pad on the proposed 28 acre expansion area.

A lighting plan shall be submitted for approval prior to final grading permit issuance. Any new outdoor lighting shall not adversely affect night time views. Lighting shall be designed to ensure that no direct offsite spill of light or glare will occur.

B. AGRICULTURE RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Convert 10 or more acres of farmland classified as prime in the report <i>Soils of Santa Clara County</i> to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3,23,24,26
b) Conflict with existing zoning for agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9,21a
c) Conflict with an existing Williamson Act Contract or the County's Williamson Act Ordinance (Section C13 of County Ordinance Code)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3,4,26

Setting

The project site is located in an area consisting almost entirely of Prime Farmland and Farmland of Statewide Importance as identified by the State Farmland Mapping and Monitoring Program (FMMP). The site is not under Williamson Act Contract.

The Z-Best site was historically used for agriculture. At the time of ZRRML's acquisition in 1997, the 157-acre two-parcel project site was under cultivation for irrigated cropland. ZRRML continued leasing land in Area 2 for farming until 2000, at which time the site was allowed to remain fallow. The site has been maintained in a fallow state since 2000 (per Greg Ryan – Z Best Composting Facility operator)

The Z-Best Composting Facility site is zoned "Agricultural" by the County Zoning Ordinance, which allows a variety of agricultural and agricultural support uses. Composting is a conditionally allowed use in the County, as specified under Section 4-4.2 of the Santa Clara County Zoning Ordinance.

Discussion of Impacts

a) The proposed facility site is located within an area known to contain prime agricultural soils (Class II) – soil type Sunnyvale silty clay (Sv), and a small portion of the site non-prime agriculture (Class III) – soil type Clear Lake clay drained (Ck) according to Dept. of Conservation soils maps. The site has historically been used for farming. The California Division of Land Resource Protection defines prime farmland as

land that has 1) been in production of irrigated crops at some time during the four years prior to the FMMP mapping date and 2) soils that meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the USDA Natural Resources Conservation Service (NRCS) (California Department of Conservation, Division of Land Resource Protection 2004). The proposed 28 acre compost facility expansion area has not been in production of irrigated crops during the past four years. Therefore, it does not meet the criteria for Prime Farmland or Farmland of Statewide Importance. Since the site is not classified as important farmland by the FMMP, the project would not have a significant impact on agricultural land.

b) The Z-Best facility is a conditionally allowed use pursuant to the County use permit. As such, implementation of the proposed project would not result in a conflict with the County's existing zoning for agricultural use.

c) The site is not under Williamson Act Contract. Therefore there are no Williamson Act Contract impacts.

d) As indicated in the response to impact "a" above, the proposed compost facility expansion site has not been in production of irrigated crops during the past four years. Therefore, the project would not result in the conversion of existing farmland to non-agricultural uses.

Mitigation

None Required.

C. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5,28
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,29
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5,29
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,29
e) Create objectionable odors or dust affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5,21, 29, 47

This section discusses federal and state ambient air quality standards and existing air quality conditions in the project area, and describes the overall regulatory framework for air quality management in California and the region. Information presented in this section is based in part on communication with the Bay Area Air Quality Management District (BAAQMD). This section then identifies potential air quality impacts of the proposed project, as well as mitigation measures to reduce significant impacts to less-than-significant levels.

Setting

The proposed project site is within Santa Clara County, which is located in the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB consists of Santa Clara County and six other counties—Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Napa—as well as portions of Solano and Sonoma Counties.

Regional Climate and Topography

The primary factors that determine air quality are the locations of air pollutant sources and the amount of pollutants emitted from those sources. Meteorological and topographical conditions are also important factors. Atmospheric conditions, such as

wind speed, wind direction, and air temperature gradients, interact with the physical features of the landscape to determine the movement and dispersal of air pollutants.

The project site is located in the south bay region of the Bay Area, which is located in the San Francisco Bay Area Air Basin (SFBAAB). Mountains bound the Santa Clara Valley to the east, south, and west, and by the San Francisco Bay to the north. Temperatures in the valley are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. The northern end of the valley experiences mean maximum temperatures in the low-80s during the summer and the high-50s during the winter, with mean minimum temperatures ranging from the high-50s in the summer to the low-40s in the winter. Further inland in the valley, temperature extremes are greater.

Winds in the valley are greatly influenced by the terrain. This results in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A light south-southeasterly drainage flow occurs during the late evening and early morning, and a north-northwesterly sea breeze flows through the valley during the afternoon and early evening. The southern end of the valley, in the vicinity of the proposed project, sometimes becomes a "convergence zone" during the summer when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds.

Figure 2 represents a wind rose summarizing the percentage of time wind blows in each direction and the mean wind speed by direction. The wind rose meteorological data was taken from the BAAQMD's meteorological station located in Gilroy, approximately 3 miles north of the proposed project area, for the years 1990 through 1993, and 1995 through 1996. Within the proposed project area, wind direction predominantly follows a northwest-southeast pattern. The average wind speed for the years for which meteorological data is available is 6.5 miles per hour, and calm winds occur 0.09 percent of the time. Wind speeds are weakest in the fall and winter and greatest in the spring and summer. Summer afternoons and evenings are quite breezy, and nighttime and early morning hours frequently have calm winds in all seasons. Strong winds are rare, and occur mostly in conjunction with the occasional winter storm.

The Santa Clara Valley has high air pollution potential. Stable air, high summer temperatures, and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from Alameda, San Mateo, and San Francisco Counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low-level inversions, ozone can be recirculated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterly in the afternoon. A similar recirculation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

Pollution sources in this subregion are plentiful and complex. The Santa Clara Valley has a high concentration of industry at the northern end, in the "Silicon Valley," and some of these industries are sources of air toxics and criteria pollutants. In addition, Santa Clara Valley's large population and many work-site destinations generate the highest mobile source emissions of any subregion in the Bay Area.

Air Quality Management

The air quality management agencies of direct importance in Santa Clara County include the U.S. Environmental Protection Agency (EPA), California Air Resources Board (ARB), and the BAAQMD. EPA has established federal ambient air quality standards for which ARB and the BAAQMD have primary implementation responsibility. ARB and the BAAQMD are also responsible for ensuring that state ambient air quality standards are met. The BAAQMD is also responsible for implementing strategies for air quality improvement and recommending mitigation measures for new growth and development.

Air quality is determined primarily by the type and amount of contaminants emitted into the atmosphere, the size and topography of the basin, and its meteorological conditions. State and federal criteria pollutant emission standards have been established for six pollutants: carbon monoxide (CO), ozone (O₃), particulate matter (PM₁₀ [particulates 10 microns or less in diameter] and PM_{2.5} [particulates 2.5 microns or less in diameter]), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. Within the SFBAAB, the BAAQMD is responsible for ensuring that these emission standards are not violated. The BAAQMD develops and enforces air quality regulations for non-vehicular sources, issues permits, participates in air quality planning, and operates a regional air quality monitoring network.

Federal and State Ambient Air Quality Standards

Existing air quality conditions in the project area can be characterized in terms of the ambient air quality standards that the federal government and California have established for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health and welfare with an adequate margin of safety. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions).

The national ambient air quality standards (NAAQS), which describe acceptable conditions, were first authorized by the federal Clean Air Act of 1970. Air quality is considered in "attainment" if pollutant levels are below or equal to the NAAQS continuously and exceed them no more than once each year. The California ambient air quality standards (CAAQS), which describe adverse conditions, were authorized by the State legislature in 1967. Pollution levels must be below the CAAQS before a basin can attain the standard. California standards are generally more stringent than the national standards. The pollutants of greatest concern in the proposed project area are CO; ozone; and PM₁₀ and PM_{2.5}, which are inhalable. Federal and state ambient air quality standards are presented in Table 3-1.

Attainment Status

Areas are classified as either attainment or nonattainment with respect to state and federal ambient air quality standards. These classifications are made by comparing actual monitored air pollutant concentrations to state and federal standards. If a pollutant concentration is lower than the state or federal standard, the area is classified as being in attainment of the standard for that pollutant. If a pollutant violates the standard, the area

is considered a nonattainment area. If data are insufficient to determine whether a pollutant is violating the standard, the area is designated unclassified. This occurs in non-urbanized areas where levels of the pollutant are not a concern.

The EPA has classified Santa Clara County as a marginal nonattainment area for the 8-hour ozone standard. For the CO standard, the EPA has classified urbanized areas of the County (described in the Technical Support Document from March 29, 1985, 50 CFR 12540) as a moderate (≤ 12.7 ppm) maintenance area, while the rest of the County is classified as an unclassified/attainment area. The EPA has classified the County as an unclassified/attainment area for the PM₁₀ and PM_{2.5} standards. The ARB has classified Santa Clara County as a serious nonattainment area for the 1-hour ozone standard. For the CO standard, the ARB has classified the County as an attainment area. The ARB has classified Santa Clara County as a nonattainment area for the PM₁₀ and PM_{2.5} standards.

Existing Air Quality Conditions

In addition to ambient air quality standards, the existing air quality conditions in the proposed project area can be characterized by monitoring data collected in the region. The nearest air quality monitoring station is located in Gilroy, which monitors ozone; CO, PM₁₀, and PM_{2.5} are not monitored at this station. Table 3-2 summarizes air quality monitoring data from the Gilroy monitoring station for the last three years that complete data is available (2006-2008). As indicated in Table 3-2, the Gilroy monitoring station has experienced twenty-three violations of the state 1-hour ozone standard and two violations of the federal 8-hour ozone standard during the 3-year monitoring period.

Table 3-2. Ambient Air Quality Monitoring Data Measured at the Gilroy Monitoring Station

Pollutant Standards	2006	2007	2008
Ozone			
Maximum 1-hour concentration (ppm)	0.120	0.091	0.103
Maximum 8-hour concentration (ppm)	0.101	0.065	0.066
Number of days standard exceeded ^a			
NAAQS 1-hour (>0.12 ppm)	1	0	0
CAAQS 1-hour (>0.09 ppm)	19	1	3
NAAQS 8-hour (>0.08 ppm)	2	0	0

Notes: CAAQS = California ambient air quality standards.

NAAQS = national ambient air quality standards.

– = insufficient data available to determine the value.

^a An exceedance is not necessarily a violation.

Sources: ARB 2006

Sensitive Receptors

The BAAQMD generally defines a sensitive receptor as a facility or land use that houses or attracts members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive

receptors include schools, hospitals, convalescent facilities, and residential areas. Sensitive receptors located in the vicinity of the proposed project area include scattered rural residences located north of the proposed project site, across SR 25, with the closest residence located approximately 750 feet north of the proposed project facility. A residence is also located approximately 0.5 mile to the southeast of the proposed project area. Figure 3 shows the proposed project site and adjacent sensitive receptors.

BAAQMD Thresholds

The BAAQMD's thresholds of significance for construction- and operation-related emissions are presented below.

In June 2010, BAAQMD adopted updated draft California Environmental Quality Act (CEQA) Air Quality Guidelines and finalized them in May 2011 (BAAQMD, 2011). These guidelines superseded previously adopted agency air quality guidelines of 1999 and were intended to advise lead agencies on how to evaluate potential air quality impacts.

In late 2010, the Building Industry Association filed a lawsuit in Alameda Superior Court, challenging BAAQMD's CEQA Guidelines on the grounds that the agency did not comply with CEQA. In March of 2012, the Court ruled that the BAAQMD CEQA Guidelines constitute a project under CEQA and that the District must "set aside all approvals in [the resolution approving the Guidelines] and ... not disseminate these or any new approvals of officially sanctioned air quality thresholds of significance until the District fully complies with CEQA." The claims made in the case concerned the CEQA impacts of adopting the thresholds. Those issues are not relevant to the scientific soundness of the BAAQMD's analysis of what level of air quality analysis should be deemed significant. The County has determined that these thresholds are based on substantial evidence, as identified in Appendix D of the CEQA Guidelines, and has therefore incorporated them into this Initial Study.

Project Construction

Guidance from the BAAQMD's *CEQA Guidelines* indicates that the BAAQMD does not require quantification of construction emissions. Instead, it requires implementation of effective and comprehensive feasible control measures to reduce PM10 emissions (Bay Area Air Quality Management District 1999). PM10 emitted during construction activities varies greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, and weather conditions. Despite this variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to reduce PM10 emissions during construction; these measures are summarized in Table 3-3. According to the BAAQMD, if all control measures listed in Table 3-3 were implemented (as appropriate, depending on the size of the project area), air pollutant emissions from construction activities would be considered less than significant (BAAQMD 1999).

However, discussions with BAAQMD staff in 2009 indicates that the District now encourages lead agencies to quantify construction emissions and mitigate to the extent

feasible. While the BAAQMD technically does not have any quantifiable emission thresholds for construction, use of operational thresholds is acceptable for the assessment of construction-related impacts, while the District's PM10 control requirements (Table 3-3) are still appropriate to reduce construction PM10 impacts to a less-than-significant level. (Tholen pers. comm.)

In 2000, the ARB classified diesel exhaust as a carcinogen. Consequently, the BAAQMD recommends that potential health risks associated with exposure to construction-related diesel exhaust be evaluated. The BAAQMD recommends that a preliminary screening-level risk analysis (i.e., SCREEN3) be conducted to determine health risks associated with exposure to diesel exhaust; if the preliminary screening-level analysis indicates a potentially significant impact, a detailed analysis is required. (Tholen pers. comm.) Guidance from the BAAQMD's CEQA Guidelines indicates significant diesel health risk would occur if the probability of contracting cancer for the Maximally Exposed Individual (MEI) would exceed 10 in one million.

Table 3-3. BAAQMD Feasible Control Measures for Construction Emissions of PM10

Basic Control Measures. The following controls should be implemented at all construction sites.
<ul style="list-style-type: none"> ▪ Water all active construction areas at least twice daily. ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard. ▪ Pave, apply water three times daily, or apply (nontoxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. ▪ Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites. ▪ Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
Enhanced Control Measures. The following measures should be implemented at construction sites greater than 4 acres in area.
<ul style="list-style-type: none"> ▪ Hydroseed or apply (nontoxic) soil stabilizers to inactive construction areas (i.e., previously graded areas inactive for 10 days or more). ▪ Enclose, cover, water twice daily, or apply (nontoxic) soil binders to exposed stockpiles (e.g., dirt and sand). ▪ Limit traffic speeds on unpaved roads to 15 miles per hour (mph). ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways. ▪ Replant vegetation in disturbed areas as quickly as possible.
Optional Control Measures. The following control measures are strongly encouraged at construction sites that are large in area, located near sensitive receptors, or for any other reason may warrant additional emissions reductions, but project applicant is not required to implement.
<ul style="list-style-type: none"> ▪ Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. ▪ Install windbreaks or plant trees or vegetative wind breaks at windward side(s) of construction areas. ▪ Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. ▪ Limit the area subject to excavation, grading, and other construction activity at any one time.
Source: Bay Area Air Quality Management District 1999

Project Operations

Operational emission thresholds are set forth in the BAAQMD's *CEQA Guidelines for Assessing the Air Quality Impacts of Projects and Plans* (BAAQMD 1999). Project operations would result in a significant impact on air quality if it would result in either of the following.

Net increase in pollutant emissions of 54 pounds per day (ppd) or 10 tons per year (tpy) of reactive organic gasses (ROG), oxides of nitrogen (NO_x), or PM₁₀ and PM_{2.5};

A project-related contribution to CO concentrations exceeding the CAAQS for the 1- and 8-hour standards. Projects which do not result in the following are presumed to result in less-than-significant levels of CO emissions, and no estimation of CO concentrations is necessary: 9 ppm (8-hour average) and 20 ppm (1-hour average):

According to BAAQMD CEQA Guidelines adopted in June 2010, a significant carbon monoxide impact consists of more than 24,000 vehicles per hour of traffic volumes at affected intersections.

e) Diesel exhaust from construction activities may generate temporary odors while construction of project improvements is underway. Once construction activities have been completed, these odors will cease. Composting facilities have the potential to generate substantial amounts of odors due to the generation of ammonia and hydrogen sulfide as by products of the composting process. Composting is the biological decomposition of organic matter under controlled conditions. Decomposition that takes place in the absence of oxygen (i.e., anaerobic decomposition) produces more pungent odors. Under anaerobic conditions methane gas, carbon dioxide, and sulfur compounds are produced. Odors due to anaerobic decay are generally the odors of concern when handling organic waste material.

The entire composting process would occur within elongated windrows contained within a thermo plastic bag. The bags, which are each capable of holding up to 200 tons of feedstock material, are placed in rows separated by a 15-foot aisle and electric blowers are used to provide aeration through a system of perforated pipes installed along the base decomposition and odor generation. In addition, the composting material within each bag would act as a biofilter, and would help to provide additional odor control.

The BAAQMD has identified screening distance trigger levels for various types of land uses typically associated with odors, including composting facilities. Projects for which sensitive receptors are located within these screening distances have the potential to generate significant odor impacts and should be evaluated in more detail. Guidance provided by the BAAQMD indicates that the screening distance for a composting facility is 1 mile. Within the project area, sensitive receptors are located within 750 feet of the facility's northern boundary and 0.5 miles of the facility's southeastern boundary. In total there are 16 individual receptors (e.g. occupied businesses and residences).

For projects triggering the Districts screening level distances, the BAAQMD indicates that the assessment of odor complaints received against a facility should be undertaken to determine odor impacts (BAAQMD 1999). A facility would result in a significant odor impact if the BAAQMD has received more than one confirmed complaint per year averaged over a 3-year period, or three unconfirmed complaints per year averaged over a 3-year period. The BAAQMD was contacted to determine whether any odor complaints have been received against the Z Best facility, and it was confirmed that there have been no odor complaints. While no complaints have been received in the last three years

for the site by LEA, County Planning has received odor complaints regarding the site at the February 2007 Planning Commission Meeting for the expansion of the Z Best facility.

To address odor impacts associated with the existing facility an Odor Emissions Technical Report was prepared for the project(Jones and Stokes/IFC & IWMC 2007, Appendix E). The report describes a quantitative analysis of odor dispersion from the Z Best site that was conducted utilizing the EPA's ISCST3 (EPA 1995) computer model. Separate runs of the ISCST3 model were conducted for both existing conditions and various potential future operational conditions.

While there has not been a single odor complaint received by the BAAQMD and/or the LEA (who has sole jurisdiction over odor complaints arising from composting facilities) in the last three years, several complaints were received at the February 2007 Planning Commission Meeting for the expansion of the Z-Best facility. Hence, the current odor levels at local receptors were considered by the local populous to be objectionable.

The technical analysis indicates that only a single odor "species" (i.e. odor producing compound) slightly exceeds the BAAQMD annoyance threshold for odor at the closest receptor (Receptor #9, as identified in the Odor Emissions Technical Report) during worst-case meteorological conditions. These modeling calculations assume no additional odor mitigations beyond those presented in the 1999 IS/MND and are based on conservative assumptions. However, based on the receipt of complaints from local property owners, any exceeding of the threshold or increase in objectionable odors was considered potentially significant under CEQA.

The proposed project has been designed so that operation of the expanded facility will not cause any significant odor impacts. A previous proposal for expansion of the Z Best site (evaluated in the Odor Emissions Technical Report) included 80 acres of additional windrows of composting and mulch material. The current proposal includes utilizing 28 acres in Area 2 for finished compost and mulch material with all processed windrows. Storage of stock piles, blending, sterilizing, further screening, and bagging operations will occur in this area.

The selected materials and processes for Area 2 that have minimal odor-causing potential. Less than 5% of the overall odor emissions for a typical compost facility can be attributed to the composting activities and materials that will be placed in Area 2. This includes the following activities (with the contribution to odor emissions listed as a percentage):

- Curing Windrow 61 – 90 days old – mulch material, and Curing Windrow more than 90 days old Municipal Solid and Food Waste - approximately 3%
- Grinding Operations – less than 1%
- Feedstock Mixing – less than 1%
- Curing Windrow Turning – less than 1%
- Curing Windrow Tear down – less than 1%
- Screening – less than 1%

- Product Loadout – less than 1%

All materials moved to Area 2 will be moving farther from sensitive receptors as documented in the final Odor Emission Technical Report.

Under existing conditions, Z-Best has a current functional capacity of composting 360,000 cubic yards (cyds). Expansion of operations into the 28-acre Area 2 would keep the facilities permitted capacity at 360,000 cubic yards – while 100,000 cubic yards of the 360,000 cubic yards could be shifted to Area 2, there will be no net gain in windrowing space in Area 1 as surface area available to composting will be lost due to the widening of the required fire lanes in Area 1 from 12 ft. to 20 feet.

As perceived concentrations of odor emissions are more directly attributable to surface area used for composting operations, wind speed and direction, the expansion of composting operations will not result in a direct increase in odor for the nearby sensitive receptors.

f) **Project Construction.** The air quality impact from construction-related GHG emissions were assessed by quantifying the direct emissions from off-road, on-road, and stationary construction equipment and comparing them to the 2004 state-wide inventory. Indirect emissions from electrical use during construction were not quantified because the expansion project would not involve any increase in electricity demand during construction.

Table 3-9 provides a summary of the estimated indirect and direct GHG emissions from project construction. As summarized in the table below, construction of the proposed project would result in the direct emissions of GHGs through the use of petroleum fuels and indirect emissions through the use of electrical power. The total estimated CO₂e emissions during construction would be approximately 2,044 tons. This is approximately 0.002 percent of the projected MTCO₂e emissions for the Bay Area in 2011 (BAAQMD, 2008). These emissions would not continue past the project completion date.

Table 3-9. Total Estimated MTCO₂e Emissions during Construction

Construction Activity	Direct¹	Indirect²
Site Improvements	1,997	N/A
Construction Worker Trips	47	N/A
Total	2,044	

¹ CO₂e emissions were estimated using emission factors from the California Climate Action Registry (2009).

² Construction of the proposed project would not encourage use of large amounts of electricity resources. Therefore indirect construction-related energy use is anticipated to be minor.

Existing CARB regulations (Title 13 of the California Code of Regulations, Sections 2480 and 2485) (California Code of Regulations, 2008), which limit idling of diesel-fueled commercial motor vehicles, would help to limit GHG emissions associated with project-related construction vehicles. In addition, CARB's proposed Early Action Measures (pursuant to the California Global Warming Solutions Act of 2006) include other emission reduction measures for diesel trucks and diesel off-road equipment. The CARB will review and adopt Early Action Measures by January 1, 2010, and equipment used for construction of the project after 2010 could be subject to these requirements. Once such measures go into effect, Z Best and construction contractors would be

subject to these requirements, and the Z Best will implement these measures as required; emissions from Z Best construction activities would be reduced accordingly.

In addition to the actions set forth above and described, the Z Best shall include the following measures in construction-contract specifications, which in addition to having other environmental benefits, would also reduce GHG emissions. Some of these measures are part of CARB's "Early Action Measures."

Z Best will require that contractors maintain tire inflation to the manufacturer's inflation specifications.

Z Best will implement a construction worker education program.

Given the small amount of GHGs that would be emitted from this project during construction, continuing implementation of GHG reduction actions by Z Best, and the application of existing regulations that would also reduce GHG emissions, the project would not conflict with the state's goals under AB 32 of reducing GHG emissions to 1990 levels by 2020 relative to construction emissions, such that the project's GHG emissions would result in substantial contribution to global climate change. Therefore, this impact is considered less than significant.

Project Operations. The air quality impact from operational GHG emissions were assessed by quantifying the direct emissions worker trips, and stationary equipment, as summarized in **Table 3-10**. The direct emission of methane and other GHG from composting was also assessed in relation to the increase in composting that would occur as a result of the expansion project. Indirect emissions from electrical use during operation were also quantified in relation to the increase in operational hours for the processing plant.

Table 3-10. Project Operational Emissions ¹

Equipment/Activity	Existing MTCO ₂ e (per year)	Proposed MTCO ₂ e (per year)
Composting Windrows ²	--	--
Stationary Equipment ³	193	265
Operational Trips ⁴	384	384
Electrical Use ⁵	321	330
Total	898	979

¹ CO₂e emissions were estimated using emission factors from the California Climate Action Registry (2009), as applicable.

² CO₂e emissions from composting are considered neutral (EPA 1998, RCG 2007).

³ Assumes a proportional increase in use of stationary equipment equivalent to increase in compost processing.

⁴ Assumes composition of trips will change with no net increase in trips at project completion.

⁵ Assumes under current conditions that electrical use is roughly at peak usage of 1,564 MW-hr per year based on data provided by applicant summarizing electricity bills for electricity usage on-site for years 2007 to 2010.

The proposed project would not result in a substantial change to the treatment process or project operations. Long-term operation of the proposed facilities would result in increases in air emissions, including criteria pollutants. Area, stationary, and mobile sources of emissions are expected during operation of the proposed project. Area sources include the methane emissions

associated with the composting process. Stationary sources include operation of on-site equipment. Mobile sources are sources of emissions associated with vehicle trips, and include employees, deliveries, and maintenance activities. The primary operational emissions associated with the project are the methane (CH_4) released from increased compost processing and ozone precursors (ROG and NO_x), CO, PM10, PM2.5, and CO_2 emitted as vehicle exhaust.

Following completion of the project, operational emissions would include employee vehicles, maintenance vehicles, stationary equipment, and material deliveries. Emissions would be generated from a variety of equipment that may be used to carry out these activities. The maintenance activities required under the project would be similar to existing maintenance requirements of the current facility, but would require some additional stationary equipment, as outlined in *Chapter 2 Project Description*. Post-project emissions from operational requirements would be only slightly greater than the existing maintenance emissions due to the fact that operational stationary equipment are currently allowed to operate 24 hours a day. Operational emissions from the project's emergency generators and maintenance activities would be intermittent throughout any year of the project's operations and considered minor in extent. According to the BAAQMD Regulation 9, Rule 8: Stationary Internal Combustion Engines, the rule allows for reliability test-related activities not to exceed 50 hours in a calendar year starting in January 1, 2012. For the purpose of the presenting the potential maximum emission levels, the reliability test of the emergency generators will occur at the maximum operational duration of 50 hours per year.

Composting may result in (1) CH_4 emissions from anaerobic decomposition; (2) long-term carbon storage in the form of undecomposed carbon compounds; and (3) nonbiogenic CO_2 emissions from collection and transportation of the organic materials to the central composting site, and from mechanical turning of the compost pile. Composting also results in biogenic CO_2 emissions associated with decomposition, both during the composting process and after the compost is added to the soil. Because this CO_2 is biogenic in origin, however, it is not counted as a GHG in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (EPA 2005) and is not included in this accounting of emissions and sinks. Research suggests that composting, when managed properly, does not generate CH_4 emissions, but it does result in some carbon storage (associated with application of compost to soils), as well as minimal CO_2 emissions from transportation and mechanical turning of the compost piles. Overall, EPA estimates that centralized composting of organics results in net GHG storage of 0.05 MTCE/wet ton of organic inputs composted and applied to agricultural soil.

The process of composting 1 ton of MSW results in an equivalent 1.82 MTCO_2e , primarily consisting of methane emissions (Brown and Subler 2007). Thus the expansion project would result in an operational increase of 163,800 MTCO_2e . However, in a landfill, the same material would be anticipated to give off approximately an extra 2 MTCO_2e per ton of MSW creating 343,800 MTCO_2e . By composting this material, GHG emissions in the region are reduced by roughly 180,000 MTCO_2e by diverting compostable material that otherwise would have gone to a landfill. This results in a net reduction of greenhouse gases in the region as the result of the proposed expansion and is considered a beneficial impact.

Operational electrical use is limited to the entry weight scale equipment, offices, processing building, and aeration blowers that operate along the windrows and is currently predicted to be roughly 1,564 MW-hr per year based on peak electrical generation information provided by the applicant for years 2007 to 2010 summarized for annual usage taken from information of electrical utility bills for the existing facility. As operation of only the processing building is

anticipated to increase, increases in electrical usage are tied only to this activity, anticipated to be approximately 40% of the total electrical use on-site. Overall, the proposed expansion project would result in a net increase of 81 MTCO₂e, representing a 3% increase over existing emissions. Therefore, increases in criteria pollutants during project operation are considered to be less than significant.

Mitigation

Mitigation Measure AIR-1: Reduce NO_x Emissions from Off-Road Diesel Powered Equipment. The project shall provide a plan, for approval by the lead agency and BAAQMD, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent ARB fleet average at time of construction. Acceptable options for reducing emissions may include, but are not limited to:

use of late model engines,

low-emission diesel products,

alternative fuels (e.g., aqueous diesel fuel),

engine retrofit technology (e.g., diesel particulate filters, diesel oxidation catalysts, lean-NO_x catalysts),

after-treatment products, and/or

other options as they become available

Mitigation Measure AIR-2: Comply with the ARB's ATCM for Stationary Compression Ignition Engines. The project applicant shall comply with the ARB's ATCM for stationary compression ignition engines. This can be achieved through the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

Mitigation Measure AIR-3: Comply with BAAQMD Regulation 9, Rule 8. The project applicant shall comply with BAAQMD Regulation 9, Rule 8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (See Appendix F).

D. BIOLOGICAL RESOURCES					
WOULD THE PROJECT:	IMPACT				SOURCES
	YES			NO	
*Questions relating to the California Department of Fish & Game "de minimis impact finding" for the Certificate of Fee Exemption are listed in italics.	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	
a) 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 7, 17b, 17o,
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,7, 8a, 17b, 17e, 33
c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or tributary to an already impaired water body, as defined by section 303(d) of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3, 7, 17n, 32
d) Have a substantial adverse effect on oak woodland habitat as defined by Oak Woodlands Conservation Law (conversion/loss of oak woodlands) – Public Resource Code 21083.4?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 30, 31
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,7, 17b, 17o
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3,4
g) Conflict with any local policies or ordinances protecting biological resources:					
i) Tree Preservation Ordinance [Section C16]?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,3,31
ii) Wetland Habitat [GP Policy, R-RC 25-30]?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3, 8a
iii) Riparian Habitat [GP Policy, R-RC 31-41]?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3, 8a,

Setting

This setting is based on background data review and field surveys, conducted on December 8, 2005 by Joel Gerwein, a Jones & Stokes/ICF botanist/wetlands ecologist, and Matthew Jones, a wildlife biologist. Based on the site surveys conducted by Jones & Stokes/ICF, the project site and immediately adjacent areas contain habitat for threatened, endangered, or sensitive species. Also a followup biological survey was conducted for confirming absence of Congdon's tar plant by Live and Oak Associates in August & September 2006 also documented in this report.

Methods

Jones & Stokes/ICF biologists reviewed existing information and conducted a field survey to identify biological resource issues in the project area for the Z-Best Composting Facility Expansion. The following information was reviewed.

California Natural Diversity Database (CNDDDB) (2006) records search of the 7.5-minute U.S. Geological Survey (USGS) quadrangles (Mount Madonna, Gilroy, Gilroy Hot Springs, Watsonville East, Chittenden, San Felipe, Prunedale, San Juan Bautista, and Hollister)

California Native Plant Society's (CNPS's) 2001 Inventory of Rare and Endangered Plants of California (updated 2004)

U.S. Fish and Wildlife Service (USFWS) list of special-status species for Santa Clara County

In Addition, ICF Jones & Stokes staff reviewed habitat and species modeling prepared for the Santa Clara Valley Habitat Plan, an HCP/NCCP that will cover the study area. The County approved the Santa Clara Valley Habitat Plan in October, 2012 and the plan is expected to be approved by other local public agencies that are partners in the plan in the fall of 2012, and start implementation in 2013. Until final adoption and the start of implementation of the Habitat Plan, the proposed project is considered an "interim" project under the HCP/NCCP. Following the start of implementation of the Plan, the project would be governed under any applicable fees and conditions, should be project be identified as a "covered project" under the Plan.

This information was used to develop lists of special-status species and other sensitive biological resources that could be present in the region. Species were included in these lists if they were known to occur in the project region and if their habitats occur in the project vicinity.

A Jones & Stokes/ICF botanist and wildlife biologist conducted a field survey on December 8, 2005. During the field survey, the biologists surveyed the project area, including the drainage channel that forms the eastern boundary of the site, the Pajaro River riparian zone in the southeastern corner of the site, and adjacent habitats. The general purpose of the biological field survey was to characterize biological communities

and their associated wildlife habitat uses and determine whether suitable habitat is present for special-status species that have the potential to occur in the project region (Tables 3-11 and 3-12).

A Live Oaks Associates botanist conducted field surveys for special status plant species on August 9, 2006 and September 27, 2006. During the field surveys, the botanist surveyed the project area during the blooming season for special status species plants. The purpose of the survey was to followup on the potential for Congdon's tar plant to occur on site. The surveys conclude that Congdon's tar plant is absent from the project site.

Existing Conditions

Biological Communities

The general characteristics of each habitat type are described below. The following section is divided into two parts—sensitive natural communities and other natural communities.

Sensitive Natural Communities

One sensitive natural community, mixed riparian woodland, was identified in the study area. Mixed riparian woodland is recognized by the California Department of Fish and Game (DFG) as a sensitive community. In addition, for the purposes of this IS, streams (including unnamed tributaries) and freshwater marshes are considered sensitive natural communities because these aquatic habitats provide a disproportionate amount of suitable habitat for both common and special-status species.

Mixed Riparian Woodland

Riparian woodland is present in a narrow band along an unnamed drainage channel, located on the eastern border of the property, to the Pajaro River, and along the Pajaro River itself.

The drainage channel flows through a straight earthen trapezoidal channel along the eastern boundary of the property. The narrow band of riparian woodland along the eastern drainage is dominated by an overstory of arroyo willow (*Salix lasiolepis*) and an understory of poison hemlock. Cattails (*Typha latifolia*), hardstem bulrush (*Scirpus acutus*), and willow herb (*Epilobium brachycarpum*) are present in riparian woodland in this area as well.

Mixed riparian woodland along the Pajaro River is characterized by an overstory of red willow and an understory of California blackberry (*Rubus ursinus*). Stinging nettle (*Urtica dioica*) is also present in the understory, and Oregon ash (*Fraxinus latifolia*) and coast live oak (*Quercus agrifolia*) are present in the overstory.

Aquatic Habitats

Two unnamed drainage channels exist along the eastern and southern boundaries of the property. Both channels appear to be intermittent or ephemeral in nature, and are deeply incised. Both channels flow towards and into the Pajaro River in the southeastern corner of the property. Due to the intermittent or ephemeral hydrology, both channels are unlikely to support fish, but certain pockets or long-lived ponded features could support species such as California red-legged frog, pacific tree frog (*Hyla regila*), and western pond turtle. Both channels are likely regulated under Section 404 of the Clean Water Act (CWA) as an “other water” of the United States.

As discussed above, the eastern drainage is dominated by an overstory of arroyo willow (*Salix lasiolepis*) and an understory of poison hemlock with cattails (*Typha latifolia*), hardstem bulrush (*Scirpus acutus*), and willow herb (*Epilobium brachycarpum*) also present. The southern channel is generally devoid of overstory material and is dominated by poison hemlock (*Conium maculatum*), broad-leaved peppergrass (*Lepidium latifolium*), and panicked bulrush (*Scirpus microcarpus*).

The Pajaro River abuts the very southeastern corner of the site. The Pajaro River is a perennial feature that is known to provide habitat for Central California Coast steelhead trout populations. Vegetation along the Pajaro River is characterized by an overstory of red willow and an understory of California blackberry (*Rubus ursinus*). Stinging nettle (*Urtica dioica*) is also present in the understory, and Oregon ash (*Fraxinus latifolia*) and coast live oak (*Quercus agrifolia*) are present in the overstory.

A treatment pond is present, with a fringe of freshwater marsh. Vegetation in this area is dominated by panicked bulrush (*Scirpus microcarpus*), broad-leaved peppergrass (*Lepidium latifolium*), and poison hemlock (*Conium maculatum*). Scattered red willow (*Salix laevigata*) are present as well, and the herbaceous layer includes rabbitsfoot grass (*Polypogon monspeliensis*), black mustard (*Brassica nigra*), and bristly ox-tongue (*Picris echioides*).

Streams and ponds are considered sensitive communities because they can support special-status species such as California red-legged frogs and western pond turtle.

Other Natural Communities

Non-Native/Ruderal Grassland

The proposed expansion area for Z-Best’s composting operations is dominated by ruderal vegetation, with scattered coyote brush (*Baccharis pilularis*) individuals also present. Species present in this area include curly dock (*Rumex crispus*), bristly ox-tongue (*Picris echioides*), Mexican tea (*Chenopodium ambrosioides*), bull thistle (*Cirsium vulgare*), and wild radish (*Raphanus sativus*). .

Non-native grassland is the most common biological community in the study area and the region. It occurs throughout the study area. Non-native grassland is an herbaceous plant community dominated by non-native annual grasses (Holland 1986, Sawyer and Keeler-Wolf 1995). In the study area, the dominant grasses include wild oat (*Avena*) species,

brome (*Bromus*) grasses, wild barley (*Hordeum*) species, Italian ryegrass (*Lolium multiflorum*), and annual fescue (*Vulpia*) species. Species composition of the non-native grassland is highly diverse and includes many other native and non-native forbs. Common forb species in the study area include many clover (*Trifolium*) species, filaree (*Erodium*) species, miniature lupine (*Lupinus bicolor*), four-spot (*Clarkia purpurea* ssp. *quadrivulnera*), California poppy (*Eschscholzia californica*), purple owl's-clover (*Castilleja exerta*), smooth cat's-ear (*Hypochaeris glabra*), milk thistle (*Silybum marianum*) and Ithuriel's spear (*Triteleia laxa*). Widely scattered Valley oak trees are located in the non-native grasslands in the study area. However, these oaks are not sufficiently abundant for the study area to be classified as oak savanna.

Grasslands support insects, amphibians, reptiles, and small birds and mammals that are preyed on by species such as raptors and coyotes (*Canis latrans*). Mammalian prey species include California vole (*Microtus californicus*), deer mouse (*Peromyscus maniculatus*), western harvest mouse (*Reithrodontomys megalotis*), and California ground squirrel (*Spermophilus beecheyi*). If burrows are present within annual grasslands, they may provide habitat for burrowing owls, California tiger salamanders, and California red-legged frogs.

Special-Status Species

A description of special-status plants and wildlife species that have the potential to occur in the study area is provided below. Special-status species are defined as:

species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) (Title 50, Code of Federal Regulations [CFR], Section 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register [FR] for proposed species);

species that are candidates for possible future listing as threatened or endangered under ESA (67 FR 40657, June 13, 2002);

species that are federal species of concern;

species that are listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (Title 14, California Code of Regulations [CCR], Section 670.5);

plants listed as rare under the California Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.);

plants considered by CNPS to be "rare, threatened, or endangered in California and elsewhere" (CNPS List 1B species);

species that meet the definitions of "rare" or "endangered" under the State CEQA Guidelines, Section 15380;

animal species of special concern to California Department of Fish and Game (DFG); and

animals fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Tables 3-10 and 3-11 identify the special-status plant and wildlife species that could occur in the project region. Based on a review of the CNDDDB (DFG 2006) and other technical reports, none of these species have been previously reported within the project area. A discussion of special-status plants and wildlife is provided separately below.

Special-Status Plants

Of the 35 special-status plant species that could occur in the region (Table 3-12), five species were determined during the pre-field survey to have potential to occur in the project area on the basis of existing information and the presence of suitable habitat conditions in the area. None of these species would have been in bloom and easily identifiable at the time of the December 2005 survey. Five special-status plants, Santa Cruz tarplant (*Holocarpha macradenia*), legenere (*Legenere limosa*), showy Indian clover (*Trifolium amoenum*), saline clover (*Trifolium depauperatum* var. *hydrophilum*), and Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) were identified during the pre-field investigation as having a low potential to occur in the study area because suitable, albeit degraded, habitat is present. None of these species were observed during the pre-field investigation. Supplemental special-status plant surveys were conducted in August and September 2006 by Live Oak Associates, qualified biological consultant firm. The results of the surveys confirm that there are no Congdon's tar plant on-site.

Special-Status Wildlife

Of the 47 special-status wildlife species that could occur in the region (Table 3-13), 10 were determined during the pre-field analysis to have potential to occur in the project area. The site survey found no threatened, endangered, or sensitive species located on the site, but Central California Coast steelhead (*Oncorhynchus mykiss*) are known to occur in the Pajaro River adjacent to the site. Additionally, Western pond turtle (*Actinemys marmorata*), California red-legged frog (*Rana aurora draytonii*), and California tiger salamander (*Ambystoma californiense*) may be encountered in either the drainage channel or the Pajaro River adjacent to the site. A search of the California Natural Diversity Database (CNDDDB) (CDFG 2006) indicated a least Bell's vireo (*Vireo bellii pusillus*) sighting within 2 miles of the project site.

South-Central California Coast steelhead (*Oncorhynchus mykiss*) is federally listed as threatened and is a DFG species of concern. Trout can be either anadromous (migrates from freshwater to the ocean and returns to spawn in freshwater), or it can complete its entire life cycle in fresh water. Those fish that remain in freshwater are referred to as rainbow trout. Steelhead, the anadromous form of *Oncorhynchus mykiss*, can spend several years in freshwater prior to smoltification and can spawn more than once before dying (Busby et al. 1996). Spawning runs occur from December through June. Central California Coast ESU steelhead trout are known to occur in the Pajaro River watershed and there are no complete downstream barriers, giving steelhead the potential to occur in the project area.

Western pond turtles, including both the northwestern (ssp. *marmorata*) and southwestern (ssp. *pallida*) subspecies, are USFWS and DFG species of concern. Western pond turtles occur in a variety of permanent and intermittent aquatic habitats, such as ponds, marshes, rivers, streams, and ephemeral pools. Pond turtles require suitable basking and haul-out

sites, such as emergent rocks or floating logs, which they use to regulate their temperature throughout the day (Holland 1994). In addition to appropriate aquatic habitat, these turtles require an upland oviposition site in the vicinity of the aquatic habitat, often within 200 meters (656 feet). Nests are typically dug in grassy, open fields with soils that are high in clay or silt fraction. Egg laying usually takes place between March and August (Zeiner et al. 1988). While the turtles may be active all year along the coast, at interior locations such as the Central Valley, pond turtles are more likely to be active between April and October. Observations have been reported approximately in Eastman Canyon Creek, Uvas Creek, and Tick Creek, all in the project vicinity, but not the Pajaro River or either drainage channel.

The California red-legged frog is federally listed as threatened. Red-legged frogs are associated with aquatic habitats, but may make use of adjacent riparian and upland areas. Red-legged frogs are found primarily near deepwater pools with overhanging vegetation and dense surrounding and emergent vegetation and are known to occur in the Pajaro River within 0.25 miles of the Z-Best facility. Additionally, individuals searching for suitable habitat may use the Pajaro River or the drainage channel as a dispersion corridor. The use of upland habitat is not well understood, but individuals have been known to travel well out of the riparian area. The proposed project site has a history of heavy disturbance and does not currently contain suitable upland habitat. However, red-legged frogs may still enter the area.

Least Bell's vireo is federally and state listed as endangered. Least Bell's vireo is a summer resident of Southern California, usually migrating from Mexico in March and leaving by the end of August. It inhabits low dense riparian growth and usually nests in low growing willow (*Salix* sp.), baccharis (*Baccharis* sp.) and Mesquite (*Prosopis* sp.) in the vicinity of water. Llagas Creek has areas of dense willow and may provide nesting habitat. There was a least Bell's vireo sighting in 1997 on Llagas Creek between Highway 152 and the confluence with the Pajaro River. There has not been any subsequent sighting of least Bell's vireo along Llagas Creek since the 1997 sighting. With the range of the species extending northward, the species may be more common in the future, but not within the current proposed timeline for project implementation.

The western burrowing owl is a federal and state species of concern. Burrowing owl habitat is annual and perennial grasslands, deserts, and scrublands characterized by low growing vegetation. Suitable habitat may also include trees and shrubs if the canopy cover is less than 30 percent of the ground surface (The California Burrowing Owl Consortium 1993). Burrowing owls use burrows constructed by other animals and may also use man-made structures such as culverts, debris piles, and holes beneath pavement. No burrowing owls were observed during site surveys in 2004 and more recent surveys have not identified nesting burrowing owls in the South County (Albion Environmental 2008). The 2008 Albion study did locate Burrowing owls in San Benito County to the south, within a mile or two of the project site.

Discussion of Impacts

Construction and operational activities associated with the proposed expansion into Area 2 could result in temporary or permanent impacts on biological resources in the study area. The analysis assumes that there would be excavation activity, and associated

backfill of existing material in the vicinity of the Pajaro River in conjunction with the construction of a vegetative drainage area and floodplain mitigation area adjacent to Pajaro River. In summary, the analysis assumes that, there may be indirect impacts on sensitive biological communities that could occur as a result of the proposed plan changes. Construction of the floodplain mitigation area as shown on site plans could indirectly affect flows from the Pajaro River, located immediately adjacent to the waterway through an increase of intake of floodwaters into the mitigation area during large storm events. During a 10 year flood event, the Pajaro River could flood up to 2 feet in height above the existing top of bank up to 6 ft. in height during a 100 year storm event. During these larger storm events, floodwaters would flow into the floodplain mitigation area.

Steelhead Trout

There is no potential for direct impacts on Central California Coast ESU steelhead trout, as the proposed project proposes no construction in or near the Pajaro River. However, as confirmed by the ICF/Jones and Stokes biologist (phone conversation – M.Jones, 10/26/12) steelhead trout could potentially be diverted into the floodplain mitigation area during larger storm events. This could potentially result in the entrapment of trout within this area. However, the proposed floodplain mitigation area includes a proposed culvert (with outfall to the Pajaro) which allows the area to drain following storm events. Mitigation listed below will ensure that the design and construction of this culvert will ensure that steelhead trout to not remain entrapped within the floodplain mitigation area. Water Quality mitigations (described below in the section Hydrology and Water Quality) will ensure that stormwater runoff during construction and operations does not result in potentially significant impacts on Central California Coast ESU steelhead trout.

Least Bell's Vireo, California Red Legged Frog

The proposed project could have a potentially significant effect, either directly through habitat modifications or through indirect impacts to adjacent habitats, on least Bell's vireo and California red-legged frog. Although these species have not been documented in the project area, suitable habitat is located in the drainage channel and in the Pajaro River adjacent to the site, and on disturbed grasslands, channel banks, and road berms in the vicinity of the project area.

However, the potential for direct impacts to least Bell's vireo and California red-legged frog and their habitat is considered less than significant because the area for proposed expansion (Area 2) is very disturbed and the species have not been documented in the project area. The possibility that these species would be found in the project area is negligible based on the field surveys. With the implementation of Environmental Measures to protect water quality (discussed in Chapter 2, *Project Description*) and Water Quality mitigations (described below in the section *Hydrology and Water Quality*) the potential for indirect impacts to these species and their habitat is considered less than significant.

Western Burrowing Owl, Western Pond Turtle

Based on the disturbed nature of the proposed expansion area, it is very unlikely that either the Western Burrowing Owl or the Western Pond Turtle could be present onsite.

However, due to their known presence in the region, the potential for them to be present onsite, and be potentially be impacted by construction activities, cannot be ruled out. Thus, as a precautionary measure, preconstruction surveys to avoid direct impacts to these species, as described below, are required.

The proposed expansion may have an indirect effect on the Pajaro River, located adjacent to the southeastern corner of the project site. The Pajaro River is important riparian habitat, but the river is buffered from expansion activities by the 400-foot Pajaro River bank reconstruction area (a set aside for a potential future flood conservation easement) and an additional 200-foot vegetative buffer, which will reduce direct impacts to Pajaro River aquatic and riparian habitats. However, construction activities could increase erosion, create dust, and cause mobilization of sediment that could be carried to the Pajaro River and have an adverse effect on creek habitat and water quality. This could have an incremental indirect adverse effect on the special-status species (western pond turtle and Central California Coast steelhead) known to occur in the Pajaro River watershed. To minimize the mobilization of sediment to adjacent water bodies, the proposed project identifies erosion-, sediment-, and dust-control measures to be included in the construction specifications (see Erosion Control Measures to Protect Water Quality and Dust Control Measures to Protect Air Quality in Chapter 2, Project Description). Therefore, this impact is considered less than significant.

In addition, construction activities could result in the input to the Pajaro River of petroleum-based products used as fuel and lubricants for construction equipment and other potentially toxic materials associated with construction. Implementation of Environmental Measures to protect water quality (discussed in Chapter 2, *Project Description*) and water quality mitigations (described below in the section *Hydrology and Water Quality*) would reduce this impact to less than significant.

c) The proposed project would not result in effects on wetlands because there are no wetlands present in the project site or site vicinity. Therefore, there would be no impact.

d) The proposed project would not interfere substantially with the movement of any native resident or migratory species or with established native resident or migratory wildlife corridors, nor would it impede the use of native wildlife nursery sites. The highest quality migratory habitat near the project site is the Pajaro River and adjoining riparian corridor. With the applicant's designation of the Pajaro River bank reconstruction area, the distance to the edge of bank is over 400 feet from the edge of the developed site. Additionally the developed site will include vegetated landscaping buffers, vegetated stormwater swales, and a non-vegetated stormwater and sedimentation pond which would not be actively managed post construction and would, at a minimum, provide an additional 1,000 foot buffer from normal project site activities. Thus, at the Pajaro River's closest position in relation to the active composting pad, over 1,400 feet of buffer is provided, which is anticipated to be more than adequate protection of red-legged frog and western pond turtle from potential impacts resulting from the proposed project. Therefore, there would be no impact.

e) The proposed project would not 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 County approved the Santa Clara Valley Habitat Plan in October, 2012 and the Plan is expected to be approved by other local

public agencies that are Local Partners in the Plan in the fall of 2012, and start implementation in 2013. Until final adoption and the start of implementation of the Habitat Plan, the proposed project is considered an “interim” project under the HCP/NCCP. Following the start of implementation of the Plan, the project would be governed under any applicable fees and conditions, should be project be identified as a “covered project” under the Plan.

f) The proposed project would not conflict with any Santa Clara County policy or ordinance protecting biological resources, such as the County tree preservation policy, or County wetland and riparian policies. The project would not result in the removal of trees, impacts to wetlands, or impacts to protected riparian areas. The applicant’s designation of the Pajaro River bank reconstruction area (a set aside for a potential future flood conservation easement) shall guarantee undeveloped riparian protection 400 feet from the edge of bank to the edge of the Area 2 expansion. Therefore, there would be no impact.

Mitigation

- 1) Pre-construction surveys for western burrowing owls and western pond turtles are required. Compliance with this condition requires documentation as follows:
 - a) Prior to final grading permit issuance, the applicant shall submit a copy of a contract with a qualified biologist to conduct the pre-construction surveys.
 - b) Pre-construction surveys shall be conducted within 15 days prior to construction. Prior to final inspection, the pre-construction surveys shall be submitted to the attention of the Planning Office, CA Dept. of Fish & Game, and U.S Fish & Wildlife Service for review.
 - c) Temporary Construction Barrier. If western pond turtles are found, prior to construction/grading activity construction fencing shall be installed around the boundaries of grading/construction activity, to prevent species from entering the project footprint during construction. The barrier will consist of 3-ft wide silt fencing buried to a depth of at least 6 inches below the soil surface. The barrier shall be inspected maintained and repaired as necessary to ensure the fencing is function, and is not a hazard to species. The location of the barrier shall be shown on final grading plans.
 - d) If western burrowing owls are found, all nest sites during the nesting/breeding season (February 1 to August 31) shall be avoided. Eviction outside of the nesting season may be permitted pending evaluation of eviction plans and receipt of form written approval from the CA Dept. of Fish & Game.
 - e) Establishment of a non-disturbance buffer zone of a minimum of 250 feet shall be established around active burrowing owl nesting sites, of any nesting burrowing owls are discovered during the pre-construction surveys. Construction may occur outside of the 250 foot non-disturbance buffer zone.
 - f) Other measures as required by US Fish & Wildlife Service, and CA Dept. of Fish and Game shall be complied with during all construction/grading work.

2) As part of the floodplain mitigation area, a 24" inch culvert shall be installed that follows CA Dept. of Fish & Game Guidelines for Culvert Criteria for Fish Passages. This will ensure that any aquatic life within Pajaro River, including but not limited to steelhead trout and western pond turtles will not inadvertently be permanently diverted into the floodplain mitigation area. The culvert shall be designed to drain water from storm water events of the floodplain mitigation area to Pajaro River. Based on the design of the culvert, permits may be required from CA Dept. of Fish & Game, Regional Water Quality Control Board, and Army Corps of Engineers.

E. CULTURAL RESOURCES					
WOULD THE PROJECT	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines, or the County's Historic Preservation Ordinance (Section 17 of County Ordinance Code) – i.e. relocation, alterations or demolition of historic resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3, 16, 19, 40, 41
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5 of the CEQA Guidelines?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 19, 40, 41,
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2,3,4,,40,41
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 40,41
e) If within New Almaden Historic area, conflict with General Plan policies of this designated special policy area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8a

Setting

Introduction

This section summarizes the prehistoric, ethnographic, and historic context of the project area, the methods and results of the cultural resources investigation conducted for the proposed project, and the impacts and mitigation measures for cultural resources. For additional detail regarding the cultural resources investigation please refer to the technical report completed for the survey (Jones & Stokes 2006).

Prehistoric Background

The southern Santa Clara Valley has been a region of intense human occupation since far back in prehistory, long before the European explorers arrived in the eighteenth century. In the early twentieth century, the prehistory of the region was virtually unknown aside from a small amount of ethnographic information (Kroeber 1925) and the discovery of a few prehistoric sites at the southern end of the San Francisco Bay (Nelson 1906). Since the late 1960s, however, as a result of rapid population growth and the requirements of environmental legislation, numerous prehistoric sites have been discovered within the southern Bay Area. The research data from these sites has led to a much greater understanding of the prehistory of the region.

The southern Santa Clara Valley encompassed tidal marshland, grassland prairie, and oak savannah and woodland. The marshlands, riparian corridors, and oaks provided numerous resources ranging from shellfish, fish, waterfowl, and terrestrial mammals to seeds and acorns. These habitats supported large populations of people due to the immense resource base they provided. Long-term residential use of particular areas resulted in the accumulation of shellfish, soil, and other debris, which has resulted in the creation of large mounds along the tidal marsh and bay shore and numerous smaller seasonal habitation throughout Santa Clara Valley (Erlandson and Jones eds. 2002).

Previous archaeological investigations within the project vicinity and the surrounding region have shown that mobile hunter-gatherers inhabited the southern Santa Clara Valley. Over time, their foraging strategies became more focused on the locally obtainable resources, and their lives became increasingly more sedentary (Erlandson and Jones eds. 2002).

Ethnographic Background

At the time of European contact, the San Francisco Bay Area was occupied by a group of Native Americans whom the ethnographers referred to as the Ohlone or Costanoans. The territory of the Ohlone people extended along the coast from the Golden Gate in the north to just beyond Carmel in the south, and as much as 60 miles inland (Levy 1978). The specific project area was likely used by the Taunan subgroup of the Ohlone, who held the hilly regions around Alameda Creek and Arroyo del Valle, south of Livermore Valley, along with other groups in the region (Milliken 1995).

The Ohlone were hunter-gatherers and relied heavily on acorns and seafood. They also exploited a wide range of other foods, including various seeds (the growth of which was promoted by controlled burning), buckeye, berries, roots, land and sea mammals, waterfowl, reptiles, and insects (Bean 1994).

Seven Spanish missions were founded in Ohlone territory between 1777 and 1797. While living within the mission system, the Ohlone commingled with other groups, including the Esselen, Yokuts, Miwok, and Patwin. Mission life was devastating to the Ohlone population (Milliken 1995). It has been estimated that in 1777, when the first mission was established in Ohlone territory, the Native American population numbered around 10,000; it declined rapidly to less than 2,000 by 1832 as a result of introduced disease, harsh living conditions, and reduced birth rates.

After the secularization of the missions around 1830, Indians gradually left the missions. Many went to work as wage laborers on the ranchos, in the mines, and in domestic positions. There was a partial return to aboriginal religious practices and subsistence strategies, but the Ohlone culture was greatly diminished (Levy 1978). Today, descendants of the Ohlone still live near the proposed project area, and many are active in maintaining their traditions and advocating for Native American issues.

Methods and Results

Records Search

A records search conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information system (CHRIS) at Sonoma State University. The search resulted in the identification of two previously recorded archaeological sites, CA-SCL-203 and -495, less than .25 mile from the proposed project area, as well as several associated archaeological studies.

CA-SCL-203 was first recorded by Winter in 1974 (Winter 1975) as a result of a 270-acre survey, during which he observed a very sparse amount of archaeological material spread over an expansive area. Winter conducted an extensive excavation at the location of the site, which produced no archaeological deposits.

Far Western Anthropological Studies Group (FWARG) conducted a subsequent excavation at the location as part of a large survey and investigation along Highway 101 and 152 (Hildebrandt and Mikkelsen 1990; 1993). The goal of the FWARG investigation of CA-SCL-203 was primarily to determine whether or not there was in fact a cultural deposit in the recorded location of the site. The investigation included many excavation units and twenty-one backhoe trenches, covering 36 acres in total. The results of the investigation were almost completely negative and produced only two small pieces of stone tool debris, but no perceptible archaeological deposit.

CA-SCL-495 is a prehistoric and historic era archaeological site located in an orchard north of the project area, recorded by Cartier in 1992. A human burial was uncovered when a tree was removed (Holman 1997).

In addition, in 1997 Holman and Associates surveyed the proposed project area in 20-meter transects during which visibility was very good due to recent discing of the area. The area had recently flooded and fine silts covered the project area. Several chert flakes were observed scattered throughout the area.

The project area is situated within the alluvial plain of the Pajaro River and its tributaries, and has been subject to annual flooding for many decades, both prior to the construction of levees, and after which flooding continues to occur every five to ten years (Hildebrandt and Mikkelsen 1990; 1993). In addition, the project area and surrounding area have been subject to long-term agricultural disturbance. The presence of a few sparsely scattered archaeological remnants on the surface in this highly disturbed setting, as represented in the project area, does not demonstrate evidence for a significant archaeological deposit.

However, the Canadero Creek and Pajaro River riparian corridors and surrounding grasslands and oak savannah environment would have been an abundantly rich resource base for the Native American population and there is a strong possibility that the area was occupied on a seasonal basis in prehistoric times. The discovery of a human burial at CA-SCL-495 less than 0.25 mile from the proposed project's site also attests to the potential for archaeological deposits in the area.

Native American Consultation

Jones & Stokes archaeologist initiated consultation with the Native American Heritage Commission (NAHC) on May 16, 2006. Jones & Stokes requested that the NAHC consult their sacred lands database and provide us with a list of interested Native American groups and individuals with knowledge of the project area. The NAHC replied on May 25, 2006, stating that the search of its sacred lands database did not indicate the presence of any Native American cultural resources in the study area. The NAHC also provided a list consisting of 13 local Native American representatives. On May 31, 2006, a letter was sent to the Native American representatives listed. The letter included a brief project description, a map of the project area, and a summary of the records search results. The letter also requested that the recipient respond with any information or concerns (see Appendix A). To date, there have been no responses to this letter.

Field Survey

In December 2005, a Jones & Stokes archaeologist conducted a site visit to the Z Best composting facility. Much of the native soils at the proposed project area have long since been obscured as a result of development, grading and general use of the area. The field inspection of the proposed project area indicates that much of the ground has been previously disturbed as a result of long term agricultural use and more recently as a result of the composting facility. The area where additional development is planned, in Area 2, was very disturbed, annual grasses were fairly dense and visibility was poor.

Discussion of Impacts

In the event that human skeletal remains are encountered, the applicant is required by County Ordinance No. B6-18 to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of section 7050.5 of the Health and Safety Code and the County Coordinator of Indian affairs. No further disturbance of the site may be made except as authorized by the County Coordinator Of Indian Affairs in accordance with the provisions of state law and this chapter. If artifacts are found on the site a qualified archaeologist shall be contacted along with the County Planning Office. No further disturbance of the artifacts may be made except as authorized by the County Planning Office.

a) Based on previous investigations in the project area and surrounding vicinity and the proximity of the project area to previously recorded sites, there remains a potential for the discovery of archaeological deposits in the project area. Due to the sensitive nature of the project area for the archaeological materials, it is recommended that an archaeological monitor be present during construction activities related to the implementation of the project. Disturbance of archaeological resources during project implementation would be considered a significant impact. This is a significant impact that would be reduced to less than significant impact by implementing Mitigation Measures CR-1 and CR-1A).

A search of the County Historic Resources Database revealed no sites that would be directly or indirectly be impacted by the proposed expansion project. Thus, there would be no impact and no mitigation is required.

b) While no human remains have been identified directly within the project area as a result of the records search or consultation with the NAHC and interested Native American individuals in Santa Clara County, research shows that human remains have been uncovered less than .25 mile from the project area at CA-SCL-495. Construction of the proposed project could result in the identification of human remains associated with unrecorded archaeological deposits. Disturbance of human remains is considered a significant impact. This is a significant impact that would be reduced to less than significant by implementation of Mitigation Measure CR-2.

c) The records search of the revealed no unique paleontological resource or site or unique geologic feature that would be directly or indirectly be impacted by the proposed expansion project. Thus, there would be no impact and no mitigation is required.

d) While no paleontological resources have been identified within the project area, construction of the proposed project could result in the identification of unrecorded paleontological deposits. Disturbance of these resources is considered a significant impact. Therefore, Mitigation Measure CR-3: Paleontological Resources is required to reduce the impacts to less than significant.

e) The proposed project is not located within the New Almaden Historic Area. Thus, there would be no impact and no mitigation is required.

Mitigation

Mitigation Measure CR-1A: Archaeological Resources- Stop Work If Buried Cultural Deposits Are Encountered During Construction Activities. If buried cultural resources such as chipped stone or groundstone, historic debris, building foundations, or human bone are inadvertently discovered during ground-disturbing activities, work will stop within a 100-foot radius of the find until a qualified archaeologist can assess the significance of the find and recommend additional treatment measures appropriate to the nature of the find. The County will be responsible for ensuring that treatment measures are implemented, in accordance with the archaeologist's recommendations.

Mitigation Measure CR-1B: Archaeological Monitoring During Construction Activities in Area 2 of Proposed Project. While no significant archaeological resources have been located within the project area, the project area is sensitive for the presence of previously unidentified archaeological deposits due its proximity to recorded archaeological sites and the nature of the project area environment. A qualified archaeological monitor shall be present during all construction activities that involve native soil disturbance (i.e. grading etc.). Evidence of complying with this mitigation shall be in the form of the following requirements:

Final grading plans shall contain language indicating that subsurface cultural resources may be present on the property and that monitoring by a qualified archaeologist is required during construction.

Prior to issuance of final grading permit, submit evidence of a contract with a qualified archaeologist to perform monitoring during construction.

Prior to release of the bond for the improvements, a report must be submitted for approval to the Planning Office by the consulting archaeologist summarizing the results of the monitoring and any remediation measures taken during construction, if necessary. Submit two (2) copies of the report. One shall be distributed to NWIC for their records.

The presence of an archaeological monitor during construction activities would help reduce the impact of inadvertent discovery and adverse effect to archaeological resources to a less-than-significant level.

Mitigation Measure CR-2: Archaeological Resources - Stop Work If Human Remains Are Encountered During Construction Activities. In the event that human skeletal remains are encountered, the applicant is required by County Ordinance No. B6-18 to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of section 7050.5 of the Health and Safety Code and the County Coordinator of Indian affairs. No further disturbance of the site may be made except as authorized by the County Coordinator Of Indian Affairs in accordance with the provisions of state law and this chapter. If artifacts are found on the site a qualified archaeologist shall be contacted along with the County Planning Office. No further disturbance of the artifacts may be made except as authorized by the County Planning Office.

If human remains are encountered during construction, the County Coroner will be notified immediately. A qualified archaeologist will also be contacted immediately. If the County Coroner determines that the remains are Native American, the Coroner will then contact the Native American Heritage Commission, pursuant to Section 7050.5[c] of the California Health and Safety Code.

The County Coordinator of Indian Affairs will also be contacted. There will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the County Coroner has determined that no investigation of the cause of death is required; and, if the remains are of Native American origin,

The Native American Heritage Commission will identify a Native American most likely descendent to make a recommendation with regards to appropriate treatment of human remains within 24 hours after being notified by the commission.

If the NAHC fails to make a recommendation, the descendants of the deceased Native Americans will make a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of with appropriate dignity the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98;

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Sec. 8100), and disturbance of Native American cemeteries is a felony (Sec. 7052).

Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

Mitigation Measure CR-3: Paleontological Resources - Stop Work If Vertebrate Remains Are Encountered During Construction. If vertebrate fossils are discovered during construction, work will stop within a 100-foot radius of the find until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment will include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds. The County will be responsible for ensuring that the paleontologist's recommendations regarding treatment and reporting are implemented.

F. GEOLOGY AND SOILS					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6, 17L, 43
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6, 17c, 18b
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6, 17c, 17n, 18b
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6, 17L, 118b
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6, 2, 3
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2, 3, 17c, 23, 24, 42
d) Be located on expansive soil, as defined in the report, <i>Soils of Santa Clara County</i> , creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14, 23, 24,
e) 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 waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3, 6, 23, 24,
f) Cause substantial compaction or over-covering of soil either on-site or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3, 6
g) Cause substantial change in topography or unstable soil conditions from excavation, grading, or fill?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 3, 6, 42

Setting

Geology and Hazards

The Z-Best Composting Facility is located to the south of Gilroy in the southern end of the Santa Clara Valley, which is bounded by the Diablo Range to the east and the Coast Ranges to the west. The project site is underlain by recent alluvial fan and floodplain deposits (California Department of Conservation 1966). The southeastern corner of the project site is within the floodplain of the Pajaro River.

This region has historically experienced a high level of seismic activity. The Association of Bay Area Governments (ABAG) indicates that the project site is located in an area that is subject to a “strong” level of ground shaking (ABAG 2009a).

There are no Alquist-Priolo zones located in the project area (California Geological Survey 1999). Santa Clara County’s Fault Rupture Hazard Zone Mapping identifies faults that are not zoned under Alquist-Priolo, but do have the potential for surface rupture. The Fault Rupture Hazard Zone Mapping identifies the Carnadero Fault as concealed within 2200 feet to the southwest of the subject parcels and the Castro Fault (part of the Sargent Fault Zone) located 7800 feet to the southwest (Dibblee 2006). Therefore, hazard of surface fault rupture at the project site is considered low. However, the project site is located in proximity to a number of faults recognized as active by the State of California and zoned pursuant to the Alquist-Priolo Act, including the San Andreas, Calaveras, and Hayward faults. The project site lies between the San Andreas fault to the west and Calaveras fault to the east, and is approximately 25 miles south of the Hayward fault. Other known faults in the area include the Silver Creek fault and the Madrone Springs fault. Each of these faults is capable of generating earthquake-induced ground shaking at the project site. The controlling design fault is the Calaveras-Pacines-San Benito fault, which is less than 10 miles from the project site and is capable of producing a maximum credible earthquake event of moment magnitude 7.5.

An ABAG (2009b) regional liquefaction hazard map indicates that the project site is in an area of potential liquefaction. The Santa Clara County Planning Office has mapped the entire project site, including the expansion area, as having a high susceptibility for liquefaction (Santa Clara County Planning Office 2002). The Santa Clara County Planning Office does not map the project site in a landslide hazard zone (Santa Clara County Planning Office 2002).

Soils

The soils underlying the project site have been assigned to three soil series that extend in irregular bands outward from the Pajaro River. These include Clear Lake series, Pacheco series, and Sunnyvale series soils (U.S. Soil Conservation Service 1974). Engineering properties such as expansion potential of these soils are not readily available from the literature.

The Clear Lake series consists of poorly drained clays that have developed in alluvium derived from sedimentary sources. The two soil types that occur on the project site include Clear Lake clay, drained and Clear Lake clay, saline. Clear Lake clay, drained has slopes of less than 2 percent and lies on low alluvial plains. Runoff is very slow and the hazard of erosion is none to slight. Clear Lake clay, saline is similar to that of Clear Lake clay, drained, but the surface layer contains slight concentrations of salts.

The Pacheco series consists of poorly drained clay loams that are underlain by sedimentary alluvium. These soils are on low alluvial plains and have slopes of less than 2 percent. Runoff is very slow and the hazard of erosion is none to slight.

Sunnyvale silty clay, drained consists of poorly drained silty clays that are underlain by alluvium derived from sedimentary rock. These soils occupy low positions on the alluvial

plains and have slopes of less than 2 percent. Runoff is very slow and the hazard of erosion is none to slight.

Discussion of Impacts

a) (i) The project site is not located in an earthquake fault zone established by the State of California pursuant to the Alquist-Priolo Act, nor is it directly traversed by any fault(s) recognized as an active seismic source by Santa Clara County, nor the Uniform Building Code/California Building Code (UBC/CBC). The risk of surface fault rupture at the site is thus considered low, and associated impacts are expected to be less than significant. No mitigation is required.

a) (ii) Based on recent analysis by the USGS's Working Group on Earthquake Hazards, the project area is very likely to experience strong seismic ground shaking during the lifespan of the proposed project. Because Z-Best staff would be onsite 24 hours a day, there is some risk of injury or mortality if structures were damaged in an earthquake. Thus, the risk to human safety is moderate and there could constitute a potential for significant impact for individuals present during a large earthquake. The risk of structural damage is also substantial and could constitute a potential for significant impact. However, the proposed project would be designed and constructed in accordance with all relevant provisions of the current Uniform Building Code standards. Moreover, the project proponent has completed a site-specific geotechnical investigation for the project, consistent with all applicable codes and regulations and the prevailing standard of care for geotechnical engineering (Grice Engineering 1999). This report includes recommendations for seismic safety, and the project proponent has committed to implementing all recommendations in the report. With these provisions in place, risks would be minimized to the extent feasible and are considered less than significant. No additional mitigation is required.

a) (iii) Given that the project site is in a known liquefaction hazard area and is in a region that is susceptible to ground shaking, liquefaction, and other types of ground failure, the proposed project could result in ground failure. However, proposed new facilities would be constructed in accordance with the most recent Uniform Building Code standards. Additionally, as identified above, the project proponent has completed a site-specific geotechnical investigation for the project, consistent with all applicable codes and regulations and the prevailing standard of care for geotechnical engineering (Grice Engineering 1999). This report includes specific recommendations and measures related to the foundation and construction of the expanded materials-handling building. These measures will reduce the potential for adverse effects to less than significant.

a) (iv) The project site has not been mapped as a landslide hazard zone (Santa Clara County Planning Office 2002). Substantial earthwork, which could result in slope stability hazards, is not anticipated, as no such earthwork is proposed. Thus, there would be no impact and no mitigation is required.

b) The soils at the project site are generally characterized by very slow surface runoff with a slight erosion hazard; however, the steepness of the banks of the Pajaro River and adjacent drainage channels increases the erosion hazard level in these areas. Construction activities, including grading, would expose soil to accelerated erosion, and this impact is

considered potentially significant. However, implementation of the environmental measures described in *Erosion Control Measures to Protect Water Quality*, in Chapter 2, Project Description, would minimize potential erosion impacts. Additionally, these measures would be included in the SWPPP prepared for the project that would further minimize potential impacts. Therefore, this impact is considered less than significant.

Surface soils on the project site have undergone varying degrees of disturbance; even where topsoil is present, these areas do not represent an important topsoil resource. Further disturbance by construction and operational activities would not result in significant loss of topsoil. Thus, there would be no impact and no mitigation is required.

c) The proposed project would not involve construction adjacent to the banks of the Pajaro River or adjacent drainage channels along the eastern and southern border of the project site. Thus, there would be no impact and no mitigation is required.

d) The soil at the project site is characterized by moderate expansion potential. However, the proposed buildings would be constructed in accordance with the most recent Uniform Building Code standards and the recommendations of the project geotechnical report (Grice Engineering 1999), which would reduce any potential impacts to less than significant

e) The proposed project includes a newly constructed engineered mound wastewater soil absorption septic system. All of soils identified on the site have low permeability, very slow runoff, and are poorly drained, which are characteristics that support a mounded septic system. Z-Best received a waiver resolution for the mounded septic system from the Central Coast Region California RWQCB on March 6, 2006, and are in compliance with all of the requirements of that resolution (Resolution Number R3-2006-0013; see Appendix G). Thus, impacts are less than significant.

f) The geotechnical report for the proposed building expansion found that there was no significant risk for compaction of soils (Grice Engineering 1999). The Report also includes measures to reduce the potential for compaction consistent with all applicable codes and regulations and the prevailing engineering standard of care. Thus, any potential impacts would be reduced to less than significant.

g) The project does not propose any excavation, grading, or fill that could significantly alter topography or create unstable soil conditions at the project site. Strictly, any earthwork can, if it's designed or done wrong. Additionally, all new and expanded facilities would be constructed in accordance with the most recent Uniform Building Code standards. Moreover, the project proponent has completed a site-specific geotechnical investigation for the project, consistent with all applicable codes and regulations and the prevailing standard of care for geotechnical engineering (Grice Engineering 1999). These measures will reduce the potential for adverse effects to less than significant.

G. GREENHOUSE GAS EMISSIONS				
	IMPACT			
WOULD THE PROJECT	YES			NO
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Climate Change

Greenhouse Gases

The earth's atmosphere naturally contains a number of gases, including (but not limited to) carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), which are collectively referred to as greenhouse gases (GHGs). GHG emissions are generally numerically depicted (when applicable) as carbon dioxide equivalents (CO₂e). CO₂e represents CO₂ plus the additional warming potential from CH₄ and N₂O. The common unit of measurement for carbon dioxide equivalents is in metric tons (MTCO₂e).

These gases trap some amount of solar radiation and the earth's own radiation, preventing it from passing through earth's atmosphere and into space. GHG are vital to life on earth; without them, earth would be an icy planet. For example, CO₂ is an element that is essential to the cycle of life. In general, CH₄ and N₂O have 21 and 310 times the warming potential of CO₂, respectively. Human-made emissions of GHG occur through the combustion of fuels, as well as a variety of other sources.

Increasing GHG concentrations are believed to be warming the planet. As the average temperature of the earth increases, weather may be affected, including changes in precipitation patterns, accumulation of snow pack, and intensity and duration of spring snowmelt. The sea level may rise, resulting in coastal erosion and inundation of coastal areas. Emissions of air pollutants and ambient levels of pollutants also may be affected in areas. Climate zones may change, affecting the ecology and biological resources of a region. There may be changes in fire hazards due to the changes in precipitation and climate zones.

While scientists have established a connection between increasing GHG concentrations and increasing average temperatures, important scientific questions remain about how much warming would occur, how fast it would occur, and how the warming would affect

the rest of the climate system. At this point, scientific efforts are unable to quantify the degree to which human activity impacts climate change. The phenomenon is worldwide, yet it is expected that there would be substantial regional and local variability in climate changes. It is not possible with today's science to determine the effects of global climate change in a specific locale, or whether the effect of one aspect of climate change may be counteracted by another aspect of climate change, or exacerbated by it.

Man-made greenhouse gas emissions originate from a variety of sources, notably industrial processes, transportation, and energy production. Within California, the leading contributors of greenhouse gas emissions are transportation (41%), industrial processes (23%), and energy production (20%).

Regulatory Environment

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.), which limits statewide greenhouse gas (GHG) to 1990 levels and establishes a goal of achieving these emissions reductions by 2020 (representing a 25 percent reduction in greenhouse gas emissions). AB 32 requires the California Air Resources Board (CARB) to adopt a comprehensive blueprint for limiting greenhouse gas emissions by the end of 2008 and complete the necessary rulemaking to implement that plan by the end of 2011.

In addition, the adoption of SB 97 in 2007 mandates that the California Office of Planning and Research (OPR) prepare CEQA Guidelines which establish standards for evaluating greenhouse gas emissions including the creation of feasible mitigation measures. The California Resource Agencies adopted amendments to the CEQA Guidelines for Greenhouse Gas Emissions on December 30, 2009, which became effective on March 18, 2010. The modified CEQA Guidelines require that public agencies in California evaluate greenhouse gas emissions within their CEQA documents, using either qualitative or quantitative methods. Although the modified CEQA guidelines prescribe that CEQA documents must evaluate Greenhouse Gas emissions and determine if emissions will be significant, they do not establish a clear methodology or quantitative thresholds for making this determination.

In November 2009, The Bay Area Air Quality Management District (BAAQMD) published proposed revisions to its CEQA Guidelines for addressing Air Quality impacts. These updated Guidelines included proposed quantitative thresholds for Greenhouse Gas Emissions, establishing both a "bright line" threshold of significance for GHG emissions and also an efficiency threshold. Using a methodology that models how new land use development in the San Francisco Bay area can meet AB 32 GHG reduction goals, the BAAQMD Guidelines establish a significance threshold of 1,100 metric tons of CO² per year. In addition to this bright line threshold, the Guidelines include an "efficiency" threshold to be used for urban high density, transit oriented development projects that are intended to reduce vehicle trips but may still result in overall emissions greater than 1,100 metric tons per year. These proposed GHG thresholds were adopted by the BAAQMD Board of Directors on June 2, 2010.

In June 2010, BAAQMD adopted updated draft *California Environmental Quality Act (CEQA) Air Quality Guidelines* and finalized them in May 2011 (BAAQMD, 2011). These guidelines superseded previously adopted agency air quality guidelines and were intended to advise lead agencies on how to evaluate potential air quality impacts. The new CEQA guidelines introduced numerical thresholds of significance for determining if land use plans and land development projects would contribute a significant amount of greenhouse gases to the atmosphere. The recommended thresholds included both a total per-project limit of 1,100 metric tons of CO₂e per year as well as an efficiency-based threshold of 4.6 metric tons of CO₂e per year per service population.¹³ Projects would have the option of addressing either of the thresholds.

In late 2010, the Building Industry Association filed a lawsuit in Alameda Superior Court, challenging BAAQMD's CEQA Guidelines on the grounds that the agency did not comply with CEQA. In March of 2012, the Court ruled that the BAAQMD CEQA Guidelines constitute a project under CEQA and that the District must "set aside all approvals in [the resolution approving the Guidelines] and ... not disseminate these or any new approvals of officially sanctioned air quality thresholds of significance until the District fully complies with CEQA." The claims made in the case concerned the CEQA impacts of adopting the thresholds. Those issues are not relevant to the scientific soundness of the BAAQMD's analysis of what level of GHG emissions should be deemed significant. The County has determined that these thresholds are based on substantial evidence, as identified in Appendix D of the CEQA Guidelines, and has therefore incorporated them into this Initial Study.

On June 17, 2010 the California Air Resources Board (CARB) approved regulations to reduce methane emissions from municipal solid waste (MSW) landfills with more than 450,000 tons waste-in-place. These measures will make a substantial contribution to the overall 2020 statewide GHG emission reduction goal of approximately 174 million metric tons of carbon dioxide equivalent gases. Two of the measures that specifically relate to construction and operation of the proposed expansion project are a low-carbon fuel standard and landfill methane capture measures. The landfill methane capture measure sets statewide standards for the installation and performance of active gas collection/control systems at uncontrolled municipal solid waste (MSW) landfills. In addition, CARB regulations include efficiency and emissions control resulting in total reductions on the order of 2 to 4 million MTCO₂e by 2020. CARB has developed a guidance document for landfill operators and regulators that recommends technologies and best management practices for improving landfill design, construction, operation and closure for the purpose of reducing GHG emissions. Z Best Composting Facility is exempt from these requirements because the overall capacity of the facility less than 450,000 tons.

Discussion of Impacts

The impact discussion utilizes the BAAQMD's thresholds identified above to determine the level of impacts associated with the proposed project, unless otherwise specified.

a) A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds growth estimates included in the applicable air quality plan, which, in turn, would generate emissions not accounted for in the applicable air quality plan emissions budget. Therefore, proposed projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the relevant air plans.

The proposed project would not induce population growth. However, implementation of the proposed project would result in an additional 18 employees, relative to existing conditions. The proposed project site's zoning would be consistent with the zoning of the site under existing conditions. Consequently, the proposed project has been included in the County's general plan and accounted for in the region's clean air plan. Further, while the proposed project would generate relatively minor amounts of emissions associated with increased employee trips, these emissions are not anticipated to exceed the emissions budget from the applicable air quality plan. This impact is considered less than significant, and no mitigation is required.

b) **Project Construction.** Construction activities for the proposed project would result in short-term impacts on ambient air quality in the area. Temporary construction emissions would result directly from site clearance, grading, site preparation activities, and indirectly from construction equipment emissions and construction worker commuting patterns. Pollutant emissions would vary daily depending on the level of activity, the specific operations, and the prevailing weather.

It is anticipated that construction activities would occur over three phases. The project applicant indicates that construction of the proposed project would involve various types of equipment, including air compressors, backhoes, bulldozers, excavators/shovels, generators, graders, mowers, loaders, and scrapers. Portions of the project site would be graded, while other portions would be lightly bladed or mowed. Excavated materials would be stockpiled adjacent to the excavations and protected from soil erosion using erosion- and sediment-control measures. A detailed inventory of construction equipment that will be used for the proposed project was not provided; Table 3-4 presents anticipated equipment that will be used during construction of the proposed project components. However, not all the equipment would be at the site simultaneously. For instance, the grader would be used for finish grading of the compost and would not be present during the entire period of construction. To represent a worst-case scenario, this analysis assumes that compost activities would occur simultaneously.

Table 3-4. Anticipated Types of Equipment That May Be Used to Construct the Proposed Project

Project Component and Equipment	Number of Equipment Pieces
Compost pad expansion generation field construction	
Excavator	2
Grader	2
Rubber tired dozer	1
Scraper	1
Tractor/loader/backhoe	2

Construction emissions were modeled with the URBEMIS2002 model, using the default horsepower and load factor information from URBEMIS2002. To estimate construction emissions, URBEMIS2002 analyzes the type of construction equipment used and the duration of the construction period, using average emissions factors over all horsepower classes. Project construction emissions are summarized in Table 3-5.

Table 3-5. Unmitigated Emissions from Construction Activities (pounds per day)

Emissions	ROG	NO _x	CO	PM10 (Total) ¹	PM10 (Exhaust)	PM10 (Dust)
Compost pad expansion generation field	16.0	104.0	133.3	204.1	4.0	200.0
BAAQMD threshold	54	54	NA	N/A	82	NA
Significant?	No	Yes	NA	N/A	No	NA

¹ Implementation of required BAAQMD dust control measures (Table 3-3) will reduce PM10 impacts to a less-than-significant level

As indicated in Table 3-5, construction activities associated with expansion of the compost pad would result in NO_x emissions in excess of the threshold levels (80 pounds per day). Consequently, this impact is considered significant. Implementation of mitigation measure AIR-1 would reduce this impact to a less than significant level (Table 3-6).

Table 3-6. Mitigated¹ Emissions from Construction Activities (pounds per day)

Emissions	ROG	NO _x	CO	PM10 (Total) ²	PM10 (Exhaust)	PM10 (Dust)
Compost pad expansion	16.0	71.7	133.3	78.9	0.3	78.6
BAAQMD threshold	80	80	NA	80	NA	NA
Significant?	No	No	NA	No	NA	NA

Mitigation measures included in these emissions estimates include aqueous diesel fuel, diesel particulate filters, lean-NOX catalysts, application of soil stabilizers to inactive areas, replacement of ground cover in disturbed areas quickly, and watering exposed surfaces twice daily.

¹ Implementation of required BAAQMD dust control measures (Table 3-3) will reduce PM10 impacts to a less-than-significant level.

In addition to significant construction-related NO_x emissions, PM10 emissions are also potentially significant. As indicated above, if all control measures listed in Table 3-3 are implemented (as appropriate, depending on the size of the project area), particulate matter emissions from construction activities would be considered less than significant (BAAQMD 1999). As described in Chapter 2, *Project Description*, to control fugitive dust emissions from construction activities, the project applicant has committed to the following environmental measures:

- Install a tire washer at the facilities truck exit.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Water all active construction areas at least twice daily
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more)
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- No vehicle shall exceed 10 miles per hour speed limit within the construction site
- The construction site entrance shall be posted with visible speed limit signs
- All construction vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering public roadways

- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.

With the implementation of the measures, impacts associated with the proposed project are anticipated to be less than significant.

Project Operation. Increased emissions associated with proposed project operations would primarily result from the increase in the number of on-site workers visiting the facility per day. The facility currently has 39 employees, and with 55 projected over the next 10 years over the two additional shift operations for 24-hour operations under the proposed expansion. Vehicle trips generated from the hauling of composting residuals (MSW noncompostables) to an off-site disposal facility would generate about 7 trips per day, but it is expected that these materials would be hauled off-site on a back-haul basis, thereby not increasing the number of trips per day, relative to existing conditions. Vehicle trips associated with hauling mulch-type materials that do not need to undergo the composting process would account for approximately 8 trips per day. This mulch material would also be hauled off-site on a back-haul basis; therefore, no increase in trips per day is expected, relative to existing conditions. \

New equipment will be required to facilitate operations within the 28 acre expansion, including a new bagging unit, trommel screens, a chip dyeing unit, soil mixers, a grinder, and a water separator. Specifications for all new equipment can be found in Appendix C.

URBEMIS2002 was used to model emissions associated with new equipment and facility employee trips. The results of this model are summarized in Table 3-7.

Table 3-7. Employee Vehicle Trip Emissions (pounds per day)

	ROG	NO _x	CO	PM10
Vehicle emissions	2.6	1.6	25.6	2.7
BAAQMD threshold	54	54	NA	82
Significant?	No	No	NA	No

As indicated in Table 3-7, emissions from employee commute trips are not anticipated to exceed BAAQMD threshold levels. This impact is considered less than significant, and no mitigation is required.

Information provided by the project applicant indicates that an emergency diesel generator would be used to supply electricity to power the radio facilities in the event of a power outage.

The ARB has established an airborne toxic control measure (ATCM) for stationary compression ignition engines. This control measure was developed to reduce health risks associated with exposure to diesel particulate matter (DPM) from stationary compression ignition engine exhaust. The ATCM establishes emissions standards for compression ignition engines greater than 50 horsepower, in addition to maximum allowable annual hours of operation for emergency diesel generators. For emergency uses, an emergency generator may operate indefinitely. For routine maintenance and testing of equipment, an

emergency diesel generator may operate for up to 50 hours per year, provided it meets an emission standard of 0.15 grams per brake horsepower-hour (g/bhp-hr) for particulate matter. However, an emergency diesel generator may operate for up to 100 hours per year for routine maintenance and testing of equipment, provided it meets an emission standard of 0.01 g/bhp-hr for particulate matter. For ROG, NO_x, and CO, all emergency diesel generators must meet Off-Road Compression Ignition Engine Certification Standards for an off-road engine of the same model year and horsepower rating, or Tier 1 standards for an off-road engine of the same maximum rated power, regardless of how long the generator may operate for routine maintenance and testing. Engines rated less than 50 horsepower are not subject to the ARB's ATCM for stationary compression ignition engines.

The BAAQMD has established Regulation 9, Rule 8, which limits the number of hours per year an emergency generator may operate. For emergency uses, an emergency generator may operate indefinitely. For routine maintenance and testing of equipment, an emergency generator may operate for up to 100 hours per year for non-emergency purposes, and up to 200 hours per year for essential public services. Engines rated less than 50 horsepower are not subject to BAAQMD Regulation 9, Rule 8.

Operation of the emergency diesel generator would generate emissions of ozone precursors, CO, and particulate matter. However, compliance with ATCM and BAAQMD standards through Mitigation Measures AIR-2 and AIR-3 will ensure that emissions from project operations are less than significant.

c) As indicated in the previous response to impact "b," implementation of Mitigation Measures AIR-1 through AIR-3 would ensure that emissions from project operations are less than significant.

d) **Project Construction.** Construction activities would entail the use of diesel equipment that would generate emissions of diesel particulate matter (DPM), which the ARB has categorized as a human carcinogen. To evaluate the potential for an increased health risk associated with exposure to construction-related DPM, emissions of DPM were modeled using the EPA's SCREEN3 model. SCREEN3 is a single source model developed to obtain pollutant concentration estimates based on the EPA's document *Screening Procedures for Estimating The Air Quality Impact of Stationary Sources*. Once pollutant emissions were estimated using SCREEN3, cancer health risks from DPM exposure were estimated using methodology recommended by the Office of Environmental Health Hazard Assessment (OEHHHA) in their guidance manual, *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (2003).

Construction equipment associated with grading of the expanded compost pad area were modeled as an area source in SCREEN3, with emissions averaged over the entire 28-acre site. Source release heights were modeled at 3.0 meters, while receptor heights were modeled at 1.9 meters. The calculation of potential cancer health risks were estimated assuming an exposure frequency of 132 days per year to account for the assumed construction duration of six months, with 22 days of construction per month. Cancer health risks were evaluated at the closest sensitive receptor, which is located approximately 750 feet north of the proposed project facility Figure 3.

Estimated health risks associated with exposure to construction-related DPM emissions were evaluated for project scenarios with and without mitigation (see Mitigation Measure AIR-1), and used PM10 equipment exhaust emissions summarized in Tables 3-5 and 3-6.

The modeling results indicate that the construction activities associated with the proposed project would result in a health risk of 1.7 cases of cancer per million for unmitigated emissions, and 1.3 cases of cancer per million for mitigated emissions. These cancer risks are well below the BAAQMD's threshold of 10 in one million. Consequently, this impact is considered less than significant and no mitigation is required.

Project Operations. As indicated in the previous response to impact "b," compliance with ATCM and BAAQMD standards through Mitigation Measures AIR-2 and AIR-3 would ensure that emissions from project operations are less than significant.

Mitigation

None required.

H. HAZARDS & HAZARDOUS MATERIALS					
	IMPACT				SOURCE
WOULD THE PROJECT	YES			NO	
	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 4, 5
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 3, 5
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	46
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	47
e) For a project located within an airport land use plan referral area or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or in the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3, 22a
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5, 48
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4
h) Provide breeding grounds for vectors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
i) Proposed site plan result in a safety hazard (i.e., parking layout, access, closed community, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3
j) Involve construction of a building, road or septic system on a slope of 30% or greater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 17n
k) Involve construction of a roadway greater than 20% slope for a distance of 300' or more?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 17n

Setting

Potential health hazards associated with Z-Best's composting activities are primarily from bioaerosols, fungal spores or other organic by-products that are imbedded in the feedstock and windrows. Air movement provides an important dispersal mechanism for bioaerosols, which can originate from almost any natural or man-made surface. Once airborne, bioaerosols can lodge in the respiratory tracts of immunosuppressed individuals and cause disease.

The Z-Best facility stores small quantities of hazardous waste on-site. These include a variety of household hazardous waste materials from incoming MSW feedstock loads, including discarded computer monitors, pesticide containers, and batteries (per communications with Greg Ryan – site operator). In accordance with the applicable codes and regulations, waste materials removed during load checks are placed in a storage locker on the west side of the operations building; waste oil, antifreeze, and used absorbent are stored in drums in a hazardous materials storage area located on the south side of the office/shop building. In addition, numerous non-waste hazardous materials, including fuels, oils, solvents, and other liquids, are stored on-site in aboveground primary or secondary containment.

Additionally, Z-best will use the expansion area to create custom blends of compost and various additives for agricultural and landscape customers. Potential additives include soil, sand, gypsum, lime, sulfur, urea, and humate. Material Safety Data Sheet (MSDS) forms (where available) for these additives are included in Appendix B. Additives would be stored in bags or in watered stockpiles in Area 2, depending on the handling requirements specific to the material.

Because the Z-Best facility stores waste and non-waste hazardous materials on-site, it is subject to the requirements of Chapter 13, Section B11-301, of the Santa Clara County Ordinance Code, which requires submittal of a Hazardous Materials Business Plan (HMBP). The Z-Best facility currently maintains a HMBP detailing the type, quantity of, storage location of, and management practices regarding all hazardous materials on-site. In addition, the Z-Best facility has an existing SWPPP, which describes the Z-Best facility and its operations; identifies potential sources of storm water pollution at the facility; recommends appropriate best management practices or pollution control measures to reduce the discharge of pollutants in storm water runoff, and provides for periodic review of the SWPPP's effectiveness.

Frazier Lake Airpark, a small, private airport, is located approximately 3.5 miles southeast of the Z-Best facility. No public airports, public use airports, or private airstrips are located in the immediate vicinity of the project site.

The project site is located in a flat, rural area vegetated by wild mustard and numerous grass species. The site is not located in a designated Very High Fire Hazard Severity Zone or a wildland area that may contain substantial forest fire risks and hazards, as determined by the California Department of Forestry (CDF) (CDF 2006). However, because the mulch stockpiles on-site involve storage of large quantities of combustible materials in confined areas and are maintained at elevated temperatures to facilitate decomposition, there is a risk of combustion.

Decomposing waste and areas of ponding water are common attractants for disease vectors such as flies, mosquitoes, and rodents. Consequently, populations of such species could potentially become established on the project site if conditions favorable to these species are allowed to persist. As discussed in the 1999 IS/MND, several existing activities at the Z-Best facility could

lead to increased presence of vectors. These include 1) the use of compostable diapers as an additive, 2) the mixing of food waste with green material in the feedstock processing area, and 3) the presence of ponding water on-site, which could create a breeding area for mosquitoes and 4) the acceptance of mixed solid waste for composting that may already contain live rodents and flies upon arrival.

Discussion of Impacts

a, b) Although the presence of bioaerosols in feedstock and windrows has the potential to create a public health hazard, implementation of the best management practices discussed in the 1999 IS/MND would reduce this impact to a less-than-significant level. These measures are incorporated into the project and include the following:

Maintain the windrows in aerobic condition through regular aeration and mixing.

Maintain windrow moisture content between 45 and 60 percent.

Maintain windrow temperatures of at least 131 degrees F throughout the pathogen reduction period, as required by 14 CCR §17868.3.

Control dust generation through regular application of water.

Issue personal protection equipment such as dust masks to personnel in close contact with composting materials.

A number of hazardous materials present on the site also have the potential to create a hazard to the public if they are accidentally released into the environment. These materials would be stored, handled, and monitored in accordance with all applicable codes and regulations, as implemented through the Z-Best HMBP. Therefore, this impact would be reduced to less than significant.

Project construction and/or grading associated with the proposed improvements in Areas 1 and 2 is not expected to create a hazard to the public through accidental release of hazardous materials. The use of materials considered hazardous would be limited to the fuels, oils, and solvents contained in construction vehicles. All materials stored or stockpiled in the staging area would be inert and are not considered hazardous. Any potential impacts that could occur as a result of the above-mentioned materials through project construction would be further minimized and contained through implementation of standard best management practices and measures identified in the NPDES General Construction Permit and amended SWPPP/SWMP (see related discussion in the Project Description, under “Environmental Measures,” and in Section H, “Hydrology and Water Quality”).

c) There are no schools located within ¼ mile of the project area; therefore, no impact is anticipated.

d) The project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the project would not create a significant hazard to the public or the environment.

e) The project site is not located within an airport land use plan or within 2 miles of a public or private airstrip. The closest airport, Frazier Lake Airpark, is located approximately 3.5 miles from the project site. The project site is not located in the vicinity of any developed areas, and therefore would not interfere with helipads used for emergency services (e.g., helipads at hospitals). As

such, the proposed project would not conflict with an airport land use plan, operation of nearby airports, or pose a safety hazard to people living or working in the project area. There would be no impact.

f) The proposed project would not impair implementation of or physically interfere with the adopted Santa Clara County Emergency Operations Plan or any emergency evacuation plans. There would be no impact.

g) The project site is not located in an area that is susceptible to wildfires. However, because the mulch piles in Area 2 could potentially pose a risk of combustion if the piles are not stored with appropriate care, this impact is considered significant. Implementation of the following fire control measures, as discussed in Chapter 2 (see “Fire Control Measures to Minimize Use of Public Services”), would reduce this risk to less than significant.

Separate mulch piles by a minimum of 50 feet.

Limit all mulch storage piles consistent with RCSI.

Provide additional fire hydrants adjacent to stockpile areas.

Mow surrounding grass and weeds to 4 feet or less to prevent fires from spreading to other properties.

Additionally, the following measures, which are currently being implemented as part of Z-Best’s Fire Response Plan, would further reduce the risk of wildfires due to stored combustible materials onsite.

Sixteen Z-Best employees have been assigned as primary first responders in case of a reported fire. These employees all live within 15 minutes of the facility and carry wallet cards with additional contact numbers to ensure an adequate force can be mustered quickly if not available among staff at the time of a fire.

Z-Best has substantial firefighting apparatus on site, including a 5,000-gallon water wagon and a 3,500-gallon water truck. These are always left full and are ready to use in the event of a fire. Additionally, the site has five bucket loaders and a distribution system of standpipes, quick connect rubber hoses, and sprinkler pipes that can be quickly mobilized to assist in firefighting efforts.

Z-Best currently employs preventative measures to reduce risk of a major fire, including keeping stockpiles small and well-separated, monitoring of internal stockpile temperatures, and using sprinklers to keep piles wet.

h) The proposed project would be subject to the vector control measures described in the 1999 IS/MND to reduce or eliminate potential vector impacts. These measures are incorporated into the project and include the following:

Mixed solid waste and source-separated, post-consumer waste would be processed only within the enclosed processing building. Access to the building would be controlled to minimize attraction of vectors. Accessible areas would be cleaned daily and the metal building would be constructed in part on a raised curb and in part on a 12-foot-high retaining wall, which would help deter rodents.

Appropriate temperature and moisture levels shall be maintained within active compost windrows to provide vector control as defined by the LEA, as the heat of decomposition both destroys pests within piles and deters new invasion.

Properly constructed drainage facilities would be provided to reduce the potential for liquids and storm water to pond on the site, thereby mitigating the potential for mosquito propagation.

Maintenance, monitoring, and, if necessary, rebuilding compost piles would ensure vector control.

Vector eradication programs could further employ “bug zappers,” chemical sprays, and/or traps. Commercial pest control services could be retained as necessary or as required by the LEA. Practices are in effect to control and reduce flies and rodents within and around the buildings. Natural predators such as barn owls, coyotes, feral cats, and robust cleaning practices. Rodent traps and baits are also safely deployed.

All incoming feedstock, including food waste, shall be processed within 48 hours of receipt and placed either into windrows, or bags associated with the composting process. Compostable diapers, as an additive, shall be limited to less than 15 percent of the total mass of feedstock going into the windrow, shall be incorporated into the windrows within 24 hours of receipt, and shall be prohibited during the wet season months as defined by the LEA. This feedstock is incorporated into windrows before the end of each day. ZRRML shall secure a revised SWFP and operate under the conditions set forth therein.

Inspect the site regularly and any areas where water is observed to pond should be regarded for proper drainage control.

Additionally, in consultation with the County LEA, Z-Best has developed new protocols to eliminate fly breeding areas at the site. These protocols primarily include increasing temperatures in composting windrows to fully eradicate breeding. With implementation of these new protocols and the measures described above, impacts related to the breeding or harborage of vector organisms at the Z-Best site would be less than significant.

i) The proposed project, as designed, would not prevent circulation within, access to, or egress from the project site. Access throughout the project area would be provided on 20-foot, all-weather roadways that surround the perimeter, and extend throughout the interior, of the site. The roadways would be constructed on an engineered inert pad with minimal grade, as the site is generally flat. No vehicle or equipment parking, or placement of materials, would be allowed on or adjacent to access roadways that may obstruct vehicular access. Composting operations would

also take place on an engineered inert pad that provides all-weather access and is sloped to a minimum 1 percent to allow proper drainage. Compost windrows and materials stockpiles would be separated by 12- to 20-foot passages that allow access to all areas of the operation. Therefore, the project would not result in a safety hazard due to the design of the proposed site plan.

j, k) Development of the proposed project would not occur on steep slopes, and would not expose people or structures to risks associated with steep slopes. There would be no impact.

Mitigation

None required.

I. HYDROLOGY AND WATER QUALITY					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	34, 36
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3, 4
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3, 17n
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (Note policy regarding flood retention in watercourse and restoration of riparian vegetation for West Branch of the Llagas.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
e) Create or contribute increased impervious surfaces and associated runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 3, 5, 36, 21a
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3, 18b, 18d
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 18b, 18d
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 3, 4
j) Be located in an area of special water quality concern (e.g., Los Gatos or Guadalupe Watershed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4, 6a,

k)	Be located in an area known to have high levels of nitrates in well water?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
l)	Result in a septic field being constructed on soil where a high water table extends close to the natural land surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
m)	Result in a septic field being located within 50 feet of a drainage swale; 100 feet of any well, water course or water body or 200 feet of a reservoir at capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 3
n)	Conflict with Water Collaborative Guidelines and Standards for Land Uses Near Streams?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22d, 22e

Setting

Surface Water

The major waterway near the project is the Pajaro River. The Pajaro River makes up part of the southern border between Santa Clara County and San Benito County. Located in the Santa Clara Valley, the Pajaro River meanders west through the valley and cuts through the Santa Cruz Mountains, making up the border between Santa Cruz County and Monterey County, and ultimately drains into Monterey Bay. There are many small creeks that drain into the Pajaro River upstream and downstream of the project. However, because the project drains directly to the Pajaro River, these creeks are not associated with the project. According to CWA Section 303(d) List, the Pajaro River is listed as impaired for fecal coliform, nutrients, and sedimentation/siltation. The existing Z-Best facility is not believed to be a contributor to any of these impairments; however, improper management of runoff from the facility could contribute these constituents to the river.

A water quality technical report is included in Appendix H by Jones and Stokes/IFC to determine in-situ water quality conditions of the site and the Pajaro River. Water quality data for the Pajaro River was downloaded from the USGS web site to determine baseline concentrations of 303(d) listed impairments. The USGS has not collected data for a location that is close to the proposed project. As a result, USGS station 11159000 (the Pajaro River at Chittenden), which is approximately 6 river miles downstream of the project location, was used. There are several small tributaries to the Pajaro River that enter the between the proposed project and the sampling location. As a result the data is not an exact reflection of the conditions of the Pajaro River at the project location; however, they are considered representative for the purposes of this analysis. Table 3-14 contains pH, EC, TSS, and fecal coliform data for the Pajaro River at Chittenden. Of 175 pH samples, the minimum was 7.3 and the maximum was 8.7. Of 1,081 EC samples, the average concentration was 535 microohms per centimeter ($\mu\text{ohms/cm}$), and the max was 2,220 $\mu\text{ohms/cm}$. There were 104 TSS samples collected and the average concentration was 171.5 milligrams per liter (mg/L). The maximum TSS concentration was 2,230 mg/L. There were 249 fecal coliform samples collected. The average fecal coliform concentration was 1,464 colonies per 100 milliliters. The maximum fecal coliform concentration was 17,000 colonies per 100 milliliters.

Table 3-14. The Pajaro River at Chittenden (11159000) Water Quality

	pH (standard units)	EC μohms/cm	TSS mg/L	Fecal Coliform
Date Range	Feb-52 to -Sep-68	Feb-52 to Jul-68	Feb-78 to Sep-91	Feb-78 to Sep-92
Count	175	1081	104	249
Minimum	7.3	0	2	0
Average	NA	535	171.5	1464
Max	8.7	2220	2230	17000
Source: USGS web site at: <www.usgs.gov>. Fecal coliform is in colonies per 100 milliliters.				

The Soils and Water Quality Impact Study prepared for the Z-Best Composting Facility (Edgar & Associates 2008, Appendix H) sampled stormwater runoff in 2004. Table 3-15 contains stormwater runoff data for the project.

Table 3-15. Project Storm Water Runoff Water Quality Data

Analyzed	Date Analyzed	Result	Criteria
Diesel Range Organics	3/5/2004	760 micrograms per liter (μg/L)	56 to 140
Iron	2/27/2004	2 μg/L	300 μg/L
Lead	2/27/2004	ND	ND
Zinc	2/27/2004	0.051 μg/L	2000 μg/L
Nitrate as NO ₃	2/25/2004	ND	ND
Phosphate as P	2/25/2004	ND	ND
Total Organic Carbon (TOC)	3/9/2004	53 mg/L	
Total Suspended Solids (TSS)	2/28/2004	66 mg/L	See Notes
Electromagnetic Conductivity (EC)	2/25/2004	910 μohms/cm	
pH	2/25/2004	8.15	7 to 8.5

Source: Edgar & Associates, Inc. 2008.

Notes: Iron criteria is EPA Secondary MCL. Lead Criteria is PEA Primary MCL. Zinc Criteria is EPA suggested no adverse response levels (SNARLS) for toxicity other than cancer risk. Diesel is integrated risk information system (IRIS) reference dose as a drinking water level. pH criteria is based on the Central Coast RWQCB Basin Plan. The Central Coast RWQCB Basin Plan states that waters shall not contain suspended material in concentrations that will adversely affect beneficial uses.

Data indicated elevated levels of Diesel Range Organics. Diesel Range Organics are believed to be a result of heavy equipment operation. Nitrate, phosphate, and lead were

all non-detects. TSS are a result of the stormwater transporting sediment to the sedimentation pond. The sediment settles out in the pond prior to discharge to the Pajaro River. EC of 910 $\mu\text{ohms/cm}$ is over the average Pajaro River EC of 535, but under the maximum Pajaro River EC of 2,220 $\mu\text{ohms/cm}$. The EC is a result of the stormwater runoff collection of sediments and TDS. TOC was detected 53 mg/L. No numeric criteria for TOC exist; however, this concentration is not anticipated to adversely affect beneficial uses in the Pajaro River. No sampling was conducted for pathogens.

As such, available data does not suggest that the existing Z-Best facility contributes to any 303(d)-listed impairments in the Pajaro River and generally meets water quality standards. No data was available for fecal coliform. However as a standard procedure, composting facilities are required to test the composting material for ecoli and salmonella contaminants periodically. Dept. of Environmental Health reviews the submitted samples in compliance with health regulations. To date the Z Best composting facility is in compliance.

Groundwater

Two water supply wells are located on the project site. The well located in Area 1 (westerly portions) is the current well in use. It was drilled to a depth of 580 feet below ground surface, and historic water levels in this well indicate an average depth of 25 feet. The Depth to First Water Maps for Groundwater Management issued by the Santa Clara Valley Water District shows the area to be around the 0 to 10 feet to first water depth. (Edgar & Associates 2008, Appendix H).

Department of Water Resources Bulletin 118 categorizes the project to be in the Gilroy-Hollister Groundwater Basin, Llagas subbasin. The Llagas subbasin has a total surface area of 56,000 acres or 87 square miles. Groundwater level trends in the basin have remained fairly stable over the entire period of record with the exception of a few static water level drops followed by recovery during the 1976–1977 and 1987 - 1992 drought periods. Groundwater storage is estimated to be 150,000 acre feet (DWR 2006).

Groundwater quality in the Llagas subbasin is characterized as being relatively hard, but good for most beneficial uses. The Santa Clara Valley Water District created a Nitrate Management Program in October 1991 to investigate and remediate elevated nitrate concentrations in the subbasin. The study was completed in 1996, and the results suggested that nitrate concentrations are increasing over time and that currently elevated concentrations still exist in the subbasin (DWR 2006). Since 1997 more than 600 wells have been sampled throughout southern Santa Clara County and more than half of the samples exceed the federal safe drinking water standards for nitrate. However it is important to note that the nitrate samples that were in excess of state and federal criteria were only collected from private wells. All public wells within the county meet drinking water standards. (DWR 2006).

Flooding

The proposed project involves 157 acres of which 77 are currently being used as a composting facility, and the remaining 28 of 80 acres is planned for a 28 acre all weather

operation pad to store finished compost processing and equipment, a vegetative drainage area, and a detention basin.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), the entire facility is located within Zone A defined as an area that is within the 100-year flood plain and where base flood elevations and flood hazards are not determined. However, the Pajaro River Watershed Study shows that the majority of the existing composting pad is outside of the 100-year floodplain, while the entire expansion area is inundated by the 25-year floodplain, and portions of the southern half of the expansion area are inundated by the 10-year floodplain.

A drainage study and floodplain analysis was completed as part of the proposed expansion. The study concluded that a 32.6-acre-foot detention basin is required to detain the 100-year 24-hour precipitation event and the basin could be designed to allow 13.6 cubic feet per second (cfs) to be discharged to the Pajaro River. However, flooding from the Pajaro River may inundate the 28-acre expansion area as the site is located in the Soap Lake Basin area of the active Pajaro River floodplain.

The proposed expansion project will disturb 80 acres, Area 2 as shown in Appendix A, defined in the project application. 28 acres will be filled to elevations above the calculated BFE (Base Flood Elevation). The remaining 52 acres are utilized for floodplain mitigation. Area 2 includes a proposed excavation of 295,240 cubic yards, and a proposed fill of 419,470 cubic yards. The project proposes to import over 124,000 cubic yards of fill in order to raise the composting pad above the BFE to reduce impact of floodwater on the operations and material stored on site. This fill will reduce the storage capacity of the floodplain. In order to mitigate for the fill, the project proposes to excavate and remove existing soil from the floodplain resulting in a net increase in the storage volume of the floodplain. The 28-acre site will contain on site storm water detention designed to mitigate the facility expansion for the 100-year storm event and for the proposed compost stockpiles. The 80 acre development area is currently located in a FEMA (Federal Emergency Management Agency) mapped Floodplain Zone A and is also located within what is referred to as the 100-year Soap Lake (an area that occurs along the Pajaro River). The Soap Lake is a naturally occurring low-lying area in the floodplain that acts like a lake and temporary detention basin during rainstorm events.

This project should comply with all FEMA and County requirements. The FEMA mapped Floodplain Zone A is an area of unknown flood depth. Santa Clara County Floodplain Ordinance, as well as the Federal Code of Regulations, require properties greater than 5 acres located in a FEMA mapped Flood Zone A to determine the BFE. Santa Clara County's Floodplain policy for development in the floodplain requires the development to demonstrate the following:

- 1) No increase in the BFE, and
- 2) No adverse impact (NAI) to the floodplain.

A NAI statement shall state that the proposed project will not:

- 1) increase the flow velocities of the Pajaro River;

- 2) expand or change the limits of the floodplain;
- 3) alter or change the physical characteristics of the floodplain; or
- 4) decrease flood storage capacity within the floodplain.

In order for Z-best to demonstrate that the project can meet these requirements, the owner applied to FEMA for a CLOMR (Conditional Letter of Map Revision) in July 2012. A LOMR (Letter of Map Revision) is required per the Federal Regulation and County's Conditions of Approval prior to project completion.

The Santa Clara County, in conjunction with the Santa Clara Valley Water District (SCVWD), have reviewed and approved Z-best's CLOMR application. The County and the SCVWD have reviewed the project and determined that the project as designed demonstrates that the proposed project constructed with the proposed mitigation area will not impact the existing FEMA mapped floodplain as well as the 100-year Soap Lake.

Regulatory Setting

A variety of agencies have jurisdiction over the project study area. Water quality regulations applicable to the project are outlined below.

Federal Regulations

Clean Water Act

Important applicable sections of the CWA (33 USC 1251–1376) include the following:

Sections 303 and 304 provide water quality standards, criteria, and guidelines.

Section 401 requires an applicant for any federal permit that proposes an activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of CWA. Certification is provided by the RWQCB.

Section 402 establishes NPDES, a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the RWQCB.

Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers.

Federal Flood Insurance Program

Congress, alarmed by increasing costs of disaster relief, passed the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts is to reduce the need for large publicly funded flood control structures and disaster relief by restricting development on floodplains.

The FEMA administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA issues Flood Insurance Rate Maps for communities participating in the National Flood Insurance Program. These maps delineate flood hazard zones in the community.

State Regulations

Porter-Cologne Water Quality Act

The State of California's Porter-Cologne Water Quality Control Act (California Water Code, Section 13000 et seq.) provides the basis for water quality regulation in California. The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. Based on the report, the RWQCBs issue waste discharge requirements to minimize the effect of the discharge.

Central Coast Regional Water Quality Control Board

The Central Coast RWQCB is responsible for the protection of beneficial uses of water resources in the Central Coast region. The Central Coast RWQCB uses planning, permitting, and enforcement authorities to meet this responsibility for implementing plans, policies, and provisions for water quality management in the region. Beneficial uses of surface waters are identified for major surface waters and their tributaries, and are described in the Basin Plan. In addition, the Basin Plan identifies water quality objectives and implementation plans for the protection of the beneficial uses of the basin.

Permitting for Construction Activities

The RWQCB administers the NPDES stormwater permitting program in the Central Coast region. Construction sites disturbing 1 acre or more of land are subject to the permitting requirements of the NPDES General Permit. The project applicant must submit a NOI to the RWQCB to be covered by the General Permit prior to the beginning of construction. The General Permit requires the preparation and implementation of a SWPPP, which must be prepared before construction begins. Implementation of the plan starts with the commencement of construction and continues through the completion of the project. Upon completion of the project, the applicant must submit a Notice of Termination to the RWQCB to indicate that construction is completed. This proposed project is anticipated to be less than the 1 acre requirement.

Permitting for Dewatering Activities

Under the NPDES program, the RWQCB has also adopted a General Permit for Discharges with Low Threat to Water Quality (General Low Threat Permit). This permit applies to discharges that meet the following criteria:

Pollutant concentrations in the discharge do not cause, have a reasonable potential to cause, or contribute to an excursion above any applicable water quality objectives, including prohibitions of discharge as specified in the permit;

The discharge does not include water added for the purpose of diluting pollutant concentrations; and

Pollutant concentrations in the discharge will not cause or contribute to a degradation of water quality or impair beneficial uses of receiving waters.

The permit identifies various examples of activities that may be authorized by the permit, including discharges associated with the following:

Supply well installation, development, test pumping and purging;

Maintenance of uncontaminated water supply wells, pipelines, tanks, etc.;

Hydrostatic testing and/or disinfection of water supply vessels, pipelines, tanks, etc.;

Water supply system failures, pressure releases, etc.; and

Other low-threat discharges not covered by the General Construction Permit.

Under the permit, continuous discharges are generally limited to 0.05 million gallons per day (mgd), while intermittent/one-time discharges may allow flows as high as 0.25 mgd. The allowed duration of discharge is between one month and one year, depending upon the type of activity.

This permit would be likely to apply to the proposed project if the contractors conducted dewatering activities during construction (such as construction in areas of high groundwater), and discharged the effluent to surface water or groundwater.

The permit contains waste discharge and effluent limitations similar to those in the General Construction Permit. To obtain coverage, the applicant must submit an NOI and data establishing the chemical characteristics of the dewatering discharge. A standard monitoring and reporting program is included as part of the permit.

For discharges that are not covered by the general permits discussed above, an individual NPDES permit and Waste Discharge Requirements (WDR) must be obtained from the RWQCB.

Discussion of Impacts

a, f, j, and k) The project involves some construction-related changes to Area 1 and the expansion of Area 2. The proposed changes to Area 1 include paving the existing parking lot to create an impermeable surface. The proposed project also includes the newly constructed septic tank with an engineered mound soil absorption disposal system. The mound system was designed is in full compliance with the 1980 State Water Resources Control Board *Guidelines for Mound Systems* and the 1989 SWRCB *Guidelines for the Design, Installation, and Operation of Mound Sewage Disposal Systems*. In addition to construction-related changes to Area 1, the project involves expanding Area 2. The

proposed project would expand the permitted area by 80 acres in Area 2 for the following:

Finished compost processing/storage and equipment storage on an expanded 55-acre all-weather pad.

Vegetative drainage area.

Sedimentation basin.

Setback area from State Highway 25.

Pajaro River bank reconstruction area (future flood conservation easement).

These construction activities would result in soil disturbance. If the soil is not contained and is directly exposed to rain, soil erosion and sediment could flow into the Pajaro River, resulting in the potential degradation of water quality. Construction-related runoff could also contain other pollutants that could contribute to water quality impairments in the Pajaro River. Construction equipment would use toxic chemicals (e.g., gasoline, oils, grease, lubricants, and other petroleum-based products) that could be released accidentally. Additionally, excavation activities from the septic tank installation could reach shallow groundwater levels that rest just below the riverbed and require dewatering. Since the Pajaro River is listed on the CWA Section 303(d) List for sedimentation/siltation, releases of other construction-related sediment would be of particular concern.

Operational impacts to groundwater quality will likely be minimal due to the impervious nature of the windrows. However, there will be use of heavy equipment as part of this additional operation and the potential for fuel and other contaminant spills. Environmental commitments listed in Chapter 2 will be used for this operation. In addition, site runoff has potential to contain elevated levels of contaminants such as sediment, organic carbon, nutrients, and pathogens; however, the proposed vegetated swales and treatment pond are anticipated to improve the quality of runoff such that significant impacts to the Pajaro River are not expected. Similar treatment methods have proven to be effective at the existing facility.

Construction-related impacts are considered significant. Implementation of the Mitigation Measures WQ-1 through WQ-5 would reduce these impacts to a less-than-significant level.

b) Two water supply wells are located on the project site. The well located in Area 1 (westerly portions) is the current well in use. It was drilled to a depth of 580 feet below ground surface, and historic water levels in this well indicate an average depth of 25 feet (Edgar & Associates 2008). Because the water levels are relatively high, and the area is not considered a recharge area, the project will not substantially interfere with groundwater recharge.

Operations of the expanded facility will not result in substantial increases in consumptive water use, since the expansion would not result in the storage of additional composting materials on the site; rather the same amount of compost will be distributed over a larger

area. As a result, there will not be a significant increase in groundwater use. This impact is considered to be less than significant. No mitigation is necessary.

c–e and g, h, i) Currently, the only on-site parking consists of 24 spaces approved under the 1999 Use Permit, immediately to the north of the shop office. The proposed new parking lot would include the creation of 36 additional spaces in a single lot located along the western edge of the property to the southwest of the shop office, resulting in an increase in impervious surface of approximately 10,000 square feet. The proposed parking area would consist of compacted Class II base rock with asphalt surfacing and a wheel stop perimeter border of 4 by 4-foot pressure treated wood. In addition, asphalt surfacing would be applied to the entrance of the weight scale and exit lane. The proposed paving will result in a small amount of impervious surface. This extra impervious surface will create a small amount of additional runoff. In addition, expansion into Area 2 will result in additional space for plastic elongated windrows in Area 1, which will redirect stormwater runoff down the sides of the windrows. There will be no structures placed within the 100-year flood hazard area, which would redirect flows. All on site flows are contained within the site and no flow from the site shall impact the State Highway 25 right-of-way. In addition, expanding Area 2 involves construction of a sedimentation basin, which will collect onsite flows for settling. This additional settling basin will be designed to a sufficient capacity to handle the extra flows from this increase in impervious surfaces.

The drainage study also calculated the detention basin volume capacity based on the 100-year, 24-hour precipitation event. Calculations were based on the National Engineering Handbook – Section 4. Calculations are included in Table 3-16 below. The incremental design increase from the 25-year, 24-hour storm event to the 100-year, 24-hour storm involves an additional 0.5 inches of rain over a 24-hour period, requiring the detention basins to be sized to 32.0 acre-feet.

Table 3-16. Calculated Detention Basin Capacity Based on 25-year and 100-year Events

	25-Year, 24-Hour	100-Year, 24 Hour
Precipitation	6 inches	6.5 inches
AMC		AMC II
Hydrological Soils Group		C
Curve Number		90
Total Drainage Area		69.2 acres
Rainfall Volume	27.9 acre-feet	8.9 acre-feet
Detention Basin Capacity		32.0 acre-feet
Source: Edgar & Associates Inc. 2008		

Even though the on-site detention basins would be designed to hold the 100-year storm event runoff from on-site drainage, an off-site event greater than the 10-year flood would inundate the detention basin and flood much of the 80-acre expansion project. The capacity of the detention pond would be diminished and would not be able to detain the

localized on-site 100-year, 24-hour storm event, but would be able to hold 32.0 acre-feet of off-site water that would have continued downstream should the detention pond not be located there.

Assessing the Soap Lake floodplain storage using a variety of methods and potential phases of development, the floodplain can store as much 6,205 acre-feet to 9,367 acre-feet at a flood stage of 140 feet elevation and as much as 51,507 acre-feet to 77,461 acre feet at 145 feet flood stage elevation. The proposed project site would be inundated by flood water at a 143 to 144 feet flood stage for the 25-year flood event based upon the Edgar & Associates Inc. 2008 study and would be inundated by floodwater at approximately a 146 foot flood stage based upon the Schaaf & Wheeler 2012 Conditional Letter of Map Revision (CLOMR) Study submitted to the Federal Emergency Management Agency (FEMA) in early 2012. This difference in elevation is explained through a datum shift between the two studies.

The stage storage curves provided in the Pajaro River Watershed Study provide storage volume is from 11,000 acre feet to 22,000 acre-feet for the 25-year flood event flood stage. The project site would be inundated by floodwater at a 144 to 145 feet flood stage for the 50-year flood event based upon the Edgar & Associates Inc. 2008 study. The stage storage curves provided in the Pajaro River Watershed Study provide storage volume is from 15,000 acre-feet to 28,000 acre-feet for the 50-year flood event flood stage. A loss of 50 acre-feet of flood storage volume (approximately 0.18% to 0.33% of the 50-year flood event storage resulting from construction of the new compost pad under the expansion project should not be considered significant given the capacity of the Soap Lake Floodplain.

As discussed in the 1997 IS/MND (Brown and Caldwell 1997), flooding of the site has occurred as recently as December 31, 1996 to January 2, 1997. At that time, flooding was restricted to Area 2 and the southeast corner of Area 1. Flooding of the project site and vicinity, part of the Soap Lake Basin, would result in the inundation of portions of the project site by a large, slow moving body of water. While this flooding could be potentially significant, the site has been designed to flood and has been previously permitted by the RWQCB (Board Order No. 96-10) with the knowledge of on site flooding. The applicant is knowingly assuming the risk of property damage in a flood and no life is at stake. The processing facility and other structures are all sited in the northwest corner of the project site, which is above the 145 foot elevation and provides protection from flooding under the predicted 50 year flood event. Construction of the engineered inert fill would add site elevation (about 21 inches) in Area 2 and would reduce exposure of windrows to flood waters. Compost windrows, if flooded are more likely to become diffuse and saturated rather than swept away into the Pajaro River (as observed during previous flood events). Additionally, no new or expanded structures are proposed in any portion of the existing property or the expansion area. Thus, this impact is considered to be less than significant. No mitigation is necessary.

l and m) Two water supply wells are located on the project site. The well located in Area 1 (westerly portions) is the current well in use. It was drilled to a depth of 580 feet below ground surface, and historic water levels in this well indicate an average depth of 25 feet. However, the Depth to First Water Maps for Groundwater Management issued by the Santa Clara Valley Water District shows the area to be around the 0 to 10 feet to first water. (Edgar & Associates 2008). The new septic tank will not be built within 50 feet of

a drainage swale or 100 feet of any well watercourse or water body. However, the septic tank will be built on an area with a relatively high water table according to the Santa Clara Valley Water District Depth to First Water Maps. Because the mound system design is in full compliance with the 1980 State Water Resources Control Board Guidelines for Mound Systems and the 1989 State Water Resources Control Board Guidelines for the Design, Installation, and Operation of Mound Sewage Disposal Systems, this impact is considered less than significant.

n) As the Pajaro River is buffered from expansion activities by the 400-foot Pajaro River bank reconstruction area (a set aside for a potential future flood conservation easement) and an additional 200-foot vegetative buffer, the project exceeds the recommendations of the Santa Clara County Water Collaborative's *Guidelines and Standards for Land Use Near Streams*. This impact is considered less than significant.

Mitigation

Mitigation Measure WQ-1: Dry Season Construction. Construction will be conducted in the dry season (May–October) to the extent possible. Construction during the dry season would reduce the potential for stormwater runoff that contains construction-related contaminants to reach the Pajaro River.

Mitigation Measure WQ-2: Comply with Construction BMPs. In addition to Mitigation Measure WQ-1, before onset of any construction activities, the contractor will comply with proper construction BMPs in order to protect water quality. Because the Pajaro River is impaired for sediment, these BMPs shall be selected with a goal of achieving sediment removal and represent the best available technology (BAT) that is economically achievable. BMPs to be implemented as part of this mitigation measure may include, but are not limited to, the following measures.

Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.

The County will inspect that BMPs are installed properly; the County will notify the applicant if there is a noncompliance issue and will require compliance.

Mitigation Measure WQ-3: Comply with Dewatering Permit. Wastewater generated as a part of construction dewatering shall be either contained on-site such that there is no discharge to surface waters, or discharged to the sanitary sewer for treatment at a wastewater treatment plant. If effluent is discharged to the sanitary sewer, a permit must be obtained.

If discharge to surface waters is unavoidable, prior to engaging in construction-related dewatering activities, the contractor shall obtain an NPDES permit and WDRs from the CCRWQCB. Depending on the volume and characteristics of the discharge, coverage under the General Construction Permit is possible. If dewatering discharges are of a nature that would not allow coverage under the General Construction Permit, the General Low Threat Permit could be implemented. As a worst-case scenario, the contractor would

need to obtain an individual NPDES permit for dewatering discharges. As a performance standard, and due to the listed impairments of the Pajaro River, measures implemented as part of the permits to protect water quality shall be selected with a goal of achieving zero sediment discharge and represent the BAT that is economically achievable.

During dewatering activities, all permit conditions would be followed. This will include the design and implementation of measures to meet permit conditions, such as retention of dewatering effluent until all particulate matter has settled before it is discharged, use of infiltration areas, and other BMPs. Final selection of water quality control measures will be subject to approval by the RWQCB.

The contractor will verify that necessary permits have been obtained before allowing dewatering to begin. The County or contractor will routinely inspect the dewatering site to verify that measures specified in the permit are properly implemented, and perform visual inspections of effluent to verify quality before the effluent is discharged. Inspections will include verification that the effluent is not discolored and does not exhibit sheens or films, which indicate the presence of contaminants other than sediment. If, during the permitting process, it is determined that there is reasonable potential for contaminants besides sediment to be found in dewatered effluent, the County or its contractor will take samples and conduct laboratory analyses for these constituents prior to construction occurring. For ongoing dewatering activities, monitoring will be performed at least biweekly. The county or its contractor will immediately notify the contractor if there is a noncompliance issue, and will require compliance. If a spill occurs, Mitigation Measure WQ-5 would need to be implemented.

Mitigation Measure WQ-4: Implement a Spill Prevention and Control Program.

The contractor shall develop and implement a spill prevention and control program to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction and operation of the project. Implementation of this measure would comply with state and federal water quality regulations and reduce the impact to a less-than-significant level.

The federal reportable spill quantity for petroleum products, as defined in the EPA's CFR (40 CFR 110) is any oil spill that (1) violates applicable water quality standards, (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline, or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If a spill is reportable, the contractor's superintendent would notify the County LEA officials and any other responsible party, which have spill-response and clean-up ordinances to govern emergency spill response. A written description of reportable releases shall be submitted to the RWQCB. This submittal must include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases shall be documented on a spill report form.

If groundwater quality levels have been degraded in excess of water quality standards, the following mitigation measure would be required and would reduce this impact to a less-than-significant level.

Mitigation Measure WQ-5: Implement Measures to Maintain Water Quality. If an appreciable spill has occurred and results determine that project activities have adversely affected surface or groundwater quality, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to ASTM standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the contractors will select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the County.

Mitigation Measure Wq-6: FloodPlain Mitigation. Per County Land Development Engineering's requirements – the proposed 28 acres of compost expansion area will be filled to elevations above the calculated BFE (Base Flood Elevation) to reduce impacts of floodwater on the operations and material stored on site. The 28 acre site will contain on site storm water detention designed to mitigate the facility expansion for the 100 year storm events and for the proposed compost stockpiles.

J. LAND USE					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2, 4
b) 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, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8a, 9, 18a
c) Conflict with special policies:					
i) San Martin &/or South County?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 8a, 20
ii) Los Gatos Specific Plan or Lexington Watershed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 8a, 22c
iii) New Almaden Historical Area/Guadalupe Watershed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 8a
iv) Stanford?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8a, 21
v) City of Morgan Hill Urban Growth Boundary Area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8a, 17a
vi) West Valley Hillsides Preservation Area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 8a
vii) Water Collaborative (Guidelines and Standards for Land Use Near Streams)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Setting

Land uses in the project vicinity are primarily agricultural. The composting facility site is zoned "Agricultural" by the County Zoning Ordinance, and the Santa Clara County General Plan designates the site as Agriculture–Large Scale (40-acre minimum lot size). Scattered residences occur throughout the neighboring agricultural area, with the closest residence located about 500 feet north of the site. The dominant natural feature in the project vicinity is the Pajaro River, which borders the southeast corner of the site.

Discussion of Impacts

a) The proposed project would occur in an area with existing agricultural and agricultural-related uses, as well as low-density rural residences; however, impacts would be confined to the 157-acre-project site, a portion of which is developed to support existing composting operations. Therefore, the project would not result in disrupting or dividing the physical arrangement of an established community.

b) The Z-Best Composting Facility site is zoned "Agricultural" by the County Zoning Ordinance. The facility is a conditionally allowed use pursuant to the County use permit. As such, implementation of the proposed project would not result in a conflict with any applicable zoning ordinances.

c) The proposed project is consistent with the policies of the South County Joint Area Plan, which applies to the incorporated and unincorporated areas south of the Morgan Hill-San Jose boundary agreement line approved by Local Agency Formation Commission (LAFCO) of the County. As the Pajaro River is buffered from expansion activities by the 400-foot Pajaro River bank reconstruction area (a set aside for a potential future flood conservation easement) and an additional 200-foot vegetative buffer, the project exceeds the recommendations of the Santa Clara County Water Collaborative's *Guidelines and Standards for Land Use Near Streams*. No other plans or policies apply to the proposed project. Therefore, the project is not expected to conflict with any special policies.

Mitigation

None required.

K. NOISE					
WOULD THE PROJECT:	IMPACTS				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8a, 13, 22a, 45
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2, 5
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2, 5
e) For a project located within an airport land use plan referral area or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or private airstrip would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 5, 22a

Setting

This section addresses the noise environment in the project area.

Noise Terminology

The following are brief definitions of noise terminology used in this evaluation:

Sound. A vibratory disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

Noise. Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Ambient Noise. The composite of noise from all sources near and far in a given environment exclusive of particular noise sources to be measured.

Decibel (dB). A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.

A-Weighted Decibel (dBA). An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Equivalent Sound Level (L_{eq}). The average of sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.

Exceedance Sound Level (L_{xx}). The sound level exceeded XX percent of the time during a sound level measurement period. For example L_{90} is the sound level exceeded 90 percent of the time and L_{10} is the sound level exceeded 10 percent of the time.

Maximum and Minimum Sound Levels (L_{max} and L_{min}). The maximum or minimum sound level measured during a measurement period.

Day-Night Level (L_{dn}). The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

Community Noise Equivalent Level (CNEL). The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

L_{dn} and CNEL values rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment. In general, human sound perception is such that a change in sound level of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving a sound level.

Regulatory Setting

County of Santa Clara General Plan Noise Element

The County of Santa Clara's General Plan Noise Element, as adopted on December 20, 1994, contains planning guidelines relating to noise and identifies goals and policies to support achievement of those goals. Noise element guidelines relate primarily to land use compatibility with noise sources that are regulated at the local level, such as traffic, aircraft, and trains. The County's noise compatibility standards indicate that exterior noise above 55 L_{dn} would result in a noise impact to residential land uses. Within urban service areas, lands are considered to be impacted by noises within 1,000 feet of a freeway or expressway, land within the 65 dBA, CNEL area of an airport, and land near roadways where City comments on projects indicate that a noise impact exists.

County of Santa Clara Noise Ordinance

Noise regulations applicable within the County are found in Chapter VIII, Control of Noise and Vibration, Sections B11-150 through B11-159. The City's exterior noise limits are found in Section B11-152, and are summarized in Table 3-17.

Table 3-17. County of Santa Clara Noise Ordinance Exterior Noise Limits¹

Receiving Land Use Category	Time Period	Noise Level (dBA)
One- and two-family residential	10:00 p.m.--7:00 a.m.	45
	7:00 a.m.--10:00 p.m.	55
Multiple-family dwelling	10:00 p.m.--7:00 a.m.	50
Residential public space	7:00 a.m.--10:00 p.m.	55
Commercial	10:00 p.m.--7:00 a.m.	60
	7:00 a.m.--10:00 p.m.	65
Light industrial	Any time	70
Heavy industrial	Any time	75

Notes:

¹ Levels not to be exceeded more than 30 minutes in any hour.

² No person may operate or cause to be operated any source of sound at any location within the unincorporated territory of the County or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by the person, which causes the noise level when measured on any other property either incorporated or unincorporated, to exceed:

- The noise standard for that land use as specified above for a cumulative period of more than 30 minutes in any hour; or
- The noise standard for that land use as specified above plus five dB for a cumulative period of more than 15 minutes in any hour; or
- The noise standard for that land use as specified above plus ten dB for a cumulative period of more than five minutes in any hour; or
- The noise standard for that land use as specified above plus 15 dB for a cumulative period of more than one minute in any hour; or
- The noise standard for that land use as specified above plus 20 dB or the maximum measured ambient, for any period of time.

³ If the measured ambient level exceeds that permissible within any of the first four noise limit categories above (i.e., cumulative periods of 1 to 30 minutes), the allowable noise exposure standard will be increased in five dB increments in each category as appropriate to encompass or reflect the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category (i.e., any period of time), the maximum allowable noise level under the category will be increased to reflect the maximum ambient noise level.

⁴ If the noise measurement occurs on a property adjoining a different land use category, the noise level limit applicable to the lower land use category, plus five dB, will apply.

⁵ If for any reason the alleged offending noise source cannot be shutdown, the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance that the noise from the source is at least ten dB below the ambient in order that only the ambient level be measured. If the difference between the ambient and the noise source is five to ten dB, then the level of the ambient itself can be reasonably determined by subtracting a one-decibel correction to account for the contribution of the source.

⁶ In the event the alleged offensive noise contains a steady, audible tone such as a whine, screech or hum, or contains music or speech conveying informational content, the standard limits as specified above will be reduced by five dB.

The County's interior noise limits are found in Section B11-153, and are summarized in Table 3-18. These interior noise limits are only applicable to multifamily dwelling units.

Table 3-18. County of Santa Clara Interior Noise Limits for Multifamily Residential Dwellings

Type of Land Use	Time Interval	Allowable Interior Noise Level (dBA)
Multifamily dwelling	10:00 p.m.—7:00 a.m.	35
	7:00 a.m.—10:00 p.m.	45

Notes:

¹ No person will operate or cause to be operated within a dwelling unit any source of sound or allow creation of any noise which causes the noise level when measured inside a neighboring receiving dwelling unit to exceed:

- The noise standard as specified above for a cumulative period of more than five minutes in any hour; or
- The noise standard as specified above plus five dB for a cumulative period of more than one minute in any hour; or
- The noise standard as specified above plus ten dB or the maximum measured ambient, for any period of time.

² If the measured ambient level exceeds that permissible within any of the noise limit categories above, the allowable noise exposure standard will be increased in five-dB increments in each category as appropriate to reflect the ambient noise level.

³ In the event the alleged offensive noise contains a steady, audible tone such as a whine, screech or hum, or contains music or speech conveying information content, the standard limits as specified above will be reduced by five dB.

Section B11-154 enumerates specific prohibitions within the County. The loading, unloading, opening, closing, or handling of boxes, crates, containers, building materials, garbage cans, or similar objects may not occur between the hours of 10:00 p.m. and 7:00 a.m. the following day in a manner as to cause a noise disturbance across a residential real property line or at any time to violate the provisions of Table 3-17.

Construction activities may not occur between the hours of 7:00 p.m. and 7:00 a.m., weekdays and Saturdays, or at any time on Sundays or holidays to create a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance. This section does not apply to the use of domestic power tools. Where technically and economically feasible, construction activities must be conducted in a manner that the maximum noise levels at affected properties do not exceed the mobile equipment standards indicated in Table 3-19 or the stationary equipment standards indicated in Table 3-20.

Table 3-19. County of Santa Clara Construction Standards for Mobile Equipment¹

	Single- and Two-Family Dwelling Residential Area	Multifamily Dwelling Residential Area	Commercial Area
Daily, except Sundays and legal holidays 7:00 a.m.--7:00 p.m.	75 dBA	80 dBA	85 dBA
Daily, 7:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

¹ The mobile equipment standards apply to nonscheduled, intermittent, short-term operation (less than ten days) of mobile equipment.

Table 3-20. County of Santa Clara Construction Standards for Stationary Equipment¹

	Single- and Two-Family Dwelling Residential Area	Multifamily Dwelling Residential Area	Commercial Area
Daily, except Sundays and legal holidays 7:00 a.m.—7:00 p.m.	60 dBA	65 dBA	70 dBA
Daily, 7:00 p.m.—7:00 a.m. and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

¹ The stationary equipment standards apply to repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment.

The County's noise ordinance also prohibits operating or permitting the operation of any device that creates a vibrating or quivering effect that:

Endangers or injures the safety or health of human beings or animals; or

Annoys or disturbs a person of normal sensitivities; or

Endangers or injures personal or real properties.

The County's noise ordinance presumes that the vibration perception threshold is a motion velocity of 1/100 inches per second over the range of 1 to 100 Hertz.

Existing Conditions

Predominant sources of noise within the proposed project area include traffic from SR 25, aircraft overflights, and agricultural activities. The proposed project area is primarily rural agricultural, with some industrial land uses scattered throughout the area. Areas that are not urbanized are relatively quiet, while areas that are more urbanized are subjected to higher noise levels due to roadway traffic, industrial activities, and other human activities. To characterize noise in the vicinity of the proposed project area, noise monitoring and traffic noise modeling was conducted.

Short-term monitoring was conducted on Monday, February 20, 2006, using a Larson-Davis Model 812 Precision Type 1 sound level meter (serial number 0239) placed 5 feet above the ground on a tripod. Measurements were taken at various areas located in the vicinity of the proposed project area. The results of the short-term monitoring episode are summarized in Table 3-21. The calibration of the meter was checked before and after the measurement using a Larson-Davis Model CA250 calibrator (serial number 0125). Sound level data collected during the measurement period was logged manually. Temperature, wind speed, and humidity were recorded manually during the short-term monitoring session using a Kestrel 3000 portable weather station. During the short-term measurement session, skies were clear and sunny. Wind speeds were typically in the range of 0 to 1 mph. Temperatures were approximately 58°F, with relative humidity typically in the range of 71 to 72 percent.

Monitoring position 1 was located approximately in front of the facility windscreen, 250 yards from the closest residence north of the proposed project site, across SR 25.

Monitoring position 2 was located on the facility site along the 20-foot access road

behind the tipping grinding screening area. The noise meter was located approximately 66 yards from an operating tipping grinder, and 55 yards from an operating front end loader. The short-term measurement positions are identified in Figure 4.

Table 3-21. Summary of Short Term Monitoring Results

Position	Start Time	Duration (minutes)	Measured Sound Levels (dBA)				Noise Sources
			L _{eq}	L ₁₀	L ₅₀	L ₉₀	
1	10:48 a.m.	5:00	60.6	64.1	59.1	52.0	Traffic on SR 25, birds overhead, facility operations barely audible
2	11:08 a.m.	14:00	62.9	64.0	62.0	60.2	Tipping grinder in operation, front end loader in operation

To further characterize existing noise levels in the proposed project area, noise from SR-25, the predominant source of noise in the proposed project vicinity, was modeled using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108) and traffic data provided by Caltrans (2008). The model estimates traffic noise levels based on roadway geometrics; traffic volumes for automobiles, medium trucks (vehicles with two axles and six tires), and heavy trucks (vehicles with three or more axles); vehicle speeds; and a noise attenuation rate parameter. A computer-based implementation of the model was used that directly calculates L_{dn} values based on hourly traffic patterns, hourly truck percentages, and posted speeds. Table 3-22 summarizes modeled traffic noise levels under existing conditions for various roadways in the project area, and also presents the distances to various noise contours (60, 65, and 70 L_{dn}) for the roadway modeled. For example, on SR 25, the modeled sound level at the closest receiver is 60 dBA, L_{dn}, and 72 dBA, L_{dn} 100 feet from the centerline of SR 25. The 70 dBA, L_{dn} noise contour is located 134 feet from the centerline of SR 25, the 65 dBA, L_{dn} noise contour is 289 feet from the centerline of SR 25, and the 60 dBA, L_{dn} noise contour is 622 feet from the centerline of SR 25.

Table 3-22. Summary of Traffic Data and Noise Modeling Results for Existing Conditions

Roadway	Daily Traffic Volume	Speed (mph)	L _{dn} at Receiver	L _{dn} at 100 Feet	Distance to 70 L _{dn} contour (feet)	Distance to 65 L _{dn} contour (feet)	Distance to 60 L _{dn} contour (feet)
SR 25	22,200	55	60	72	134	289	622

Vehicle mix for all roadways are assumed to be 90% automobiles, 5% medium trucks, and 6% heavy trucks¹

¹ Source: California Department of Transportation 2008

Noise-Sensitive Land Uses

Sensitive land uses are generally defined as locations where people reside or where the presence of noise could adversely affect the use of the land. Typical noise-sensitive land uses include residences, schools, hospitals, and parks. Noise-sensitive land uses in the project area that could be affected by the project include scattered rural residences

located north of the proposed project site, across SR 25, with the closest residence located approximately 750 feet north of the proposed project facility. A residence is also located approximately 0.5 miles to the southeast of the proposed project area. Figure 4 shows the proposed project site and adjacent land uses.

Discussion of Impacts

Project Construction

a) Noise from construction activities would include noise from grading, excavation, and other earthmoving activities. Additionally, construction noise also results from machinery and equipment used in the construction process. A detailed inventory of construction equipment that will be used for the proposed project was not available; therefore, this noise analysis is based on anticipated construction equipment that will be used during earthmoving and construction activities. Table 3-23 presents a list of noise generation levels for various types of equipment typically used on various construction projects. The list, compiled by the Federal Transit Administration (1995), was used in this analysis to estimate construction noise. A reasonable worst-case assumption is that the three loudest pieces of equipment for each phase would operate simultaneously and continuously over at least a 1-hour period for a combined-source noise level.

Table 3-23. Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level 50 feet from Source (dBA)
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Scraper	89
Truck	88
Source: Federal Transit Administration 1995	

Based on the noise levels presented in Table 3-23, Table 3-24 calculates estimated sound levels from construction activities as a function of distance, assuming simultaneous operation of a scraper, bulldozer, and truck for a combined-source noise level of 92 dBA at 50 feet. The magnitude of construction noise impacts was assumed to depend on the type of construction activity, the noise level generated by various pieces of construction equipment, and the distance between the activity and noise-sensitive receivers. The calculations in Table 3-24 are based on an attenuation rate of 6 dB per doubling of distance. Any shielding effects that might result from local barriers (including topography) are not included, thus making the analysis conservative. Additional attenuation from ground absorption is ignored because of the area is generally hardscape.

Table 3-24. Estimated Construction Noise in the Vicinity of an Active Construction Site

Entered Data:			
Construction Condition: Site leveling			
Source 1: Scraper - Sound level (dBA) at 50 feet =			89
Source 2: Bulldozer – Sound level (dBA) at 50 feet =			85
Source 3: Truck - Sound level (dBA) at 50 feet =			88
Average Height of Sources - Hs (ft) =			10
Average Height of Receiver - Hr (ft.) =			5
Ground Type (soft or hard) =			soft
Calculated Data:			
All Sources Combined - Sound level (dBA) at 50 feet =			92
Effective Height (Hs+Hr)/2 =			7.5
Ground factor (G) =			0.0
Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Sound Level (dBA)
50	0	0	92
100	-6	-2	85
200	-12	-4	77
300	-16	-5	72
400	-18	-6	69
500	-20	-6	66
650	-22	-7	63
700	-23	-7	62
800	-24	-7	61
900	-25	-8	60
1000	-26	-8	58
1200	-28	-9	56
1400	-29	-9	55
1600	-30	-9	53
1800	-31	-10	52
2000	-32	-10	50
2500	-34	-10	48
3000	-36	-11	46
Calculations based on Federal Transit Administration 1995.			
This calculation does not include the effects, if any, of local shielding that may reduce sound levels further.			

As indicated above in Table 3-24, construction activities have the potential to exceed Santa Clara County noise standards for any short-term construction activities that may occur during nighttime hours. Table 3-24 also indicates that construction activities could potentially exceed the County's noise standards for all long-term construction activities. The project applicant has committed to the following environmental measures to minimize the effects of construction-related noise:

The normal working day for construction activities will be between 7:00 a.m. and 5:00 p.m. Construction will not be allowed on Saturdays, Sundays, and holidays.

Construction equipment will have appropriate mufflers, intake silencers, and noise control features and will be properly maintained and equipped with exhaust mufflers that meet state standards.

Vehicles and other gas- or diesel-powered equipment will be prohibited from engine revving and unnecessary (i.e. greater than five minutes) warming up and idling.

Stationary equipment (e.g. bagging equipment, generators, and grinders) will not be located immediately adjacent to the project boundary in either Area 1 or Area 2 (i.e. within 25 feet of the property line) unless enclosed in a noise-attenuating structure.

With the implementation of the environmental measures above to minimize construction-related noise, construction noise is a less than significant impact.

Project Operations

Noise generating operations associated with the proposed project would include additional and new equipment associated with expanded operations in Area 2 and the increase in processing operations in the processing building to 24 hours per day, 7-days per week (currently between 7:00 a.m. and 10:00 p.m.). The increased frequency of receiving and processing operations to 24-hours per day, 7-days per week necessary to facilitate the increase in operations within the processing building would also generate potential increases in noise generation. Information provided by the project applicant indicates that there would be no changes in traffic proposed by this project expansion.

Facility expansion would increase the number of on-site workers visiting the facility per day. The facility currently has 45 employees, and with 60 projected over the next 10 years over the two additional shift operations for 24-hour operations under the proposed expansion. Noise from employee vehicles is not anticipated to result in a significant noise impact because employee vehicles are typically passenger automobiles and light-duty trucks; these types of vehicles are typically not associated with significant noise levels.

Vehicle trips generated from the hauling of composting residuals (mixed solid waste noncompostables) to an off-site disposal facility would generate about 7 trips per day, but it is expected that these materials would be hauled off site on a back-haul basis, thereby not increasing the total number of trips per day. Vehicle trips associated with hauling mulch-type materials that do not need to undergo the composting process would account for approximately 8 trips. This mulch material would also be hauled off-site on a back-haul basis; therefore, no increase in trips per day is expected. Due to the change in operations to 24-hours per day, 7-days per week, it is anticipated that deliveries and haul truck traffic during nighttime hours would occur with greater frequency. The operation of heavy- and medium-duty trucks during nighttime hours when the ambient noise

environment is quietest and noise-sensitive land uses most sensitive to noise disturbances during typical sleeping hours is anticipated to result in an increase in noise levels in excess of County standards (45 dB).

It is anticipated that the predominant source of noise conflicts generated by the expansion of the proposed facility would be the additional equipment used for facility operations in the Area 2 and the increase in operations to 24-hours per day, 7-days per week. The expansion into Area 2 would situate equipment closer to receptors #10 and #11, east of the project facility. Continuous facility operations up to 24-hours per day, 7-days per week could result in a potential increase in noise conflicts for all receptors within 3,000 feet of the facility during nighttime hours when the ambient noise environment is quietest. Noise-sensitive land uses are typically most sensitive to noise disturbances during nighttime hours because this time of the day is when sleep most often occurs.

In comparison to noise measurements taken during existing project operations (Table 3-21), future project operations are assumed to be similar in extent as those generated by construction equipment (Table 3-24) and would exceed the County's noise standards during daytime and nighttime hours for all eleven receptors within 3,000 feet of the proposed project (i.e. nighttime noise in excess of 45 dB). Consequently, this impact is considered significant. Implementation of Mitigation Measures NOISE-2 through NOISE-3 would reduce this impact to a less-than-significant level.

b) Construction activities associated with the operation of heavy equipment may generate localized groundborne vibration and noise. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from the receiver. Additionally, vibration from these activities will be short-term and will end when construction is completed. Because construction activity will not involve high impact activities, such as pile driving, this impact is considered less than significant.

c) Noise from project operations would result in a permanent increase in ambient noise levels in the project vicinity. As discussed in the response to "impact a," no processing operations shall occur during night time. Consequently, this impact is considered less than significant.

d) Construction activities would result in a temporary increase in noise. As discussed in the response to "impact a," no construction is allowed during night time hours. Consequently, this impact is considered less than significant.

e) The proposed project is not located within an airport land use plan referral area or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or private airstrip. Therefore, there would be no impact.

Employ Noise-Reducing Construction Practices. The County shall require the construction contractor to employ noise-reducing construction practices, including, but not limited to:

Locating equipment as far as practical from noise sensitive uses (i.e. maintain vehicles greater than 3,000 feet from receptors unless necessary to complete the activity);

Using equipment that is quieter (i.e. less than 80 decibals) than standard equipment;

Using noise-reducing enclosures around stationary noise-generating equipment; and

Constructing barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.

As standard practice the operator shall maintain equipment for noise minimal impacts:

All equipment to have appropriate mufflers, intake silencers, and noise control features and will be properly maintained and equipped with exhaust mufflers that meet state standards;

Vehicles and other gas- or diesel-powered equipment will be prohibited from engine revving and unnecessary (i.e. greater than five minutes) warming up and idling.

A noise complaint monitoring tracking program shall be implemented. This program shall identify specific measures to address any noise concerns. A sign shall be placed on-site during construction to identify who to contact for noise complaints as part of this program.

Mitigation

None required.

L. POPULATION AND HOUSING					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 4
b) Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2, 3, 4

Setting

The project site is within the City of Gilroy's Sphere of Influence (SOI), as determined by the Santa Clara County Local Agency Formation Commission (LAFCO). According to the Association of Bay Area Governments (ABAG), an estimated population of 53,500 in 15,450 households resided within the City of Gilroy's SOI in 2005. By 2030, ABAG projects the number of people residing within the City's SOI will increase to 66,400 in 19,050 households. This represents both a 19 percent increase in population and a 19 percent increase in the number of households over a 25-year period (Association of Bay Area Governments 2005).

Discussion of Impacts

a, b) With implementation of the proposed project, the Z-Best Composting facility would continue to receive and process organic materials and mixed solid waste in an effort to divert these materials from landfills. In this way, the project would serve to assist the County in meeting the 50 percent waste diversion goal, as mandated by the California Integrated Waste Management Act (AB 939).

The compost facility would not result in the extension of infrastructure facilities that would enable new land use development. Implementation of the proposed project would require the installation of infrastructure and utilities associated with the sedimentation basin and septic tank system. Installation of this infrastructure would be sized to meet the needs of the compost facility alone, and would not be able to accommodate the needs of any other planned or unplanned development. Therefore, there would be no impact.

Although expansion of operations into Area 2 would significantly expand the site area under the proposed project, the Z-Best Composting Facility would not exceed the current permitted limit of 450,000 tons per year of compostable material, and would be permitted to store up to 130,000 cubic yards of finished compost onsite, in addition to the existing

facilities permitted capacity to store 500,000 cubic yards of active compost, curing compost, feedstock, additives, and ground material. The facility is expected to expand the number of people it employs, from 39 current employees to an estimated 55, over the next 10 years. However, these additional employees could easily be absorbed into the region and would not generate demand for new residential development. Therefore, the project is not expected to displace substantial numbers of housing or people.

Mitigation

None required.

M. PUBLIC SERVICES					
WOULD THE PROJECT:	IMPACT				
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
i) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
ii) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5
iii) School facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5

Setting

The project site is served by the South Santa Clara County Fire District (SSCCFD), which has an automatic aid agreement with the City of Gilroy Fire Department to provide fire and emergency response services to unincorporated areas of the Morgan Hill, San Martin, and Gilroy. Station 3, located at 3050 Hecker Pass Highway in Gilroy, is the nearest SSCCFD facility to the project site and is presently equipped to provide a full range of emergency response services, including fire suppression, emergency medical assistance, vehicle extrication, swift water rescue, hazardous material response, earthquake, and flood preparedness (SSCCFD 2009). The station houses one fire engine, and two full-time firefighting personnel. (Vaccaro pers. comm.). The closest fire station to the project site is the Chestnut Station, located at 7070 Chestnut Street in Gilroy. This station houses one ladder truck, one fire engine, and four full-time firefighting personnel (Gilroy Fire Department 2009).

Police services for the project vicinity are provided by the Santa Clara County Sheriff's Office from the South County Sub-Station, located at 80 W. Highland Avenue in San Martin. The station is staffed by 31 sworn officers, including 1 lieutenant, 4 sergeants, 1 detective sergeant, 2 detective deputies, and 4 parks deputies. Patrol units dispatched from the South County Sub-Station serve the unincorporated areas surrounding San Martin, Rucker, Uvas Canyon, Morgan Hill, and Gilroy. The project site is within the George 5 (G5) patrol beat, to which one deputy is assigned. In addition, one deputy is assigned to the Rural Crimes Unit and performs specialized agricultural enforcement duties in the South County agricultural communities. The Santa Clara County Sheriff has a mutual aid agreement with the City of Gilroy Police Department and California

Highway Patrol. Both agencies are able to provide first responder and backup assistance as needed (Rodriguez pers. comm.).

No school, park, or other public facilities are located in the vicinity of the proposed project.

Discussion of Impacts

a) The proposed project would not involve any type of use that would be associated with an increased demand on all services, with the potential exception of fire services. As the project is not residential, it would not impact existing schools, parks, or other public facilities, and no such facilities exist in the vicinity of the project site. Thus, no impacts are anticipated to police, schools, parks, or other public facilities and services. The project could, however, potentially increase demand on fire services. Implementation of the following fire control measures, as discussed in Chapter 2 (see “Fire Control Measures to Minimize Use of Public Services”), would reduce the demand on fire services.

Separate mulch piles by a minimum of 50 feet.

Limit all mulch storage piles consistent with RCSI.

Provide additional fire hydrants adjacent to stockpile areas.

Mow surrounding grass and weeds to 4 feet or less to prevent fires from spreading to other properties.

Impacts to fire services would be further reduced by the following measures, which are currently being implemented as part of Z-Best’s Fire Response Plan and would compensate for any increased pressure on local fire services.

Sixteen Z-Best employees have been assigned as primary first responders in case of a reported fire. These employees all live within 15 minutes of the facility and carry wallet cards with additional contact numbers so an adequate force can be mustered quickly.

Z-Best has substantial firefighting apparatus on site, including a 5,000-gallon water wagon and a 3,500-gallon water truck. These are always left full and are ready to use in the event of a fire. Additionally, the site has five bucket loaders and a distribution system of standpipes, quick connect rubber hoses, and sprinkler pipes that can be quickly mobilized to assist in firefighting efforts.

Z-Best currently employs preventative measures to reduce the risk of a major fire, including keeping stockpiles small and well-separated, monitoring of internal stockpile temperatures, and using sprinklers to keep piles wet.

With implementation of these fire suppression measures, impacts on fire services are less than significant.

Mitigation

None required.

N. RESOURCES AND RECREATION					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2, 3, 6, 44
b) Result in the loss of availability of a locally-important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2, 3, 6, 8a
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2, 4, 5
d) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 4, 5
e) Be on, within or near a public or private park, wildlife reserve, or trail or affect existing or future recreational opportunities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17h, 21a
f) Result in loss of open space rated as high priority for acquisition in the "Preservation 20/20" report?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	27

Setting

Mineral Resources

The principal legislation addressing mineral resources in California is the Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code Sections 2710–2719), which was enacted in response to land use conflicts between urban growth and essential mineral production. In accordance with SMARA, California Geological Survey (CGS)—formerly the California Division of Mines and Geology—has classified lands within the San Francisco-Monterey Bay region into Mineral Resource Zones (MRZs). The MRZ classifications are defined as follows.

MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.

MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data.

MRZ-4: Areas where available information is inadequate for assignment into any other MRZ.

Based on the existing CGS classifications of this region, the project site is not classified for mineral resources (Kohler-Antablin 1999). Additionally, the County General Plan does not identify any mineral resource deposits of regional or statewide significance in the project vicinity (Santa Clara County 1994).

Recreation

There are no recreational resources in the immediate project vicinity. The two closest recreational facilities to the project area include Gavilan Golf Course, a 9-hole executive course located approximately 2.5 miles northeast of the project site, and Christmas Hill Park, a 51-acre public park located approximately 4.25 miles from the project site (City of Gilroy 2009). Future regional/countywide trail corridor routes with the San Juan Bautista de Anza National Historic Trail, the Monterey Yosemite Trail, and the Benito-Clara Trail, are proposed along the southeastern corner of the facility site.

Discussion of Impacts

a, b) No known mineral resources or important mineral resource recovery sites have been identified on the project site. In addition, existing open space land uses surrounding the site would likely preclude mineral extraction on adjacent lands. Therefore, no impact to mineral resources or to an important mineral resource recovery site would occur.

c, d) As the project is not residential, it would not increase demand for parks and other recreational facilities, and no parks or recreational facilities presently exist in the vicinity of the project site. Therefore, there would be no impact.

e) Countywide trail routes R1-A (San Juan Bautista de Anza National Historic Trail), R2 (Monterey Yosemite Trail), and R3 (Benito-Clara Trail) are proposed to cross the southeastern corner of the facility site. As discussed in the 1999 IS/MND, ZRRML has expressed its willingness to grant a trail easement to the County for the construction, management, and patrol of the proposed trail segment and the proposed project would not interfere with ZRRML's ability to grant the easement. Therefore, the proposed project would not affect future recreational opportunities related to the development of the trail.

f) As discussed in the 1999 IS/MND, the facility site is not a high priority for acquisition as open space. Therefore, development of the proposed project would not result in a loss of open space identified as a high priority in the “Preservation 20/20” report.

Mitigation

None required.

O. TRANSPORTATION / TRAFFIC					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 5, 6, 7, 49, 53
b) Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6, 49, 50, 53
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5, 6, 7, 53
d) Substantially increase hazards due to a 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"/>	3, 5, 6, 7, 53
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5, 48, 53
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	52, 53
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8a, 21a
h) Not provide safe access, obstruct access to nearby uses or fail to provide for future street right of way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3, 6, 7, 53

Setting

SR 25 is a two-lane rural highway that serves as a primary commuter route between Hollister and Gilroy. To the west of the Z-Best site, SR 25 intersects with Highway 101, the main north-south arterial through the region. Highway 101 is the backbone of the circulation system for many cities and communities throughout California, including the Bay Area cities to the north and the Monterey area cities to the south.

Both Highway 101 and SR 25 experience high levels of traffic congestion due to heavy peak-period commuter traffic volumes. Morning peak-period traffic is heaviest on westbound SR 25 and northbound Highway 101, with afternoon peak-period traffic occurring in the reverse commute direction. According to the 1999 IS/MND, SR 25 has an Average Daily Traffic (ADT) of 21,100 vehicles per day (vpd) in the site vicinity, while Highway 101 has an ADT of 59,000 vpd near the SR 25 interchange.

Other roads in the project vicinity include Bolsa Road, located about 600 feet east of the facility site, and Bloomfield Avenue, located approximately 0.75 mile to the west. Both of these routes are two-lane, rural routes with comparatively lower volumes of traffic than SR 25 or Highway 101. According to the 1999 IS/MND, both Bolsa Road and Bloomfield Avenue have an ADT of less than 2,000 vpd.

Discussion of Impacts

a, b) The amount of traffic, incoming tons, and on-site storage capacity associated with the proposed project will not be expanded beyond current permit limits. As discussed in the 1999 IS/MND, on an average daily basis, assuming a 1,500 TPD permitted capacity, the total daily entering traffic would be 178 vpd, or an ADT of 356. Daily traffic was estimated to include 52 commercial vehicle trips, 20 inert material delivery trips, 60 self-haul trips, 21 outgoing compost trips, 15 employee trips, and 10 visitor trips per day. Based on these data, 33 trips would be associated with the a.m. peak hour, and 20 trips would be associated with the p.m. peak hour. The peak traffic for truck deliveries to the site occurs between 9 a.m. and 3 p.m., which is outside the normal commute hours for Highway 25. Approximately 8 percent of the Z-Best facility traffic would be expected to occur during the morning peak commute hour (generally between 7 and 8 a.m.).

There would also be vehicle trips generated from hauling composting residuals (MSW noncompostables) to an off-site disposal facility. Based on a mixed solid waste inflow of 700 TPD, ZRRML expects a residual of approximately 20 percent or 140 TPD. This amount of residual would generate about 7 trips per day, but it is expected that these materials would be hauled off-site on a back-haul basis, thereby not increasing the number of trips per day. Hauling mulch type materials that do not need to undergo the composting process would account for approximately 150 TPD, or 8 trips. This mulch material would also be hauled off-site on a back-haul basis; therefore, no increase in trips per day is expected. The traffic generated by incoming mulch feedstock material is already included as green material.

On a peak day of 2,500 TPD, which ZRRML expects to occur 10 to 15 days per year, there would be an additional 46 vehicles per day or 92 additional trips, resulting in a total of 448 ADT. (The a.m. and p.m. peak hour trips would be 46 and 26, respectively.) With the adjustments in the daily employee traffic to account for shortfalls in the 1999 daily self-haul and visitor traffic projections (see "Traffic Count Adjustments" in Chapter 2, Project Description), an additional 35 employee vehicles per day, or 70 additional trips, would be added to area roadways. Thus, traffic generated by the proposed project could be as much 518 ADT under peak conditions.

As discussed in the 1999 IS/MND Average Daily Traffic (ADT) was approximately 18,200 vehicles per day, which based on the 1999 analysis correlated to a Level of Service (LOS) of A. The 2008 ADT for the same stretch of Hollister Road (State Route 25) is 21,000 vehicles per day, representing a 15% increase in ADT. This increase in ADT corresponds to a current LOS of C for the project vicinity, based on the volumetric differences in LOS for similar roadways (Highway Capacity Manual, Special Report 209, Transportation Research Board, 2000). The proposed project's peak day ADT of 518 trips would comprise approximately 2.5% of daily traffic volumes on SR 25 and less than 1% of daily traffic volumes on Highway 101, the level of change due to implementation

of the proposed project would not be significant from the standpoint of intersection or roadway capacity. Thus, this does not represent a significant impact to LOS, as the Santa Clara County threshold for significant impacts to traffic flow is an LOS of lower than D at peak travel periods.

Another standard threshold for traffic impacts is a project induced increase of 100 or more peak hour trips. As the total peak amount of trips for the entire facility (i.e. including the current baseline and all future potential trip expansion) on the peak capacity day would result in 46 and 26 a.m. and p.m. peak hour trips, respectively, the contribution is less than significant. As construction related traffic is anticipated to be a fraction of operational traffic, no exceedance of thresholds for traffic related impacts are anticipated. Therefore, no impacts are anticipated.

c) No changes to existing air traffic patterns in the project vicinity are anticipated to occur as a result of the proposed project. There would be no impact.

d) Access throughout the project area would be provided on 20-foot, all-weather roadways that surround the perimeter, and extend throughout the interior, of the site. These roadways would not create a hazard through a design feature, such as a sharp curve or a dangerous intersection, nor would the use of these routes be incompatible with their intended use. Therefore, the project would not result in a safety hazard due to the design or use of the site access roadways.

e) As described above in impact “d,” access throughout the project areas would be provided on 20-foot roadways, which could accommodate emergency vehicles in the event of a fire. The proposed project design would also include additional fire hydrants adjacent to stockpile areas consistent with the recommendations of the Santa Clara County Fire Marshal. Therefore, implementation of the proposed project would not result in inadequate emergency access to the project site.

f) The proposed project would create 36 additional parking spaces southwest of the shop office, thereby increasing the number of available spaces from 24 to 60. The new spaces are considered adequate for the number of employees and visitors that are projected to visit the site at full buildout. Therefore, the project is not expected to result in inadequate parking capacity.

g) As discussed in the 1999 IS/MND, no adopted policies, plans, or programs supporting alternative transportation would be affected by the proposed project. In addition, no proposed bicycle or pedestrian facilities are planned for Highway 25 in the vicinity of the Z-Best site. Therefore, no impact is anticipated.

h) The entrance to the facility lies on a broad floodplain and is easily visible for 0.75 miles away whether approaching from the east or west, with the only visual impediment being the riparian zones of Cordonices Creek, approaching from the west, or the Pajaro River, approaching from the east. The entrance to the facility is at the apex of a broad turn such that oncoming motorists from either direction are facing towards the facilities entrance. Vegetation is setback from the existing shoulder of the roadway and much of the entrance to the facility is visible, meaning that trucks both entering and exiting the facility are readily visible from either direction, night or day.

The current access road at the Z-Best site was built to commercial standards with sight distances exceeding 800 feet in each direction. Although the current road would not pose a significant barrier to access under the proposed project, there are several measures incorporated into the 1999 Use Permit that further minimize hazards associated with the Z-Best facility entrance. These measures include:

Adding a stop sign and painted stop bar at the facility exit;

Adding a directional sign for the Z-Best facility on eastbound Highway 25 about 2000 feet from the intersection; and

Ensuring that no landscaping or other physical feature near the facility entrance would interfere with sight distance in each direction.

Mitigation

None required.

P. UTILITIES AND SERVICE SYSTEMS					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5,
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5, 21a, 38
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5
d) Require new or expanded entitlements in order to have sufficient water supplies available to serve the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5, 21,
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5
f) Not be able to be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 5
g) Be in non-compliance with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5, 6

Setting

On-site wells provide the bulk of the facility's water supply needs, including a dedicated potable water well.

Drainage channels on the project site drain to the Pajaro River that flows to the southwest and eventually discharges into Monterey Bay. As discussed in the 1999 IS/MND, the existing design of the Z-Best site has provided for the phased development of a final sedimentation basin at the southeast corner of the site where all site drainage would collect prior to its being discharged to the Pajaro River.

Solid waste is generated on-site as noncompostable materials recovered from incoming feedstock. Recovered materials are stored in dumpsters on-site and are later transported to a permitted waste disposal site. The Z-Best Composting Facility assists the County in

meeting its 50 percent waste diversion goal by diverting mixed solid waste and other materials from local landfills.

Discussion of Impacts

a–e) All of the facility's water supply needs are currently provided by on-site wells and would not require new or expanded entitlements. Domestic sewage would be handled by the proposed septic system; as such, operation of the Z-Best facility would not exceed the existing wastewater treatment thresholds of the SWRCB. Stormwater drainage would be managed entirely on-site and would not require or result in the construction of new off-site storm water drainage facilities or the expansion of existing facilities. Therefore, the project would not result in impacts related to water, wastewater, or stormwater infrastructure.

f, g) The proposed project would not cause the facility to exceed its permitted limit of 1,500 TPD of solid waste, as established under the existing County use permit. Under the proposed project, Z-Best would continue to divert noncompostable materials from landfills. The proposed project is not expected to significantly affect landfill capacity and would be in full compliance with federal, state, and local solid waste regulations. Therefore, the project would not result in impacts related to solid waste.

Mitigation

None required.

Q. Mandatory Finding of Significance					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
*Questions relating to the California Department of Fish & Game "de minimus impact finding" for the Certificate of Fee Exemption are listed in italics.	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 to 53
b) Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of an individual 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 to 53
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 to 53

Discussion of Impacts

a) The project would not result in long-term impacts on the quality of the environment; fish, wildlife, or plant species (including special-status plant species), or prehistoric or historic cultural resources. However, the project has the potential to have minor adverse effects that could degrade the quality of the environment (water quality, biological resources, noise, air quality, and traffic). This impact is considered less than significant with implementation of the BMPs and additional mitigation measures identified in this IS/MND.

b) The project would not result in cumulative impacts that are individually or cumulatively considerable. The project effects are temporary and construction-related, and all potential impacts would be less than significant or reduced to less-than-significant levels with mitigation required as part of the proposed project. No impacts would result in a substantial contribution to a cumulative impact.

c) The project has the potential to have minor adverse effects on human beings from increased noise, dust, and traffic during construction and operation. This impact is considered less than significant because the impacts would be temporary and would be mitigated with the BMPs and additional mitigation measures identified in this IS/MND.

1. Environmental Information Form
 2. Field Inspection
 3. Project Plans
 4. Planner's Knowledge of Area
 5. Experience With Other Projects of This Size and Nature
 6. County Expert Sources: Geologist, Fire Marshal, Roads & Airports, Environmental Health, Land Development Engineering, Parks & Recreation, Zoning Administration, Comprehensive Planning, Architectural & Site Approval Committee Secretary
 7. Agency Sources: Santa Clara Valley Water District, Santa Clara Valley Transportation Authority, Midpeninsula Open space Regional District, U.S. Fish & Wildlife Service, CA Dept. of Fish & Game, Caltrans, U.S. Army Core of Engineers, Regional Water Quality Control Board, Public Works Depts. of individual cities, Planning Depts. of individual cities,
 - 8a. Santa Clara County General Plan
 - 8b. The South County Joint Area Plan
 9. SCC Zoning Regulations (Ordinance)
 10. County Grading Ordinance
 11. SCC Guidelines for Architecture and Site Approval
 12. SCC Development Guidelines for Design Review
 13. County Standards and Policies Manual (Vol. I - Land Development)
 14. Table 18-1-B of the Uniform Building Code [1994 version]
 15. Land Use Database
 16. Santa Clara County Heritage Resource (including Trees) Inventory [computer database]
 17. GIS Database
 - a. SCC General Plan Land Use, and Zoning
 - b. Natural Habitat Areas & Riparian Plants
 - c. Relative Seismic Stability
 - d. Archaeological Resources
 - e. Water Resources & Water Problems
 - f. Viewshed and Scenic Roads
 - g. Fire Hazard
 - h. Parks, Public Open Space, and Trails
 - i. Heritage Resources
 - j. Slope Constraint
 - k. Serpentine soils
 - l. State of California, Alquist-Priolo Earthquake Fault Zones, and County landslide & fault zones
 - m. Water Problem/Resource
 - n. USGS Topo Quad, and Liquefaction
 - o. Dept. of Fish & Game, Natural Diversity Data
 - p. FEMA Flood Zones
- Base Map Overlays & Textual Reports (GIS)
18. Paper Maps
 - a. SCC Zoning
 - b. Barclay's Santa Clara County Locaide Street Atlas
 - c. Color Air Photos (MPSI)
 - d. Santa Clara Valley Water District - Maps of Flood Control Facilities & Limits of 1% Flooding
 - e. Soils Overlay Air Photos
 - f. "Future Width Line" map set

19. CEQA Guidelines [Current Edition]

Area Specific: San Martin, Stanford, and Other Areas

San Martin

- 20a. San Martin Integrated Design Guidelines
- 20b. San Martin Water Quality Study
- 20c. Memorandum of Understanding (MOU) between Santa Clara County & Santa Clara Valley Water District

Stanford

- 21a. Stanford University General Use Permit (GUP), Community Plan (CP), Mitigation and Monitoring Reporting Program (MMRP) and Environmental Impact Report (EIR)
- 21b. Stanford Protocol and Land Use Policy Agreement

Other Areas

- 22a. ALUC Land Use Plan for Areas Surrounding Airports [1992 version]
- 22b. Los Gatos Hillside Specific Area Plan
- 22c. County Lexington Basin Ordinance Relating to Sewage Disposal

Soils

23. USDA, SCS, "Soils of Santa Clara County
24. USDA, SCS, "Soil Survey of Eastern Santa Clara County"

Agricultural Resources/Open Space

25. Right to Farm Ordinance
26. State Dept. of Conservation, "CA Agricultural Land Evaluation and Site Assessment Model"
27. Open Space Preservation, Report of the Preservation 2020 Task Force, April 1987 [Chapter IV]

Air Quality

28. BAAQMD Clean Air Plan (1997)
29. BAAQMD Annual Summary of Contaminant Excesses & BAAQMD, "Air Quality & Urban Development - Guidelines for Assessing Impacts of Projects & Plans" [1999]

Biological Resources/ Water Quality & Hydrological Resources/ Utilities & Service Systems"

30. Site-Specific Biological Report
31. Santa Clara County Tree Preservation Ordinance Section C16
32. Clean Water Act, Section 404
33. Riparian Inventory of Santa Clara County, Greenbelt Coalition, November 1988
34. CA Regional Water Quality Control Board, Water Quality Control Plan, San Francisco Bay Region [1995]
35. Santa Clara Valley Water District, Private Well Water Testing Program [12-98]
36. SCC Nonpoint Source Pollution Control Program, Urban Runoff Management Plan [1997]
37. County Environmental Health / Septic Tank Sewage Disposal System - Bulletin "A"

38. County Environmental Health Department Tests and Reports

39. Calphotos website:

<http://www.elib.cs.berkeley.edu/photos>

Archaeological Resources

40. State Archaeological Clearinghouse, Sonoma State University

41. Site Specific Archaeological Reconnaissance Report

Geological Resources

42. Site Specific Geologic Report

43. State Department of Mines and Geology, Special Report #42

44. State Department of Mines and Geology, Special Report #146

Noise

45. County Noise Ordinance

Hazards & Hazardous Materials

46. Section 21151.4 of California Public Resources Code

47. State Department of Toxic Substances, Hazardous Waste and Substances Sites List

48. County Office of Emergency Services
Emergency Response Plan [1994 version]

Transportation/Traffic

49. Transportation Research Board, "Highway Capacity Manual", Special Report 209, 1995.

50. SCC Congestion Management Agency, "2000 Monitoring and Conformance report"

51. Official County Road Book

52. County Off-Street Parking Standards

53. Site-specific Traffic Impact Analysis Report

*Items listed in bold are the most important sources and should be referred to during the first review of the project, when they are available. The planner should refer to the other sources for a particular environmental factor if the former indicate a potential environmental impact

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Rodriguez, Lt. Dalia. Santa Clara County Sheriff. June 17, 2009—email.

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Attachment B

Proposed Conditions of Approval

CONDITIONS OF APPROVAL

Date: February 7, 2018
Owner/Applicant: Zanker Resource Mgmt.
Location: 980 Highway 25, Gilroy (APN: 841-37-028 & 029)
File Number: PLN11206-18A
CEQA: Use of Prior CEQA
Project Description: Architecture and Site Approval (ASA) for an existing 10,000 square foot canopy overhang attached to an existing processing building, with a 361,000-gallon water supply tank and 80 square foot fire equipment building, as submitted on October 15, 2018.

If you have any question regarding the following Conditions of Approval, call the person whose name is listed as the contact for that agency. He or she represents a particular specialty or office and can provide details about the conditions of approval.

Agency	Name	Phone	E-mail
Planning	Valerie Negrete	(408) 299- 5791	Valerie.negrete@pln.sccgov.org
Environmental Health	Darrin Lee	(408) 299 - 5748	darrin.lee@cep.sccgov.org
Land Development Engineering	Eric Gonzales	(408) 299 – 5716	Eric.gonzales@pln.sccgov.org
Fire Department	Alex Goff	(408) 299-5763	Alex.goff@sccfd.org

STANDARD CONDITIONS OF APPROVAL

Planning

1. Development and maintenance of the project shall take place in accordance with approved plans, received by the Planning Department on October 15, 2018. The plans show a 10,000 square foot canopy addition, 80 square foot fire shed and 361,000- gallon water tank.
2. The project shall comply with all prior mitigation measures contained within the environmental document, Initial Study dated June 2009, and approved Use Permit approved December 6, 2012.
3. The applicant shall be responsible for paying all reasonable costs associated with work by the County Planning Department, or work conducted under the supervision of the County Planning Office, or any way related to conditions of approval.

4. The 361,000-gallon water tank shall be colored in the approved color, Tan, as shown in the approved plans received by the Planning Department on October 15, 2018.

Land Development Engineering

5. Provide for the uninterrupted flow of water in swales and natural courses on the property or any access road. No fill or crossing of any swales or watercourses is allowed unless shown on the approved plans.
6. Property owner is responsible for the adequacy of any drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health or damage to adjoining property.

Drainage:

7. Demonstrate the subject property has adequate existing and proposed storm drainage facilities in accordance with criteria as designated in the County Drainage Manual. At a minimum, plans and calculations shall demonstrate all of the following:
 - i. The site can be adequately drained,
 - ii. The development of the site will not cause problems to nearby properties,
 - iii. The site is not subject to significant damage from the one-percent flood, and
 - iv. The on-site drainage will be controlled in such a manner as to not increase the downstream peak flow or cause a hazard or public nuisance. If this cannot be demonstrated, the difference between the three-year pre-development and the ten-year post-development storm peak flows for duration of two hours shall be detained on-site.

Fire

8. The building shall be equipped with an approved automatic fire sprinkler system complying with NFPA 13 because addition exceeds 500 sq. ft. and total floor area exceeds 3,600 sq. ft. Fire sprinklers may also be required by the Building Code for your project.
9. Should the Fire Marshal standards conflict with any other local, state or federal requirement, the most restrictive shall apply. Construction of access roads and driveways shall use good engineering practice.
10. Fire department Access Roads shall be provided within 150-ft. of all exterior portions of all structures. Access roads shall comply with the following:

- a. Width: Clear width of drivable surface of 20-ft.
- b. Vertical Clearance: 15-ft.
- c. Inside Curve Radius: 42-ft.
- d. Grade: Maximum grade shall not exceed 15%.
- e. Surface: All driving surfaces shall be all-weather and capable of sustaining 75,000-pound gross vehicle weight.
- f. Bridges: All bridges shall be capable of sustaining 75,000-pound gross vehicle weight and meet the latest edition of the CalTrans Standard Bridge Design Specifications. Appropriate signage, including but not limited to weight or vertical clearance limitations, or any special conditions shall be provided.
- g. Dead-end Roads: Dead-end roads in excess of 150-ft. in length shall be provided with an approved turnaround meeting County Standard SD-16. Acceptable turnarounds shall be 40 ft. by 48 ft. pad, hammerhead, or bulb of 32 ft. radius complying with County Standard SD-16. All turnarounds shall have a slope of not more than 5% in any direction.
- h. Secondary Access Road: A secondary access road shall be provided because it has been determined by the Fire Marshal that access by a single road might be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access. Secondary access has been approved as submitted. [REF: CFC §503.1.2]
- i. Gates: Gates shall not obstruct the required width or vertical clearance of the driveway and may require a Fire Department Lock Box/Gate Switch to allow for fire department access. Installation shall comply with CFMO-A3.
- j. All fire apparatus access roads meeting the minimum width shall have permanent "no parking fire lane" signs located so that all access roads are clearly identified, and the required clearance maintained as per CFC 503.3.
- k. Driveways (fire apparatus access roads within the property) shall be provided within 150-ft. of all exterior portions of all structures. Access roads shall comply with the following:
 - A) Width: Clear width of drivable surface of 20 ft.

- B) Vertical Clearance: 13-ft. 6-in.
- C) Curve radius, grade, surface, bridges and gates shall comply with the provisions listed for Access Roads.
- D) Inside Curve Radius: 42-ft.
- E) Grade: Maximum grade shall not exceed 15%. The Fire Marshal may permit grades up to a maximum of 20% if no other method is practicable and if consistent with good engineering practices, provided an approved automatic fire sprinkler system is installed throughout the affected structure(s). In no case shall the portion exceeding 15% gradient be longer than 300 feet in length, unless there is at least 100 feet at 15% or less gradient relief between each 300-foot section. Grades exceeding 15% shall be paved in compliance with SD5.
- F) Surface: All driving surfaces shall be all-weather and capable of sustaining 75,000-pound gross vehicle weight.
- G) Bridges: All bridges shall be capable of sustaining 75,000-pound gross vehicle weight and meet the latest edition of the CalTrans Standard Bridge Design Specifications. Appropriate signage, including but not limited to weight or vertical clearance limitations, or any special conditions shall be provided.
- H) Dead-end Roads: Turnaround shall be provided for driveways in excess of 150 ft. as measured along the path of travel from the centerline of the access road to the structure. Acceptable turnarounds shall be 40 ft. by 48 ft. pad, hammerhead, or bulb of 32 ft. radius complying with County Standard SD-16. All turnarounds shall have a slope of not more than 5% in any direction.
- I) Gates: Gates shall not obstruct the required width or vertical clearance of the driveway and may require a Fire Department Lock Box/Gate Switch approved by the responding fire department to allow for fire department access. Installation shall comply with CFMO-A3.
- J) All fire apparatus access roads meeting the minimum width shall have permanent "no parking fire lane" signs located so that all access roads are clearly identified and the required clearance maintained as per CFC §503.1.2.
- K) A number address approved by the Building Inspection Office shall be placed on the building (or at the entrance to the facility) in such a position

as to be plainly visible and legible from the street or road fronting the property. [REF: CFC §505.1]

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO BUILDING PERMIT ISSUANCE

11. **Prior to issuance of building permit**, the applicant shall submit a copy of the approved landscape and irrigation system plan, prepared and stamped by a licensed landscape architect or contractor to Planning Office attention to Valerie Negrete, Project Planner.
12. Conditions of approval from County File No. 6498-08P and 08A shall remain in effect.

Fire

13. A written construction site safety plan shall be submitted directly to the Fire Marshal's Office **prior to approval of any Land Development Engineering construction permit** (if required) or **prior to issuance of the building permit**.
14. **Prior to issuance of building permit**, the applicant shall provide minimum fire protection water supply for hydrants:
 - a. Fire-Flow: Fire flow and duration shall be determined by Table B105.1 of the County Fire Code. NOTE: The fire-flow may be adjusted depending upon the final size of the structure shown on the building permit set of drawings. Pumps supplying pressure shall be listed fire pumps or shall be installed in accordance with CFMO-W7, Installation of Non-Listed Pumps for Fire Protection Water.

Exception: Fire-flow may be provided by a single tank or interconnected tanks sized to meet the capacity determined by the required fire-flow and duration and outfitted with 4-in. / 4-1/2-in. tank outlets complying with CFMO-W2, Sec. III-B(c).
 - b. Hydrants: Hydrants to be located within 400 ft. of all exterior portions of structures, but not less than 40 ft. from the structure(s).
 - c. Tanks: Installation shall be in accordance with CFMO-W6, Installation of Private Fire Protection Water Storage Tanks.

Fire Sprinklers:

15. The fire sprinkler system shall be installed and finalized by this office. A separate permit shall be obtained from the Fire Marshal's Office by a state licensed C-16 contractor **prior to installation**. Please allow for a minimum of 30 days for plan review of fire sprinkler plans.

Land Development Engineering

16. **Prior to issuance of building permits**, applicant shall include a single sheet on plans which contain the County standard notes and certificates as shown on County Standard Cover Sheet. Plans shall be neatly and accurately drawn, at an appropriate scale that will enable ready identification and recognition of submitted information. Minimum letter size for plan submission and approval shall be no smaller than 1/8 inch.
17. Obtain a Drainage Permit from Land Development Engineering (LDE) **prior to beginning any construction activities**. Issuance of the Drainage permit is required **prior to LDE clearance of the building permit** (building and Drainage permits are applied for concurrently). The process for obtaining a Drainage Permit and the forms that are required can be found at the following web page:

www.sccplanning.org > I Want to.. > Apply for a Permit > Grading Permit

If the County Roads and Airports Department provides a condition of approval to obtain an encroachment permit, the application for the permit will be submitted to the Land Development Engineering Office with the grading/drainage permit.

Please contact LDE at (408) 299-5734 for additional information and timeliness.

Floodplain:

18. Drainage plans shall be prepared by a Registered Civil Engineer, drawn to scale showing the nature, location, dimensions, and elevation of the area in question; existing or proposed structures, fill, storage of materials, and drainage facilities pursuant to Section C12-800 through C12-826 of the County Ordinance Code, inclusive. The following information is required:
 - a. Submit a copy of an approved Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency.
 - b. Within the six months after project completion, submit a copy of an approved Letter of Map Revision (LOMR) from the Federal Emergency Management Agency.

ASA
File #11206-18A
February 7, 2019

**CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO BUILDING PERMIT
FINAL**

Planning

19. **Prior to issuance of any permits**, the applicant shall pay all reasonable costs associated with the work by the Department of Planning and Development.

Fire

20. Fire protection water system shall be installed and inspected **prior to approval of the foundation or final inspection for construction with completely noncombustible components**. System shall be maintained in good working order and accessible throughout construction.

These conditions, approved on February 7, 2019 by the Zoning Administrator, are valid for a period of four (4) years.

THE CONDITIONS OF APPROVAL MUST BE COMPLETED, AND A BUILDING PERMIT ISSUED BY FEBRUARY 7, 2022, UNLESS AN EXTENSION OF TIME APPLICATION IS MADE AND GRANTED, OR THIS SINGLE BUILDING SITE APPROVAL SHALL BECOME VOID.

WHEN YOU ARE READY TO PROCEED WITH THIS PROJECT, PLEASE CALL THE COUNTY LAND DEVELOPMENT OFFICE, AT (408) 299-5770, REGARDING INSTRUCTIONS FOR COMPLIANCE WITH THE CONDITIONS OF APPROVAL.

This approval is based upon information submitted on the application form and approved plans. Erroneous information, omission of relevant information or substantial changes will void this approval.

Valerie Negrete, Associate Planner

STATEMENT OF ACCEPTANCE:

I, Zanker Road Resource Management, Ltd., as property owner of the subject application, hereby agree to the aforementioned final conditions of approval.

ASA
File #11206-18A
February 7, 2019

Date_____ Signature_____

NOTE: Please return one signed copy of this page of the conditions, as per instructions of the enclosed cover letter, to:

Valerie Negrete
County of Santa Clara
Planning Office, 7th Floor
70 W. Hedding Street
San Jose, CA 95110

Attachment B1

Prior Use Permit and ASA Conditions of Approval

EXHIBIT B

Architectural & Site Approval Conditions of Approval

File Number: 6498-08P M1-08A M1-09G M1
Owner/Applicant: Zanker Road Resource Management / Greg Ryan
Meeting Date: December 6, 2012
Project Description: Modification of Use Permit, and Architectural and Site Approval with Grading to expand the composting facility by an additional 28 acres for storage and final processing of finished composting.

APPLICATION APPROVED SUBJECT TO CONDITIONS STATED BELOW IN ACCORDANCE WITH PLANS AS SUBMITTED.

Items marked with single asterisk (*) must be completed prior to final grading permit issuance.

Items marked with double asterisks (**) must be completed prior to release of bond for grading.

PLANNING OFFICE

Contact Colleen Oda at 408 299-5797, Colleen.Oda@pln.sccgov.org for information regarding these conditions.

1. The following improvements are included with this approval for a composting/transfer facility including the following:

Existing Improvements – Area 1

- 77 acres of composting/transfer processing operations
- 34,000 sq. ft. processing building
- 4,000 sq. ft. office building
- Mounded septic system
- Landscaping tree berm
- Parking and other related improvements (including ADA access from the parking area to the buildings) to support the use. NOTE: Parking area will be expanded to accommodate a minimum of 60 parking spaces.

Proposed Improvements – Area 2

- 28 acre all weather pad for final processing of finished composting and storage on Area 2
- equipment storage areas

- Sedimentation and flood protection basins
 - Landscaping tree berm
 - Pajaro River flood conservation easement
2. Development must take place in accordance with plans submitted on May 15, 2012 for the Use Permit, Architectural and Site Approval and Grading Approval prepared by Total Compliance Management and Schaaf & Wheeler. No expansion of composting windrows is allowed outside scope of approved site plan.
 3. Maintain the following setbacks for the maintenance of all buildings associated with the subject approval.

Front: 30 feet

Sides: 30 feet

Rear: 30 feet

Landscaping

The following requirements apply, unless considered exempt by the County Landscape Ordinance.

- 4.* Landscape Plan. Prior to issuance of final grading permit, submit four (4) copies of a landscape plan and irrigation system plan, prepared and stamped by a licensed landscape architect or contractor to Planning Office for review and approval. Visual screening is required to minimize visibility of the 8 ft. raised compost pad on the 28 acre expansion area.

Installation shall utilize native or naturalized species with consideration to drought tolerance, adaptability and relationship to environment; color, form and pattern, ability to provide shade, soil retention, and fire resistance. Plan shall consist of a variety of landscape material types (i.e. large/small trees, shrubs, and group cover) of varying species.

Plan shall include species name (generic and common), size and container size of all proposed plants. Plan must also describe any relevant details of irrigation and maintenance.

5. The requirements of Division B33 of the County Ordinance Code (Water Conservation in Landscaping) shall apply for proposed landscaping. In particular:
 - a. Landscape water efficiency must be demonstrated by utilizing any one of the three options provided in Section B33-5: Demonstration of Landscape Water Efficiency.
 - b. Landscape design must comply with all applicable standards and criteria of Section B33-6: Water-Efficient Design Elements.
 - c. Landscape and irrigation plans must comply with all applicable standards and criteria of Section B33-8: Landscape and Irrigation Design Plans.

The County Landscape Ordinance and supporting information can be found on the Planning Office website: www.sccplanning.org.

6. Landscaping Soils Requirements

- a. Soil must be capable of supporting existing landscaping and proposed installation and must have adequate water storage capacity. Soil characteristics, including structure, texture, percolation, pH, mineral content, and microbiology, should be evaluate early in the design process. Soil amendments, such as compost or fertilizer, should be added as appropriate.
- b. A minimum two (2) inch layer of mulch should be applied on all exposed soil surfaces of planting areas, except in areas of direct seeding application (e.g. hydro-seed).
- c. Stabilizing mulching products should be used on slopes.

7.** Landscape Installation Report. A landscape installation assessment shall be conducted by the landscape architect (or other certified landscape professional) within the 30 days following the completion of landscaping and irrigation system installation. The findings of the assessment shall be consolidated into a landscape installation report submitted to the Planning Office.

- a. The landscape installation report shall include, but it not limited to: confirmation that the landscaping and irrigation system was installed as specified in the landscape and irrigation design plan, irrigation system tuneup, system pressure test with distribution uniformity and reporting overspray or run off that causes overland flow. The report shall document any problems encountered, and shall identify and explain any discrepancies between the plan and installation.
- b. The landscape installation report shall include the following statement: “The landscape and irrigation has been installed as specified in the landscape and irrigation design plan and complies with the criteria of the County of Santa Clara Water Conservation in Landscaping Ordinance and the permit(s) issued by the County for the project.”

8. Landscape Maintenance. The landscape installation and irrigation system shall be maintained to ensure successful establishment following installation, and to ensure water use-efficiency consistent with Division B33. Irrigation systems shall be tested, adjusted and repaired following with manufacturers’ specifications and the recommendations of the landscape professional.

Failed plants shall be replaced with the same or functionally equivalent plants that may be size-adjusted as appropriate for the stage of growth of the overall installation.

Lighting

- 9.* Submit an outdoor lighting plan and manufacture’s detail of shields to Planning for review and approval prior to issuance of final grading permit. The outdoor

lighting plan shall use full cut-off lighting fixtures directed downwards to minimize spillover lighting and visibility. On-site lighting shall be designed, controlled and maintained so that no light source is visible from off the property.

Parking

- 10.* A minimum of 60 parking spaces, including 3 handicapped stalls, shall be provided for the project. Prior to final grading permit issuance, revised parking plan shall be submitted to Planning for review and approval. Site plan received on May 15, 2012 shows 56 parking spaces.

Handicapped parking spaces shall be a minimum of eight (8) feet in width and 18 feet in length and shall be provided with an adjacent access aisle. Access aisles shall be a minimum of 60" in width.

- 11.* Submit sample of striping marking and bumpers for parking and directional arrow to Planning for review and approval prior to issuance of final grading permit.
12. Parking space areas, and driveways shall be maintained with all-weather surface or an alternative design with a minimum of 65,000 lb. loading.

Ingress and Egress

- 13.* Ingress and egress locations are to be limited to one 20-foot wide access road off Highway 25, and five (5) 20-foot wide internal access roads as shown on approved plans. Show the access roads on final grading permit plans.

Construction Air Quality Management Plan

- 14.* Submit Construction Air Quality Management Plan to be reviewed and approved by the Planning Office and Bay Area Air Quality Management District prior to final grading permit issuance. The plan must demonstrate that heavy-duty (> 50 horsepower) off road vehicles to used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet average 20 percent No_x reduction and 45 percent particulate reduction compared to the most recent ARB fleet average at time of construction.

NOTE: Acceptable options for reducing emission may include, but are not limited to:

- i. use of late model engines
- ii. low-emission diesel products
- iii. engine retrofit technology
- iv. after-treatment products

15. All proposed stationary, engine, and diesel generated equipment shall comply with the CA Air Resources Board and Bay Area Air Quality Management District standards including compliance to BAAQMD Regulation 9, Rule 8.

Air Quality/Greenhouse Gas Emissions during construction

- 16.* During construction, the following BAAQMD dust control and greenhouse gas emission measures must be adhered to for all improvements. Final improvement plans must contain language requiring that the following control measures be implemented.
- a. Water all active construction areas at least twice daily.
 - b. Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least two feet of freeboard.
 - c. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
 - d. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
 - e. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. The use of dry power sweeping is prohibited.
 - f. All construction vehicles, equipment and delivery trucks shall have a maximum idling time of 5 minutes (as required by the California airborne toxic control measure Title 13, Section 2485 of California Code of Regulations (CCR)). Engines shall be shut off if construction requires longer idling time unless necessary for proper operation of the vehicle.
 - g. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
 - h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
 - i. Post a sign that is at least 32 square feet in size with minimum 2 inches letter height visible near the entrance of construction site that identifies the following requirements:
 - All construction vehicles, equipment and delivery trucks shall have a maximum idling time of 5 minutes.
 - All vehicle speed on unpaved roads shall be limited to 15 miles per hour.
 - Telephone number to contact Bay Area Air Quality Management District regarding dust complaints. Note phone number of the Bay Area Air Quality Management District Air Pollution Complaint hotline at 1-800-334-6367.

Construction Best Management Practices (BMP)

- 17.* On final grading permit plans, identify construction best management practices in order to protect water quality. BMPs to be implemented may include, but are not limited to the following measures:

- a) Temporary erosion control measures (silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, temporary revegetation or other ground cover)
- b) Erosion-control vegetation to be in place October 15 and April 15.
- c) Maintain water quality (i.e. vegetative buffer strips etc.)
- d) Notify Planning Office to conduct inspection after BMPs are installed.

Comply with NPDES Permit

- 18.* Prior to final grading permit issuance, obtain updated NPDES permit from the Central Coast Regional Water Quality Control Board (RWQCB). Submit copy to the Planning Office. This includes a “General Permit for Low Threat Discharge of Groundwater to Water Quality.” Contact RWQCB staff Michael Higgins at (805) 542-4649 for information regarding this condition.

Spill Prevention and Control Program

- 19.* Submit Spill Prevention and Control Program to Planning Office for approval prior to final grading permit issuance. This program must minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction and operation of the project.

Archaeological Resources Monitoring

- 20.* Final grading plans shall contain language indicating that subsurface cultural resources may be present on the property and monitoring by a qualified archaeologist is required during construction.
- 21.* Prior to issuance of final grading permit, submit evidence of a contract with a qualified archaeologist to perform monitoring during construction.
- 22.** Prior to release of the bond for the improvements, a report must be submitted for approval to the Planning Office by the consulting archaeologist summarizing the results of the monitoring and any remediation measures taken during construction, if necessary.
23. If buried cultural resources are inadvertently discovered during ground disturbing activities, work shall stop within a 100-foot radius of the find until a qualified archaeologist can assess the significance of the find and recommend additional treatment measures.

Dry Season Construction

24. Construction shall be conducted during the dry season (May 1 to October 31).

Contamination Analysis

25. If an appreciable spill occurs that would affect surface or groundwater quality, a detailed plan and analysis shall be prepared by a Registered Environmental Assessor to identify the likely cause of contamination. The plan must conform to ASTM standards, and include recommendation for reducing or eliminating the source or mechanisms of contamination.

Biological Resources Mitigation

- 26.* Prior to final grading permit issuance, submit a copy of contract with qualified biologist to conduct pre-construction surveys for western burrowing owls and western pond turtles.
- 27.** Pre-construction surveys shall be conducted within 15 days prior to construction. Prior to release of final grading bond, the pre-construction surveys shall be submitted to the attention of Planning Office, CA Dept. of Fish & Game, and U.S Fish & Wildlife Service for review.
- 28.* Temporary Construction Barrier. If western pond turtles are found, prior to construction/grading activity, construction fencing shall be installed around the boundaries of grading/construction activity, to prevent species from entering the project footprint during construction. The barrier will consist of 3-ft wide silt fencing buried to a depth of at least 6 inches below the soil surface. The barrier shall be inspected, maintained and repaired as necessary to ensure the fencing is functional, and is not a hazard to species. The location of the barrier shall be shown on final grading plans.
29. If western burrowing owls are found, all nest sites during the nesting/breeding season (February 1 to August 31) shall be avoided. Eviction outside of the nesting season shall be permitted pending evaluation of eviction plans and receipt of formal written approval from the CA Dept. of Fish & Game.
30. Other measures as required by US Fish & Wildlife Service, and CA Dept. of Fish & Game shall be complied with during all construction/grading work.
- 31.* On final grading plans, show storage capacity of new detention basin and flood protection basin with installation of a minimum size 24" inch culvert in the floodplain mitigation area. This will ensure that any aquatic life within Pajaro River, including but not limited to steelhead trout and western pond turtles will not advertently be stranded in the floodplain mitigation area. The culvert shall be designed to drain water from storm water events of the floodplain mitigation area to Pajaro River.
- 32.* Prior to final grading permit issuance, provide copy of clearance or permits from the following agencies for the culvert installation (CA Dept. of Fish & Game, Regional Water Quality Control Board, U.S Army Corps of Engineers, Santa Clara Valley Water District).

LAND DEVELOPMENT ENGINEERING

Contact Shelly Theis at (408) 299-5736, Shelly.Theis@pln.sccgov.org for information regarding these conditions.

Plan Review Process and Format:

33. * A project clearance (“goldenrod”), must be issued by the Land Development Engineering Section of the Development Services Office, prior to the issuance of the Grading Permit. The process for obtaining a project clearance involves, but is not limited to, submitting a minimum of eight copies of signed engineered plans for Engineering Plan Check, a Plan Check fee, Inspection fee, and a financial security for the project. Please expect a minimum four to six weeks for the review process. Once all the fees and security have been submitted, and the plan has been approved and signed, a grading permit will be issued by the Land Development Engineering Section and said construction may begin. This permit does not imply that a building permit has been issued. Please contact Mai Trinh (299-5734) for plan submittal requirements and timelines.
- 34.* Final plans shall contain standard notes and certificates as shown on County Standard Cover Sheet. The minimum letter size for plan submission and approval shall be no smaller than 1/10 inch.

Agreements:

- 35.* Enter into a land development improvement agreement with the County per Section C12-206 of the County Code. Submit an Engineers Estimate of Probable Construction Cost prepared by a registered civil engineer with the all above stages of work clearly identified for all improvements and grading as proposed in this application. Also, submit an Estimate of Probable Construction Cost prepared by a licensed landscape architect for the proposed landscape improvements. Clearly identify all stages of the landscape work, as required by the County. Post financial assurances based upon both estimates, sign the development agreement and pay necessary inspection and plan check fees, and provide County with Certificate of Worker’s Compensation Insurance.

Maps:

36. * Lot stakes, set by a licensed land surveyor, or registered civil engineer authorized to practice land surveying shall set or verify permanent survey monuments (lot stakes), and identify the parcel boundary on the plan. If property was previously surveyed, the lot stakes must be exposed, verified and shown on grading plans. If new stakes will be set, the stakes shall set pursuant to the State Land Surveyor’s Act prior to issuance of a grading permit. The Land Surveyor / Engineer in responsible charge of the boundary survey shall file appropriate records pursuant to §8762 or 8771 of the Land Surveyors Act with the County Surveyor.

Drainage:

37. Provide for the uninterrupted flow of water in swales and natural courses on the property or any access road. No fill or crossing of any swales or watercourses is allowed unless shown on the approved plans.
38. Property owner is responsible for the adequacy of any drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health or damage to adjoining property.

Dedications and Easements:

- 39.* Offer to dedicate an easement to the public and the County a minimum of 5 feet beyond top of bank, for storm drainage purposes for the Pajaro River.
- 40.* Offer to dedicate an easement to the public and the County a minimum 25-feet for storm drainage purposes for the swales and/or channels running from the Northerly property line towards the Southerly property line effected by this development that pass drainage through the site.
- 41.* Indicate on the improvement plans all applicable easements affecting the parcel(s) with benefactors and recording information. Supply one copy of a preliminary title report, dated within 60 days of the day of submittal, with the submission of the grading/improvement plans for review by Land Development Engineering.

Improvements Plans:

- 42.* Preliminary improvement plans prepared by Total Compliance Management and Schaaf & Wheeler and received on May 16, 2012 by the Santa Clara County Planning Office have been reviewed. Submit final improvement, and drainage plans prepared by a registered civil engineer for review and acceptance by Land Development Engineering. All roadway improvement plans require plan, profile, typical sections, and contour grading. All of the following standards shall be consistent with the September 1997 Standard Details Manual, County of Santa Clara Roads and Airports Department and/or the March 1981 Standards and Policies Manual, Volume 1 (Land Development), County of Santa Clara, as appropriate. Copies of these details are available at the following websites:

Land Development Engineering Standards and Policies Manual

- Go to <http://www.sccbuilding.org>.
- Click on Land Development Engineering on the left side of the page.
- At the bottom of the page, click on Private Road Standard Details for private road details.
- Click on Plan Review & Processing link in the middle of the page for other useful links.

Said improvement plans shall include the following:

Roads to be /not to be County Maintained:

- a. Asphalt or Portland Cement Concrete Parking lot improvements as shown on the above plans in accordance with Chapter 4.30 of the Santa Clara County Zoning Ordinance and as required by the Americans with Disabilities Act.
- b. Drainage Ditch Linings per County Standard SD8.
- c. Energy Dissipaters per County Standard SD10.
- d. Standard Turnarounds and Turnouts per County Standard SD16.

Storm Water Treatment – Pajaro River / Monterey Bay Watershed

43. * This project is located within the Monterey Bay watershed and it is a Regulated Project. Pursuant to the Revised Regional Stormwater Management Plan (SWMP), the improvement plans shall include Low Impact Development (LID) treatment measures (harvesting and re-use, infiltration, evapotranspiration; or bio-treatment may be used if the first three measures mentioned are infeasible), source control measures (as applicable) and site design measures complying with the Interim LID requirements, Section 5.IX. The Interim LID requirements are the same as the LID requirements found in Provision C.3 of the 2009 Municipal Regional NPDES Permit issued by the San Francisco Bay Regional Water Quality Control Board. For additional information, please contact Clara Leik, Clean Water Program Coordinator at (408) 299-5737.

Floodplain:

- 44.* Submit grading and drainage plans, prepared by a Registered Civil Engineer, drawn to scale showing the nature, location, dimensions, and elevation of the area in question; existing and proposed contours, structures, fill, storage of materials and equipment, utilities and drainage facilities. The following information is required:
- a. Base flood elevation and proposed elevation in relation to mean sea level on the NAVD88 datum, of the lowest floor (including basement) of all structures in Zone A, elevation of highest adjacent grade and proposed elevation of lowest floor of all structures;
 - b. Proposed elevation in relation to mean sea level to which any nonresidential structure will be flood proofed, if required in Section C12-816.C.2 of the County Code; and detailed in FEMA Technical Bulletin TB 3-93.
 - c. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development.
 - d. Demonstrate on the drainage plan the site is reasonably safe from flooding;
 - e. Demonstrate on the drainage plan the proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. Each project shall be designed so as to not increase the water surface elevation greater than one foot at any point within Santa Clara County;

- f. Demonstrate on the drainage plan that the proposed development does not expand the limits of the most current FEMA mapped Flood Hazard Areas.
- g. Prepare and submit a No. Rise Certificate, No Adverse Impact Certificate and corresponding documentation and calculations demonstrating a no impact to the floodplain.
- h. Prior to final release of the bond, owner shall apply and obtain a Letter of Map Revision (LOMR) from FEMA.

Drainage:

- i. Demonstrate the subject property has adequate existing and proposed storm drainage facilities in accordance with criteria as designated in the County Drainage Manual. At the minimum, plans and calculations shall demonstrate all of the following:
 - 1. The site can be adequately drained,
 - 2. The development of the site will not cause problems to nearby properties,
 - 3. The site is not subject to significant damage from the one-percent flood, and
 - 4. The on-site drainage will be controlled in such a manner as to not increase the downstream peak flow or cause a hazard or public nuisance. If this cannot be demonstrated, provide a detention system pursuant to the Design Guidelines in Section 6.3.3 of the 2007 Santa Clara County Drainage Manual.

Grading:

- j. Plans will be processed in accordance with the Grading Ordinance and checked for conformance with Article 5 (Design Standards) Section C12-489 to Section C12-527.

Final plans to include and/or reflect the following:

- 1. Cross Sections of the parking lot, tree berm(s), access road, compost pad, flood plain mitigation area, drainage system and detention facility.
- 2. Identify mitigation areas for proposed tree berm(s) and parking lot improvements with respect to FEMA Flood Zone A demonstrating a zero impact to the floodplain.
- 3. Erosion control measures as required per Sections C12-515 through C12-527, inclusive.
- 4. Landscape Plans that demonstrate long-term erosion control, aesthetic/screening components, and any other requirements listed in these conditions.
- 5. Indicate how the graded areas are to be properly drained in accordance with criteria as designated in the County Drainage Manual. Submit necessary hydraulic calculations to justify the proposed improvements.

6. Indicate how the graded areas shall comply with setback requirements from property line for cuts and fills per Section C12-505.
7. The requirement to take all exported materials from the site to a County approved disposal site must be clearly indicated on the plan.

Utilities:

- k. All new on-site utilities, mains and services shall be placed underground and extended to serve the proposed facility. All extensions shall be included in the improvement plans submitted to Land Development Engineering for review and approval. Off-site work should be coordinated with any other undergrounding to serve other properties in the immediate area.

Notice of Intent

45. * This project will disturb one acre (43, 560 square feet) or greater of land area. Provide a calculation showing the final area disturbed with this project.

If the above calculation indicate more than one acre of disturbance, the Owner shall file a "Notice of Intent" (NOI) to comply with the Statewide General NPDES Permit for storm water discharges associated with construction activity with the State Water Resources Control Board (SWRCB). This condition is mandated by the State of California. A filing form, a filing fee, a location map, and a Storm Water Pollution Prevention Plan (SWPPP) are required for this filing. A copy of the Application shall be submitted to the SWRCB, with a duplicate copy submitted to the County, prior to grading permit issuance, and by state law must be done prior to commencing construction.

Information is available in the 7th floor lobby, and from the SWRCB web site: <http://www.swrcb.ca.gov/stormwtr/construction.html>. For additional information, please contact Clara Leik, Nonpoint Source Pollution Control Coordinator, at (408) 299-5737.

Soils and Geology:

46. * Submit one copy of the geotechnical report for the improvements, prepared by a registered civil engineer, as required by the Santa Clara County Ordinance Code, to Land Development Engineering.
47. * Submit a plan review letter by the Project Geotechnical Engineer certifying that the geotechnical issues identified in the geotechnical report been mitigated on the improvement plan. This letter shall be submitted to and reviewed by Land Development Engineering.
48. * As required by the County Geologist, submit a geotechnical engineering investigation report by the Project Certified Engineering Geologist certifying that the geologic issues identified in the project geologic report been mitigated on the improvement plan. This report shall be submitted to Land Development Engineering and reviewed by the County Geologist.

Other Conditions:

- 49.** Construct in the field all of the aforementioned improvements. Construction staking is required and shall be the responsibility of the developer.

ENVIRONMENTAL HEALTH

Contact Chris Rummel at (408) 918-1964, Chris.Rummel@deh.sccgov.org for information regarding these conditions.

- 50.* Obtain a revised Solid Waste Facility Permit from Dept. of Environmental Health.
- a. Due to the volumes of waste being generated, this application must address the increase of the acreage of the site and the inclusion of the transfer/processing aspect of the business.
 - b. A revised Report of Compost Site Information document must accompany the revised Solid Waste Facility Permit application.
 - c. The revised Solid Waste Facility Permit must have both the Composting Facility and the Transfer/Processing facility boxes checked. This new dual permitting is a result of the feedstock now being composted, which requires more processing and the disposal of residuals are significant. It is still first and foremost a composting facility, but State Cal Recycle policy changes require all revised permits to reflect incidental activities or operations to be listed on the permit if such activity would require permitting if they were stand-alone operations.
51. Proposed detention basin and surrounding floodplain ponded water management shall be in compliance with Department of Environmental Health and Regional Water Quality Control Board requirements deemed as necessary to prevent nuisance and/or surface and groundwater degradation.

FIRE MARSHAL

Contact Mac Bala at (408) 299-5763, Mac.Bala@pln.sccgov.org for information regarding these conditions.

NOTE: These are minimum Fire Marshal standards. Should these standards conflict with any other local, state or federal requirement, the most restrictive shall apply.

Fire Protection Water

52. Hydrant system shall be maintained in good working order and accessible throughout the expansion. A stop work order may be placed on the project if the system is not installed, accessible, and/or functioning at all times.
53. Fire protection water systems and equipment shall be accessible and maintained in operable condition at all times, and shall be replaced or repaired where defective. Fire protection water shall be made available to the fire department.

Fire Department Access

54. Fire department access roads, driveways, turnouts, and turnarounds shall be maintained free and clear and accessible at all times for fire department use. Gates shall be maintained in good working order, and shall remain in compliance with Fire Marshal Standard CFMO-A3 at all times.

Access Roads

- 55.* Access Roads shall comply with all the following requirements:
- a. Width: Clear drivable width shall not be less than 20'.
 - b. Vertical Clearance: Minimum vertical clearance of 15' shall be maintained to building site (trim or remove tree limbs, electrical wires, structures and similar improvements).
 - c. Surface: All driving surfaces shall be all-weather and capable of sustaining 65,000 pound loading.
 - d. Dead End Roads: Turnarounds shall be provided for dead end access roads in excess of 150 ft. in length in compliance with the California Fire Code, Section 503.2.5.
 - e. Gates/Traffic Calming Devices: At the time of plan submittal for grading permit all access control/calming devices (i.e., gates, bollards, speed bumps, etc.) shall be clearly noted on the plans. All gates crossing access roads shall comply with Fire Marshal Standard CFMO-A3.
 - f. Access Control Devices: Access control devices including bars, grates, gates, electric or magnetic locks or similar devices, which would inhibit rapid fire department emergency access to the building, must be approved by the Fire Marshal before installation. All access control devices must be provided with an approved means for deactivation or unlocking by the fire department in accordance with California Fire Code, Section 506.1 (as amended by County Ordinance).
 - g. Fire Lanes: Fire apparatus access roads and turnarounds shall have permanent "**No Parking Fire Lane**" signs located so that all access roads are clearly identified and the required clearance maintained in accordance with California Fire Code, Section 503.3.

Site Layout and Operations

56. Storage site shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned before transferring product to the site. (CFC Section 1908.2).
57. Piles or groups of piles shall not exceed 25 feet in height, 150 feet in width and 250 feet in length (CFC, Section 1908.4)
58. Piles shall be separated from adjacent pile by approved fire apparatus access roads (CFC, Section 1908.4).

59. Static piles shall be monitored by an approved means to measure temperatures within the static piles. Internal pile temperatures shall be monitored and recorded weekly. All records shall be kept on file at the facility and be made available for inspection. An operational plan indicating procedures and schedules for the inspection, monitoring and restricting of excessive internal temperatures in static piles shall be submitted to the County Fire Marshal's Office for review on an annual basis (CFC, Section 1908.6).
60. Approved material handling equipment shall be available at all times for moving product during firefighting operations (CFC, Section 1908.9).
61. The owner or operator shall develop a comprehensive Fire Prevention Control plan for monitoring, controlling and extinguishing spot fires, and the plan shall be submitted to the County Fire Marshal's Office for review and approval within 90-days after the approval of the Use Permit. The Fire Prevention Control plan shall be revised on an annual basis, or as otherwise approved by the County Fire Marshal's Office (CFC, Section 1908.10).
62. As part of the Post Approval Monitoring program for the site a compliance report shall be submitted to the County Fire Marshal's Office on an annual basis to ensure the facility remains in compliance with the terms of the Use Permit, and all current State regulations.

Miscellaneous

63. Property is located within the South Santa Clara County District Fire response area.

SANTA CLARA VALLEY WATER DISTRICT

Contact Yvonne Arroyo at 408 265-2600 x. 2319 for information regarding these conditions.

- 64.* As required by District Ordinance 90-1, file an application with the District for a permit to construct or destroy any well or to drill any exploratory holes deeper than 45 feet.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Contact Caltrans Encroachment Permit Office at (510) 622-0724 for information regarding the following condition.

- 65.* Obtain encroachment permit for any new driveway approaches. Any work or traffic control within the State right-of-way requires an encroachment permit from the Department. To apply for an encroachment permit, submit a completed encroachment permit application, environmental documentation, and 5 sets of plans (in metric units) to the attention of Encroachment Permit Office, California Department of Transportation, District 04, P.O. Box 23660 Oakland, CA 94623-0660. An encroachment permit application and instructions can be located at the following web address:
<http://www.dotca.gov/hq/traffops/developserv/permits/applications/index.html>.

EXHIBIT A USE PERMIT Conditions of Approval

File Number: 6498-08P M1-08A M1-09G M1

Owner/Applicant: Zanker Road Resource Management / Greg Ryan

Meeting Date: December 6, 2012

Project Description: Modification of Use Permit, and Architectural and Site Approval with Grading to expand the composting facility by an additional 28 acres for storage and final processing of finished composting.

APPLICATION APPROVED SUBJECT TO CONDITIONS STATED BELOW IN ACCORDANCE WITH PLANS AS SUBMITTED.

Items marked with single asterisk (*) must be completed prior to final grading permit issuance.

NOTE: These Use Permit conditions consolidate all Use Permit conditions of the current and previous Use Permit conditions of approval (Files 6498-08P M1-08A M1-09G M1, 6498-97P-97A, 6498-98P-98A).

Planning Office

Contact Colleen Oda at 408 299-5797, Colleen.Oda@pln.sccgov.org for information regarding these conditions:

1. Development must take place in accordance with plans submitted on May 15, 2012 for the Use Permit, Architectural and Site Approval and Grading Approval prepared by Total Compliance Management and Schaaf & Wheeler. No expansion of composting windrows is allowed outside scope of approved site plan.
2. Development must comply with conditions of Architectural and Site Approval and Grading (Exhibit B)
3. Operation hours shall remain same as existing permitted limits as follows :
 - a) Overall Facility – 6 a.m. to 6 p.m.
 - b) Processing Building – 6 a.m. to 10 p.m.
 - c) Windrows Material Receiving, Screening & Turning – 24 hrs. per day

4. Construction hours are limited to 8 a.m. to 6 p.m. Monday to Friday with exception of County Holidays.
5. Maximum number of persons allowed on-site is 60 (employees & visitors).
6. The site shall be developed, operated and maintained as a composting facility as defined by the County Zoning Ordinance and as a transfer station facility as defined by the County Department of Environmental Health, and CA Department of Resources Recycling and Recovery at all times.
7. The site storage on-site capacity allowed is 576,000 cubic yards for all materials including composting, inert material, finished product, waste and recyclable and other materials.
8. The site's peak daily tonnage allowed is 1,500 tons per day with the exception that a peak daily tonnage allowed for up to 15 days per year is 2,500 tons per day.
9. No compostable material which has not undergone final screening or at least 14 weeks and primary screening may be transported to the 28 acre expansion area.

Noise Complaint Signage

- 10* Prior to final grading permit issuance, submit details for noise complaint signage to be approved by the Planning Office

The following must be included:

- a) Identify noise disturbance coordinator within the facility who will be responsible for responding to complaints regarding facility operational noise.
- b) One sign shall be posted visible along the front of the site facing State Highway 25 near an access driveway entrance to the site, no smaller than 1,296 square inches in size, containing the name, telephone number and email address of the appropriate representative the public may contact to register a complaint about operational noise. The sign shall also contain the contact telephone number for the Department of Environmental Health to submit noise complaints. The operator shall keep a written record of all such complaints and shall provide copies of these records to the County Planning Office and Department of Environmental Health if requested.

Odor Impact Minimization Plan

11.* Prior to final grading permit issuance, an updated odor impact minimization plan shall be approved by Planning and Department of Environmental Health. The plan must include but is not limited to the following:

- a) Use of best management practices to minimize the creation of nuisance odors.
- b) Regulation and monitoring of nuisance odor conditions by the County Department of Environmental Health
- c) Identify odor disturbance coordinator within the facility who will be responsible for responding to complaints regarding facility operational odors.
- d) One sign shall be posted visible along the front of the site facing State Highway 25 near an access driveway entrance to the site, no smaller than 1,296 square inches in size, containing the name, telephone number and email address of the appropriate representative the public may contact to register a complaint about operational odors. (This can be used as the same sign as noise complaints sign referenced in Use Permit Condition #10). The sign shall also contain the contact telephone number for the Department of Environmental Health to submit odor complaints. The operator shall keep a written record of all such complaints and shall provide copies of these records to the County Planning Office and Department of Environmental Health if requested.
- e) If at any time during the permit approval the Environmental Health Department determines the facility exceeds the odor impact minimization plan standards, the Planning Director may, at his or her discretion, require a Use Permit revocation, modification, or reaffirmation hearing be scheduled before the Planning Commission. At that revocation, modification, or reaffirmation hearing, the Planning Commission may consider modifying the Use Permit to allow compliance with adopted standards.

Traffic Management Plan

12.* Prior to final grading permit issuance, a traffic management plan shall be submitted to Planning for approval.

13. Comply with the following conditions of approval as required by the September 9, 1999 Use Permit (File 6498-98P-98A):

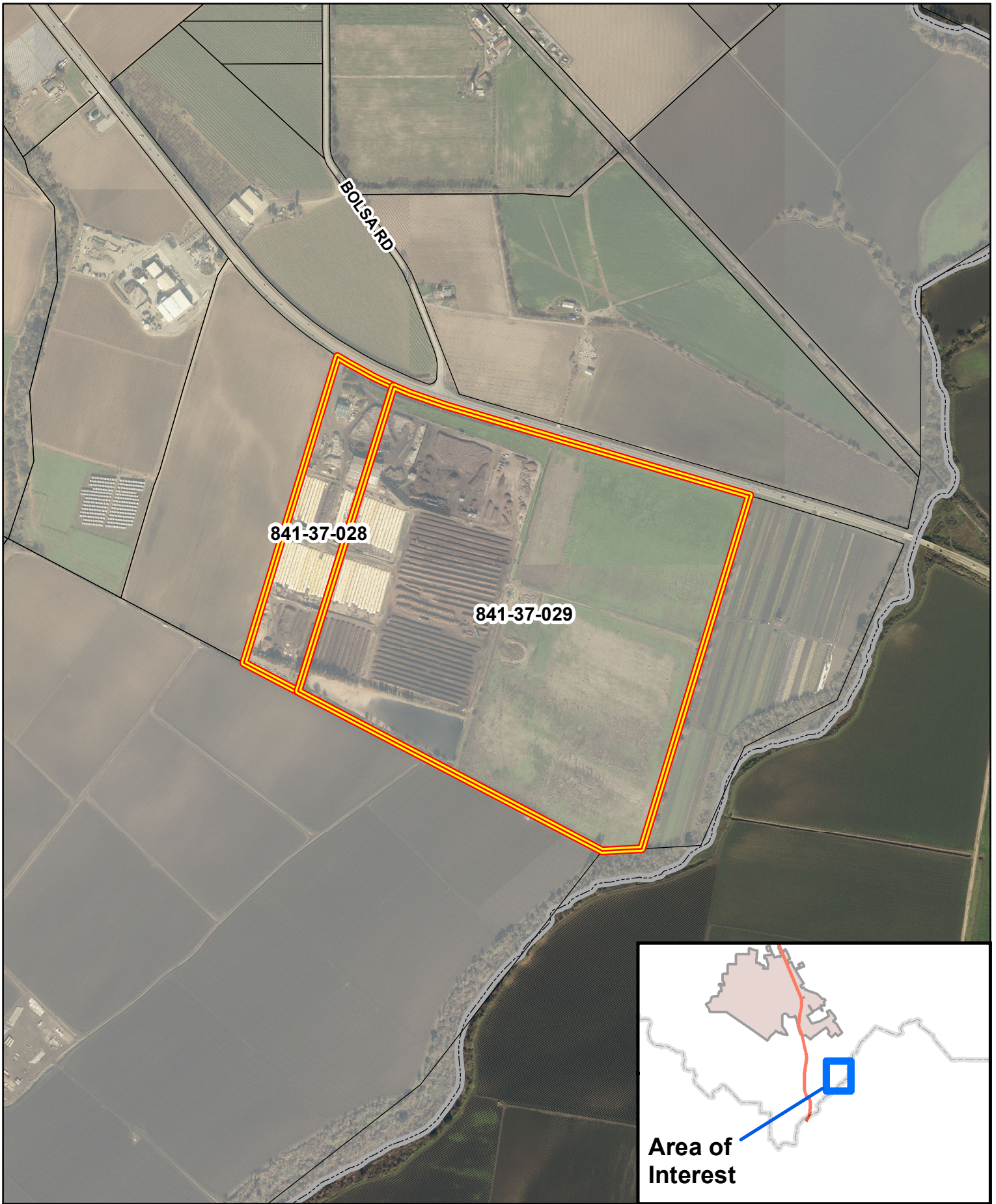
- a) All incoming feedstock, including food waste, shall be processed within 48 hours of receipt and placed either into windrows or bags associated with the CTI (Composting Technologies, Inc.) compost process.
- b) Manure, as an additive, shall be limited to 15 percent of the total mass of feedstock going into a windrow, shall be incorporated into

windrows within 24 hours of receipt, and shall be prohibited during the wet season months as defined by LEA (local enforcement agency) – Dept. of Environmental Health.

- c) The facility operator shall use best management practices to minimize the creation of nuisance odors. This will include the use of the on site windsock and anemometer to guide facility operations (i.e., when the prevailing wind is towards the north at speeds greater than 20 miles per hour, the operator would not turn the windrows).
- d) During full-scale operations of the CTI (Composting Technologies Incorporated) system, the project proponent shall use alternative earth-tone colors for the laminated plastic bags.

Attachment C

Location & Vicinity Map



File: 11206-17A
APN: 841-37-028 & -029

Vicinity Map
Attachment C

0 500 1,000 Feet



This map created by the Santa Clara County Planning Office. The GIS data was compiled from various sources. While deemed reliable, the Planning Office assumes no liability.
1/22/2019 3:46:15 PM Y:\Staff\Reports\11206\11206_vicinity_map.mxd

Attachment D

Proposed Plans



PROJECT Z-BEST COMPOST FACILITY

SUNNYVALE
425 LAKESIDE DRIVE

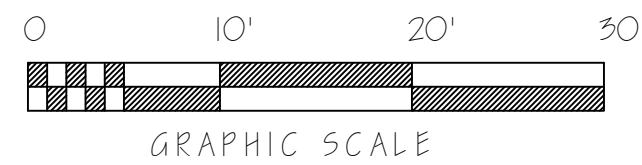
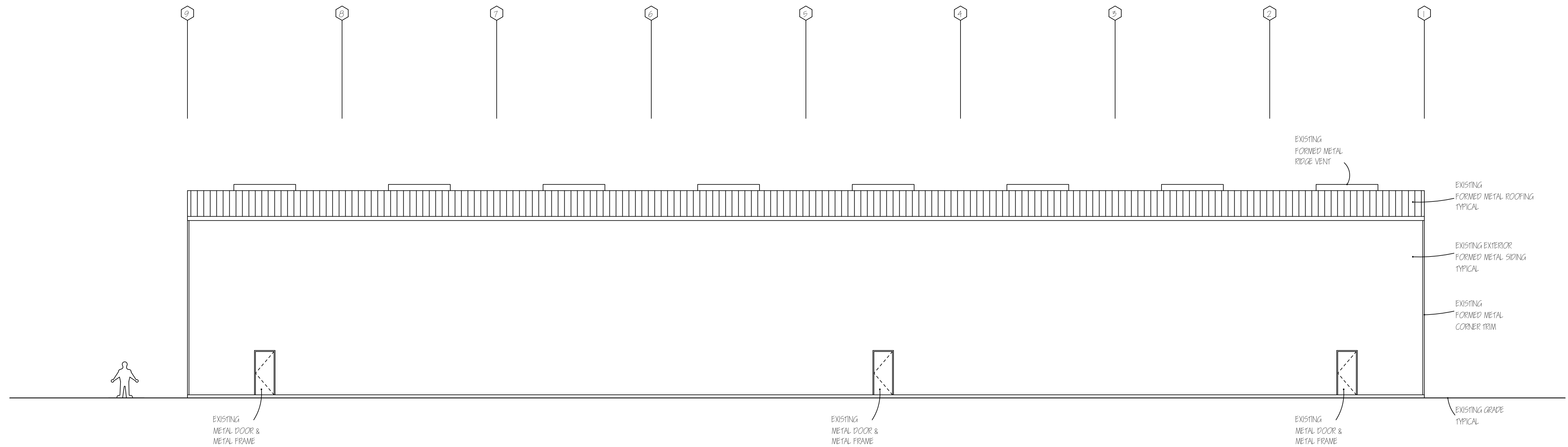
425 LAKE SIDE DRIVE
SUNNYVALE, CALIFORNIA 94085
USA
[+1] (408) 220-9223

DESIGNED PREPARED REVIEWED APPROVED

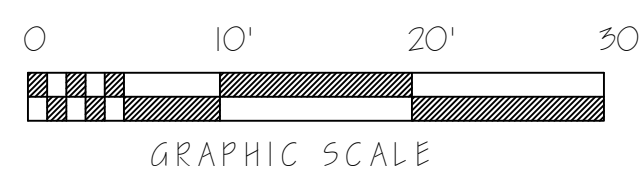
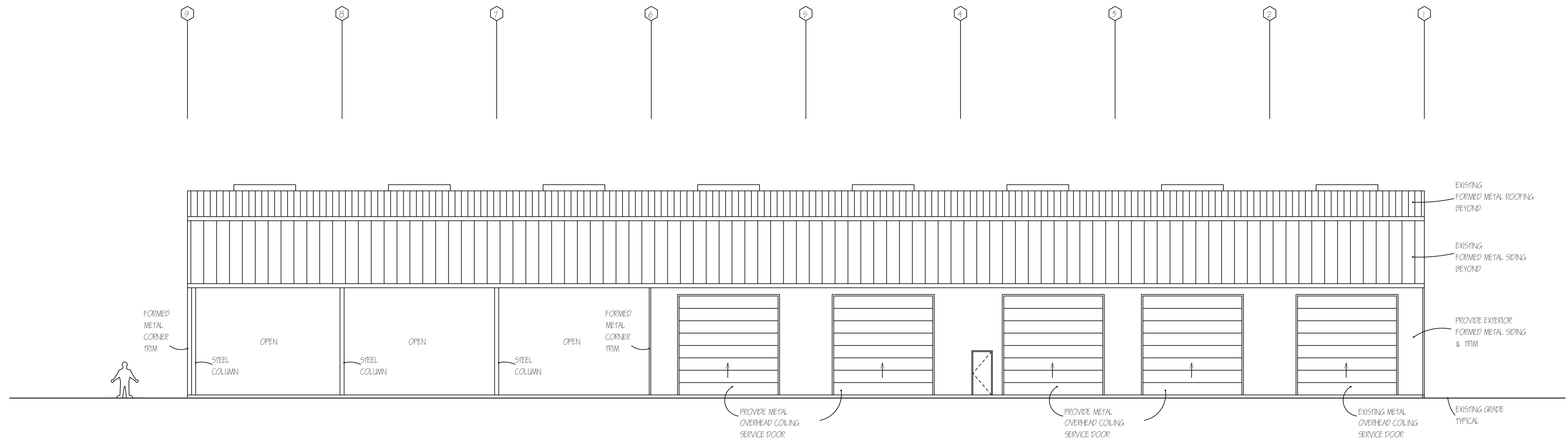
PROJECT NO. 11206-81-10-18A COUNTY FILE NO. 11206-81-10-18A REV. 3 of 3 DRAWING 3

REV: 3 of 3

ω₀



EXISTING NORTH ELEVATION = NO WORK



SOUTH ELEVATION @ PROPOSED ADDITION

ISSUED / REVISED

22 APRIL 2015

11 MAY 2015

REID LERNER ARCHITECTS
7680 MONTEREY STREET #105
GILROY, CALIFORNIA 95020
PHONE 408-842-9942
FAX 408-842-9971
reidlerner@alpaoo.com

STEEL SOLUTIONS, INC
1745 SAN FELIPE ROAD #5
HOLLISTER, CA 95025
PHONE 851-656-0774
FAX 851-656-0714

ADDITION & ALTERATIONS
OPERATIONS BUILDING
Z-BEST PRODUCTS
980 STATE HIGHWAY 25
GILROY, CA 95020

OPERATIONS BUILDING
EXTERIOR ELEVATIONS

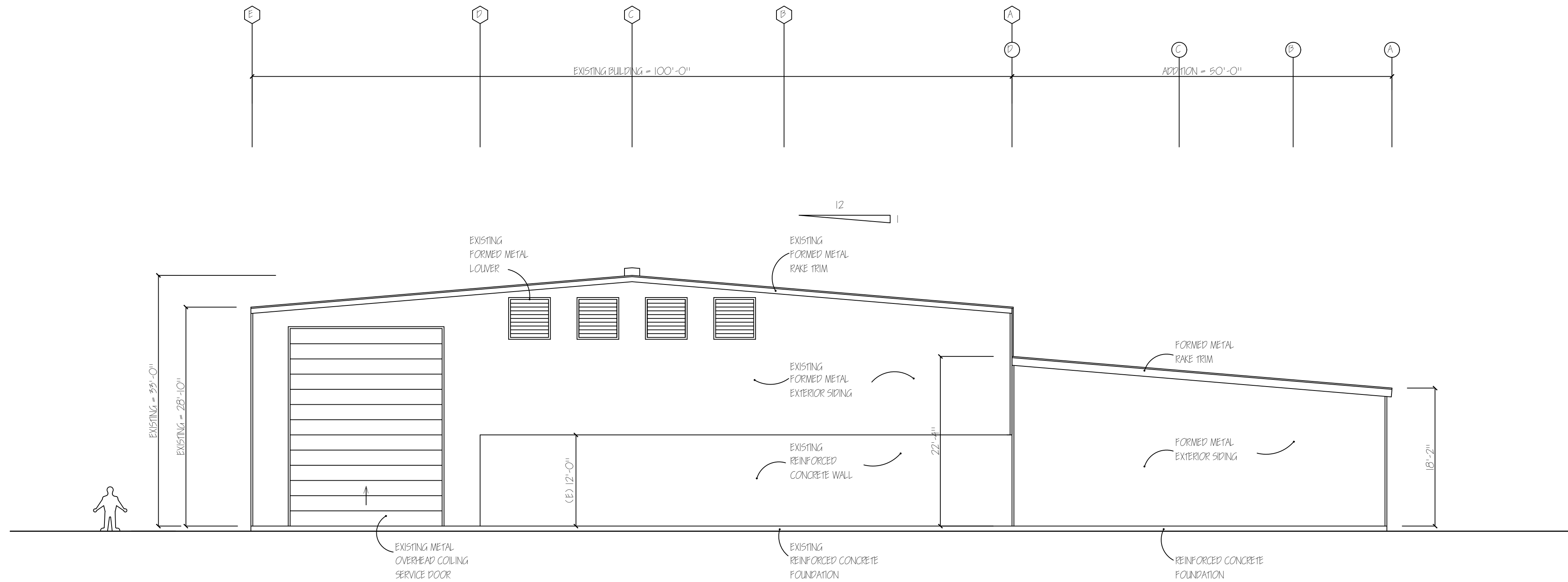
LERNER

RL

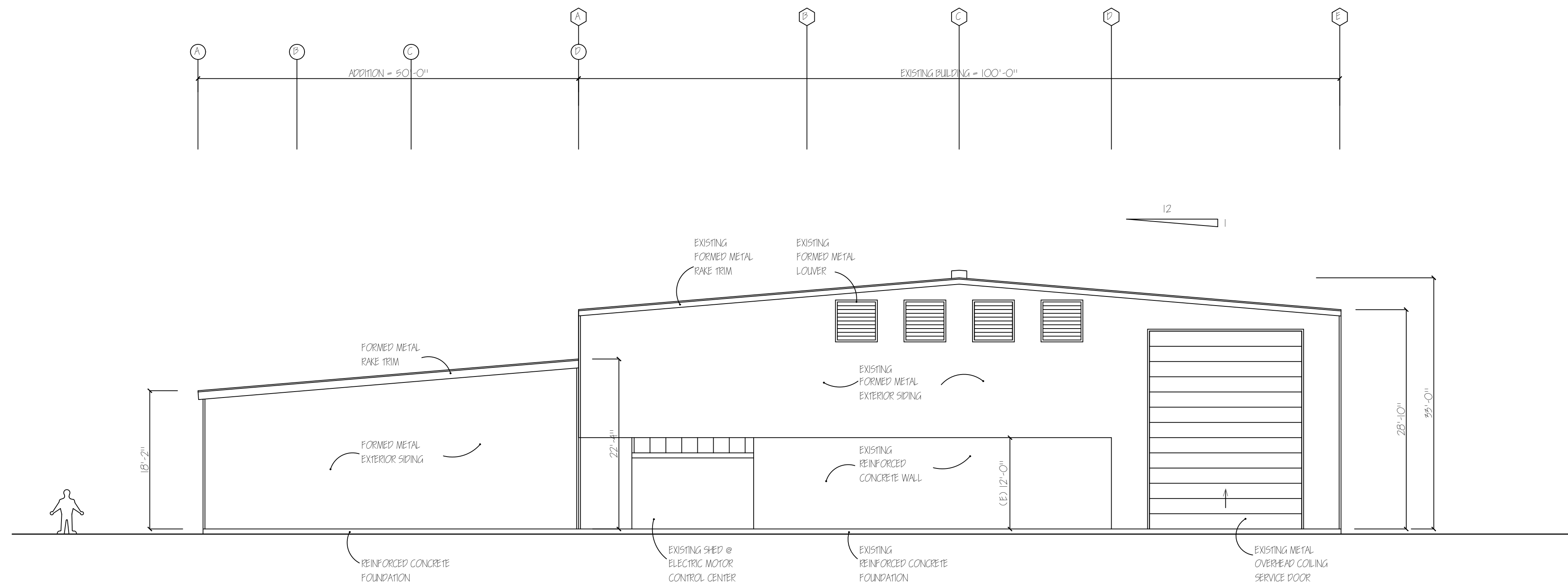
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SCALE: 1 / 120

A-4.1



WEST ELEVATION



EAST ELEVATION

ISSUED / REVISED

22 APRIL 2015

11 MAY 2015

14 JUNE 2015

REID LERNER ARCHITECTS
7680 MONTEREY STREET #105
GILROY, CALIFORNIA 95020
PHONE 408-842-9942
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HOLLISTER, CA 95025
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FAX 851-695-0774

ADDITION & ALTERATIONS
OPERATIONS BUILDING
Z-BEST PRODUCTS
980 STATE HIGHWAY 25
GILROY, CA 95020

OPERATIONS BUILDING
EXTERIOR ELEVATIONS

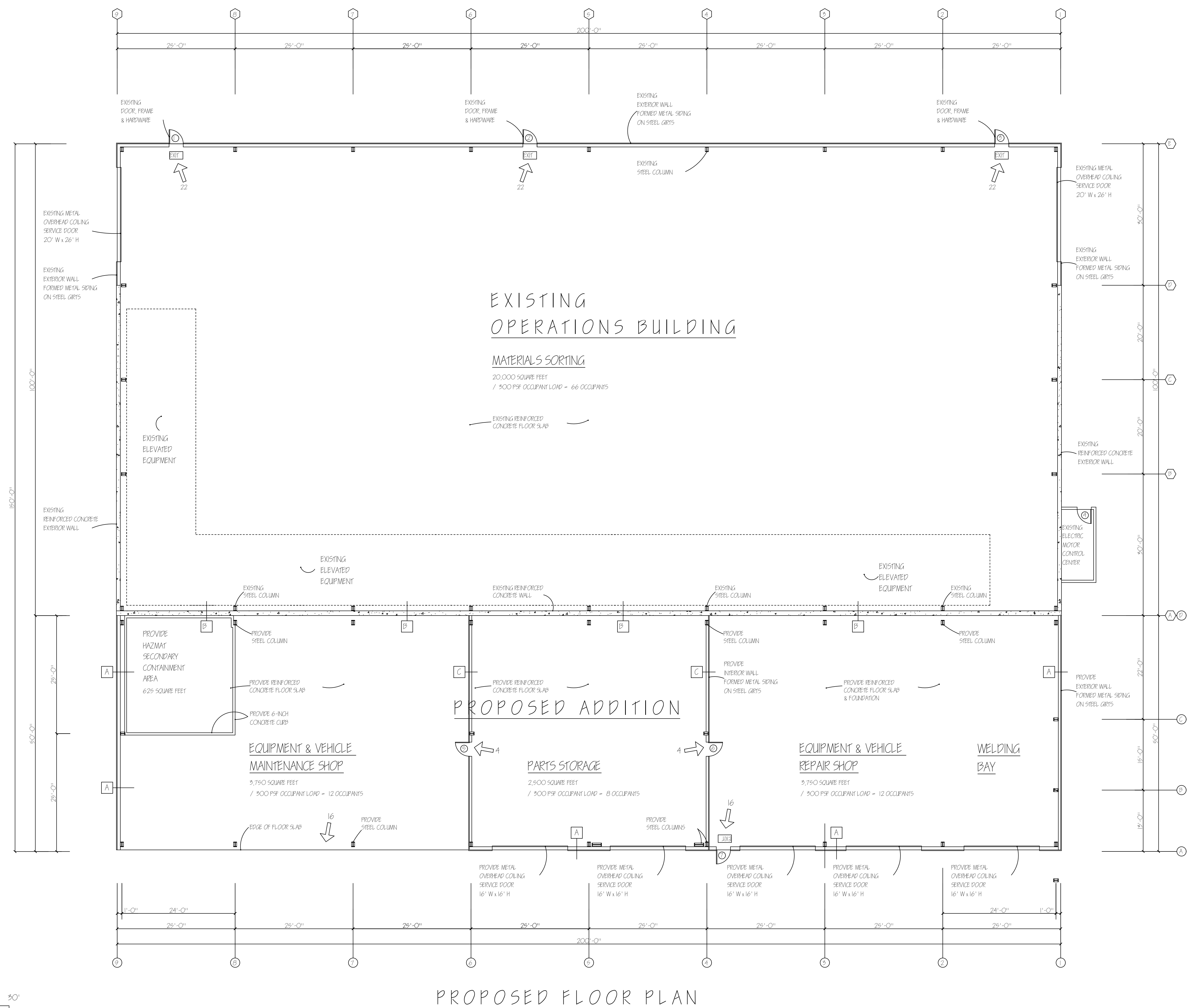
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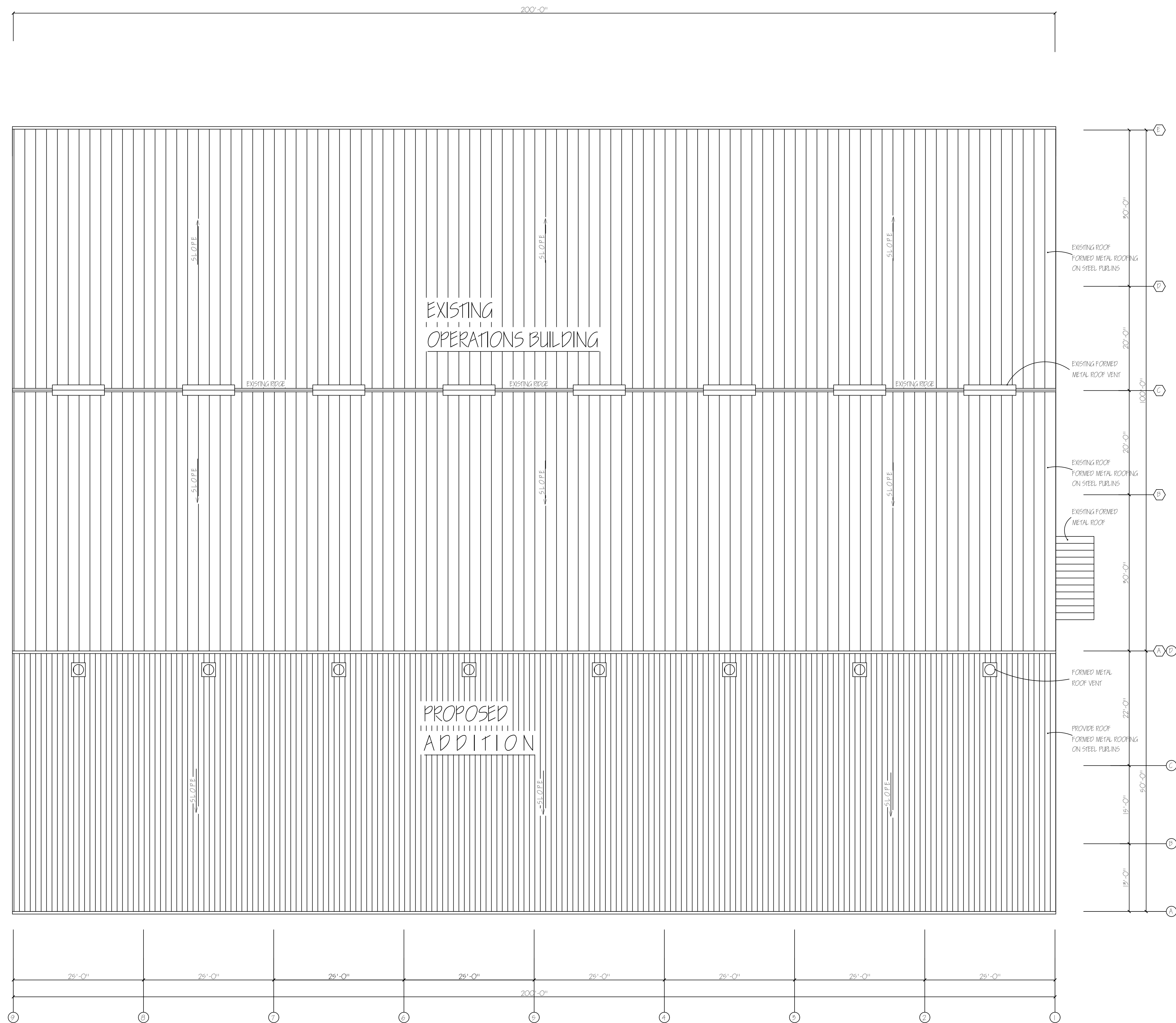
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SCALE: 1 / 120

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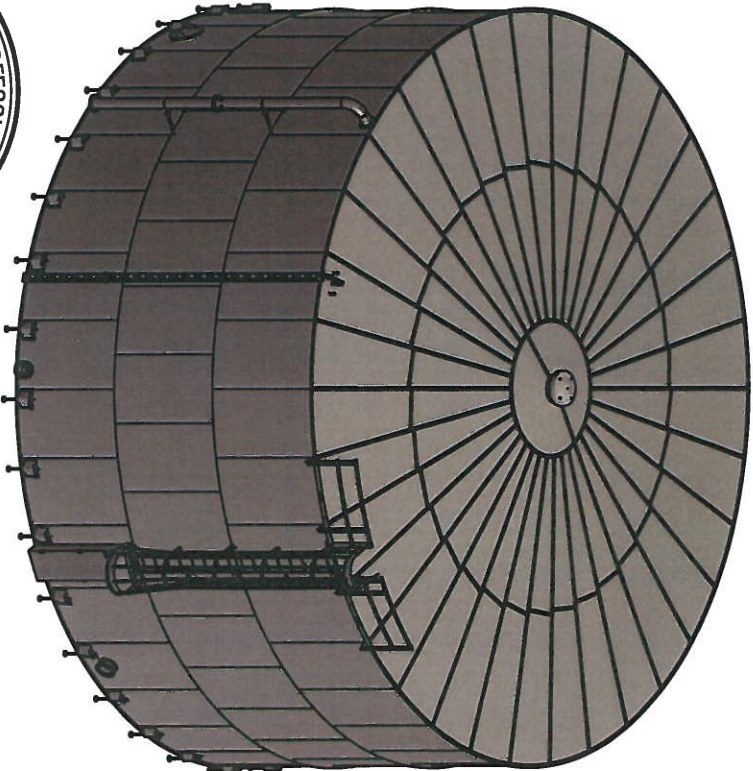
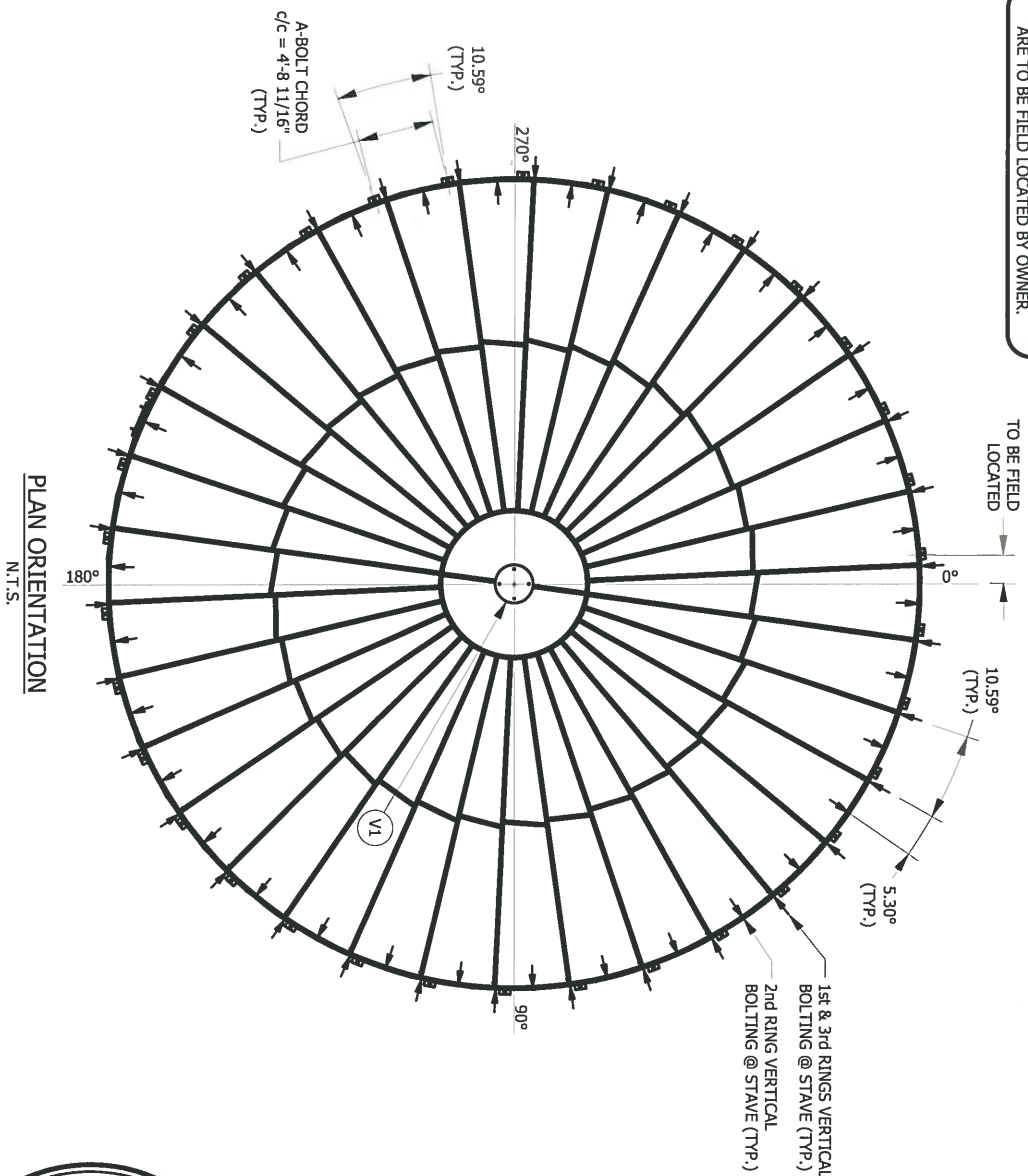


<p>ISSUED / REVISED</p>					
<p>II APRIL 2015</p>					
<p>22 APRIL 2015</p>					
<p>II MAY 2015</p>					
<p>14 JUNE 2015</p>					
<p>REID LERNER ARCHITECTS 7680 MONTEREY STREET #109 GILROY, CALIFORNIA 95020 PHONE 408-642-9942 FAX 408-642-9971 reidlerner@vjakco.com</p>					
<p>STEEL SOLUTIONS INC. 1749 SAN FELIPE ROAD #5 HOLLISTER, CA 95025 PHONE 831-638-0774 FAX 831-638-0974</p>					
<p>ADDITION & ALTERATIONS OPERATIONS BUILDING Z-BEST PRODUCTS 980 STATE HIGHWAY 25 GILROY, CA 95020</p>					
<p>OPERATIONS BUILDING PROPOSED FLOOR PLAN</p>					
<p>LERNER</p>					
<p>R.</p>					
<p>SCALE: 1" = 10' - 0"</p>					
<p>SCALE: 1 / 120</p>					
<p>A-3.O</p>					



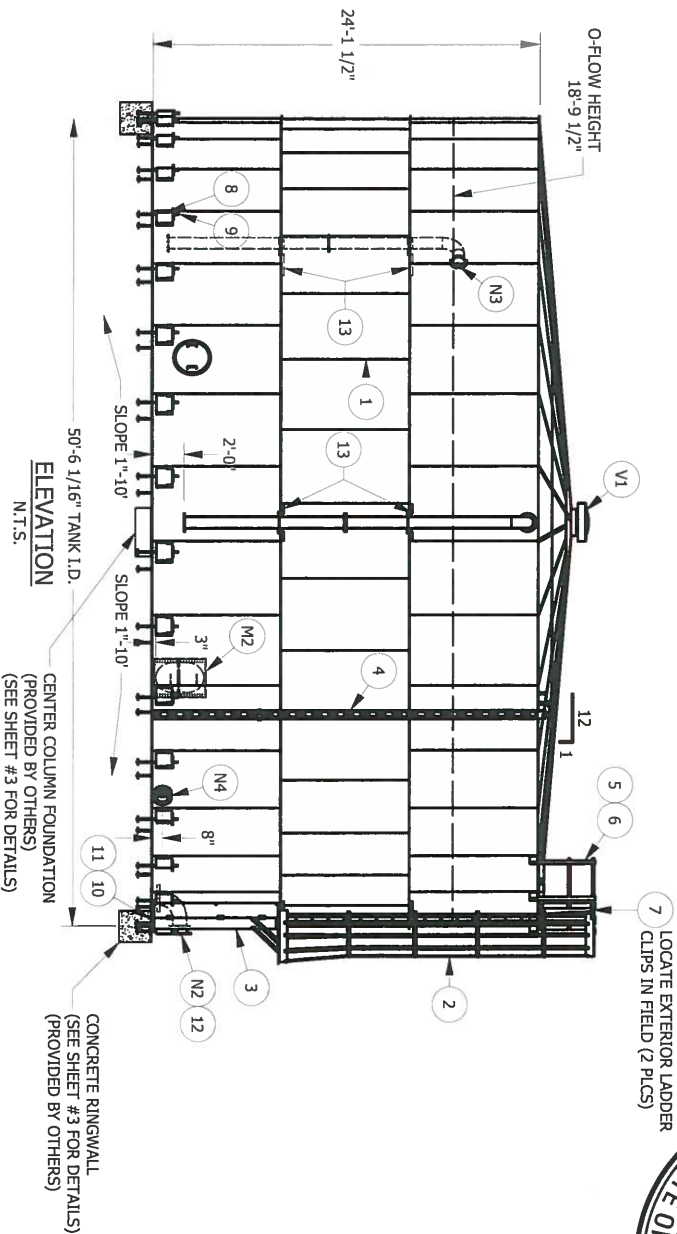
A-3.2

ORIENTATION NOTE:
ORIENTATION FOR NOZZLES AND ACCESSORIES
ARE TO BE FIELD LOCATED BY OWNER.



PLAN ORIENTATION

N.T.S.



GENERAL NOTES:

1. TANK TO BE FABRICATED IN ACCORDANCE W/ A.W.W.A. D103-09, NFPA-22 & FACTORY-COATED IN ACCORDANCE W/ A.W.W.A. D103-09 SECT. 12.6.
2. EXTERIOR COATING OF TANK & ACCESSORIES TO BE FUSION BONDED BAKED-ON POWDER POLYESTER 3 MILS. D.F.T. COLOR: "AXALTA OR EQUAL" SUPERIOR SAND #PFT-609-56 W/PRIMER @ 2 MILS D.F.T. FOR A TOTAL OF 5 MILS D.F.T. (SAME COLOR AS INTERIOR)
3. INTERIOR COATING OF TANK & ACCESSORIES TO BE FUSION BONDED BAKED-ON POWDER EPOXY 5 MILS. MIN. D.F.T. (N.S.F. 61 APPROVED) COLOR: "AXALTA OR EQUAL" TANK TAN #EFT-602-P7.
4. ALL BOLTS & NUTS UNLESS OTHERWISE NOTED SHALL BE GALV. -BOLTS TO BE GRADE 5, BOLTS & NUTS INSIDE TANK TO BE ENCAPSULATED W/ STRUCTURAL BOLTS & NUTS TO BE (GALV.) (SQ. HD. BOLTS @ BOTTOM)
5. TANK BOTTOM TO BE VACUUM TESTED PRIOR TO WATER TEST.
6. ONE DEGREE OF ARC TAKEN ON SHELL O.D. = 5 5/16"
7. ALL TANK OPENINGS TO BE FIELD LOCATED, EXCEPT ITEM M1,M2,V1 & 4
8. DUE TO POWDER COATING ALL PIPE WILL BE FLANGED @ APPROX. 10 FEET SECTIONS (SEE ELEVATIONS).
9. PRESHIP ANCHOR BOLTS

PROJECT:
Z-BEST PRODUCTS
GILROY, CALIFORNIA

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SUPERIOR TANK COMPANY INC. WHO HOLDS AND GRANTS ALL RIGHTS OF INVENTION UNDER PATENT AND COPYRIGHT LAW. REPRODUCTION OR TRANSMISSION IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION OF SUPERIOR TANK COMPANY INC. IS PROHIBITED.

DESIGN INFORMATION

SPECIFICATIONS:

RISK CATEGORY =

AWMA D03-09, 2016 CBC, ASCE 7-10, NFPA-22

WIND SPEEDS

III

WIND LOADS

115 MPH

EXPOSURE CATEGORY =

C

SEISMIC DESIGN PARAMETERS

II

SEISMIC USE GROUP =

D

I_E IMPORTANCE FACTOR

1.25

SITE CLASS =

S₁ =

S₂ =

1.564 g

S₃ =

0.696 g

ROOF LOADING

25 PSF

ROOF LIVE LOAD =

4.375 PSF

ROOF DEAD LOAD =

2,000 PSF

SOIL PROPERTIES

ALLOWABLE SOIL BEARING CAPACITY (NET) PER GEOTECHNICAL REPORT BY EARTH SYSTEMS PACIFIC DATED SEPTEMBER 13, 2016

STCI REVISION HISTORY				
REV	ECO	DESCRIPTION	DATE	DESIGNER
A		CHGD CBC TO 2016.	03/09/17	JJ

ITEM	PART NUMBER	DESCRIPTION	QTY	UOM
V1	9009-016-002	ROOF VENT, 20"Ø, w/ ALUM HEAD, 4" x 9", 30 HOLES (FPC)	1	EA
N4	9022-019-002	NOZZLE, SHELL, 8"-150# F.F. w/6" PROJ, 3/16" THK. REPAD (FPC)	1	EA
N3	9048-188-002	O-FLOW ASSY, 8"Ø SCH.20 PIPE, 1'-10" X 18'-1 1/2" w/ 90° LR ELBOW & FLANGED S.S. SCREEN (FPC)	1	EA
N2	9013-065-002	NOZZLE, SHELL 10"-150# F.F. w/6" PROJ, 3/16" THK. REPAD (FPC)	1	EA
N1	9029-350-002	INLET RISER ASSY, 8"Ø STD WT PIPE X 21'-5 1/2" LG w/ 90° LR ELBOW (FPC)	1	EA
M2	9039-300-002	FLUSH C/O ASSY, 24"X36", 50'-6 1/16"Ø, 1/4" THK. 2PC DOOR DR. (FPC)	1	EA
M1	9005-765-002	24"Ø SHELL MNW, 1/4" FLG w/ 3/16" REPAD, 50'-6 1/16"Ø TANK, EPDM (FPC)	1	EA
15	13582B-HWK	HARDWARE KIT, ACCESSORIES,13582B	1	EA
14	9033-044-001	FIBER EXP JOINT, CONCRETE FOUNDATION, 4'-3" SQ.	1	EA
13	9026-267-002	PIPE SUP, 8" PIPE w/ 1'-10" CENTER (FPC)	4	EA
12	9013-011-002	ANTI-VORTEX OUTLET, 10"Ø, 3/16" THK. REPAD X 21" X 15" CENTER (FPC)	1	EA
11	M001-114-000	POLYETHYLENE (LDPE) FILM (VISOQUEEN) CLEAR, 0.004" THK, 20' WIDTH, 50' LG.	3	EA
10	9987-458-199	FIBER EXP JOINT, 1'-3 1/8" X 48", 50'-6 1/16" TANK	41	EA
9	9028-348-001	ANCHOR BOLT ASSY, Ø3/4" X 31" LG. w/ 3 NUTS, WASHER & 4" DIA. X 1/4" THK. ANCHOR PLATE	34	EA
8	9028-325-002	STIRRUP 12 GA X 12" w/ 3/8" REINF & 3/4" THK. HOLD DWN PLT w/ 1"Ø HOLE (ENCAP)(FPC)	34	EA
7	9994-548-399	EXT LDR, CLIP, 12Ga, 12" X 1 1/2" w/ HOLES (GALV.)	2	EA
6	9016-126-003	HANDRAIL, PERIMETER, LH, 3'-6"X 7" LG, 50'-6 1/16"Ø (GALV.)	1	EA
5	9016-125-003	HANDRAIL, PERIMETER, RH, 3'-6"X 7" LG, 50'-6 1/16"Ø (GALV.)	1	EA
4	9000-020-001	FULL TRAVEL, LIT 24'-1 1/2" HIGH BOLTED TANK	1	EA
3	9004-025-002	LADDER ENCLOSURE w/ CAGE ANTT-CLIMB(FPC)	1	EA
2	9002-096-003	EXT LDR 24'-1 1/2" W/BKGRD REBAR RUNGS (GALV.)	1	EA
1	5024-007-002	50'-6 1/16" DIA X 24'-1 1/2" HIGH BOLTED STEEL TANK AWMA D103-09 (ENCAP)(FPC)	1	EA

UNLESS OTHERWISE SPECIFIED, TOLERANCES ARE:	
INCHES	ANGLES
FRACTIONS	DECIMALS

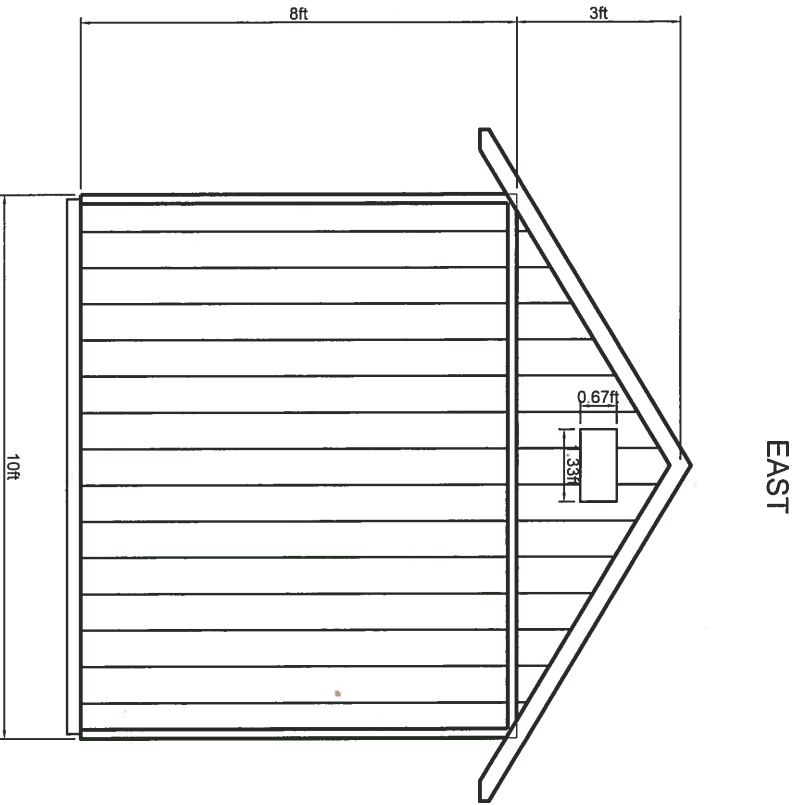
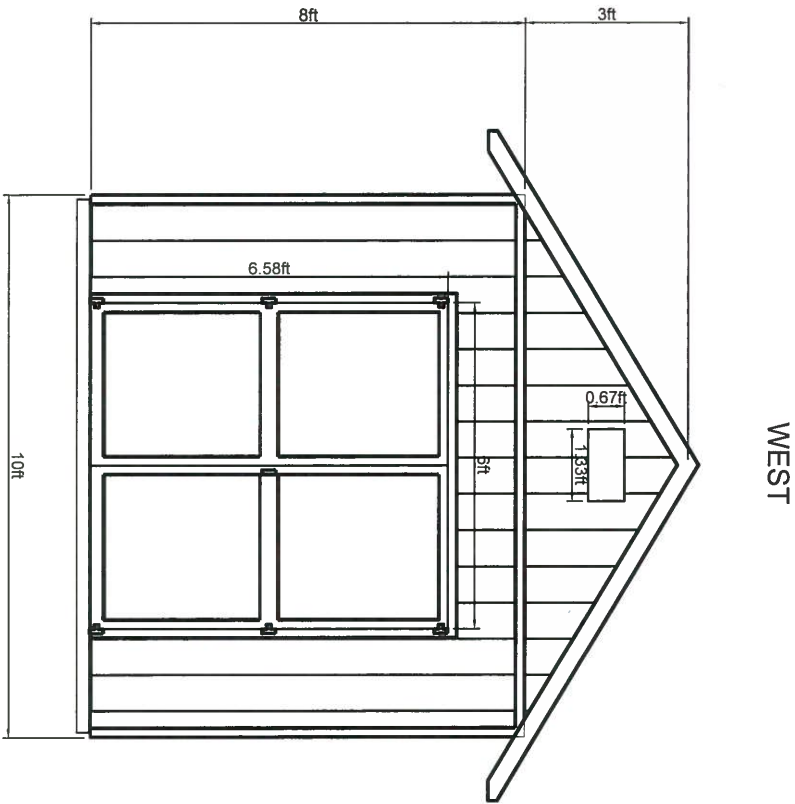
C/CUSTOMER:	
DRAWN BY:	DATE
J. JONES	10/13/2016
CHECKER:	DATE
BB	10/20/2016
APPROVED:	DATE
BB	10/20/2016

BILL OF MATERIALS	
TITLE:	50'-6 1/16" DIA X 24'-1 1/2" HIGH BOLTED STEEL TANK
SIZE:	AWMA D103-09 (FPC)
PROJECT:	Z-BEST PRODUCTS
SCALE:	B
PART #	13582B
SHEET:	1 OF 3

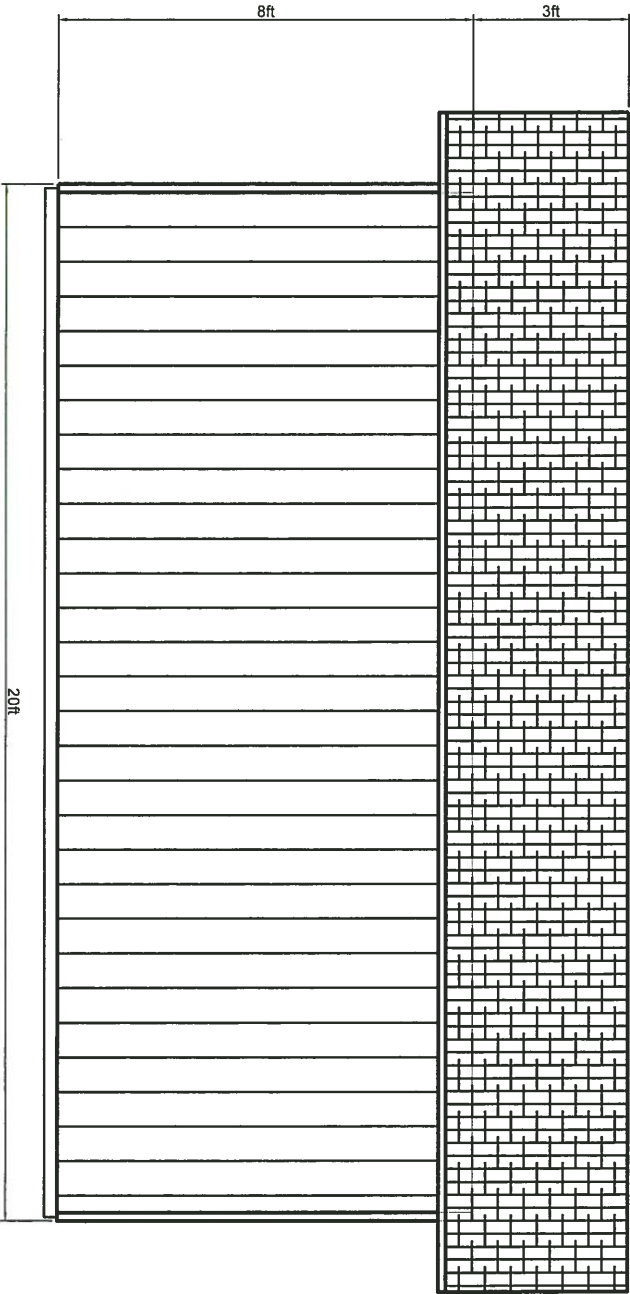
DO NOT SCALE DRAWING	JOB #	13582B	PART #	13582B	SHEET:	1 OF 3
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PROJECT:	Z-BEST PRODUCTS	GILROY, CALIFORNIA
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Figure 4



NORTH/SOUTH



- NOTES:
1. FIRE PUMP SHED TO BE TUFF SHED PREMIER PRO TALL RANCH OR SIMILAR
 2. COLOR: SIDING/DOOR-NOTORIOUS, TRIM-COCOA CREAM
 3. ROOFING-OWENS CORNING DESERT TAN DIMENSIONAL



CLIENT
Z-BEST COMPOSTING FACILITY

PROJECT
Z-BEST COMPOSTING FACILITY

CONSULTANT

YYYY-MM-DD 2018-07-24

DESIGNED EMD

PREPARED EMD

REVIEWED LMA

APPROVED KGH



TITLE
FIRE PUMP SHED ELEVATIONS

PROJECT NO 13397640

REV 0

REV

FIGURE 5