



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Paul Krutko
John Stufflebean

SUBJECT: SEE BELOW

DATE: 05-26-09

Approved

Date

6/1/09

COUNCIL DISTRICT: 4

SUBJECT: MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY AND ZERO WASTE ENERGY DEVELOPMENT COMPANY, INC., FOR THE DEVELOPMENT OF LEASE TERMS FOR A BIOGAS FACILITY ON WATER POLLUTION CONTROL PLANT PROPERTY

RECOMMENDATION

Adopt a resolution authorizing the City Manager to negotiate and execute a Memorandum of Understanding between the City of San José and Zero Waste Energy Development Company, Inc., regarding their intent to develop lease terms for use of approximately 40 acres of a closed landfill site located on San José/Santa Clara Water Pollution Control Plant buffer-lands, for a biogas facility and the process for bringing the lease forward for Council and other required approvals and any amendments to the master agreement with the tributary agencies, if needed.

OUTCOME

The proposed action will allow staff to work directly with Zero Waste Energy Development Company, Inc. (Zero Waste Energy) towards bringing a biogas facility to the City of San José. This project would further the Green Vision and aligns with the goals of the current San José/Santa Clara Water Pollution Control Plant ("WPCP" or the "Plant") Land Use Plan. The proposed facility would use dry anaerobic fermentation technology to generate biogas and compost. This technology is used commercially in Europe and the proposed facility would be the first such facility in the United States. The green technology that would be showcased by such a facility is consistent with the City's Green Vision goals including: #1 Create 25,000 Clean Tech Jobs; #3 Receive 100% of electrical power from renewable sources; and #5 Zero Waste to landfills and converting waste to energy; and provides additional organics recycling capacity, which is in short supply in the San Francisco Bay Area.

The proposed site for the biogas facility is a landfill that was closed in 1969 and acquired for WPCP buffer lands in 1982. Proceeding with development of lease terms and a process for bringing a lease and related project actions forward for Council and other required approvals could facilitate substantial infrastructure investment in San José.

BACKGROUND

Zero Waste Energy, a subsidiary of GreenWaste Recovery, Inc, proposes to develop a 150,000-ton per year dry fermentation anaerobic digestion facility to process and recover energy from the organic portion of municipal solid waste generated by both the City and other municipalities. The proposed location is on approximately 40 acres of buffer lands of the WPCP, located on the north side of Los Esteros Road, and adjacent to Green Waste/Zanker's existing and currently proposed recyclables processing facilities. The new facility would be part of an integrated waste management system and would complement GreenWaste/Zanker's processing operations. The project is proposed to be developed in phases, with each of the three phases designed to increase capacity by 50,000 tons per year of organic materials.

The proposed facility would employ an anaerobic digestion system that would take organic materials and, using a dry fermentation system, produce two products: a biogas containing methane and a compost. The organic material feedstock would consist of a combination of primarily food waste and yard waste. The project technology sequesters carbon dioxide and methane from the organic feedstock in an airtight digester. This particular technology is proprietary and has been commercially demonstrated in Germany by Bekon Energy Technologies. Bekon built twelve facilities in Germany and Italy. Thirteen additional facilities are scheduled for construction in Europe in 2009. Although anaerobic digestion systems, which produce biogas, are common in the United States, including at the WPCP, all the existing processes currently employ wet feedstock. By contrast, the Bekon process can utilize the relatively dry organic portion of the municipal solid waste stream. This technology is designed to process additional material which is hard to recycle and currently ends up in a landfill.

In early 2008, the Environmental Services Department issued a Request for Information (RFI) for an Alternative Technology Energy Facility on WPCP lands. At that time, no feasible alternative was presented due to two significant issues: the technologies in the RFI responses were largely untested on a commercial scale and the responders required significant long-term (15 to 25 years) solid waste tonnage commitments from the City at costs which started at \$2 million annually. Anaerobic digestion is a process that the City currently uses extensively at the WPCP, and the facility currently being proposed by Zero Waste Energy would utilize an anaerobic digestion technology which has been demonstrated in several commercial-scale facilities in Europe. The new proposed technology is much more viable than that proposed in Zero Waste Energy's RFI response; in addition, the firm's proposed transaction with the City has been simplified to a ground lease. Zero Waste Energy also seeks loan guarantees for the facility from the American Recovery and Reinvestment Act for sustainable energy capitalization projects.

ANALYSIS

WPCP Closed Landfill Site

Current Use

166 acres of WPCP bufferlands, located at 2100 Los Esteros Road, was operated as a private landfill from approximately 1938 to 1969. Subsequently, in approximately 1982, this property was acquired to be buffer lands for the Plant.

Zanker Resource Management Company purchased and developed a 70 acre portion of the former landfill site from the City in 1982, and continues to operate that site as a landfill and recycling facility today. The remaining 96 acre site is mostly undeveloped with only a recycled water filling station fronting the site and intermittent soil management and cover maintenance activities occurring as needed. More than half of the site's 96 acres are designated as wetlands, leaving a developable area of approximately 40 acres.

Older landfills, present potential threats to groundwater from contaminants leaching from waste, landfill gas hazards as a result of decomposing waste, and structural concerns due to differential settlement of the site over time. Consequently, redevelopment of the site would require special engineering investigation and design to mitigate those issues. The Local Enforcement Agency (local authority for the California Integrated Waste Management Board) and the San Francisco Bay Regional Water Quality Control Board have regulatory authority over the operations, maintenance and redevelopment of landfill sites, assuring that public health and safety and environmental standards are met. The submittal and approval of a Post-Closure Land Use Proposal, which includes project-specific plans, would be required as a first step to redevelopment. One of the proposed terms for lease of the site is that Zero Waste Energy would complete the landfill closure process on behalf of the City and provide ongoing monitoring and mitigations required in the Post Closure Land Use Proposal, relieving the City from undertaking these activities itself. The amount of acreage necessary to complete the closure process is still to be determined, and is likely to be part of further discussions.

Ownership of Proposed Facility Site

The City of San José and the City of Santa Clara are joint owners of the Plant lands under the terms of the 1959 San José Santa Clara Joint Powers Authority Agreement (JPA) related to the operation and management of WPCP. Because San José and Santa Clara are co-owners of the Plant Lands, the Councils of both cities must approve any disposition of those lands to third parties for non-Plant purposes.

In addition, disposition of Plant lands to third parties for non-Plant purposes is subject to the 1983 wastewater treatment agreement among San José, Santa Clara, the City of Milpitas, and the sanitation districts of Cupertino, West Valley, Burbank and Sunol (Tributary Agency Agreements). Under the Tributary Agency Agreements, the Treatment Plant Advisory Committee (TPAC) advises the San José and Santa Clara city councils on matters affecting the

WPCP, including matters related to WPCP lands. The TPAC consists of representatives of the joint owners and the tributary agencies.

In order to approve a lease of the proposed facility site to Zero Waste Energy, the Santa Clara City Council would need either to execute the lease itself or execute an agreement with the City of San José authorizing such a lease. TPAC recommendation would be required for the consideration of the lease or other agreement between the two joint owners. In addition, the Milpitas City Council and the boards of the tributary agency sanitation districts may need to approve amendments to their respective Tributary Agency Agreements.

Refer to the attached Preliminary Site Layout Concept for the Zero Waste Energy facility on the proposed site.

Private Lease to Adjacent Property Owner

The proposed site is currently bounded by tidal marshlands and GreenWaste/Zanker Road Resource Recovery operation and landfill to the north, WPCP sludge drying beds to the east/northeast, Los Esteros Road and the WPCP facility to the south, and Artesian Slough and the GreenWaste/Zanker Material Processing Facility to the west. As such, GreenWaste is the only private property owner directly adjacent to the Nine Par site. Similar to the sale of surplus City-owned real estate to an adjacent property owner, staff recommends that this WPCP property be leased to the owner of adjacent property, at fair market value, subject to any terms and conditions provided by Council and the City of Santa Clara. Due to ever evolving technological advances in the treatment of waste water, it is difficult to predict the long term need or timing for future development of the site. At this time, the Plant does not have development plans for this property. This does not preclude potential use of the land in the future for new or improved processes for water treatment. In addition, further development of the subject site is presently encumbered with the process and expense of formally closing the former land fill prior to redevelopment.

Staff and the City Attorney's Office are presently researching whether there are any "private activity" financial issues under Internal Revenue Service regulations pertaining to the development of this site.

By offering a ground lease at fair market value to the adjacent property owner, the Plant would relinquish the ability to expand Plant processes onto this site for the term of the lease, between 20 and 30 years. This action would provide a means of closing the former landfill and redeveloping the subject site while still providing ultimate control over the future use of the property.

Determination of Land and Lease Value

Staff completed a Field Investigation and Site Development Feasibility Summary Report for the proposed facility site in September 2007, which detailed some of the potential development issues with this site. Staff intends to use this report and an independent commercial land appraisal to ascertain the land and lease value of the property for the purposes of the negotiations.

There are opportunities to structure a site to include terms beyond a standard flat lease rate. These might include an option for the Plant to procure gas at favorable rates for use in its daily operations and also lease consideration that takes into account the volume of waste material that flows through the biogas facility. The recommended lease that staff will bring to the San José and Santa Clara City Councils for consideration would include an evaluation of the most favorable terms for the WPCP and the Tributary Agencies.

Consistency with Plant Land use Plan and Integration with the WPCP Master Plan Process

The proposed project is compliant with Council Policy 6-31 "Use of San José/Santa Clara Water Pollution Control Plant Lands" adopted in November 2000. The project may contribute to the Plant's operations through the generation of biogas for Plant use and would provide lease revenue for the Cities of San José and Santa Clara and the Tributary agencies.

Any development of this facility would be closely coordinated with the ongoing Plant Master Planning effort. The Plant Master Plan will address several critical issues, including aging infrastructure, energy management, population growth, flood control, odor control, new regulations, habitat protection, and land uses. In addition to determining the most sustainable technologies for treating wastewater, the Master Plan will consider potential new uses on the Plant site, which comprise approximately 2,600 acres. Buffer-land uses currently under consideration include uses that: generate revenue, contribute to research and development of renewable energies and clean technologies, and transforms the WPCP into an energy supplier, all of which align to the Zero Waste Energy proposal.

Based on the technical and land use analysis conducted for the Plant Master Plan to date, the proposed facility site will be included in the future operational area of the Plant and has already associated with energy production for the Plant. Energy self-sufficiency is one of the objectives of the Plant Master Plan. In addition, the Plant Master Plan team has developed proposed criteria for land use projects that should proceed ahead of the Master Plan, including unique short-term opportunities that are consistent with the vision for the Plant Master Plan while providing overall environmental benefits and generating revenue. The proposed project is consistent with this criteria, which may be brought to Council prior to or at the same time as any potential lease is presented to Council for its consideration.

Alignment with City Green Vision

The proposed Zero Waste Energy project would promote the City's sustainable energy, Zero Waste, and climate protection goals. The Green Vision focuses on clean and green technology as an emerging industry sector and as a mechanism to transform San José's economy. The Green Vision also enables San José/Silicon Valley to continue as a place where entrepreneurs come together to innovate and to solve the world's greatest challenges. The proposed facility would build on the legacy of San José/Silicon Valley in demonstrating and adopting next-generation solutions that can serve as a model nationwide to help other communities achieve an aggressive environmental agenda, create economic prosperity, and respond to climate change.

The City has expressed interest in developing renewable energy from portions of municipal solid waste streams to realize the following Green Vision goals:

- Creating 25,000 Clean Tech jobs as the World Center of Clean Tech Innovation
- Receiving 100 percent of electrical power from clean renewable sources
- Diverting 100 percent of the waste from landfills and converting waste-to-energy

The City's Sustainable Energy Policy and Action Plan, developed in April 2008, provides the City a road map to develop sustainable energy sources. In addition, the City's Zero Waste goals also promote emerging energy conversion technologies to increase materials diversion from landfills. Further, due to increasing concerns about greenhouse gas emissions from landfills including methane, the State of California, as part of the Global Warming Solutions Act (AB32), has prioritized finding alternative ways to dispose of organic waste.

Burrowing Owl Habitat

The draft Santa Clara Valley Habitat Conservation Plan (HCP) lists the Western Burrowing Owls as a covered species with Plant lands considered suitable habitat. The burrowing owl has also been identified as a State species of special concern because of the decline in both local and statewide populations, and in suitable habitat and foraging areas. As part of the HCP evaluation of Plant lands, Department of Fish and Game staff presented a concept which would use the proposed site as dedicated and managed habitat specific to the burrowing owl. Issues relevant to the burrowing owl, including any impact developing this site could have on owl habitat requirements on other portions of Plant lands, will be addressed as part of the environmental process prior to presenting any proposed agreement to Council for its consideration.

Summary of Preliminary Terms for Memorandum of Understanding (MOU)

The proposed Zero Waste Energy project would require no financial commitment from the City, and would leverage the proximity of the existing Zanker properties to the east and west of the Nine Par site. With these project benefits, and the previously issued RFI, staff believes that it is appropriate to forward the project to the Council with a request to enter into a MOU to initiate negotiations to develop a 20 to 30 year lease with Zero Waste Energy for use of this property.

The following outlines a preliminary list of issues that would need to be addressed included in the MOU:

- Timing and process for coordination of project with the Alviso community and other stakeholders and for pursuing environmental clearance for the proposed biogas facility
- Timing and process for negotiating lease terms and conditions
- Timing and process for obtaining appraisal(s)

Staff intends that the appropriate CEQA clearance would be prepared for the proposed project before any recommended final lease would be brought back for Council consideration, and that such a proposed agreement would specify all the responsibilities of the lessee for bringing the facility on-line and for on-going operations, including:

- Site landfill closure plan and regulatory coordination

- Ongoing post closure operation, maintenance, and monitoring of the landfill for term of lease
- Construction and operational permits, including from local, regional, and state agencies
- How to address provisions for the site and facility if Zero Waste Energy dissolves or ceases to be a going concern
- Grounds for termination of lease
- Indemnification for San José, Santa Clara, and Tributary Agencies

EVALUATION AND FOLLOW-UP

If the Council approves the staff recommendation, staff and Zero Waste Energy representatives will engage in MOU negotiations. If the negotiations are successful, the City Manager will execute the MOU. The MOU will not obligate the City to lease the proposed site to Zero Waste Energy, but will establish a process for pursuing lease negotiations and environmental review of the project in addition to all other required approvals. Staff will pursue returning to City Council in fall 2009 with proposed timelines for the CEQA and regulatory approval process for the proposed facility; a proposed timeline for obtaining an appraisal if it has not been previously completed; and proposed business terms and conditions for the preparation of a lease for Council consideration, once all required environmental reviews and necessary regulatory approvals are in place.

PUBLIC OUTREACH/INTEREST

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

This recommendation does not meet any of the criteria listed above. This memorandum will be posted on the City's Internet website for the June 16, 2009 Council Agenda.

Should the City choose to pursue this lease, Zero Waste Energy would be required to meet the community notification and meeting requirements of CEQA and of City and other permitting agencies. Staff also notified the project proponents that early outreach will be required to the Alviso Community. In addition, the City is conducting an extensive WPCP Master Plan community and stakeholder engagement process throughout which input is being sought on land use alternatives, to include clean tech and energy-producing development.

COORDINATION

This memorandum has been coordinated with the City Manager's Budget Office, City Attorney, Planning, Building, and Code Enforcement, and Public Works/Real Estate Departments. This report is scheduled to be considered at the Treatment Plant Advisory Committee meeting on June 11, 2009.

COST SUMMARY/IMPLICATIONS

Zero Waste Energy, will be responsible for all one time and ongoing costs related to the development and operation of this facility, including: City appraisal, CEQA clearance, site preparation, permitting, project design, construction, operations, maintenance, and on-going closed landfill mitigation monitoring on the Nine Par parcel related to this project.

This project would likely produce lease revenue for San José, Santa Clara and the WPCP tributary agencies. As a joint owner of the Plant lands, Santa Clara is entitled to receive a share of any income derived from the lease of Plant lands during the term of the JPA. The Master Agreements governing the relationships for the City of Milpitas and the Cupertino, West Valley, Burbank, and Sunol sanitation districts provide the agencies with "participation rights" in the Plant lands through 2031. The Master Agreements state that, if San José and Santa Clara sell or otherwise dispose of any of the lands no longer needed for Plant purposes, the agencies have the right to share in any revenue derived. The Master Agreements further provide that Santa Clara and the tributary agencies are not entitled to receive revenue from the disposition or lease of land until they have fully paid their allocable share of land costs.

It should be noted that San José is scheduled to annex the entire Sunol District over the next few years, and as a result, San José will assume all of Sunol's rights in the Plant lands. The current share of each entities allocation in the Plant lands under consideration for the Zero Waste Energy facility is listed below (recent authorization of capacity sale from Cupertino to Milpitas will result in adjustment of the values for those agencies):

San José	66.181 %
Santa Clara	16.620 %
West Valley	6.472 %
Cupertino	4.074 %
Milpitas	7.092 %
Burbank	0.248 %
<u>Sunol</u>	<u>0.313 %</u>
Total	100.000 %

HONERABLE MAYOR AND CITY COUNCIL

05-26-09

Subject: MOU Between the City and Zanker Road Biogas, LLC, for Lease of Nine Par Landfill Site

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CEQA

Not a Project. As described above, CEQA must be completed before the Council approves a project or the lease of a project. Related project submittals including CEQA and any lease of City property will be brought forward for subsequent Council and other public agency review and approval.



PAUL KRUTKO
Chief Development Officer

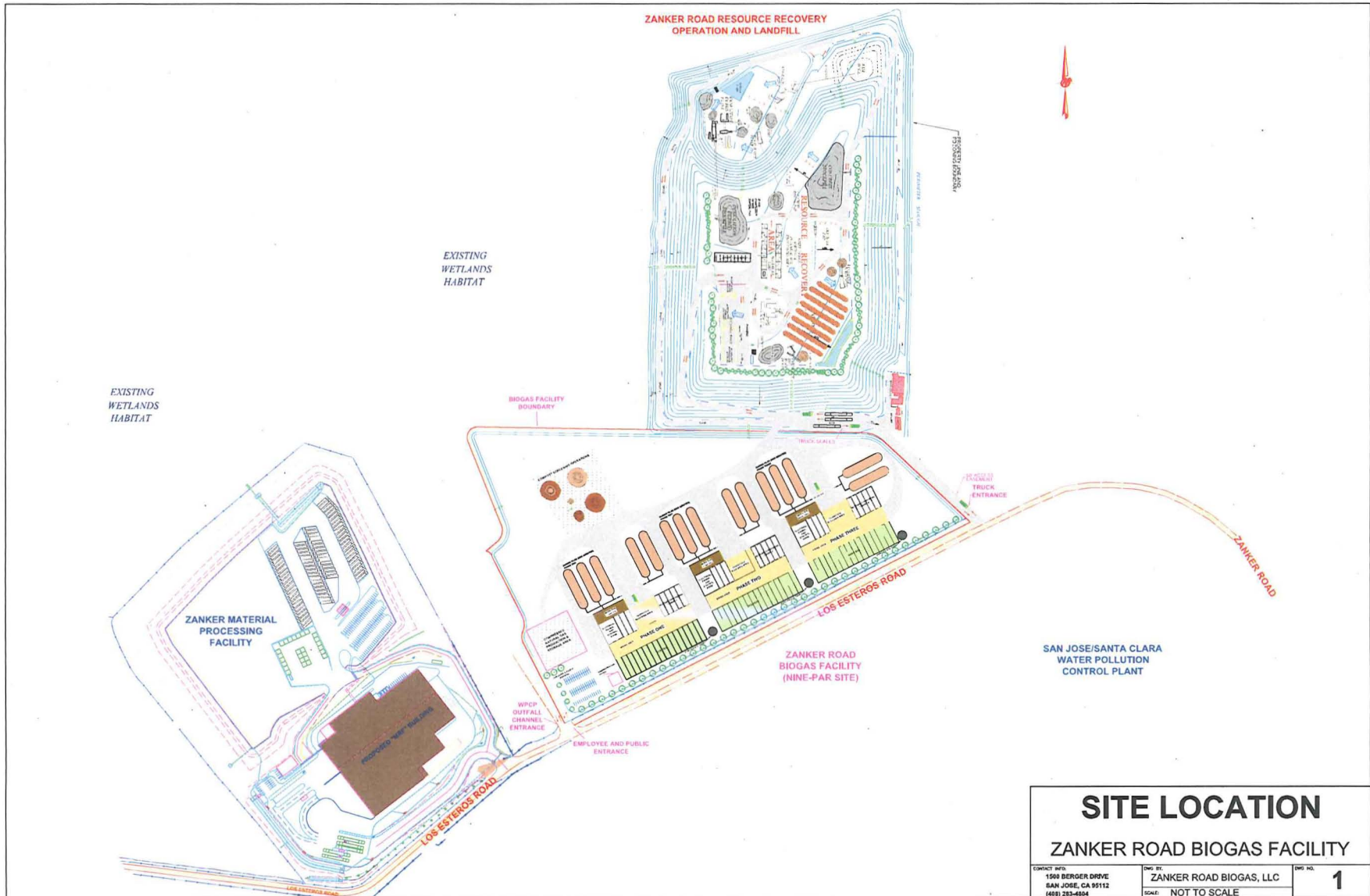


JOHN STUFFLEBEAN
Director, Environmental Services Department

ATTACHMENT: Preliminary Proposed Site Layout Concept for Zero Waste Energy Facility

For questions please contact Kerrie Romanow, Assistant Director, Environmental Services Department, at (408) 535-8552 or Nanci Klein, Manager Corporate Outreach, Office of Economic Development, at (408) 535-8184.

ATTACHMENT: Preliminary Proposed Site Layout Concept for Zero Waste Energy Facility



SITE LOCATION		
ZANKER ROAD BIOGAS FACILITY		
CONTACT INFO: 1560 BERGER DRIVE SAN JOSE, CA 95112 (408) 253-4554	DWG BY: ZANKER ROAD BIOGAS, LLC	DWG NO. 1
SCALE: NOT TO SCALE		