

DOCKETED

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Laurelwood Data Center (19-SPPE-01)

Data Response Set 4

Submitted to
California Energy Commission

Prepared by
MECP1 Santa Clara 1, LLC

with technical assistance from

JACOBS[®]

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Introduction

On July 8, 2019, California Energy Commission (CEC) Staff submitted a *Motion for Leave to File Additional Data Requests* (Motion), which included an appendix with additional data requests in the subject areas of Hazards & Hazardous Materials and Hydrology/Water Quality regarding the Laurelwood Data Center (LDC) (19-SPPE-01) Small Power Plant Exemption (SPPE). (TN#: 228917). For ease of reference, these data requests appended to the Motion are referred to collectively as California Energy Commission (CEC) Staff Data Request, Set 4.

As acknowledged in Staff's Motion, the period for discovery and issuance of data requests has ended. Without waiving its rights to object to the issuance of any other data requests, MECP1 Santa Clara 1, LLC's (MECP or the Applicant) provides the attached responses to California Energy Commission (CEC) Staff Data Request, Set 4. The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as presented by CEC Staff and are keyed to the Data Request numbers.

New or revised graphics or tables are numbered in reference to the Data Request number. For example, the first table used in response to Data Request 28 would be numbered Table DR28-1. The first figure used in response to Data Request 28 would be Figure DR28-1, and so on. Figures or tables from the LDC SPPE that have been revised have "R1" following the original number, indicating revision 1.

Additional tables, figures, or documents submitted in response to a data request (for example, supporting data, stand-alone documents such as plans, folding graphics, etc.) are found at the end of each discipline-specific section and are not sequentially page-numbered consistently with the remainder of the document, though they may have their own internal page numbering system.

Hazardous Materials & Hydrology/Water Quality

Background: Responsible Party for Demolition

The revised project description does not adequately capture the scope and overlap of demolition efforts underway and planned for the project site. On page 2-20 of the revised project description the “demolition of the existing foundations, asphalt, and underground utilities is expected to take approximately 3 months” (TN#228823). From the limited project description, it is not clear whether the Applicant or Siliconix is responsible for the demolition of the site.

Data Requests

- 1) *Please clarify the role and extent of efforts that Siliconix would have in the demolition.*

Response: As described in the SPPE Application, Siliconix is responsible for the demolition of all buildings and subsurface structures. (TN # 227273-1; *passim*; see, for example, pp. 2-19, 2-20, 3.1-1, 3.5-1, 3.5-6, 3.6-1, 3.9-1, 3.9-2, 3.9-3, 3.11-1, 3.16-1, and 3.18-1)

Background: Monitoring Well Removal

In Section 3.9.3 (TN#227273-1), there is a mention that "it is likely that the construction of LDC will require a monitoring well to be removed and relocated to another location onsite."

Data Requests

- 2) *Please provide information on how demolition of underground utilities would proceed in the event that demolition/ground-disturbing activities approach an existing monitoring well (for example, within 15 feet). What steps would be taken to ensure that the integrity of the surface seal of the monitoring well is not impacted as a result of these demolition activities?*

Response: Please see the response to Data Request No. 5.

- 3) *Please clarify whether and why the identified monitoring well would be relocated.*

Response: Well abandonment permits were obtained for 10 wells monitoring wells (MW-20AB, MW-21AB, MW-22AB, MW-23AB, MW-24AB, MW-1A, MW-5A, MW-9B, MW-11C, MW-15A, and MW-26B). Well construction permits were obtained for three new wells. See Figure DR-3. On June 26, 2019, the Regional Board approved the monitoring well plan set forth in Figure DR-3, including the abandonment and relocation of monitoring wells. (*Pers. Comm.*, email from John D. Wolfenden, PE, Section Leader, Toxics Cleanup Division, San Francisco Bay Regional Water Quality Control Board to Siliconix)

- 4) *If the monitoring well would have to be relocated:*

- a. *Would Siliconix perform the relocation?*

Response: Yes.

- b. *Who will be responsible for notifying the relevant regulatory agencies of the change in the monitoring system?*

Response: Siliconix.

- c. *Would any approvals from the San Francisco Bay Regional Water Quality Control Board or other regulatory agency be needed?*

Response: Alterations of the monitoring well network for the site, including well abandonments and relocations, requires approval by the Regional Board. Abandonment and relocation of wells may also require well destruction or construction permits from the Santa

Clara Valley Water District. As discussed above in response to Data Request 3, Siliconix requested abandonment of 10 wells on the property, installation of 3 new replacement wells, and modifications to the ongoing groundwater monitoring program for the site. The proposed modifications to the monitoring well network were approved by the Regional Board in an email dated June 26, 2019, as set forth in Figure DR-3. (*Pers. Comm.*, email from John D. Wolfenden, PE, Section Leader, Toxics Cleanup Division, San Francisco Bay Regional Water Quality Control Board to Siliconix)

d. *How long would the relocation of the well take?*

Response: The length of time to relocate a well is dependent upon the receipt of approvals and the availability of a well contractor. With the permits received and the well contractor identified, the on-site work is estimated to take approximately 2 weeks.

e. *Who would be responsible for continuing groundwater monitoring and clean-up activities?*

Response: Siliconix.

Background: Construction Near Monitoring Wells

In Figure SQ 10-1 Proposed Excavation Depths Laurelwood Data Center included with the Updated Project Description submitted in June 2019 (TN#228823), it appears that excavation for the generator yard north of Building 2, along the northern boundary of the site may impact the integrity of one or more monitoring wells.

Data Requests

5) *Please provide additional details for site grading and demolition that address procedures that will be taken to ensure that ground-disturbing activities will not impact the integrity of existing monitoring wells. This would include means for protecting the surface seal of the well and ensuring that construction activities do not result in creating preferential pathways for surface water infiltration below the sanitary seal of the well.*

Response: As described in response to Data Requests 3 and 4 above, Siliconix is responsible for and will conduct any activities needed to relocate or abandon on-site wells. The Applicant understands that such activities will be conducted under the auspices of the Regional Board's review and approval. To ensure that existing monitoring wells are not impacted, the Applicant understands that the depth of engineered fill will be compared to the estimated depths of the seals on the wells. If site grading would result in a final grade too close to the existing seals, or if the presence of the wells will inhibit grading, wells will be abandoned and replaced as determined on a case-by-case basis in consultation with the Regional Board.

Other measures will include the marking of monitoring wells prior to site grading and demolition so that damage can be avoided during ground disturbing activities. During pavement demolition, pavement around wells will be sawcut and carefully removed. Excavation within 5 feet of the wells, if any, will be accomplished by hand.

Following the completion of site grading and demolition activities, well casing heights may be modified and well vaults reinstalled as necessary to accommodate any resulting elevation changes. Visual inspections of each well will be conducted using a downwell video camera to ensure no damage resulted from site grading and demolition activities.

In the event that well seals are compromised, the wells will be abandoned and replacement wells will be installed in accordance with Santa Clara Valley Water District (SCVWD) Well Ordinance 90-1, the SCVWD Well Standards, and conditions of the Well Destruction and Well Construction Permits. In addition, Regional Board approval will be sought.

6) *Please provide a figure showing monitoring well locations as well as the proposed grading plan.*

Response: Please see Figure DR-3.

Background: Dewatering During Construction

The proposed project could require dewatering during the installation of building foundations. Since the groundwater beneath the site is contaminated, its discharge may not be allowed under the Construction General Permit, Section III, Discharge Prohibitions, Part C. If the applicant finds that dewatering discharge is contaminated, the applicant would have to apply for coverage under San Francisco Regional Water Quality Control Board Order No. R2-2017-0048, National Pollutant Discharge Elimination System Permit No. CAG912002, General Waste Discharge Requirement for Discharge or Reclamation of Extracted and Treated Groundwater Resulting from the Cleanup of Groundwater Polluted by Volatile Organic Compounds (VOCs), Fuel Leaks, Fuel Additives, and Other Related Wastes (VOC and Fuel General Permit) or other pertinent permits.

Data Requests

7) *Please describe the project’s expected dewatering needs.*

Response: Minor dewatering in the shallow zones, zones A and B as identified in the Site Management Plan (SMP), if any, is anticipated during demolition and can be managed in accordance with procedures specified in Section 5 of the SMP (Attachment DR-7). The SMP was submitted to the Regional Board on February 19, 2019 and approved on March 13, 2019. While unlikely, if dewatering is required in in the deeper zone (the C zone) or if large volumes of groundwater are anticipated, additional evaluation of the impacts on groundwater contamination and regulatory approval beyond the SMP may be required and, if this contingency arises, Regional Board review and approval would be obtained.

8) *Please describe whether the dewatering would be conducted by the Applicant or Siliconix.*

Response: Siliconix will be responsible for dewatering during demolition, including treatment and discharge. During construction, Applicant and Siliconix will coordinate treatment and discharge of any construction-related extracted groundwater in accordance with the SMP and any Regional Board requirements

9) *If dewatering would be conducted by Siliconix, as part of the ongoing groundwater clean-up effort, what approvals would be necessary and how might this influence the project schedule?*

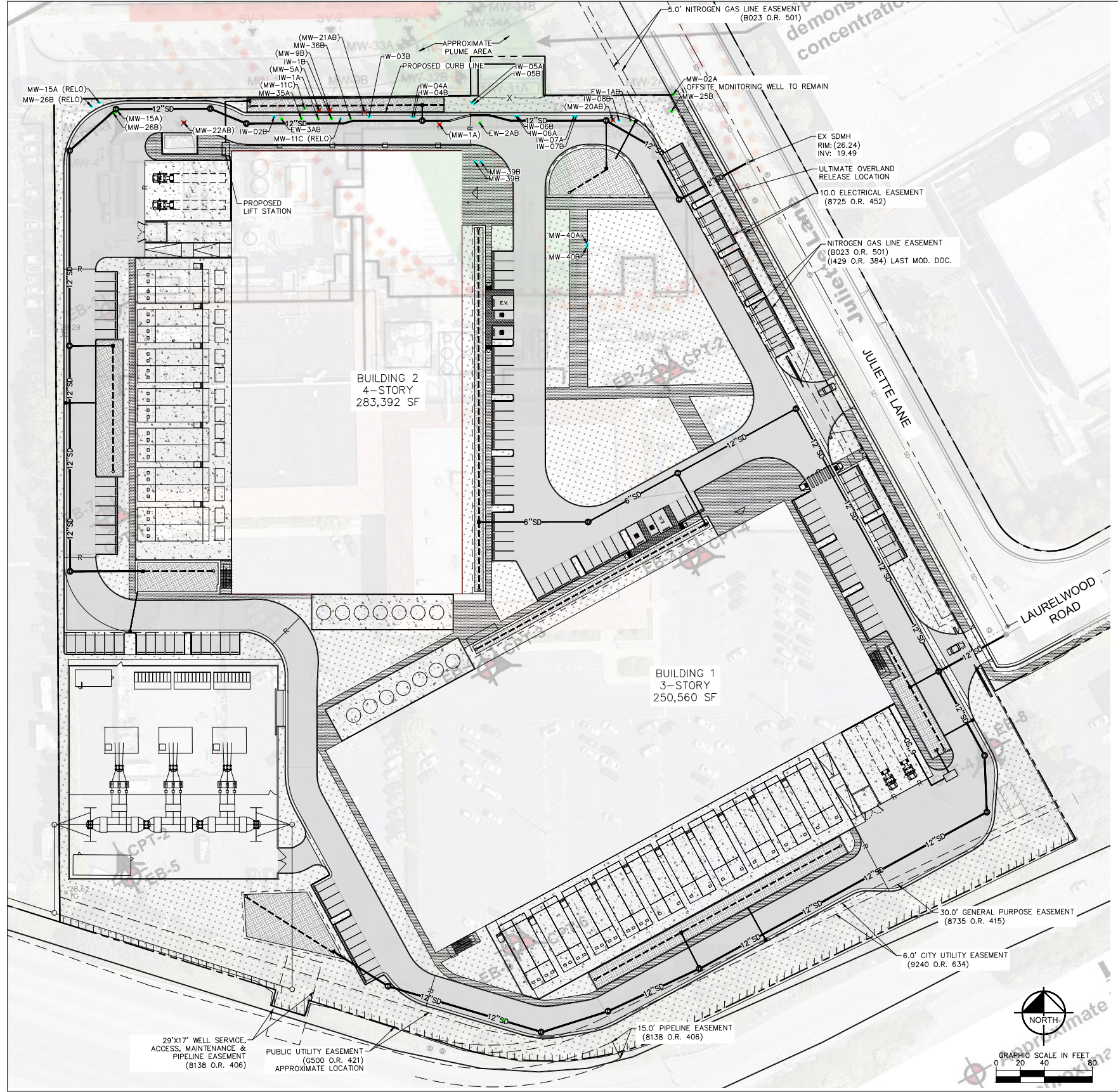
Response: Extracted groundwater resulting from dewatering activities would be treated and discharged under the existing VOC and Fuel General Permit for the site. Approval from the Regional Board would be required if significant modifications to the existing Authorization to Discharge associated with this general permit are required, though this is not expected. Potential modifications could include change in flow rate or treatment system design, if necessary. Regional Board review and approval would be required if dewatering activities are anticipated to adversely impact ongoing remediation activities. The Regional Board may require additional monitoring wells and/or sampling events to evaluate potential impacts. The ongoing groundwater cleanup will continue and will not influence the project schedule, given that the site is well-characterized, the treatment system will continue to operate, and the approved monitoring well system will ensure Regional Board’s continued oversight of ongoing cleanup activities.

10) *Please describe any other discharge permits that could be required of the Applicant if dewatering were to occur.*

Response: No other discharge permits are anticipated to be required.

Figures

\\PSP01\CA_P\PROJECT\BAV_LDR\192221001 - EDGECORE DATA CENTER\CAD\EXHIBITS\EX 4 - MONITORING WELLS & SITE PLAN.DWG 7/15/2019 7:33 PM NELSON, KARR



LEGEND

- PROPERTY LINE
- - - EASEMENT/SETBACK LINE
- R — R — R — RIDGE LINE
- GB — GRADE BREAK LINE
- FLOW LINE
- SD — STORM DRAIN LINE
- - - PERFORATED PIPE
- LP LOW POINT
- HP HIGH POINT
- DROP INLET
- LANDSCAPE/PLANTER AREA
- ▨ BIORETENTION AREA
- ▩ ASPHALT CONCRETE PAVEMENT
- ▧ STANDARD DUTY CONCRETE PAVEMENT
- ▦ HEAVY DUTY CONCRETE PAVEMENT
- ⊕ PROPOSED WELL
- ⊙ EXISTING WELL
- ⊗ REMOVAL OF EXISTING WELL
- MW-XX (MW-XX) EXISTING MONITORING WELL TO REMAIN
- MW-XX (MW-XX) EXISTING MONITORING WELL TO BE REMOVED
- MW-XX (RELO) PROPOSED MONITORING WELL RELOCATION
- EW-XX EXISTING EXTRACTION WELL TO REMAIN
- EW-XX (EW-XX) EXISTING EXTRACTION WELL TO BE REMOVED
- EW-XX (RELO) PROPOSED EXTRACTION WELL RELOCATION
- IW-XX PROPOSED INJECTION WELL LOCATION
- (IW-XX) EXISTING INJECTION WELL TO BE REMOVED
- IW-XX (RELO) PROPOSED INJECTION WELL RELOCATION

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JOB NO.: 094861004
PRINT DATE: 07/10/19
DESIGNED BY: KN
CHECKED BY: MJ
SET ISSUED:
2/1/2019 ENTITLEMENTS
6/14/2019 PCC #2

SHEET NAME:
GRADING,
MONITORING
WELLS, & SITE
PLAN
SHEET NO.: EX-3

Figure DR-3
Monitoring Well Locations
Laurelwood Data Center
Santa Clara, California

Attachment DR-7
Section 5 of the Site Management Plan

5 GROUNDWATER MANAGEMENT

During demolition and construction work, groundwater management must be implemented if groundwater is encountered during the removal of subsurface utilities and underground structures. Although there are no known Site development plans for underground structures, groundwater management must be implemented if any future plans include dewatering operations for the construction of underground structures or utilities.

The laboratory analytical analyses of groundwater samples have revealed detectable concentrations of VOCs and total petroleum hydrocarbons (TPH). Groundwater management during demolition and Site redevelopment should include proper treatment and disposal of water.

In the event that dewatering or groundwater removal is required during removal or backfilling of deep utilities or subsurface structures, generated groundwater will be temporarily containerized in frac tanks on-Site pending characterization by the Siliconix Representative. Following characterization and at the discretion of the Siliconix Representative, groundwater may be treated using the existing treatment system and discharged to the storm drain system pursuant to the NPDES General Permit, or transported off-Site for permitted disposal.

No groundwater generated during demolition or construction may be diverted directly to the storm drain or other means towards any receiving water body (e.g. via easements, embankments, landscaping, hillside, etc.).