

DOCKETED

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Project Title:	CA3 Backup Generating Facility-Vantage
TN #:	239485
Document Title:	VDC Responses to CEC Data Request Set 3 - CA3BGF
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RESPONSE TO CEC STAFF DATA REQUEST SET 3

CA3 Backup Generating Facility (21-SPPE-01)

SUBMITTED TO: CALIFORNIA ENERGY COMMISSION

SUBMITTED BY: **Vantage Data Centers**

August 26, 2021



INTRODUCTION

Attached are Vantage Data Centers (VDC) responses to California Energy Commission (CEC) Staff Data Request Set No. 3 (1-6) for the CA3 Backup Generation Facility (CA3BGF) Application for Small Power Plant Exemption (SPPE) (21-SPPE-01). Staff issued Data Request Set No. 3 on August 6, 2021.

The Data Responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as Staff presented them and are keyed to the Data Request numbers (1-6). Additional tables, figures, or documents submitted in response to a data request (e.g., supporting data, stand-alone documents such as plans, folding graphics, etc.) are found in Attachments at the end of the document and labeled with the Data Request Number for ease of reference.

For context, the text of the Background and Data Request precede each Data Response.

GENERAL OBJECTIONS

VDC objects to all data requests that require analysis beyond which is necessary to comply with the California Environmental Quality Act (CEQA) or which require VDC to provide data that is in the control of third parties and not reasonably available to VDC. Notwithstanding this objection, VDC has worked diligently to provide these responses swiftly to allow the CEC Staff to prepare the Draft Environmental Impact Report (DEIR).

HAZARDS AND HAZARDOUS MATERIALS

BACKGROUND: Airport Land Use

The project site is located approximately 1.75 miles southeast of the Norman Y. Mineta San Jose International Airport. The project site is subject to Title 14, Part 77.9 of the Code of Federal Regulations, Construction or Alteration Requiring Notice. With a maximum project height of 108.4 feet above ground level (AGL), the project would exceed the FAA notification 100:1 surface threshold of 92.4 feet (AGL) at the project site. As a result, the project applicant would need to submit Form 7460-1 to the FAA for review.

DATA REQUESTS

1. Please submit FAA Form 7460-1 for the project site. Please file to the docket a copy of the filed information to the FAA and the resulting determinations when available.

RESPONSE TO DATA REQUEST 1

VDC has filed Form 7460-1 for the project site. Copies of the forms and proof that they have been uploaded and filed with the FAA are contained in Attachment HAZ DR-1.

LAND USE

BACKGROUND: Required Variance for Front Yard Setback Requirement

Based on a July 12, 2021 conversation between CEC staff and the City of Santa Clara Planning Division, the proposed CA3 project does not fully provide the requisite 15-foot landscaped setback along the Walsh Avenue frontage (CEC 2021 and CA3 2021). The City Planning Division provided staff with Project Clearance Committee Minutes dated June 22, 2021 in which the Planning Division noted: (1) a Variance application would be required to reduce/eliminate the front landscaped setback and would not be supported by Planning Division staff; and (2) redesign of the frontage is required and an alternate location for the generator yard is to be examined (CEC 2021).

DATA REQUESTS

2. Please describe how Vantage is addressing the Project Clearance Committee requirements provided by the City Planning Division for the front yard landscape setback.

RESPONSE TO DATA REQUEST 2

VDC provided a response to this issue in its Response to CEC Data Request Set 2, Data Request Number 7 and included a Revised Site Plan as Attachment LU DR-44. VDC includes the Revised Site Plan again as Attachment LU-DR-2. As shown on the Revised Site Plan, the project perimeter road and 8 of the generators have been relocated to accommodate the 15-foot landscape setback. Moving the generator yard to the west side would put the generators closer to sensitive receptors and therefore the Revised Site Plan is the superior option. The generator yard will be screened as required by City requirements and will also reduce any aesthetic impacts to less than significant levels.

3. Please confirm if Vantage will relocate the generator yard to an alternate location and provide a revised site plan.

RESPONSE TO DATA REQUEST 3

Please See Response to Data Request 2 above.

4. If Vantage does not plan to relocate the generator yard, please provide documentation that the City would support a Variance for the CA3 project.

RESPONSE TO DATA REQUEST 4

As described in Response to Data Request 2 above, VDC has already revised the site plan to comply with the 15-foot landscape setback and therefore no variance is required. VDC is engaged in ongoing discussions with the City of Santa Clara Planning Staff and will continue to work with the City to address the specific architectural treatments and tree replacement plans sufficient to meet the City's request. The PCC is an ongoing process and the current revised site plan will continue to be reviewed by the City Staff. VDC believes that the issues have been resolved for purposes of the CEC to perform its CEQA analysis. Specific architectural treatment of the west side of the building and the screening of the generator yard will be determined by the City during the PCC and ultimately approved for architectural review at the City's Design Review Hearing after the CEC publishes a decision on the SPPE Application. The City may develop conditions of approval to include in its land use authorization to ensure specific aesthetic treatment of the generator screening and building, landscaping plan additions, or other modifications but no mitigation measures are required to be included in the DEIR.

With the Revised Site Plan, the CEC Staff can complete its Land Use and Aesthetics sections of the DEIR. VDC has requested concurrence from the City Planning Staff.

PROJECT DESCRIPTION

BACKGROUND: SVP System Impact Study

As indicated in the Supplemental Responses to the CEC Staff Data Requests Set 1, the CA3DC would be on the Silicon Valley Power's (SVP) Central Loop and the build out of the data center would be restricted until the impacts on the SVP system are understood. The SVP is conducting a System Impact Study to understand the impacts of the CA3DC loads on the transmission system.

DATA REQUESTS

5. Please provide the System Impact Study.

RESPONSE TO DATA REQUEST 5

The background provided is generally correct, but Vantage provides additional clarification. As described in the SPPE Application, the CA3DC will be constructed but leased to clients over time in accordance with the then present demand for data center space and services. Additionally, as with every data center project or any other project that would require electricity, Vantage's future clients cannot occupy portions of the CA3DC without Vantage's ability to provide the electricity necessary for the client's demand. This is unlike a power plant which upon reaching commercial operation would have the ability to transmit all of its electricity to the grid, the CA3DC will ramp up its electrical demand over time. That demand curve is unknown, but Vantage believes that ultimately the entire CA3DC can be successfully leased and occupied by clients.

As described by SVP at evidentiary hearing in prior proceedings, it works closely with all of its large electricity users, especially data centers, to forecast increasing electrical demand on an annual basis. If SVP simply did not have the ability to serve Vantage's predicted demand, Vantage could and would not increase its electrical demand until SVP could provide the electricity. Therefore, Staff's reliance on a System Impact Study for use in its CEQA analysis is misplaced. There can be no environmental impact associated with SVP's inability to provide electricity to meet Vantage's desired electrical demand.

Therefore, the background's assertion that "the build out of the data center would be restricted until the impacts on the SVP are understood" is only partially accurate. A better statement would be that Vantage simply could not use more electricity than SVP can provide. Therefore, as with other projects approved by the Commission, the System Impact Study is not needed for the Commission to be able to complete its analysis.

Unlike a System Impact Study for a power plant, the SVP System Impact Study will study the ability to serve the CA3DC over the long term in addition to serving other existing and new users. In other words, the System Impact Study is not solely studying the impacts to the system from the CA3DC alone.

Vantage has already included the known upgrades to the SVP system necessary for it to receive electricity at the CA3DC site. They include the new substation and switching station and the overhead wires and poles necessary to interconnect to the Uranium Substation. Any other upgrades would not be specifically attributable to the CA3 alone and therefore, would not be required for Staff's CEQA analysis.

For example, as shown in Attachment PD DR-5, SVP acknowledges that it requires outside the system upgrades to be performed by PG&E to increase electricity imports into its system. These network upgrades are not solely the result of the CA3DC, but instead are the result of all the increased electrical demand forecasted by SVP. These outside the system upgrades are part of the Transmission Planning Process. Such upgrade projects have not yet been defined but would be subject to CEQA at the time they are proposed by PG&E.

Similarly, as part of SVP's network upgrade evaluation, if it is determined that additional network upgrades would be necessary to serve future load, such network upgrades would be processed within the City of Santa Clara and compliance with CEQA would be conducted by the City at the time the network upgrade is proposed. This is how the upgrades to the SVP "loops" was performed. While new users benefit from the loop upgrades, no individual project was the sole cause for the loop upgrades.

Staff should not treat these potential future upgrades as "part of the whole of the action" with the CA3DC because they are not caused by CA3DC, are not necessary for the project to be built, and are part of the routine SVP planning processes to serve future load.

Vantage believes that the letter provided by SVP in Attachment PD DR-5 is sufficient for it to fulfill its obligations under CEQA and to determine that the CA3DC will not cause environmental impacts associated with SVP's supply of electricity.

6. Please identify any system upgrades that would be required to fully support the CA3DC.

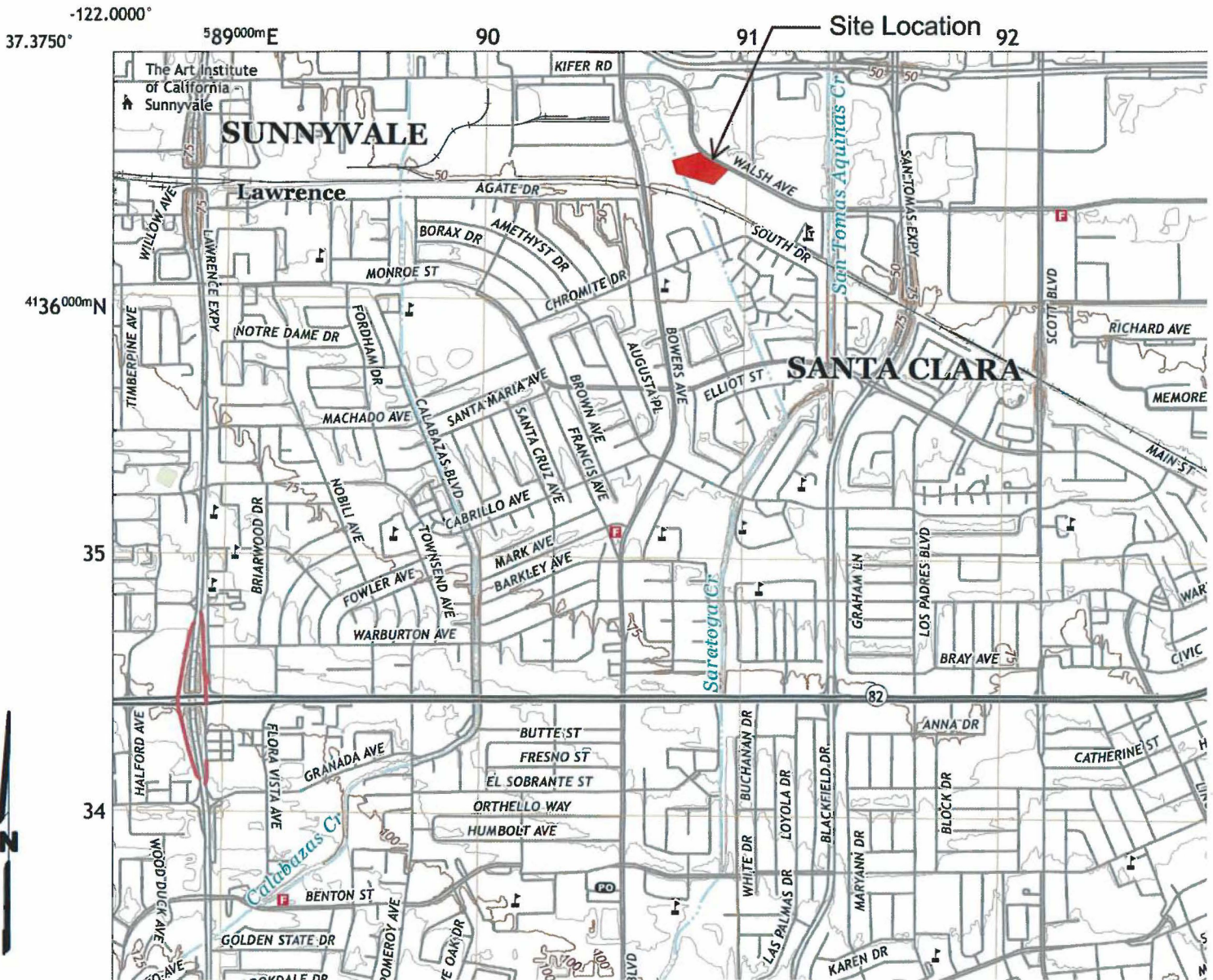
RESPONSE TO DATA REQUEST 6

See Response to Data Request 5.

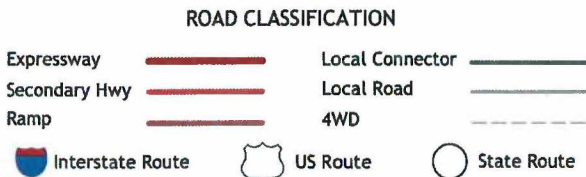
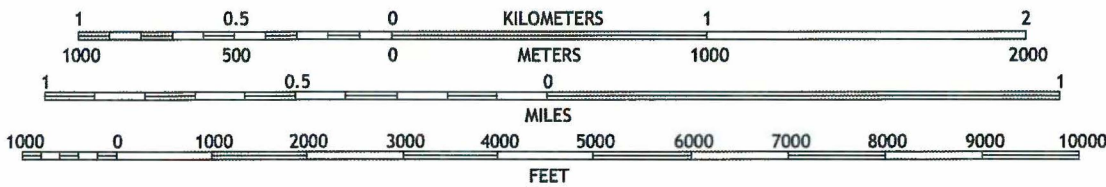
ATTACHMENT HAZ DR-1
FAA Form 7460-1 and Proof of Filing



U.S. DEPARTMENT OF THE INTERIOR
 U.S. GEOLOGICAL SURVEY SAN JOSE WEST QUADRANGLE
 CALIFORNIA - SANTA CLARA COUNTY
 7.5-MINUTE SERIES



SCALE 1:24 000



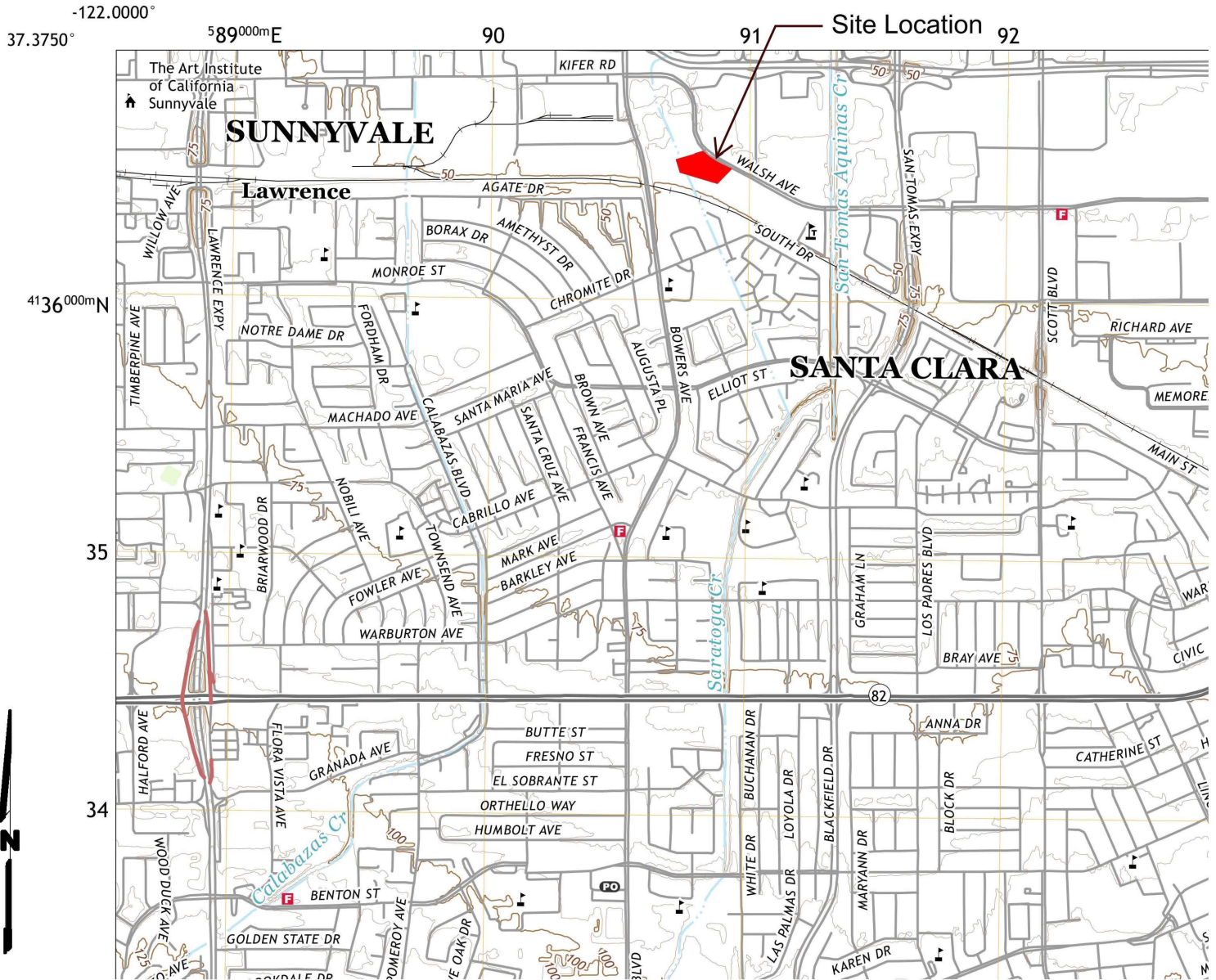
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4	5	6
7	8	

ADJOINING QUADRANGLES

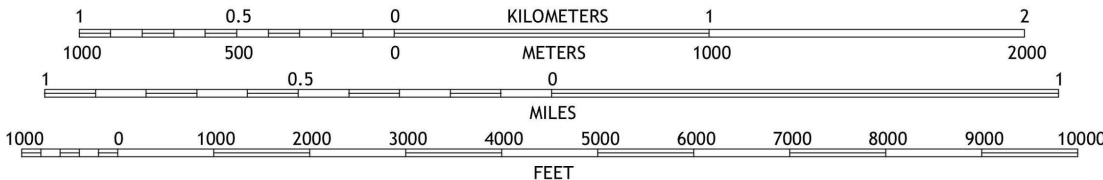
- 1 Mountain View
- 2 Milpitas
- 3 Calaveras Reservoir
- 4 Cupertino
- 5 San Jose East
- 6 Castle Rock Ridge
- 7 Los Gatos
- 8 Santa Teresa Hills



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SCALE 1:24 000





Notice of Proposed Construction or Alteration - Off Airport

[Add a New Case \(Off Airport\) - Desk Reference Guide V_2018.2.1](#)

[Add a New Case \(Off Airport\) for Wind Turbines - Met Towers \(with WT Farm\) - WT-Barge Crane - Desk Reference Guide V_2018.2.1](#)

Project Name: VANTA-000651542-21

Project Summary : VANTA-000651542-21

Structure	City, State	Lat/Long	Map	Actions	7460-2 Received	Latest Letter
Walsh/NW Pkwy Building Accepted 2021-AWP-13075-OE	Santa Clara, CA	37° 22' 14.74" N 121° 58' 25.23" W	Show Map	Clone Upload a PDF Add 7460-2		None

[Mapping - Desk Reference Guide V_2018.2.0](#) [Attaching Documents - Desk Reference Guide V_2018.2.0](#)

[Upload a PDF to the Project](#)

Draft: Cases that have been saved by the user but have not been submitted to the FAA.

Waiting: Wind Turbine/Met Tower (w/WT Farm) cases that have not been submitted to the FAA and are waiting for an action from the user, either to verify the map or attach specific documents

Accepted: Cases that have been submitted to the FAA.

Add Letter: Cases that have been reviewed by the FAA and require additional information from the user.

Work in Progress: Cases that are being evaluated by the FAA.

Interim: Cases that have been reviewed by the FAA and require resolution from the user.

Determined: Cases that have a completed aeronautical study and an FAA determination.

Terminated: Cases that are no longer valid.

Please allow the FAA a minimum of 45 days to complete a study.

Case Transfer:

- Use the check box(es) to select the case(s) you want to transfer.
- Select the "Transfer Cases button" to open the "Manage Transfer Cases" screen.

Note: Drafts and cases in Add and Terminated status can not be transferred.

[Click here to contact the appropriate representative.](#)



Notice of Proposed Construction or Alteration - Off Airport

[Add a New Case \(Off Airport\) - Desk Reference Guide V_2018.2.1](#)

[Add a New Case \(Off Airport\) for Wind Turbines - Met Towers \(with WT Farm\) - WT-Barge Crane - Desk Reference Guide V_2018.2.1](#)

Project Name: VANTA-000651542-21	Sponsor: Vantage Data Centers
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Details for Case : Walsh/NW Pkwy Building

[Show Project Summary](#)

Case Status		Date Accepted: 08/23/2021											
ASN: 2021-AWP-13075-OE		Date Determined:											
Status: Accepted		Letters: None											
		Documents: 08/23/2021 20210816 - FAA_Fo...											
Public Comments: None		08/23/2021 2021-08-19 USGS M...											
		Project Documents: None											
Construction / Alteration Information		Structure Summary											
Notice Of: Construction		Structure Type: Building											
Duration: Permanent		Structure Name: Walsh/NW Pkwy Building											
if Temporary : Months: Days:		FDC NOTAM:											
Work Schedule - Start: 05/01/2022		NOTAM Number:											
Work Schedule - End: 06/01/2023		FCC Number:											
*For temporary cranes-Does the permanent structure require separate notice to the FAA? To find out, use the Notice Criteria Tool. If separate notice is required, please ensure it is filed. If it is not filed, please state the reason in the Description of Proposal.		Prior ASN:											
State Filing:													
Structure Details		Proposed Frequency Bands											
Latitude:	37° 22' 14.74" N	Select any combination of the applicable frequencies/powers identified in the Colo Void Clause Coalition, Antenna System Co-Location, Voluntary Best Practices, effective 21 Nov 2007, to be evaluated by the FAA with your filing. If not within one of the frequency bands listed below, manually input your proposed frequency(ies) and power using the Add Specific Frequency link. Add Specific Frequency <table border="1"> <thead> <tr> <th>Low Freq</th> <th>High Freq</th> <th>Freq Unit</th> <th>ERP</th> <th>ERP Unit</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Low Freq	High Freq	Freq Unit	ERP	ERP Unit					
Low Freq	High Freq			Freq Unit	ERP	ERP Unit							
Longitude:	121° 58' 25.23" W												
Horizontal Datum:	NAD83												
Site Elevation (SE):	46 (nearest foot) PASSED												
Structure Height (AGL):	108 (nearest foot)												
Current Height (AGL):	(nearest foot)												
* For notice of alteration or existing provide the current AGL height of the existing structure. Include details in the Description of Proposal													
Minimum Operating Height (AGL):	(nearest foot)												
* For aeronautical study of a crane or construction equipment the maximum height should be listed above as the Structure Height (AGL). Additionally, provide the minimum operating height to avoid delays if impacts are identified that require negotiation to a reduced height. If the Structure Height and minimum operating height are the same enter the same value in both fields.													
Requested Marking/Lighting:	None												
	Other :												
Recommended Marking/Lighting:													
Current Marking/Lighting:	N/A Proposed Structure												
	Other : <input type="text"/>												
Nearest City:	Santa Clara												
Nearest State:	California												
Description of Location: <i>On the Project Summary page upload any certified survey.</i>	The proposed building will be constructed near the intersection of Walsh Ave and Northwestern Pkwy in Santa Clara, CA. The site is located approximately 1.75 miles away from the west end of Norman Y. Mineta San Jose International Airport.												
Description of Proposal:	New 469,467 square foot 4-story data center building. The building is oriented Northeast fronting onto Walsh Avenue												

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ATTACHMENT LU DR-2

Resubmittal of Revised Site Plan and General Arrangement Drawing

ATTACHMENT PD DR-5

SVP Letter to VDC



September 24, 2020

Vantage Data Centers
Sam Huckaby, Vice President – Construction
2820 Northwestern Parkway
Santa Clara, CA 95051

Subject: New Data Center at 2590 Walsh

Dear Mr. Huckaby,

The City of Santa Clara's Electric Department, Silicon Valley Power, is the electric utility for the City of Santa Clara. Electric service to the subject project will be provided in accordance with the Rules and Regulations for the utility as approved by the Santa Clara City Council. Silicon Valley Power has reviewed the power needs and commitments at all Vantage sites within the City per the property list below:

- 2820 Northwestern
- 2897 Northwestern
- 737 Mathew
- 2590 Walsh (new proposed project not yet approved – request for 90 MVA)

Based on Vantage's existing and future power needs, Silicon Valley Power should be able to provide the following total power combined for all the sites:

- Up to 126.5 MVA from the current date to the end of Second Quarter of 2022
- Up to 192.5 MVA at Third Quarter of 2022 upon completion of the South Loop Project.
 - If there are delays on the South Loop Project, it will affect the timeline to increase from 126.5 to 192.5.
 - 737 Mathew is limited to 33 MW until the South Loop Project is completed.
- Silicon Valley Power is starting the process for additional transmission capacity to the City. The conceptual timeline for completion is Fourth Quarter of 2025. Upon completion of additional transmission, Vantage can increase from 192.5 MVA to 273 MVA.
- If Vantage has a need to exceed 192.5 MVA prior to these timeframes, the City would be interested in partnering on a battery storage project or other generation facility to serve those needs.

The specific details of this service and SVP system modifications required to provide this capacity for 2590 Walsh will be worked out in a Substation Service Agreement at a future date. The City is also in the process of reviewing and updating its load development fee, which will be applicable for any new project (or above 192.5 MVA). It is also important to note that all appropriate fees will need to be paid, and this letter does not supersede any requirements or

agreements for the already approved sites at 2820 Northwestern, 2897 Northwestern, and 737 Mathew.

Questions can be directed to Wendy Stone at (408) 615-5648.

Thank you,

A handwritten signature in blue ink, appearing to read 'M. Pineda', with a stylized flourish at the end.

Manuel Pineda

Chief Electric Utility Officer

City of Santa Clara – Silicon Valley Power

cc: Michael Stoner