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May 12, 2021

Ms. Corinne Lytle Bonine, PMP
Environmental Planner
Chambers Group, Inc.

LLG Reference: 3-20-3302

Subject: **Brawley Solar Project**
Imperial County, California

Dear Ms. Bonine:

Linscott, Law & Greenspan, Engineers (LLG) has prepared this letter report to summarize the results of our evaluation of the proposed Brawley Solar Project ("Project") from a traffic and transportation perspective. The Project site is located at 5003 Best Ave, Brawley, California.

INTRODUCTION

The project is proposing to build, operate and maintain the Brawley Solar Energy Facility, a 40 Megawatt (MW) photovoltaic (PV) solar farm and 40 MW/160 MWh battery energy storage system (BESS) on approximately 225 acres in Brawley, Imperial County. The County of Imperial (County) has identified the Project as a Solar Energy Electrical Generator, which is a permitted use within the A-2-G zone upon approval of a Conditional Use Permit (CUP). The purpose of this letter report is to explain the construction traffic that will be generated by the project. Included in this traffic report are the following.

- Project Description
- Existing Conditions Discussion
- Trip Generation
- Summary and Conclusions

PROJECT DESCRIPTION

Project Location

The Project is located at 5003 Best Ave, Brawley, California on six privately owned parcels. Imperial County identifies the land use of the Project site as Agriculture and zoning as General Agricultural. Currently the Project site contains alfalfa fields within different levels of harvest. North and east of the Project site is undeveloped agricultural land. South of the Project site is a mixture of undeveloped agricultural

land and dirt lots used for staging activities. The City of Brawley Wastewater Treatment Plant is located along the western edge of the Project site.

Figure 1 shows the Project Area Map.

Project Description
Solar cells, also called photovoltaic (PV) cells, convert sunlight directly into electricity. PV cells combine to create solar modules, or panels, and many solar panels combined together to create one system is called a solar (or PV) array. Installation of the PV arrays would include installation of mounting posts, module rail assemblies, PV modules, inverters, transformers and buried electrical conductors. Concrete would be required for the footings, foundations and pads for the transformers and substation work.

All access to the Project site would be located off Best Avenue. Access roads would be constructed with an all-weather surface, to meet the County Fire Department's standards, and lead to a locked gate that can be opened by any emergency responders. An all-weather surface access road, to meet the County's standards, would surround the perimeter of the Project site, as well as around solar blocks no greater than 500 by 500 feet. The Project would be required to conform to all California Public Utilities Commission (CPUC) safety standards. The Project site perimeter would be fenced with a 6-foot high chain link security fence topped with barbed wire, with gates at the access points.

Construction activities would be sequenced and conducted in a manner that addresses storm water management and soil conservation. During construction, electrical equipment would be placed in service at the completion of each power-block, after the gen-tie line has been completed. The activation of the power-blocks is turned over to interconnection following the installation of transformer and interconnection equipment upgrades. This in-service timing is critical because PV panels can produce power as soon as they are exposed to sunlight, and because the large number of blocks and the amount of time needed to commission each block requires commissioning to be integrated closely with construction on a block-by-block basis.

During construction the workforce would consist of laborers, electricians, supervisory personnel, support personnel and construction management personnel. Up to 120 people are expected to be on-site per day. Project laydown and construction staff parking is expected to be located on-site or at the North Brawley Geothermal Power Plan in an approximately 4-acre area.

Construction is anticipated to start in quarter four of 2021 and would take approximately 6-9 months to complete. Construction would generally occur during daylight hours, Monday through Friday. However, non- daylight work hours may be necessary to make up schedule deficiencies, or to complete critical construction activities. For example, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. If construction is to

occur outside of the County's specified working hours, permission in writing will be sought at the time. The County's construction equipment operation shall be limited to the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m. Saturday. No commercial construction operations are permitted on Sunday or holidays.

Construction of the Project would occur in phases beginning with site preparation and grading and ending with equipment setup and commencement of commercial operations. Overall, construction would consist of three major phases over a period of approximately 6-9 months:

1. Site Preparation, which includes clearing grubbing, grading, service roads, fences, drainage, and concrete pads; (1 month) (60 workers and 50 trucks).
2. PV system installation and testing, which includes installation of mounting posts, assembling the structural components, mounting the PV modules, wiring; (7 months) (100 workers and 60 trucks).
3. Site clean-up and restoration. (1 month) (40 workers and 40 trucks).

Once fully constructed, the Project would be operated on an unstaffed basis and be monitored remotely from the Brawley Geothermal Power Plant control room, with periodic on-site personnel visitations for security, maintenance and system monitoring.

Figure 2 shows the Construction Access Points

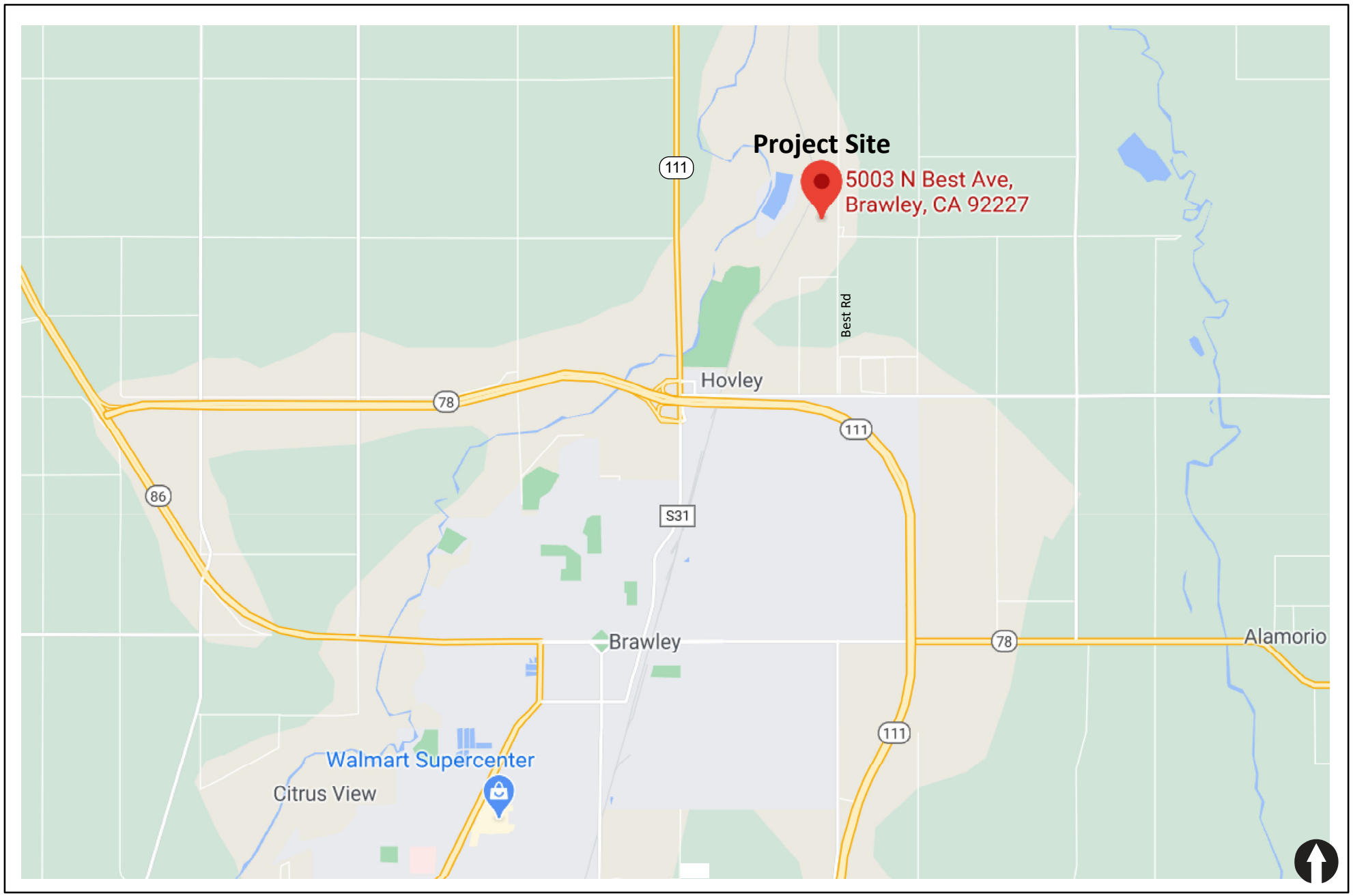

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Figure 1

Project Area Map

BRAWLEY SOLAR PROJECT

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Figure 2

Construction Access Points

BRAWLEY SOLAR PROJECT

EXISTING CONDITIONS

Existing Transportation Conditions

The following is a description of the nearby roadway network:

Best Avenue is an unclassified roadway in the Imperial County Circulation Element Plan. It is currently constructed as a two-lane north-south roadway in the study area. There is no posted speed limit. There are no bike lanes provided.

Ward Road is an unclassified roadway in the Imperial County Circulation Element Plan. It is currently constructed as a two-lane east-west roadway in the study area. There is no posted speed limit. There are no bike lanes provided.

State Route 111 (SR-111) begins at the International Border between Mexico and the United States traveling north with two travel lanes in each direction. SR 111 (Imperial Avenue) is classified as a 4-Lane primary north/south arterial in the City of Calexico Circulation Element. Class II bicycle lanes are provided north of SR 98. Bus stops are not provided. Curb, gutter, and sidewalks are provided south of SR 98. Curbside parking is permitted intermittently south of SR 98, on both sides of the roadway. The speed limit is posted at 55 mph.

TRIP GENERATION

Project Trip Generation

As described above, construction of the Project would occur in phases beginning with site preparation and grading and ending with equipment setup and commencement of commercial operations. During peak construction activities, 120 workers and a maximum of 60 trucks at a time would be required.

Daily and peak hour trip generation rates and in/out splits were calculated for the peak construction period using detailed data developed for analysis of the project's impacts. Construction activities would generally occur during a 12-hour-shift day. A worst case scenario in which all employees would arrive prior to the morning peak commuter period (7:00 – 9:00 a.m.) and depart within the evening peak period (4:00 – 6:00 p.m.) was assumed. Truck trips are anticipated to be distributed generally evenly throughout the 12-hour-shift day. In order to provide a conservative analysis, all employees were assumed to arrive and depart during peak commute periods. In addition, no carpooling for construction employees was assumed.

A passenger-car-equivalent (PCE) factor of 2.5 was applied to heavy vehicles (per the Highway Capacity Manual or HCM) to account for their reduced performance characteristics in the traffic stream (e.g. starting, stopping, and maneuvering). This information was used in calculating the project-generated average daily traffic (ADT).

Table 1
Construction Project Trip Generation

Use	Size	PCE[b]	Daily Trips		AM Peak Hour		PM Peak Hour	
			Rate (In + Out)	Volume (ADT)[a]	Volume		Volume	
					In	Out	In	Out
Personnel	120	1	2.0 /personnel	240	114	6	6	114
Trucks	60	2.5	2.0 /truck	300	13	13	13	13
Subtotal	**-**	**-**	**-**	***540***	***127***	***19***	***19***	***127***

Footnotes:

a. ADT – Average daily traffic

b. PCE – Passenger Car Equivalent

General Notes:

1. To estimate the employee traffic, it is conservatively assumed that 100% of the employee traffic would access the work area during the same commuter peak hours between 7:00 – 9:00 a.m. & 4:00 – 6:00 p.m..

2. The In/Out splits assumed are 95:5 during AM peak hour and 5:95 during the PM peak hour.

3. Truck trips are estimated to occur relatively evenly throughout a 12-hour construction hours proposed for the Project. For 30 trucks, this calculates to approximately 2.3 trucks/hour without PCE.

4. A passenger-car-equivalent (PCE) factor of 2.5 was applied to heavy vehicles (per the Highway Capacity Manual or HCM)

Table 1 tabulates the total daily and peak hour project traffic volumes. The project during construction trip generation is calculated to be 540 ADT with 127 inbound/ 19 outbound trips during the AM peak hour and 19 inbound/ 127 outbound trips during the PM peak hour. These values include the heavy-vehicle PCE-adjustment.
Post-construction, the facility would be operated on an unstaffed basis and be monitored remotely from the Brawley Geothermal Power Plant control room, with periodic on-site personnel visitations for security, maintenance and system monitoring. Therefore, an assessment of the post-construction scenario was not conducted.

CONCLUSION

Based on the low amount of construction trips generated and low existing traffic volumes on area roadways, no substantial transportation impacts are anticipated.

Vehicle Miles Traveled (VMT) analysis is not required since the post construction operational traffic is close to zero.

Please call us at 858.300.8800 if you have any questions or comments regarding this letter report.

Sincerely,

Linscott, Law & Greenspan, Engineers

John Boarman, PE
Principal