

Solar Photovoltaic Systems Developer RFQ Questions, Responses and Clarifications

August 6, 2014

1. Why are the locations specified in the offering limited to 1 megawatt (MW) each?

A specific provision, Exhibit "H", in BART's agreement with Pacific Gas and Electric limits our authority to install PV at each station or site to 1 MW.

2. Can terms of Exhibit "H" be distributed?

Please see attached copy of the exhibit.

3. Are the eBART site and other sites open for touring at this time?

Formal site visit arrangements for solar developers who have submitted statements of qualifications may be made by BART at some point in the future once qualifications are received. The Warm Springs Station, eBART Antioch Station parking, and MacArthur Parking Structure are currently under construction, with the MacArthur Parking Structure anticipated to open to the public within the next 30 days and portions of the eBART parking already open. Construction on the Hayward and Walnut Creek structures has not commenced yet.

4. Clarification regarding the Antioch eBART parking lot rendering serving as Appendix B.2 on Page 25:

Only the conduit identified in red has been installed. The location depicted is not the precise actual location of the conduit. The dashed lines in black are simply suggested locations for possible future PV system related conduit, subject to a developer's feasibility analysis.

5. Is there a desire or requirement for Electric Vehicle (EV) charging stations? Are electric vehicle charging stations expected to be incorporated into the design?

The RFQ asks for developers to provide information on experience that they may have with developing, integrating, and/or operating any EV charging stations, as they could be integrated into a PV system project. However, EV charging station experience or the intent to install them has not been made a requirement. Currently, BART has a prototype at 20 or so locations with 110 volt plugs. A proposed PV project with EV charging as a result of this solicitation could include 220 volt plugs.

6. Clarification regarding the Hayward Maintenance Complex:

*The two new Hayward Maintenance Complex structures will be the Component Repair Shop consisting of approximately 120,000 square feet and the Overhaul Shop with approximately 53,400 square feet, **not** approximately 160,000 square feet each as was stated in the RFQ. The construction of the Component Repair Shop is scheduled to begin*

in the spring of next year and the construction of the Overhaul Shop will begin at a later date, perhaps in two or three years. Additionally, the Component Repair Shop will include a separate covered open air storage structure, approximately 17,200 square feet, that would be available for Solar Photovoltaic System Development. The construction of this structure will be included with the Component Repair Shop and it will be located between the Component Repair Shop and the Central Warehouse.

In summary, structures available for Solar Photovoltaic System Development at the Hayward Maintenance Complex location are:

Component Repair Shop: 120,000 square feet

Overhaul Shop: 53,400 square feet

Covered Structure: 17,200 square feet

Total: 190,600 square feet

Attached are BART's most recent Component Repair Shop Overall Site Improvement Plan and Single Line Diagram drafts. The Site Improvement Plan shows a possible location for inverter and distribution panels subject to the selected developer's feasibility analysis. The Line Diagram shows provisions in the switchboard to connect the future solar system.

7. For the MacArthur and Walnut Creek parking structures, is there a preference for a single access tract or tilt PV system?

Systems will likely be fixed tilt at least at MacArthur, but this is not definitive.

8. What firm designed the MacArthur Parking Structure and was the structure designed to accommodate rooftop solar panels?

The MacArthur Parking Structure was designed by International Parking Design (IPD). The structure was designed to accommodate rooftop solar.

9. What percentage of overall electricity need at the Walnut Creek BART Station will a PV system be expected to provide?

One third to one half of daytime use, up to 1 MW for BART. Please see clarification below.

10. Clarification regarding the new Walnut Creek Parking Structure:

The new parking structure at the Walnut Creek BART Station that would be part of the Walnut Creek BART Transit Village is proposed to be a privately owned facility with a 99 year ground lease agreement. A PPA or similar agreement for a rooftop PV system at this location would require collaboration with both BART and a private developer. Load needs and limits for this location may be impacted by the new parking structure and transit village development as well as by the BART station and its existing parking structure.

11. How would potential PV Systems at additional locations, other than those included in this RFQ be addressed?

Additional locations would be made available under a new RFQ, or similar solicitation, that is separate and distinct from the current RFQ.

12. What is BART's current rate for electricity from Pacific Gas and Electric (PG&E)?

Currently, BART pays an all-inclusive rate of \$0.10 per kWh from several supply sources including PG&E.

13. For the MacArthur Parking structure, does BART insist on the rooftop solar panel design depicted in Appendix B.4 on Page 30?

No. Please note that a PV system on the rooftop of this parking structure may need to go through environmental clearance and design review with the City of Oakland.

14. Can the developer retain environmental and tax credits that may be available?

Yes, these credits would not need to be transferred to BART.

15. Does BART currently have active projects that utilize a PPA rate structure?

Yes, in Gridley, CA and at our Richmond and Hayward shops.

16. How were the locations specified in the RFQ identified by BART?

The District's original intent was for a PV system to be incorporated at the new Warm Springs Station, which is now in construction. The District recognized that it could be advantageous to add additional locations and the four additional locations were identified. These locations have the most immediate need for or availability for PV development.

17. How long is it anticipated to take to build the new parking structure at the Walnut Creek?

Construction for the new Walnut Creek Station parking structure could begin in the spring of 2015, at the earliest. Construction might take 12 to 18 months.

18. Has BART identified local hire, project stabilization agreement or prevailing wage requirements for PV system installations that may result from this RFQ?

BART's Prevailing Wage Policy would be applicable (please see Appendix A of the RFQ). BART has not requested local hire or project labor agreement provisions in the RFQ, but such provisions may become applicable in the development of a PPA.

19. Is additional ground level PV installation currently a possibility in other, non-identified, areas of the Warm Springs Station parking lots?

Not at this time. The District is interested in additional solar systems being placed within the BART system. However, we are also interested in transit-oriented development (TOD) opportunities that exist on and around our stations. Placing panels throughout the stations at grade parking area might serve to foreclose the possible future development of TOD in these areas.

20. Is it possible to get structural and/or electrical drawings of the Warm Springs facilities, especially for the concourse roof?

Such drawings are substantial and will be made available at a later point in the developer selection process. Warm Springs will include extensive provisions to accommodate PV installation.

The October 17, 2012 Draft BART Warm Springs Extension Project Final SEIR Addendum for Photovoltaic Panels may be of interest to potential respondents to this RFQ. This document is now available at <http://www.bart.gov/development/>

21. For Warm Springs, is it required to put solar on the ventilation structures in the park? Or would it be acceptable to utilize more of the parking lot space instead?

Not necessarily. If in your view the ventilation structures in the park are not viable locations, you could advise us of this.

At some point in the future, BART may wish to see transit oriented development occur on portions of the surface parking area, so the surface parking area made available is limited. Please see the response to Question 19.

22. Are any high profile vehicles expected in these parking lots? Is there a specified height for carport structures?

BART has height restrictions at our parking structures and can establish height restrictions for vehicles in PV carport areas as well. The District has established a minimum height of nine feet for PV carport canopy systems.

23. If there is not sufficient space at each of the sites for 1MW of solar PV, will BART still move forward with the projects using reduced system sizes? For parking canopy systems, we usually estimate approximately 220,000 square feet per 1MW.

1MW was stated as the maximum per location in the RFQ. BART would still entertain a project that produces less than 1MW per location.

24. In addition to the MacArthur Transit Village project, will any of the other sites have conduit incorporated into the structures/sites from the areas proposed for solar PV to the electrical rooms (where the point of interconnection and meters will be)?

Where are potential interconnection locations for each site?

Certain provisions (conduit, space and access) are being made or will be made to accommodate PV at all five of the locations. Specific information describing those provisions and other relevant details not yet provided will be provided at a later date to the developer(s) that have submitted statements of qualifications and have been deemed most qualified by the District.

The District's desire is that interconnection procedures will be routine. Information on the interconnection facilities will be assessed further at a later date and potentially only after selection of developer(s).

Exhibit “H” of BART Agreement with PG&E

EXHIBIT "H"

SPECIAL INTERCONNECTION AGREEMENT FOR BART SOLAR OR WIND ELECTRIC GENERATING FACILITIES

This "Special Interconnection Agreement for BART Solar or Wind Electric Generating Facilities" ("Special Interconnection Agreement") is entered into by and between San Francisco Bay Area Rapid Transit District ("BART") and Pacific Gas and Electric Company ("PG&E"), a California corporation. BART and PG&E are sometimes also referred to in this Special Interconnection Agreement jointly as "Parties" or individually as "Party." In consideration of the mutual promises and obligations stated in this Special Interconnection Agreement and its attachments, the Parties agree as follows:

1. Purpose

This Special Interconnection Agreement provides for BART to connect and operate a photovoltaic solar or wind Generating Facility in parallel with PG&E's Transmission and Distribution Systems to serve the electric service account that PG&E uses to interconnect BART's Generating Facility. Consistent with the provisions of Section 701.8 of the California Public Utilities Code and the "Agreement Between San Francisco Bay Area Rapid Transit District and Pacific Gas and Electric Company for Specified CPUC Jurisdictional Electric Services", Excess Generation from BART's photovoltaic solar or wind Generating Facility may offset part or all of BART's electric requirements for Supplemental Power at a like voltage within the conjunctively billed and metered arrangement.

2. Summary and Description of BART's Generating Facility

2.1 A description of the Generating Facility, including a summary of its significant components and a single-line diagram showing the general arrangement of how the Generating Facility and loads are interconnected with PG&E's Transmission and Distribution Systems is attached to and made a part of this Special Interconnection Agreement as Appendix A.

2.2 Name and address of the location of the Generating Facility

Location Name: _____

Address: _____

City/Zip Code: _____

Size of Generating Facility _____ kW (Solar or Wind Output)

3. Documents Included and Defined Terms

This Special Interconnection Agreement includes the following exhibits that are specifically incorporated herein and made a part of this Special Interconnection Agreement:

Appendix A: Description of Generating Facility and Single-Line Diagram
(Supplied by BART)

Appendix B: A copy of PG&E's Agreement for Installation or Allocation of

Special Facilities (Forms 79-255, 79-280, 79-702) or Agreements to Perform Any Tariff Related Work (62-4527), if applicable (Formed by the Parties)

When initially capitalized, whether in the singular or in the plural, the terms used herein shall have the meanings assigned to them either in this Special Interconnection Agreement or in PG&E's Electric Rule 21, Section H.

- a. "BART Solar Generation" means solar photovoltaic electricity directly connected to, used and generated at BART owned, leased, or rented facilities with the intent to offset power delivered to BART by PG&E. A BART Solar Generation installation must have a nameplate generating capacity of less than or equal to 1 MW per location. For the purposes of this Special Interconnection Agreement, BART Solar and Wind Generation installations, up to a cumulative total nameplate generating capacity of 5,000 KW at BART locations, will not be considered bypass.
- b. "Excess Generation" means solar and/or wind electricity directly connected to, used and generated at BART owned or leased facilities that exceeds metered physical load at that specific premises during a given hourly interval.
- c. "Export" means the uncompensated and unscheduled flow of electrical energy onto PG&E's Distribution System which occurs when Excess Generation exceeds Supplemental Power during the applicable metering interval.
- d. "Supplemental Power" means bundled service power supplied and delivered by PG&E pursuant to the E-20 Rate Schedule or its successor.
- e. "System" means the mass transit system that BART is currently operating in and for the purpose of serving Alameda and Contra Costa Counties, the City and County of San Francisco and part of San Mateo County, within the State of California, plus all the additions within these counties and all extensions into other counties.
- f. "BART Wind Generation" means wind electricity directly connected to, used and generated at BART owned, leased, or rented facilities with the intent to offset power delivered to BART by PG&E. A BART Wind Generation installation must have a nameplate generating capacity of less than or equal to 50 KW per location. For the purposes of this Special Interconnection Agreement, BART Solar and Wind Generation installations, up to a cumulative total nameplate generating capacity of 5,000 KW at BART locations, will not be considered bypass.

4. Customer Billing and Treatment of BART Excess Generation

BART shall be billed in accordance with the terms set forth in "Exhibit F: Billing Methodology" in the "Agreement Between San Francisco Bay Area Rapid Transit District and Pacific Gas and Electric Company for Specified CPUC Jurisdictional Electric Services"

5. Term and Termination

5.1 This Special Interconnection Agreement shall become effective as of the last date entered in Section 16 below. The Special Interconnection Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:

- (a) The Parties agree in writing to terminate the Special Interconnection Agreement.
- (b) Unless otherwise agreed in writing by the Parties, at 12:01 A.M. on the day following the date the electric service account through which BART's Generating Facility is interconnected to PG&E is closed or terminated.
- (c) At 12:01 A.M. on the 61st day after BART or PG&E provides written Notice pursuant to Section 9 below to the other Party of BART's or PG&E's intent to terminate this Special Interconnection Agreement.

5.2 BART may elect to terminate this Special Interconnection Agreement pursuant to the terms of Section 5.1(c) for any reason. PG&E may elect to terminate this Special Interconnection Agreement pursuant to the terms of Section 5.1(c) for one or more of the following reasons:

- (a) A change in applicable rules, tariffs, or regulations, as approved or directed by the CPUC, or a change in any local, state or federal law, statute or regulation, either of which materially alters or otherwise affects PG&E's ability or obligation to perform PG&E's duties under this Special Interconnection Agreement; or,
- (b) BART fails to take all corrective actions specified in PG&E's Notice that BART's Generating Facility is out of compliance with the terms of this Special Interconnection Agreement within the time frame set forth in such Notice; or,
- (c) BART abandons the Generating Facility. PG&E shall deem the Generating Facility to be abandoned if PG&E determines, in its sole opinion, the Generating Facility is non-operational and BART does not provide a substantive response to PG&E Notice of its intent to terminate this Special Interconnection Agreement as a result of BART's apparent abandonment of the Generating Facility affirming BART's intent and ability to continue to operate the Generating Facility; or,
- (d) BART's Generating Facility ceases to meet all applicable safety and performance standards set out in Section 6.

5.3 Notwithstanding any other provisions of this Special Interconnection Agreement, PG&E shall have the right to unilaterally file with the CPUC, pursuant to the CPUC's rules and regulations, an application to terminate this Special Interconnection Agreement.

- 5.4 Any agreements attached to and incorporated into this Special Interconnection Agreement shall terminate concurrently with this Special Interconnection Agreement unless the Parties have agreed otherwise in writing.

6. Generating Facility Requirements

- 6.1 BART's Generating Facility must meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the CPUC regarding safety and reliability including Rule 21.
- 6.2 BART shall: (a) ensure that the Generating Facility and Interconnection Facilities are maintained in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, Section 6.1, and (b) obtain any governmental authorizations and permits required for the construction and operation of the Generating Facility and Interconnection Facilities. BART shall reimburse PG&E for any and all losses, damages, claims, penalties, or liability it incurs as a result of BART's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of BART's Generating Facility.
- 6.3 BART shall not commence parallel operation of the Generating Facility until PG&E has provided express written approval.

7. Interconnection Facilities

- 7.1 BART and/or PG&E, as appropriate, shall provide Interconnection Facilities that adequately protect PG&E's Transmission and Distribution System, personnel, and other persons from damage or injury, which may be caused by the operation of BART's Generating Facility.
- 7.2 BART shall be solely responsible for the costs, design, purchase, construction, permitting, operation, and maintenance of the Interconnection Facilities that BART owns.
- 7.3 If the provisions of PG&E's Electric Rule 21, or any other tariff or rule approved by the CPUC, require PG&E to own and operate a portion of the Interconnection Facilities, BART and PG&E shall promptly execute a Special Facilities Agreement that establishes and allocates responsibility for the design, installation, operation, maintenance, and ownership of the Interconnection Facilities. This Special Facilities Agreement shall be attached to and made a part of this Special Interconnection Agreement as Appendix B.

8. Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Special Interconnection Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages of any kind whatsoever.

9. Notices

- 9.1 Any written notice, demand, or request required or authorized in connection with this Special Interconnection Agreement (“Notice”) shall be deemed properly given if delivered in person or sent by first class mail, postage prepaid, to the person specified below:

If to PG&E: Pacific Gas and Electric Company
Attention: Manager, Service and Sales Department
P.O. Box 770000, Mail Code B19C
San Francisco, California 94177

If to BART: San Francisco Bay Area Rapid Transit District
Attention: Manager, Energy Division
300 Lakeside Drive, 16th Floor
Oakland, California 94612

- 9.2 A Party may change its address for Notices at any time by providing the other Party notice of the change in accordance with Section 9.1.
- 9.3 The Parties may also designate operating representatives to conduct the daily communications, which may be necessary or convenient for the administration of this Special Interconnection Agreement. Such designations, including names, addresses, and phone numbers may be communicated or revised by one Party’s Notice to the other.

10. Review of Records and Data

- 10.1 PG&E shall have the right to review and obtain copies of BART’s operations and maintenance records, logs, or other information such as Generating Facility availability, maintenance outages, and circuit breaker operation requiring manual reset, relay targets and unusual events pertaining to BART’s Generating Facility or its interconnection to PG&E.
- 10.2 BART authorizes release to the California Energy Commission (CEC) of information regarding BART’s facility, including customer name and Generating Facility location, size, and operational characteristics, as requested from time to time pursuant to the CEC’s rules and regulations.

11. Assignment

BART shall not voluntarily assign its rights nor delegate its duties under this Special Interconnection Agreement without PG&E’s written consent. Any assignment or delegation BART makes without PG&E’s written consent shall not be valid. PG&E shall not unreasonably withhold its consent to BART’s assignment of this Special Interconnection Agreement.

12. Non-Waiver

None of the provisions of this Special Interconnection Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Special Interconnection Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.

13. Governing Law, Jurisdiction of CPUC, Inclusion of PG&E's Tariff Schedules and Rules

13.1 This Special Interconnection Agreement shall be interpreted, governed, and construed under the laws of the State of California as if executed and to be performed wholly within the State of California without giving effect to choice of law provisions that might apply to the law of a different jurisdiction.

13.2 This Special Interconnection Agreement shall, at all times, be subject to such changes or modifications by the CPUC as it may from time to time direct in the exercise of its jurisdiction.

13.3 The interconnection and services provided under this Special Interconnection Agreement shall at all times be subject to the terms and conditions set forth in the Tariff Schedules and Rules applicable to the electric service provided by PG&E, including but not limited to Electric Rules 2, 14, 15, 16 and 21 available at PG&E's website at _____ or by request, which Tariff Schedules and Rules are hereby incorporated into this Special Interconnection Agreement by this reference.

13.4 Notwithstanding any other provisions of this Special Interconnection Agreement, PG&E shall have the right to unilaterally file with the CPUC, pursuant to the CPUC's rules and regulations, an application for change in rates, charges, classification, service, tariff or rule or any agreement relating thereto.

14. Amendment and Modification

This Special Interconnection Agreement can only be amended or modified by a writing signed by both Parties.

15. Entire Special Interconnection Agreement

This Special Interconnection Agreement, including any incorporated Tariff Schedules and Rules, contains the entire Special Interconnection Agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Special Interconnection Agreement. Each party also represents that in entering into this Special Interconnection Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Special Interconnection Agreement or in the incorporated Tariff Schedules and Rules.

16. Signatures

The signatories hereto represent that they have been duly authorized to enter into this Special Interconnection Agreement on behalf of the Party for which they sign.

IN WITNESS WHEREOF, the Parties hereto have caused this Special Interconnection Agreement to be executed by their duly authorized representatives. This Special Interconnection Agreement is effective as of the last date set forth below.

**San Francisco Bay Area Rapid
Transit District**

Pacific Gas and Electric Company

By:

By:

(Signature)

(Signature)

(Type or Print Name)

(Type or Print Name)

Title:

Title:

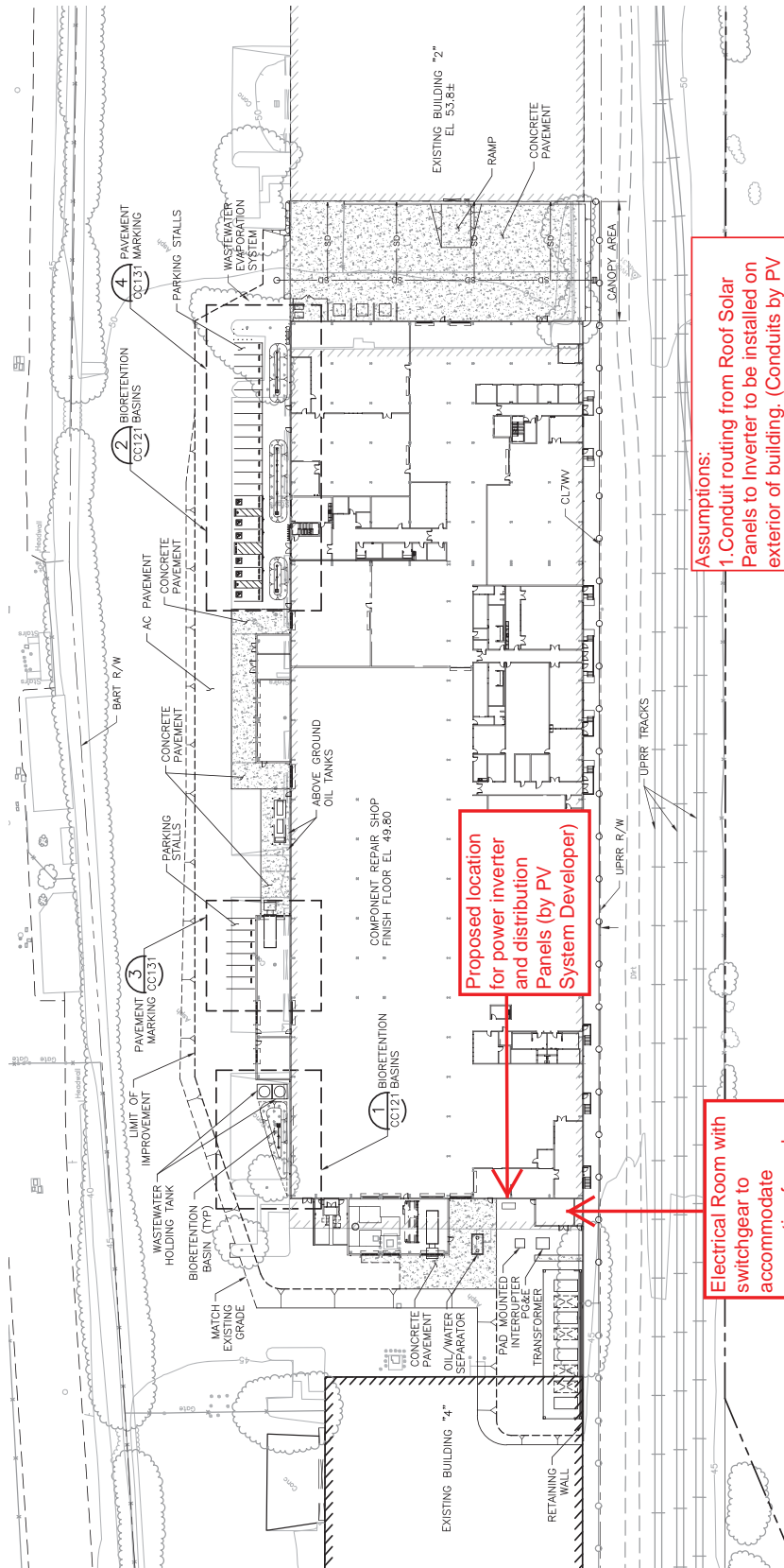
Date:

Date:

Hayward Maintenance Complex Component Repair Shop
Overall Site Improvement Plan &
Single Line Diagram Drafts

NOTES:

1. SEE CONTRACT SHT. NO. CC111 AND CC112 FOR GRADING AND DRAINAGE PLAN.
2. SEE CONTRACT SHT. NO. CC131 FOR PAVEMENT MARKING PLAN.



Proposed location for power inverter and distribution Panels (by PV System Developer)

Assumptions:
 1. Conduit routing from Roof Solar Panels to Inverter to be installed on exterior of building. (Conduits by PV System Developer)
 2. Need Solar System size and appearance layout to confirm inverter location.

Electrical Room with switchgear to accommodate connection for solar system. Conduits from switchgear to exterior of electrical room in 01RQ-110 Contract 4-4"C.

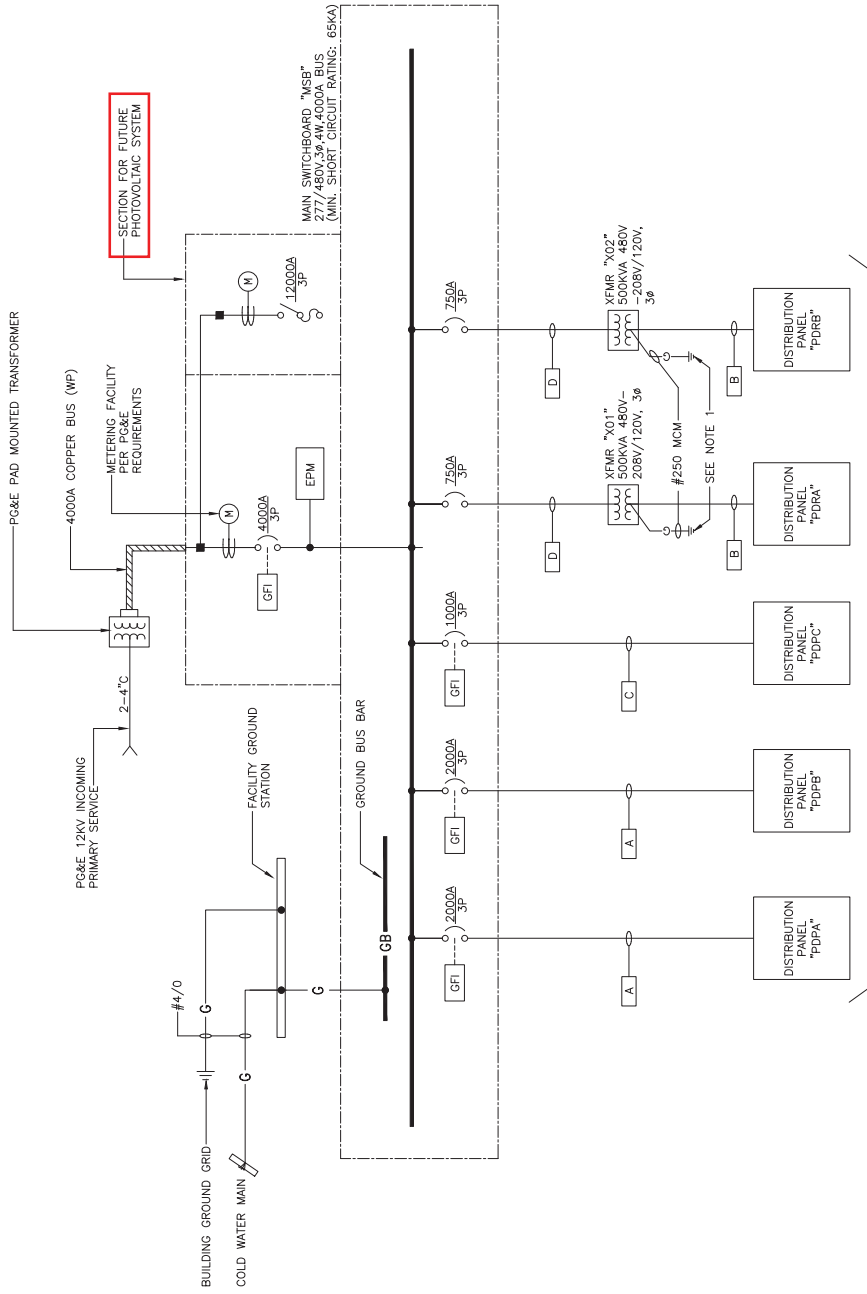


DRAFT

CAD FILE NAME HMC-110-CC105.dwg		HAYWARD MAINTENANCE COMPLEX PROJECT MAINTENANCE FACILITIES COMPONENT REPAIR SHOP	
SIZE/SCALE D 1"=40'		OVERALL SITE IMPROVEMENT PLAN	
CONTRACT NO. 01RQ-110		REV. C	
CONTRACT SHEET NO. CC105		PAGE NO.	
SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT PGM WONG ENGINEERING, INC.		PGM WONG ENGINEERING, INC.	
APPROVED: _____ DATE: _____		APPROVED: _____ DATE: _____	
SUBMITTED: _____		APPROVED: _____	
100% FINAL SUBMITTAL 95% SUBMITTAL REVIEW 65% SUBMITTAL REVIEW		DESCRIPTION	
NO.	DATE	BY	DATE
C 20140714			
B 20140307			
A 20121228			

FEEDER SCHEDULE

TAG	PHASE	NEUTRAL	GROUND	CONDUIT	No. OF SETS
A	3#600 MCM	1#600 MCM	350 MCM	1-4"	5
B	3#750 MCM	1#750 MCM	350 MCM	1-4"	4
C	3#500 MCM	1#500 MCM	#2/0	1-4"	3
D	3#500 MCM	1#500 MCM	#1/0	1-4"	2
E	3#400 MCM	1#400 MCM	#1	1-3 1/2"	2
F	3#500 MCM	1#500 MCM	#2	1-4"	1
G	3#300 MCM	1#300 MCM	#1/0	1-3"	1
H	3#2/0	1#2/0	#6	1-2 1/2"	1
I	3#2	1#2	#6	1-2"	1
J	3#3	1#3	#6	1-1 1/2"	1
K	3#10	1#10	#10	1-1"	1



REFER TO SINGLE LINE DIAGRAM "B" ON SHEET CE003

95% DESIGN REVIEW
TENTATIVE & PRELIMINARY
FOR DISCUSSION PURPOSES ONLY

CAD FILE NAME: CE002.dwg
 SIZE: SCALE: D
 N.T.S.
 CONTRACT NO.: 01RQ-110
 REV.: B
 CONTRACT SHEET NO.: CE002
 PAGE NO.:

HAYWARD MAINTENANCE COMPLEX PROJECT
MAINTENANCE FACILITIES
COMPONENT REPAIR SHOP
 SINGLE LINE DIAGRAM "A" & FEEDER SCHEDULE

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT
 FW ASSOCIATES, INC.
 P&H WONG ENGINEERING, INC.

DESIGNED: C. WONG
 DRAWING: C. WONG
 CHECKED: E. WONG
 APPROVED: P&H WONG
 DATE: 20120930

REV.	DATE	BY	DATE	DESCRIPTION
B	20140307			95% SUBMITTAL REVIEW
A	20121129			65% SUBMITTAL REVIEW

SUBMITTED _____ APPROVED _____