URCA SOLAR CANOPY SYSTEM PROJECT

Request for Proposals

ES: 01/2019

Issue Date: 06 May 2019

Response Date: 31 May 2019

Contents

1.0 GENERAL INFORMATION

1.1 Background and Summary

The Utilities Regulation and Competition Authority (URCA) is the independent regulatory authority with responsibility for the electronic communications sector (ECS) and the electricity sector (ES) in The Bahamas. The ECS comprises fixed and mobile telephone services, spectrum and numbering, broadcasting including pay television and Internet services. As regulator of the ES, URCA's remit covers all persons who generate, transmit, distribute or supply electricity to, from, or within The Bahamas.

URCA serves a variety of stakeholders. Its work impacts not only the companies and individuals under its regulatory authority but also the consumers that have services with those companies and those otherwise invested in any of the service areas URCA regulates. More information can be found on URCA's website at www.urcabahamas.bs.

URCA has launched an organization wide Green Initiative with the overarching goal of reducing the organization's impact on the environment, demonstrating first-hand its commitment to the goals of the National Energy Plan (NEP), Electricity Act (EA) 2015, ES Policy, sustainability principles and practices via the development of in-house clean energy, energy efficiency, recycling, and water management programs. Having conducted an energy audit of URCA's office at Frederick House during 2018, URCA has commenced activities to implement changes which will reduce URCA's energy use. In concert with this URCA intends to incorporate solar generating facilities in its own operations consistent with the already established Small Scale Renewable Generation (SSRG) program.

URCA requests proposals for the engineering, procurement, construction, commissioning, and maintenance of a solar canopy system (SCS) covering an area roughly measuring 20 feet by 75 feet of its car park located on Frederick Street in Nassau, Bahamas. The SCS will be tied in to URCA's existing electrical service. Power generated by the photovoltaic system will be used to supplement URCA's energy demands with any excess being sent to the utility grid.

1.2 Eligible Bidders

Companies registered in The Bahamas are eligible to submit a proposal and be considered for the award of a contract.

1.3 Language and Law

All documents related to the proposal and project shall be in English. The governing law for the proposal and project shall be those of The Commonwealth of The Bahamas.

1.4 Cost of Proposal

URCA assumes no responsibility or liability for costs incurred by any entity participating in the proposal process. URCA may or may not award a contract following the request for proposals.

1.5 Working Hours

URCA's normal working hours are Monday to Friday, 9.00 am to 5.00 pm, excluding Public holidays.

1.6 Proposed Contract Type and Payments

Should a contract be awarded it will be on a turnkey lump sum basis. The contractor may apply for a stage payment at the completion of each stage outlined in the Cost Proposal.

1.7 Questions

A voluntary site meeting will be held at 10.00 am on Monday, 13 May 2019 at URCA's offices on Frederick Street in Nassau, Bahamas to answer questions related to the RFP and conduct an inspection of the project site. Otherwise all questions concerning the RFP shall be submitted in writing to **Shevonn Cambridge, Director – Utilities and Energy** via email at **info@urcabahamas.bs**. A single response will be provided by URCA and shared via email with all entities registered in the proposal process.

1.8 Amendments

At any time prior to the deadline for submission of proposals, URCA may modify the RFP by issuing addenda. If URCA deems it necessary it may extend the date for the submission of proposals. Any addendum issued will be communicated to all entities registered in the proposal process via email and shall become part of the RFP.

1.9 Proposal Submission

To be considered, one hard copy and one electronic copy of the proposal must be submitted at URCA's offices by 4.00pm on Friday, 31 May 2019. Proposals must be submitted in a sealed envelope, with no corporate branding or logo. The front of the envelope must be marked only as follows:

General Counsel
Utilities Regulation and Competition Authority (URCA)
Frederick House
Nassau

URCA SCS Project RFP – ES: 01/2019

The submitter will receive an URCA Official Receipt stamped with a Receipt Number. There is no charge by URCA for submitting a proposal. Proposals must be valid for no less than 90 days after the submission date. All proposals received shall become the property of URCA.

1.10 Evaluation of Proposals

URCA will first review proposals for their conformance with the requirements set out in the RFP. Only those proposals that meet the requirements will be evaluated further to determine in URCA's sole opinion the most suitable proposal. Proposals will be evaluated using the following criteria:

Criteria	Points
Completeness of the proposal	5

Quality of the proposal document	5
Professional qualifications	5
Experience with similar projects	15
Proposed work plan	15
Explanation of the proposed system	30
Return on investment	20
Minimize impact to parking spaces and traffic flow	5

2.0 SCOPE OF WORK

2.1 Project Description

The Solar Canopy System (SCS) means the solar canopy including the Photovoltaic panels, supporting structure, and other interconnected equipment up to the point of connection to URCA's existing electrical and electronic equipment forming a grid tie connection on the customer's side of the utility meter. It shall also include (1) two spare continuous 4" PVC ducts and pull box from URCA's existing utility service panel to the western wall of the car park and (2) underground supplies to 3 outdoor panels in the parking lot to supply future electric vehicle charging stations.

This RFP is intended to provide sufficient information to receive complete bids to cover the engineering, procurement, construction, commissioning, and maintenance of the SCS to cover a portion of URCA's parking lot on Frederick Street, Nassau. The area is indicated on drawing A1 in Appendix 2. The SCS shall generate power using photovoltaic panels tied in to URCA's existing electrical system to supplement the power needs of URCA's offices with any excess being sent to Bahamas Power and Light's electrical grid via the utility meter. The SCS shall conform to the requirements of the Small Scale Renewable Generation program (see BPL's website at www.bahamaselectricity.com/ssrg.html for more information).

The photovoltaic panels shall be mounted in a fixed position on a structure that will allow 9 feet clearance for vehicles to be parked underneath. The SCS shall be designed to maximize its total annual output measured in kilowatt-hours (kWh). The SCS shall include an interface to monitor and diagnose the operation, and log the energy produced. The installation is in close proximity to the ocean. The SCS design should minimize the possibility of the system being vandalized. The SCS should operate passively with little or no human intervention required.

2.2 Codes and Standards

The SCS shall conform to best practices and comply at a minimum with the most recent editions of the following codes and standards.

- Bahamas Building Code
- International Building Code
- National Electric Code
- Underwriters Laboratory
- Bahamas Power and Light Grid Interconnection

2.3 Permits, Approvals, Authorizations, Licenses

The contractor shall be responsible for all aspects of permitting, approvals, authorizations, and licenses related to the project, including but not limited to:

- Customs Department
- Department of Immigration
- Ministry of Public Works (MOPW)
- Department of Road Traffic

- Ministry of Finance
- Bahamas Power and Light (BPL)
- Utilities Regulation and Competition Authority (URCA)
- Professional engineering

2.4 Project Scope

2.4.1 Engineering

The contractor shall be responsible to gather the necessary information and design the SCS (including civil works) to:

1. Maximize the energy produced over the expected life of the system
2. Minimize the life cycle cost of the system i.e. capital, operation, maintenance, and disposal costs.
3. Allow URCA to monitor the operation and condition of the SCS including diagnosing faults. Access shall be both locally and remotely (via the internet). The SCS shall log the energy produced in kWh. At the request of the contractor URCA shall provide a hardwired Ethernet connection to the internet within 20 feet of the existing BPL utility meter to facilitate this component.

The design of the SCS shall meet the required codes and standards.

The contractor shall obtain the necessary approvals from URCA and Government entities.

The contractor shall have the structural drawings approved and stamped by a licensed professional structural engineer in The Bahamas.

The contractor shall provide URCA with the following projections for the SCS design:

1. Capital cost
2. Annual operation expenses
3. Annual maintenance expenses
4. Annual energy produced
5. Annual energy sent to the BPL grid
6. Cost to decommission and dispose of the SCS

The contractor shall provide URCA with one electronic copy of the approved engineering drawings and one hard copy of the stamped approved engineering drawings.

The contractor shall provide URCA with one electronic copy and one hard copy of the specification documents and operation and maintenance documents for all SCS components.

2.4.2 Procurement

The contractor shall be responsible to procure and deliver to site all the necessary materials, equipment, and services to complete the SCS project in accordance with the approved design – engineering drawings and supporting documentation.

The contractor shall be responsible for all aspects of procurement including but not limited to: ordering, transportation, Customs clearance, storing, and protecting the goods.

The materials and equipment shall remain under the custody of the contractor unless URCA requests their transfer in writing.

2.4.3 Construction

The contractor shall be responsible for the construction of the SCS in accordance with the approved design – engineering drawings and supporting documentation.

Construction activities shall be overseen by licensed personnel and utilize industry best practices.

The contractor shall schedule its activities to avoid disruption of URCA's work and annoyance of the public. URCA reserves the right to adjust the working hours of the contractor through mutual agreement.

The contactor shall be responsible for maintaining a clean worksite.

The contractor shall be responsible for the disposal of its waste.

The contractor shall be responsible for creating and maintaining a safe working environment.

The contractor shall procure and maintain Construction Liability Insurance in the amount of no less than Three Hundred and Fifty Thousand Dollars, B$ 350,000.00 to cover the construction phase of the project, and until a claim has been settled should a claim arise during the construction phase. URCA shall be named as the beneficiary of the insurance.

The contractor shall be responsible for obtaining approvals and coordinating activities with the relevant entities to facilitate construction. This includes but is not limited to excavations and in particular the road crossing from the URCA carpark to the existing URCA utility service and point of interconnection.

2.4.4 Commissioning

The contractor shall be responsible to commission the SCS upon completion of the construction phase.

The contractor shall be responsible to develop and submit to URCA, for URCA's agreement, a schedule for the commissioning of the SCS.

The contractor shall be responsible to coordinate commissioning with the relevant stakeholders and approving agencies, including but not limited to URCA, BPL and MOPW.

The contractor shall provide URCA will a full listing of the settings used in the commissioning of the SCS.

The contractor shall provide URCA with one hard copy and one electronic copy of the as-built drawings of the SCS.

The contractor shall obtain the necessary approvals and be responsible for and confirm the correct functioning of the SCS including the grid tie.

The contractor shall conduct at least one full day training on the operation and maintenance of the complete SCS for three persons designated by URCA. The training shall be conducted during URCA's normal working hours. The as-built drawings and operation and maintenance manuals will be used as the training documentation.

2.4.5 Maintenance

The contractor shall be responsible for the maintenance of the SCS for one year following completion of Commissioning; called the Maintenance Period.

During the Maintenance Period the contractor shall be responsible for the proper functioning of the SCS to achieve the design goals and shall replace any defective equipment at no cost to URCA.

The contractor shall guarantee the performance of the SCS per the design goals up to 5% of the total contract price. The total units actually produced during the first full year of operation will be compared to the design projected annual energy produced by the system. The contractor will then be paid using the following formula = (actual system production / projected system production) x 5% of the total contract price. The difference between the formula and 5% of the contract price shall be retained by URCA to satisfy the guarantee. The payment to the contractor will be capped at 5% of the total contract price.

3.0 PROPOSAL DOCUMENTS

Proposals shall be structured as follows:

3.1 Firm Background

Provide the following information:

- Firm name (and legal registered name if different)
- Contact details for all correspondence i.e. name, physical address, phone number, and email address.
- A copy of the current Business License
- A copy of the current Certificate of Registration for VAT.
- A brief description of the primary business activities of the firm.
- The address of the firm's website. If the firm does not have a website then state the same.

3.2 Firm Qualifications

List the names, qualifications, and experience of the principles of the firm and the staff that will be assigned to the project.

Provide details of four of the most relevant projects completed by the firm. Include the names and contact details of the customers for those projects that URCA may follow up with.

State which portions (if any) of the work that the firm intends to subcontract and the names of the subcontractors.

3.3 Proposed Work Plan

Provide a table showing the expected duration of the following project components;

Component	Duration in calendar days
Engineering	
Procurement	
Construction	
Commissioning	
Total project duration excluding the Maintenance Period	

Provide a Gantt Chart covering the complete project schedule from award of contract to completion of the Maintenance Period.

3.4 Explanation of the Proposed Solar Canopy System

Describe the proposed system including but not limited to the following:

- Photovoltaic panel type / characteristics
- Inverter type / characteristics
- The supporting structure – materials, construction
- Elevation drawing showing the approximate look of the SCS when completed. Include the angle of elevation of the PV panels to the horizontal and orientation to true south.
- Operation and maintenance
- System monitoring
- Estimated system size
- Estimated annual system output in kWh
- Estimated system life
- Provisions for future expansion and / or integration of energy storage

3.5 Cost Proposal

Provide a table showing the cost of the following project stages;

Stage	Cost, B$
Engineering	
Procurement	
Construction	
Commissioning	
Maintenance Period	
Total project cost	

Appendix 1: URCA Energy Usage

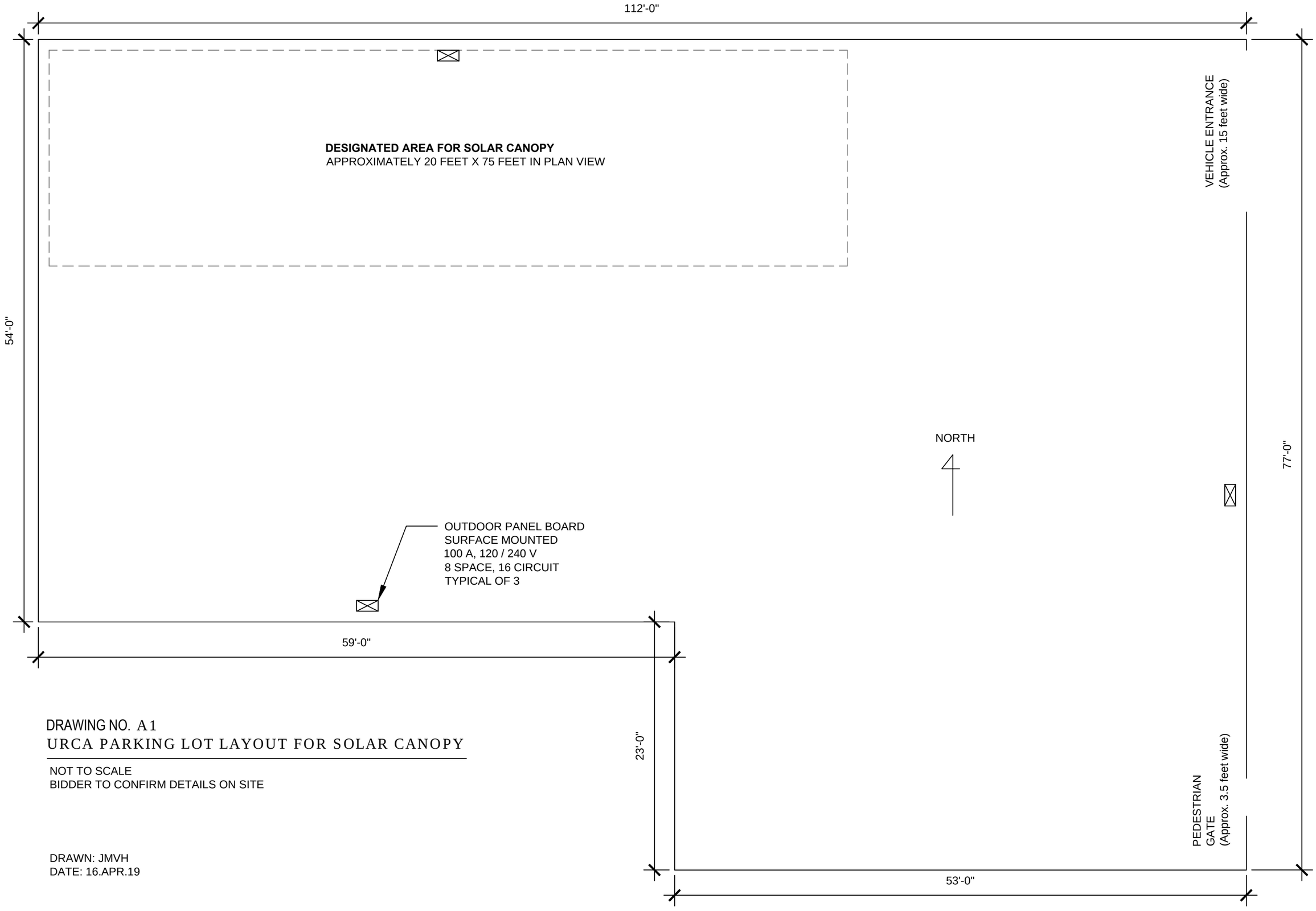
Account Number: 164731-113094 (22.Dec.17 – 23.Apr.18)

458207-113094 (04.May.10 – present)

Location Address: Frederick Street, New Providence

Meter Number: TDE1276

Start Date	End Date	Number of Days	Consumption, kWh
21.Dec.17	22.Jan.18	33	10,400
22.Jan.18	22.Feb.18	31	12,000
22.Feb.18	23.Mar.18	29	11,600
23.Mar.18	23.Apr.18	31	13,200
04.May.18	24.May.18	20	14,400
24.May.18	22.Jun.18	29	14,400
22.Jun.18	24.Jul.18	32	17,200
24.Jul.18	24.Aug.18	31	16,400
24.Aug.18	24.Sep.18	31	15,600
24.Sep.18	22.Oct.18	28	14,000
22.Oct.18	22.Nov.18	31	15,200
22.Nov.18	20.Dec.18	28	12,000



DRAWING NO. A1

URCA PARKING LOT LAYOUT FOR SOLAR CANOPY

NOT TO SCALE
BIDDER TO CONFIRM DETAILS ON SITE

DRAWN: JMVH
DATE: 16.APR.19