Bellevue Convention Center Authority Meydenbauer Center Bellevue, Washington

REQUEST for PROPOSALS (RFP):

PARCS Equipment System Upgrade

March 18, 2020

PROPOSAL DEADLINE:

Tuesday, April 21, 3:00 p.m. local time in Bellevue, Washington

PRE-SUBMITTAL INSPECTION:

Proposers are encouraged but not required to attend a pre-submittal inspection of the parking garage for the purposes of understanding existing structure and system planning at **1:00PM, Friday, March 27, 2020**, on Level P1 of Parking Garage at Meydenbauer Center. Due to the recent outbreak of COVID-19 we will be limiting pre-submittal inspection groups to 10 or less people. **Register to attend** by emailing Jeremy Heinrichs at <u>jheinrichs@meydenbauer.com</u> and include the number in your group. If more than 10 registrations are received for 1:00pm, an additional pre-submittal inspection time will be determined.

PROPOSAL DELIVERY ADDRESS:

Bellevue Convention Center Authority - Meydenbauer Center Level 3 Administrative Offices 11100 NE 6th Street Bellevue, WA 98004

EXPECTED PERFORMANCE PERIOD:

The period of performance for any Contract resulting from this solicitation is expected to begin on or about June 15, 2020 through September 30, 2020. There are as many as 33 days available within this timeframe. Installation availability is contingent upon existing event schedule. The period of consecutive days between the shutdown of existing parking equipment and the operability of new equipment shall not exceed five days. Only Proposers that are able to meet these installation timeframes should respond to this RFP. The BCCA reserves the right at its discretion to extend the contract for a period of time to be specified, in accordance with the Contract.

CONTRACTOR ELIGIBILITY:

This procurement is open to all service providers who satisfy the minimum qualifications stated herein and that are available for work in Washington State.

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1. INTRODUCTION

1.1 **PURPOSE & BACKGROUND**

The Bellevue Convention Center Authority (BCCA), a public corporation chartered by the City of Bellevue (the "City") and has been duly constituted pursuant to RCW 35.21.730 et seq. and Ordinance No. 4092 of the City, has issued this Request for Proposals (RFP) to solicit responses from service providers interested in and qualified to design and install a PARCS system capable of meeting technical requirements necessary to provide for event based parking customizable to clients and customer needs.

1.2 **OBJECTIVE & SCOPE**

The Bellevue Convention Center authority is seeking proposals from qualified contractors to design, specify, install and deliver a first class, turnkey PARCS System for its 435 stall parking facility. Understanding the event-based parking demand of the center, the methods of payment collection and validation options that Meydenbauer Center offers its client, the future growth needs of the equipment, and the application of that knowledge into the design of a solution that provides excellent customer service, highly efficient ingress and egress, and clear cloud-based reporting that will be acceptable for the widest range of applications will be integral to the solution. The successful proposer will have proven design, product and installation expertise.

1.3 MINIMUM QUALIFICATIONS

The Contractor must have no less than five (5) years' experience in PARCS equipment and installation of a scope similar or greater than the BCCA project, must have demonstrated experience installing a system in event-based facilities of equal or greater size, and must be licensed to do business in the State of Washington, as applicable.

1.4 PERIOD OF PERFORMANCE

The period of performance of any contract resulting from this RFP is tentatively scheduled to begin on or about June 29, 2020 and conclude no later than July 3, 2020. The BCCA reserves the right in its sole discretion to extend the performance period as needed to accomplish the objectives.

1.5 **DEFINITIONS**

Definitions for the purposes of this RFP include:

Contractor – Individual or company whose Proposal has been accepted by the BCCA and is awarded a fully executed, written contract.

Proposal – A formal offer submitted in response to this solicitation.

Proposer – Individual or company submitting a proposal in order to attain a contract with the BCCA.

RCW and **WAC** – The "Revised Code of Washington" and the "Washington Administrative Code", respectively, which together provide the statutory and regulatory framework for BCCA procurements.

BCCA – The Bellevue Convention Center Authority is the governmental entity issuing this RFP.

2. GENERAL INFORMATION

2.1 **RFP COORDINATOR**

All communication between potential Proposers and the BCCA shall be with the RFP Coordinator, as follows:

Name	Jeremy	Heinrichs,	Security	&	Transportation
	Manage				
Address	11100 NE	2 6 th Street			
	Bellevue,	WA 98004			
Phone Number	425-450-3	804			
Fax Number	425-637-0				
E-mail Address	<u>jheinrichs</u>	@meydenbauer.	.com		

Proposers are to rely on written statements issued by the RFP Coordinator; any other information will be considered unofficial and non-binding on the BCCA. The BCCA reserves the right to appoint an alternate RFP Coordinator during the solicitation process, as may be necessary and convenient.

2.2 ESTIMATED SCHEDULE OF PROCUREMENT ACTIVITIES

Issue Request for Proposals	March 18, 2020
Pre-bid site survey	March 27, 2020 1:00PM*
Last date for questions regarding RFP	April 10, 2020
Issue addendum to RFP (if applicable)	April 14, 2020
Proposals due	April 21, 2020
Evaluate Proposals	April 22-24, 2020
Conduct oral interviews with finalists, if required	April 27-28, 2020
Announce apparent successful Contractor(s) and send	May 1, 2020
notification via fax or e-mail to unsuccessful Proposers	
Negotiate contract(s)	May 4-8, 2020
Begin contract work	June 1, 2020

**Additional Pre-bid times may be added to limit groups to 10 or less due to COVID-19* The BCCA reserves the right to revise the above schedule.

2.3 QUESTIONS REGARDING THE SOLICITATION

Written questions may be submitted to the RFP Coordinator no later than the close of business, <u>April 10, 2020</u>. A statement of any questions received and the BCCA response(s) in the form of an addendum to the RFP will be issued no later than the close of business, April 14, 2020

2.4 **REVISIONS TO THE RFP**

In the event it becomes necessary to revise any part of this RFP, one or more addenda to the solicitation will be issued. The BCCA also reserves the right to cancel or to reissue the RFP in whole or in part, prior to execution of a contract.

2.5 **PROPRIETARY INFORMATION & PUBLIC DISCLOSURE**

All proposals received under this RFP shall remain confidential until the contract, if any, resulting from this solicitation is executed by the BCCA and the apparent successful Contractor; thereafter, the proposals shall be deemed public records as defined in Chapter 42.56 RCW.

Any information in the proposal that the Proposer desires to claim as proprietary and exempt from disclosure under the provisions of RCW 42.56 must be clearly designated. The page must be identified, as must the particular exception from disclosure upon which the Proposer is making the claim. Each page claimed to be exempt from disclosure must be clearly identified by the word "Confidential" printed on the lower right hand corner of the page. The Proposer must be reasonable in designating information as confidential; marking the entire proposal as exempt from disclosure will not be honored.

The BCCA will consider a Proposer's request for exemption from disclosure; however, the BCCA will make a decision predicated upon Chapter 42.56 RCW and Chapter 143-06 WAC. If any information is marked as proprietary in the proposal, such information will not be made available until the affected Proposer has been given an opportunity to seek a court injunction against the requested disclosure.

All requests for public records should be directed to the BCCA Administrative Services at the address on the face page of this RFP. A charge is made to the requestor for copying and shipping of disclosed public documents, as outlined in RCW 42.56.120. No fee shall be charged for inspection of contract files.

2.6 EQUAL OPPORTUNITY REQUIREMENTS

The successful vendor must comply with BCCA equal opportunity requirements. The BCCA is an Equal Opportunity Employer. It does not discriminate and does not do business with others who discriminate on the basis of race, color, creed, sex, age, nationality or disability.

2.7 COMPLIANCE WITH LAWS AND REGULATIONS

In addition to nondiscrimination and affirmative action compliance requirements previously listed, the vendor awarded the contract shall comply with federal, state and local laws, statutes and ordinances relative to the execution of the work. This requirement includes, but is not limited to, protection of public and employee safety and health; environmental protection; waste reduction and recycling; the protection of natural resources; permits; fees; taxes; and similar subjects.

2.8 INDEMNIFICATION

The vendor shall hold harmless, defend, and indemnify the BCCA and the BCCA's officers, agents, and employees against any liability that may be imposed upon them by reason of the vendor's failure to provide compensation coverage or liability coverage.

2.9 SUBMISSION OF PROPOSALS

Proposals may be submitted in hardcopy or electronically, but may <u>not</u> be transmitted via facsimile.

<u>If submitting the Proposal in hard copy, the following information is applicable</u>. Proposers are required to submit three (3) copies of their Proposal. One (1) copy <u>must</u> have original signatures and the additional copies may have photocopied signatures. The Proposal, whether mailed or hand-delivered, must be received by the BCCA no later than <u>3:00 p.m. local time in Bellevue on Monday</u>, <u>April 20, 2020</u>. The Proposal is to be sent to the RFP Coordinator at the address noted in Section 2.1, above. The submittal package should be clearly marked to the attention of the RFP Coordinator, and should include the notation "PARCS Equipment System Upgrade".

Consultants mailing Proposals should allow for normal mail delivery schedules to ensure timely receipt of their Proposals by the RFP Coordinator. Hand-delivered Proposals will <u>only</u> be accepted at the reception desk, BCCA Level 3 Administrative Offices, 11100 NE 6th Street, Bellevue. Proposers assume all risk for the method of delivery chosen; the BCCA will accept no responsibility for delays caused by any delivery service or external circumstance, e.g. traffic congestion.

<u>If submitting the Proposal electronically, the following information is applicable</u>. Proposals being submitted electronically must be sent as an attachment to an e-mail, addressed to the RFP Coordinator as noted in Section 2.1, above, and must include the notation "RFP Submittal for PARCS Equipment System Up-grade" in the e-mail subject line. Proposals must arrive at the BCCA by <u>3:00 p.m. local time in Bellevue on Monday, April 20, 2020</u>. Attachments to the e-mail shall be in Microsoft Word[®] and Excel[®] software, and/or in .pdf file form. Proposers submitting Proposals via e-mail must also send hardcopies of the cover submittal letter and the Certifications and Assurances form (Attachment A) with original signatures to the RFP Coordinator. The BCCA will accept no responsibility for problems encountered in the e-mail transmittal process.

Proposers are specifically advised that as to Proposal submittal:

1. Late Proposals will not be accepted and will be automatically disqualified from further consideration.

2. The Proposal must respond to the procurement requirements set forth herein.

3. The Proposal must be complete, must stand on its own merits, and should not respond by referring to material presented elsewhere.

4. A concise and well thought-out Proposal is more advantageous to the Proposer than a voluminous one.

5. All Proposals and any accompanying documentation submitted in response to this procurement shall become the property of the BCCA and will not be returned.

2.10 ACCEPTANCE PERIOD

Proposals must provide sixty (60) days for acceptance by BCCA from the due date for receipt of proposals.

2.11 **RESPONSIVENESS**

All Proposals will be reviewed by the RFP Coordinator to determine compliance with administrative requirements and instructions specified in the RFP. Proposers are hereby specifically notified that failure to comply with any part of the RFP may result in rejection of the Proposal as non-responsive. The BCCA reserves the right, however, at its sole discretion to waive minor administrative irregularities in the Proposals received.

2.12 **REJECTION OF PROPOSALS**

The BCCA reserves the right at its sole discretion to reject any and all Proposals received without penalty.

2.13 MOST FAVORABLE TERMS

The BCCA reserves the right to make an award without further discussion of any Proposal submitted. Therefore, the Proposal should be submitted on the most favorable terms that can be offered. The BCCA does reserve the right to contact a Proposer for clarification of its Proposal during the evaluation process. In addition, the BCCA reserves the right to enter into contract negotiations with the apparent successful Proposer, which may include discussions regarding the terms of the proposal. Contract negotiations may result in incorporation of some or all of the subject proposal. The Proposer should be prepared to accept this RFP document for incorporation into a contract resulting from this solicitation. It is also understood that the Proposal will become part of the BCCA's official procurement file.

2.14 CONTRACT AWARD AND EXECUTION

The BCCA shall not be bound or in any way obligated until both parties have executed a vendor contract. The general conditions and specification of the RFP and the successful vendor's response, as amended by contract between the BCCA and the successful vendor, including e-mail or written correspondence relative to the RFP, will become part of the contract documents. Additionally, the BCCA will verify vendor representations that appear in the proposal. Failure of a vendor to perform services as represented may result in elimination of the vendor from further competition or in contract cancellation or termination.

The vendor selected as the apparently successful vendor will be expected to enter into a contract with the BCCA. The foregoing should not be interpreted to prohibit either party from proposing additional contract terms and conditions during negotiations of the final contract. If the selected vendor fails to sign the contract within five (5) business days of delivery of the final contract, the BCCA may elect to cancel the award and award the contract to the next-highest ranked vendor. All parties may incur no cost chargeable to the proposed contract before the date of execution of the contract.

2.15 COSTS TO PROPOSE

The BCCA will not be liable for any costs incurred by the Proposer in preparation of a submittal in response to this RFP, in conduct of a presentation, or any other activities related to responding to the RFP.

2.16 NO OBLIGATION TO CONTRACT

Issuance of this RFP does not obligate the BCCA to contract in whole or in part for services specified herein.

3. PROPOSAL FORM & CONTENTS

Written proposals must be prepared on letter-size $(8-1/2 \times 11 \text{ inch})$ paper with tabs separating the major sections of the Proposal; electronically-submitted Proposals are to be formatted analogously. Proposals are not to exceed twenty (20) pages. The major sections of the Proposal are to be in the order noted below:

- 1. Signed Letter of Submittal, including signed Certifications and Assurances
- 2. Design and Technical Proposal
- 3. Qualifications
- 4. Cost Proposal

3.1 LETTER OF SUBMITTAL & AFFIDAVIT CONCERNING CONFLICTS OF INTEREST

The Letter of Submittal must be signed and dated by a person authorized to legally bind the Proposer to a contractual relationship, e.g., the President or Executive Director if a corporation, the Managing Partner if a partnership, or the proprietor if a sole proprietorship. This introductory letter should convey the Proposer's interest in the project, and highlight particular strengths of the proposed service provider. In addition, it is to include by attachment the following information about the Proposer and any proposed subcontractors:

1. Name, address, principal place of business, telephone/fax number, and e-mail address of legal entity or individual with whom contract would be written.

2. Name, address, and telephone number of the principal officer(s) (President, Vice President, Treasurer, Chairperson of the Board of Directors, etc.).

3. Legal status of the Proposer (sole proprietorship, partnership, corporation, etc.) and the year the entity was organized to do business as it now substantially exists.

4. Federal Employer Tax Identification number or Social Security number <u>and</u> the Washington Uniform Business Identification (UBI) number as issued by the Washington State Department of Revenue.

5. Location of the facility from which the Contractor would operate.

6. Identification of any current or former BCCA employees on the firm's governing board or in a management position as of the date of the proposal. Include their position and responsibilities within the Proposer's organization. If following a review of this information, it is determined by the BCCA that a conflict of interest exists, the Proposer may be disqualified from further consideration for the award of a contract.

The Affidavit Concerning Conflicts of Interest form (Attachment A to this RFP) must be signed and dated by a person authorized to legally bind the Proposer to a contractual relationship, and is to be included with the Letter of Submittal in the proposal.

3.2 DESIGN AND TECHNICAL PROPOSAL

The Design and Technical Proposal must contain a comprehensive description of services including the following elements:

A. Manufacturer make/model selection – Provide justification for the selection and suitability of the proposed solution based on use of parking facility and understanding of needs and desired outcomes. Include relevant manufacturer specifications and literature as supporting information. It is encouraged to involve the manufacturer of the proposed solution in design efforts.

B. Equipment List – Provide an itemized list of major components, listing manufacturer, model number, quantity, features and functionality.

C. Infrastructure Requirements – Electrical requirements necessary to appropriately power the proposed solution shall be stated including electrical service and structural supports required by BCCA. Space requirements necessary for any equipment including placement of onsite servers shall be stated.

D. Proposed Work Plan – Include all project requirements and the proposed tasks, services, activities, etc. necessary to accomplish the scope of the project as defined in the RFP. This section must contain sufficient detail to convey to members of the evaluation team the Proposer's knowledge of the facility tasks, subjects and skills necessary to successfully complete the project. Include any required involvement of BCCA staff. The Proposer may also present any creative approaches that might be appropriate and may provide any pertinent supporting documentation.

E. Project Schedule – Include a proposed project schedule indicating when the elements of the Work will be completed and when deliverables will be provided.

F. Deliverables – Fully describe proposed deliverables to be submitted under the Contract.

3.3 QUALIFICATIONS

A. Statement of Qualifications

1. **Company Information** – Provide an overview of a company history of performing similar work. Cite relevant experience working with Washington State government agencies.

2. Staff Qualifications/Experience – Provide a description of the proposed project team structure Identify staff, including subcontractors, who will be assigned to the potential contract, indicating the responsibilities and brief qualifications and relevant equivalent project experience of such personnel. The Proposer must commit that staff identified in its Proposal will actually perform the assigned work. Any staff substitution must have the prior approval of the BCCA.

B. Experience of the Proposer; References - On Attachment B: References Include a list of contracts the Proposer has had during the last five (5) years that relate to the Proposer's ability to perform the services needed under this RFP. List contract reference numbers,

contract period of performance, contact persons, telephone/fax numbers, and e-mail addresses, and briefly describe the type of service provided. The Proposer and staff proposed to provide the services must grant permission to the BCCA to contact references, and others for whom services have been provided. Do not include current BCCA staff as references. References will be contacted and scored for the top-ranking Proposal(s) only.

C. Related Information

1. If the Proposer or any subcontractor has contracted with the BCCA during the past 24 months, indicate the contract number and project description and/or other information available to identify the contract.

2. If a member of the Proposer's staff or subcontractor's staff was an employee of the BCCA during the past 24 months, or is currently a BCCA employee, identify the individual by name, job title or position held and separation date.

3. If the Proposer has had a contract terminated for default in the last five years, describe such incident. Termination for default is defined as notice to stop performance due to the Proposer's non-performance or poor performance, wherein the issue of performance was either (a) not litigated due to inaction on the part of the Proposer, or (b) litigated and such litigation determined that the Proposer was in default.

Submit full details of the terms for default including the other party's name, address, and phone number. Present the Proposer's position on the matter. The BCCA will evaluate the facts as presented and may, at its sole discretion, reject the proposal on the grounds of the past experience. If no such termination for default has been experienced by the Proposer in the past five years, so indicate.

3.4 COST PROPOSAL

The evaluation process is designed to award this procurement not necessarily to the least cost proposal, but rather to the proposal(s) which represent the best overall value in meeting the requirements of this RFP. However, Proposers are encouraged to submit proposals that are consistent with BCCA efforts to conserve public resources.

Identification of Costs – Proposers may elect to use the attached Bid Form, or use their own cost proposal form/format, Proposers are to identify all costs to be charged for performing the services necessary to accomplish the objectives of the contract. Included in the Scope of Work will be the identification of costs associated with a base system, and additive alternates. Each should be priced separately. Note that contractors are required to collect from the BCCA and remit to the WS Department of Revenue any Washington State sales tax applicable to the contract.

4. EVALUATION & CONTRACT AWARD

Responsive Proposals will be evaluated in accordance with the requirements stated in the solicitation and any addenda issued. Only those Proposals meeting all mandatory submittal requirements will be evaluated for possible contract award. The evaluation of Proposals shall be accomplished by an evaluation team to be designated by the BCCA, which will determine the ranking of the Proposals.

4.1 **PROPOSAL SCREENING**

Proposals received by the published deadline will be administratively screened for "responsiveness", i.e., meeting all the material requirements of the solicitation, and for proposer "responsibility", i.e., being a service provider in good standing in the State of Washington, eligible for receiving public contracts.

4.2 CLARIFICATION OF PROPOSAL

The RFP Coordinator may contact a Proposer for clarification of any portion of the respective Proposal.

4.3 EVALUATION WEIGHTING & SCORING

For all Proposals determined to be responsive to the requirements of the solicitation and determined to have been submitted by responsible Proposers, the following weighting and points will be assigned for evaluation purposes:

Design and Technical Proposal – 40%		40 points
System design approach	15 points (maximum)	-
Equipment selection, suitability	15 points (maximum)	
Thoroughness	10 points (maximum)	
Qualifications – 20%		20 points
Company History	5 points (maximum)	-
Staff Qualifications/Experience	5 points (maximum)	
References	10 points (maximum)	
Cost Proposal – 40%		40 points

100 points

Total

4.4 ORAL PRESENTATIONS

The BCCA, at its sole discretion, may select the top scoring finalist(s) from the written evaluation for an oral presentation and final determination of contract award. Should the BCCA elect to hold oral presentations, it will contact the top-scoring firm(s) to schedule a date, time and location. Commitments made by a Proposer at the oral interview, if any, will be considered binding.

4.5 NOTIFICATION TO PROPOSERS

Firms whose proposals have not been selected for further negotiation or award will be notified via fax or by e-mail.

4.6 **PROTEST PROCEDURE**

Proposers protesting this procurement shall follow the procedures described below; protests that do not follow these procedures will not be considered. This procedure constitutes the sole administrative remedy available regarding this procurement, and is available only to those Proposers who submitted a response to this solicitation document.

Upon completing the debriefing conference, the Proposer is allowed three (3) business days to file a protest with the RFP Coordinator. Protests may be submitted by facsimile or e-mail. All protests must be in writing and signed by the protesting party or an authorized agent, e.g., legal counsel. The protest must state the grounds for the protest with specific facts and complete statements of the action(s) being protested. A description of the relief or corrective action being requested should also be included. All protests shall be addressed to the RFP Coordinator.

Only protests stipulating an issue of fact concerning the following subjects shall be considered:

- A matter of bias, discrimination or conflict of interest on the part of an evaluator.
- Errors in computing the score.
- Non-compliance with procedures described in the procurement document or with BCCA policy.

Protests not based on procedural matters will not be considered. Protests will be rejected as without merit if they address issues such as: 1) an evaluator's judgment on the quality of a proposal, or 2) BCCA's assessment of its own needs or requirements.

Upon receipt of a protest, a protest review will be held by the BCCA. The BCCA Executive Director or an employee delegated by the Executive Director who was not involved in the procurement will consider the record and all available facts and issue a decision within five (5) business days of receipt of the protest. If additional time is required, the protesting party will be notified of the delay.

In the event a protest may affect the interest of another Proposer under the RFP, such Proposer will be given an opportunity to submit its views and any relevant information on the protest to the RFP Coordinator.

The final determination of the protest shall:

- Find the protest lacking in merit and uphold the BCCA's action; or
- Find only technical or harmless errors in the BCCA's acquisition process and determine the BCCA to be in substantial compliance, and therefore reject the protest; or
- Find merit in the protest and provide the BCCA options which may include:
 - Correct the errors and re-evaluate all proposals, and/or
 - Reissue the solicitation document and begin a new process, or
 - Make other findings and determine other courses of action as appropriate.

If the BCCA determines that the protest is without merit, the BCCA will enter into a contract with the apparently successful Proposer. If the protest is determined to have merit, one of the alternatives noted in the preceding paragraph will be taken.

5. RFP ATTACHMENTS

Attachment A – Affidavit Concerning Conflicts of Interest Attachment B - References Attachment C - Cost Proposal Form (optional)

6. RFP EXHIBITS

Exhibit A – Scope of Work

Attachment A Affidavit Concerning Conflicts of Interest

STATE OF:	_)	
•)
COUNTY OF:	_)	

The undersigned, being first duly sworn, on oath states on behalf of ______, hereinafter called the Proposer, as follows:

A. CONFLICT OF INTEREST

That the Bidder, by submitting its Qualifications to perform or provide work, services or materials, has thereby covenanted, and by this affidavit does again covenant and assure, that it has no direct or indirect pecuniary or proprietary interest, and that the Bidder shall not acquire any such interest, which conflicts in any manner or degree with the work, services or materials required to be performed under a contract which may result from this Request for Qualifications.

ss.

B. CONTINGENT FEES AND GRATUITIES

That the Proposer, by submitting its Qualifications to perform or provide work, services or materials, has thereby covenanted, and by this affidavit does again covenant and assure:

- 1. That no person or selling agency except bona fide employees or designated agents or representatives of the Proposer has been employed or retained to solicit or secure this submittal with an agreement or understanding that a commission, percentage, brokerage, or contingent fee would be paid; and
- 2. That no gratuities, in the form of entertainment, gifts or otherwise, were offered or given by the Proposer or any member of its agents, employees or representatives, to any official, member or employee of the Owner or other governmental agency with a view toward securing a Contract or securing favorable treatment with respect to the awarding or amending, or the making of any determination with respect to the performance of a contract which may result from this Request for Qualifications.

SIGNED this day of, 20	
Name of Proposer	
By:	
Title:	
SUBSCRIBED AND SWORN to before me this day of	, 20_

NOTARY PUBLIC in and for the State of Washington

Residing at _____

My Appointment Expires _____

Attachment B Client References

Client References #1

Client Name	
Contact Name	
Title	
Phone Number	
Email Address	
Type of Services Provided	
Services Provided Similar to	□ Yes – Explain similarities:
the BCCA's Scope of Ser-	
vices?	□ No

Client References #2

Client Name	
Contact Name	
Title	
Phone Number	
Email Address	
Type of Services Provided	
Services Provided Similar to	□ Yes – Explain similarities:
the BCCA's Scope of Ser-	
vices?	□No

Client References #3

Client Name	
Contact Name	
Title	
Phone Number	
Email Address	

Type of Services Provided	
Services Provided Similar to the BCCA's Scope of Ser-	□ Yes – Explain similarities:
vices?	□ No

Client References #4

Client Name	
Contact Name	
Title	
Phone Number	
Email Address	
Type of Services Provided	
Services Provided Similar to	□ Yes – Explain similarities:
the BCCA's Scope of Ser-	
vices?	□ No

Client References #5

Client Name	
Contact Name	
Title	
Phone Number	
Email Address	
Type of Services Provided	
Services Provided Similar to	□ Yes – Explain similarities:
the BCCA's Scope of Ser-	
vices?	□No

ATTACHMENT C: COST PROPOSAL SUBMITTAL SHEET

Pursuant to and in compliance with the Bid Documents the Proposer agrees to furnish perform the Work for the following sums, <u>excluding Washington State Sales Tax</u>.

Description	Bid Amounts	
	Dollars	Cents
Lump Sum Base System Cost		
Alternate 1: LPR System		
Alternate 2: Illuminated Lane Controllers		

Exhibit A – Scope of Work

PARKING ACEESS AND REVENUE CONTROL SYSTEM

PART 1 - GENERAL

1.01 LIST OF ABREVIATIONS

- 1. ACS Access Control System
- 2. ADA Americans with Disabilities Act
- 3. AVI Automatic Vehicle Identification
- 4. CMS Count and Monitoring System
- 5. EMI Electromagnetic Interference
- 6. ENS Entry Station
- 7. EXS Exit Station
- 8. IBC International Bar Code
- 9. ID Identification Device
- 10. LCD Liquid Crystal Display
- 11. LED Light Emitting Diode
- 12. LPN License Plate Number
- 13. LPR License Plate Recognition
- 14. MC Meydenbauer Center
- 15. PARCS Parking Access and Revenue Control System
- 16. PCI-DSS Payment Card Industry Devise Security Standard
- 17. RF Radio Frequency
- 18. RFID Radio-Frequency Identification
- 19. SCM System Control Menu
- 20. UL Underwriter's Laboratory
- 21. UPS Uninterruptable Power Supply
- 22. VoIP Voice over Internet Protocol
- 1.02 DESCRIPTION OF WORK

- A. Furnish, design, manufacture and install a fully operating Parking Access and Revenue Control System (PARCS) capable of functioning in the manner described herein.
- B. Conduit for the PARCS will be provided under a separate contract. Cabling for the PARCS will be Category 6 cable, which will be plenum-rated and can withstand a wet environment without degrading electrical performance of the PARCS.
 - 1. All wiring for the system (power, control, communication, etc.) will be provided and installed under this contract.
 - 2. If additional conduit is required, the conduit may be installed exposed if it is impractical to conceal it in the structure.
- C. Fully operating Parking Access and Revenue Control System (PARCS) including, but not limited to, the following:
 - 1. Automatic Barrier Gates.
 - 2. Vehicle Detection Systems.
 - 3. Access Control Units (Entry/Exit Stations, AVI Readers and Transponders or LPR Cameras).
 - 4. VoIP Intercom System.
 - 5. Illuminated Lane Controllers.
 - 6. Illuminated Facility Spaces Available Display.
 - 7. Pedestrian Alert Systems at External Exit Lanes (utilize existing system if possible).
 - 8. Facility Management System: Including, but not limited to, Central Computer (server) with Work Station, and Software.
 - 9. Fee Computers with Cash Drawers and Fee Indicators in Existing Booths.
 - 10. Storage Rack for Parking Control Equipment.
- D. The Meydenbauer Center (MC) is contracting for the procurement of a vendor-hosted, scalable Cloud-based integrated PARCS for the parking garage. MC expects this complete parking conversion will increase overall parking efficiency, system productivity, and improve customer service, while ensuring data security and system reliability. The desired PARCS will work via Web browser, function on all mobile platforms, possess intuitive user management, accommodate locationbased and online sales, have interactive reporting, and provide multiple media access, such as barcode, AVI, Smart Phone, LPR (as an alternative, online reservations, etc.
- E. MC wants to know upfront from the vendor of any ongoing licensing fees and annual costs.

- F. The PARCS shall include all hardware, software, licenses, installation, training and support services. Vendor shall be responsible for identifying existing and needed infrastructure, locating existing and future equipment, PARCS design, installation, power and communication cables, connection, termination, commissioning, training and all related elements to provide a fully operational PARCS. The PARCS shall have the following requirements and features.
 - 1. The PARCS shall be able to operate in the following modes:
 - a. Pay at exit to an exit station or mobile hand-held computer.
 - b. Pay on entry to an entry station or mobile hand-held computer.
 - c. Pre-Pay-printed barcode or barcode on Smart Phone.
 - d. Automatic Vehicle Identification (AVI) or License Plate Recognition (LPR).
 - e. Other modes suggested by the PARCS Vendor.
 - 2. The Central Management System shall be a network consisting of a rack-mounted server, task or subsystem computers, and workstations (physical and remote) providing on-line monitoring via the Cloud.
 - 3. The system shall allow for the addition of PARCS equipment, users, locations and modules at a later time.
 - 4. The PARCS shall operate in on-line and off-line mode.
 - 5. The PARCS shall comply with ANSI and ISO Standards.
 - 6. All time-dependent functions shall utilize real-time clock synchronization with a single system clock
 - 7. PARCS hardware and software shall be securable such that unauthorized users cannot gain access to the system.
 - 8. Account for all revenue for the facility by lane, employee, customer, event, program, payment method, and time period, with complete audit trails.
 - 9. Minimize theft and loss of revenue.
 - 10. Maintain a PCI-DSS-compliant environment, consistent with evolving standards and requirements.
 - 11. Provide for flexible rate structures capable of handling parking customers of all types.
 - 12. The PARCS shall have mass validation capabilities
 - 13. Accurately calculate appropriate fees for all manners and transactions.

- 14. Increase efficiency of operations.
- 15. Provide full reporting (revenue and statistics) and pertinent operational and management reports.
- 16. Provide an intuitive and use-friendly interface for customers and operating personnel.
- 17. Be fully protected against and not affected by weather/environmental conditions, including temperature extremes, humidity, rain, dust, RFI/EMI, and static electricity.
- 18. Meet all ADA requirements (federal, state, and local) as of the date of acceptance.
- 19. The PARCS shall be state-of-the-art.

1.03 RELATED WORK

- A. Other specification sections that are directly related to the work of this section include, but are not limited to, the following:
 - 1. Section 03 30 00 Cast-in-Place Concrete
 - 2. Division 26 Electrical
 - 3. Division 27 Communications

1.04 QUALITY ASSURANCE

- A. Supplier shall have at least five (5) years of experience in the parking control field and maintain a stock of replacement parts for the equipment specified.
 - 1. Contractor shall supply list of anticipated time to replace any piece of equipment.
- B. In the event the parking control system manufacturer is not the installer, then the installer shall be approved in writing by the system manufacturer.
 - 1. Said installer shall have previously worked successfully with the equipment manufacturer and shall submit names, locations, contacts and telephone numbers for the five most recently installed, completed projects.
- C. The equipment shall be designed, fabricated and installed to operate effectively under the climate and exposure conditions of the installation site and of the individual site requirements of each entrance/exit lane.
 - 1. All equipment shall be new.
- D. If required by the Owner, all electrical equipment shall be approved by Underwriters Laboratories, Inc. (UL) where such approval is standard in the industry.

1.05 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, specifications, installation, and maintenance instructions for each type of parking equipment required.
 - 1. Provide templates for anchor bolts and other items encased in concrete or below finished surfaces in sufficient time so as not to delay the Work.
 - 2. Documentation: The Contractor shall supply three sets of wiring diagrams and maintenance manuals for each of the major components of the system, as well as the entire as-built system wiring diagrams. The Contractor will supply operating manuals for all equipment in the entire system. A minimum of three manuals per component shall be provided.

1.06 DELIVERY, STORAGE, HANDLING

- A. The equipment shall be delivered to the site packaged to prevent damage and marked for easy identification of each component.
- B. The equipment shall be stored in a clean, dry location. Damaged equipment shall be replaced at no cost to the Owner.
- 1.07 WARRANTY
 - A. All equipment is to be covered by a manufacturer's warranty covering all parts and labor for a minimum one-year period, excluding misuse or vandalism.
 - B. All warranties commence when the respective equipment is totally operational and is accepted in writing as such by the Owner.
 - C. Local service shall be provided to maintain all equipment and systems during the warranty period with regularly scheduled maintenance on a quarterly basis.
 - D. In addition to scheduled maintenance, in the case of any malfunction, the response time for repair shall be limited to four (4) hours and no equipment, system or component shall be left non-operable after the next business day following notification by the Owner.
 - E. Include, as an option, the cost to extend warranty for a second and third year.

1.08 SYSTEM DESCRIPTION

A. General: The parking facility accommodates event, permit (monthly) and transient parkers. Permit parkers will enter and exit by activating an entry or exit AVI reader with the use of a transponder. An alternate to the AVI system for permit parkers is a License Plate Recognition (LPR) camera system, if not cost prohibitive. The LPR system shall be priced separately. Event and transient parkers will be able to pre-pay on line and scan a prepaid barcode to enter and exit, pay upon entry with a credit card to an entry station, pay upon entry or exit to a wireless hand-held computer with printer, and pay upon exit to an exit station. The PARCS system shall integrate real-time vehicle counts and sign control. The Owner desires to be able to remotely open and close gates (including overhead grills), turn lights on and off, and change rates. The Owner also desires to be able to issue a barcode to a

client to enter and exit the garage, which alerts the event manager when the client enters and exits the garage.

- B. The facility provides a total of approximately 419 event spaces plus additional spaces for permit (monthly) parkers.
- C. Description of Lanes:
 - 1. There are three lanes that are currently uncontrolled off of NE 6th Street for all parking patrons to enter and exit the garage. Two of the lanes will be reversible. LED lane status signs will be installed on the interior and exterior above each lane to indicate if the lanes are open or closed with " \downarrow " in green when open or "X" in red when closed. The illuminated lane controller signs are to be priced as an alternate. There will also be a Spaces Available Display indicating the number of event spaces available in the garage and if the event parking is full. The location of the display is to be determined.
 - 2. There are five (5) internal traffic lanes with concrete islands and cashier booths, which will remain. The existing equipment in the lanes will be removed and replaced entirely with new equipment, with the exception of the Pedestrian Alert System (if possible). The selected contractor shall be responsible for the decommissioning, removal and disposal of all existing PARCS equipment. There are two (2) dedicated entry lanes, two dedicated exit lanes and one (1) reversible lane. Vehicles will be counted as they enter and exit the garage by type of parker based on the transaction. They will be counted as event or transient parkers when they pull a ticket upon entry, pay in lane upon entering and/or exiting to a pay station or hand-held computer, scan a pre-paid bar code at the entry or exit, or present a validated ticket for partial or full discounted parking upon exit.
- D. Operation:
 - 1. Entrance Lanes Permit Parkers (AVI)

a. The entering vehicle will be automatically detected as it passes over the inductive loop in the pavement and the AVI reader will be activated.

b. When the transponder is read by the AVI reader, the permit monitoring equipment will check the transponder number for validity and the entry/exit sequence for an antipassback violation.

c. If the transponder is valid and the entry/exit sequence is correct, the gate will be activated and the gate arm will rise to allow passage of the vehicle into the facility.

d. When the vehicle passes over the gate inductive loop, the gate will close and the entry lane equipment will reset to repeat the operation for the next succeeding vehicle.

e. If the transponder fails validity or anti-passback checks or the transponder is not read by the AVI reader, the entry station display will visually indicate for the parking patron to pull a ticket to enter and to contact security. There should be an audible message to pull a ticket and to contact security as well.

- f. There will two types of permit holders. One group will pay on a monthly basis and will typically park in the facility several times each month. Another group will be considered "Daily" employee parkers and will park in the facility infrequently. Their credit card number will be on file and they will be charged once each day they park in the facility. They will have in/out privileges without being charged multiple times a day for parking.
- 2. <u>Alternate</u> Entrance Lanes Permit Parkers (LPR System)
 - a. The operation will be the same as described above except the AVI readers and transponders will be replaced with LPR cameras.
 - b. Vendor will equip entry, exit and reversable lanes with License Plate Reconition (LPR) cameras as a primary access credential for permit parkers entering the parking structure.
 - c. When the license plate number is read by the cameras, the permit monitoring equipment will check the license plate number for validity and the entry/exit sequence for an antipassback violation.

d. If the license plate is valid and the entry/exit sequence is correct, the gate will be activated and the gate arm will rise to allow passage of the vehicle into the facility.

e. When the vehicle passes over the gate inductive loop, the gate will close and the entry lane equipment will reset to repeat the operation for the next succeeding vehicle.

- f. If the license plate number fails validity or anti-passback checks or the license plate number is not read by the camera system, the entry station display will visually indicate for the parking patron to pull a ticket to enter and to contact security. There should be an audible message to pull a ticket and to contact security as well.
 - g. Vendor will be responsible for all gantries or other infrastructure necessary to mount cameras over each lane and all associated hardware and software necessary to provide a fully functioning system.
 - 3. Entrance Lanes Event and Transient Parkers

a. The entering vehicle will be automatically detected as it passes over the inductive loop in the pavement and the entry station will be activated.

b. The entry station will issue one (1) and only one ticket to each patron when the patron pushes the ticket issue button.

c. When the patron takes the ticket, the entry gate will be activated and the gate arm will rise to allow the vehicle passage into the parking garage.

d. Transient parkers will alternatively be able to enter the parking garage by inserting a credit card into the entry station or scanning a pre-paid barcode. Once processed, the entry gate will automatically open.

e. When the vehicle passes over the gate inductive loop, the gate will close, and the lane will reset to repeat the operation for the next vehicle.

f. If a vehicle does not enter the parking area after obtaining a ticket, the entrance gate will return to the down position within ten (10) seconds. The entry lane equipment will reset to issue a valid ticket, accept a credit card or allow access for a permit holder.

4. Exit Lanes - Permit (Monthly) Parkers (AVI)

a. The exiting vehicle will be automatically detected as it passes over the inductive loop in the pavement and the AVI reader will be activated.

b. When the transponder is read by the AVI reader, the permit monitoring system will check the transponder number for validity and the entry/exit sequence for an anti-passback violation.

c. If the transponder is valid and the entry/exit sequence is correct, the gate will be activated and the gate arm will rise to allow passage of the vehicle from the facility.

d. When the vehicle passes over the gate inductive loop, the gate will close, and the exit lane equipment will reset to repeat the operation for the next vehicle.

e. If the transponder is invalid, or if the entry/exit sequence is incorrect, the transponder will be rejected and the gate arm will not rise to allow passage of the vehicle through the lane. The permit monitoring equipment will record the time, transponder number, invalid action and print the message on the remote printer. A text message will be sent via Smartphone to security indicating AVI reader location, user I.D. number and type of invalid access. It should also be possible for security to open a gate remotely with a Smartphone after receiving the text message. The exit lane equipment will reset for processing the next vehicle.

- 5. <u>Alternate</u> Exit Lanes Permit (Monthly) Parkers (LPR System)
 - a. The operation will be the same as described above except the AVI readers and transponders will be replaced with LPR cameras.
 - b. Vendor will equip entry, exit and reversable lanes with License Plate Reconition (LPR) cameras as a primary access credential for permit parkers entering the parking structure.
 - c. When the license plate number is read by the cameras, the permit monitoring equipment will check the license plate number for validity and the entry/exit sequence for an antipassback violation.

d. If the license plate is valid and the entry/exit sequence is correct, the gate will be activated and the gate arm will rise to allow passage of the vehicle into the facility.

e. When the vehicle passes over the gate inductive loop, the gate will close and the entry lane equipment will reset to repeat the operation for the next succeeding vehicle.

- f. If the license plate number fails validity or anti-passback checks, a text message will be sent via Smartphone to security indicating camera location (s), user I.D. number and type of invalid access. It should also be possible for security to open a gate remotely with a Smartphone after receiving the text message. The exit lane equipment will reset for processing the next vehicle.
 - g. System will retain PCS readers as redundant credentials.
 - h. Vendor will be responsible for all gantries or other infrastructure necessary to mount cameras over each lane and all associated hardware and software necessary to provide a fully functioning system.
 - i. Owner will provide power and communication between server and lane location as specified by the Vendor to support a fully functioning system.
 - 6. Exit Lanes Event and Transient Parkers

a. The exiting vehicle will be automatically detected as it passes over the front inductive loop.

b. Event and transient parkers will be able to pay for parking as they exit the facility. They will insert their parking ticket into the exit station. After insertion of the ticket, the patron will insert cash or a credit card into the exit station. The machine will relay the credit card identification and the amount to be paid directly to the credit card company for verification and collection. Once verified, the exit gate will automatically open.

- c. Event and transient parkers that enter the parking garage by inserting a credit card will be able to exit the garage by inserting the same credit card into the exit station. The machine will relay the credit card identification and the amount to be paid directly to the credit card company for verification and collection. Once verified, the exit gate will automatically open.
- d. Event and transient parkers will be able to exit the facility by scanning a pre-paid barcode
 - e. When the vehicle passes over the gate inductive loop, the gate will close, and the lane will reset to repeat the operation for the next vehicle.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Parking control system as described herein shall be as manufactured and/or supplied by:
 - 1. Parking Equipment and License Plate Recognition (LPR)
 - a. Skidata
 - b. TIBA
 - c. Scheidt + Bachman USA
 - d. T2 Systems and HTS

- e. DKS Doorking, Inc.
- f. WPS USA
- g. FlashParking
- h. Or approved equivalent
- 2. Automatic Vehicle Identification (AVI)
 - a. Transcore
 - b. TagMaster
 - c. Or approved equivalent
- 3. Lane Status Signs and Parking Guidance System
 - a. Signal-Tech
 - b. Daktronics
 - c. Park Assist
 - d. Parking Sense USA, Inc
 - e. Or approved equivalent
- 4. Intercom
 - a. Aiphone
 - b. DuKane
 - c. Tronics, A Hubbell Company
 - d. Talk-A-Phone
 - e. Or approved equivalent
- 5. Barcode
 - a. International Bar Code Systems (IBC)
 - b. Or approved equivalent
- 6. Pedestrian Alert System (maintain the existing system if possible)
 - a. Cooper Industries
 - b. Or approved equivalent

2.02 EQUIPMENT LIST

- A. The following equipment list consists of basic system components. Auxiliary items required for the proper functioning of the system, whether mentioned or not, shall include but not be limited to: heaters, fans, wiring, transformers, relays, pedestals, etc. It is the manufacturer's responsibility to provide every component necessary for a complete and functional system.
- B. Standard finish for all of the equipment.
- 2.03 SYSTEM CONFIGURATION

- A. NE 6th Street Entrance, Exit and Reversable Lanes
 - 1. Entrance Lanes (Total 1)
 - (2) LED Lane Status Sign
 - (1) Spaces Available Display
 - 2. Reversible Lane (Total 2)
 - (2) LED Lane Status Sign
 - (1) Pedestrian Warning System
- B. 12th Avenue NE
 - (1) Pedestrian Warning System (maintain existing system if possible)
- C. Internal Entrance, Exit and Reversible Lanes
 - 1. Entrance Lane (Total 2)
 - (1) AVI Reader or LPR Cameras (number and location to be determined)
 - (1) Parking Barrier Gate
 - (1) Entry Station with Intercom and Barcode Reader
 - (1) Digital Self-Tuning Vehicle Detector
 - (3) Detector Loops
 - 2. Exit Lane (Total 2)
 - (1) AVI Reader or LPR Cameras (number and location to be determined)
 - (1) Parking Barrier Gate
 - (1) Exit Station with Intercom and Barcode Reader
 - (1) Fee Display and Fee Computer with Cash Drawer
 - (1) Digital Self-Tuning Vehicle Detector
 - (3) Detector Loops
 - 3. Reversible Lane (Total 1). The following equipment list assumes the exit lane on 12th Ave. NE remains open and entering and exiting traffic travel in the same direction. If this changes in the future the equipment listed below will change.
 - (1) AVI Reader or LPR Cameras (number and location to be determined)
 - (1) Parking Barrier Gate
 - (1) Entry Station with Intercom and Barcode Reader
 - (1) Exit Station with Intercom and Barcode Reader
 - (1) Fee Display and Fee Computer with Cash Drawer
 - (1) Digital Self-Tuning Vehicle Detector
 - (3) Detector Loops
 - 4. Manager's (Parking) Office

- (1) Parking Access and Revenue Control System
- (1) Linked Computer with Printer and Software
- (1) Storage Rack
- (1) Communication & Wiring Interface
- (1) Master Intercom Station
- 5. Other
 - (1) Self-Scan Validation Unit, to be placed on a table or stand, shall enable parking customers to self-validate their own parking tickets with real-time verification.

2.04 PARKING BARRIER GATES

- A. Cabinet: Welded construction of 10-gauge aluminum with mounting holes accessible from inside the cabinet. Gasketed door with flush mount T-handle lock; provide two keys.
- B. Barrier open/close time of less than 1.5 seconds.
- C. Gate Arm is aluminum and 8'-0 in length. Provide folding gate arm if required by low height clearance. Height of arm is approximately 36 inches in the down position.
- D. Mechanical: Gate motor minimum 1/3 HP, heavy duty, high output torque, 115 VAC, single phase, instant reversing with duty cycle match to a load in excess of 10,000 operations per day. Provide adjustable cams for adjustment of gate arm travel. Provide feature that will automatically reverse gate direction, should any object be struck in its downward motion.
- E. Controller: Controller shall contain logic for one-way lanes, two-way lanes, operations with AVI readers and detector loops and be easily field programmable through the use of easily accessible DIP type switches or by keypad buttons. All gate logic controllers shall be removable and interchangeable with the logic controllers of all other gates on this project. Provide output signals for the following counts: Total vehicles and total illegal vehicles (see illegal vehicle counts below). These counts shall be taken directly from the control logic and not from detector loops. Provide a momentary contact any time a car illegally passes through the lane by tailgating the previous automobile. Provide two vehicle detectors inside the control logic. The detectors shall incorporate a tailgate recognition system capable of resolving two automobiles within six inches of each other on a standard 2-1/2 foot by 6-foot detector loop. The logic controller shall send and receive information from the computer located in the parking manager's office.
- F. Electrical: All electrical control components for the auto gate shall be supplied in a factory sealed, plug-in controller. Supply a cadmium plated connection box for all high voltage wiring with a 115 VAC grounded convenience outlet, heater control switch with preset thermostat and an on-off switch for the power to the auto gate.
 - 1. All external inputs shall be low voltage control and provide a connection panel containing at least 16 spare terminals for use by the installing contractor.
- G. Possible optional equipment to be provided with the barrier gates are an audio and visual warning system and foam covers.

2.05 AVI READERS

- A. Enclosure: The long-range RFID Readers shall be pedestal or overhead mounted.
- B. Electrical: The RFID Readers primary power hall be 115 VAC Secondary Power shall be 24 VAC (24 VDC) or less. The RFID Reader shall read encoded information on a transponder.
- C. The RFID Reader shall have the following features:
 - 1. Memory of at least 5,000 transponders.
 - 2. Provide a fourteen-day battery back-up for communications memory buffer and time clock.
 - 3. Void a transponder or group of transponders out of memory.
 - 4. Make valid a transponder or group of transponders in memory.
 - 5. Reader shall contain built-in self diagnostics and circuit indicator status lights.
 - 6. Reader shall provide relay access granted/denied messages and alarm status messages.
 - 7. Reader shall provide full, passive and timed anti-passback features.
 - 8. The AVI readers must have a minimum read range of 10-15 feet at 10 MPH with a 99.9% accuracy rate. System shall read and process the AVI ID within one second of presentation to reader.
 - 9. The AVI reader system shall not be affected by neighboring electronic systems or electronically controlled devices.
 - 10. AVI Reader/Controller unit enclosure shall be durable, non-corrosive and environmentally sealed with tamper-proof hardware and tight-fitting gaskets and suitable for pole or overhead mount.
- D. Provide all necessary software and hardware for the RFID reader to communicate with the central computer.
- 2.06 AVI TAGS
 - A. AVI ID Device (Tag): The AVI ID Device must be programmable with a unique identification code. Upon receipt of a RF signal from the antenna, the AVI ID Device will return a signal that carries its unique ID. Include the following features:
 - 1. A high frequency RF tag/unit operating within the 902 to 928 MHz band as allowed by the Federal Communications Commission (FCC). The AVI system shall operate on a narrow bandwidth of less than 5kHz. The rate of transmission must be 9600 Baud.
 - 2. The ID device maybe either active or passive with a guaranteed service life of not less than five years. The case must be sealed, dust proof and weatherproofed.

- 3. Compact windshield mount.
- B. Operation: The AVI System shall operate using a radio frequency (RF) signal to identify authorized patrons. An identification device (ID) will normally be mounted on the inside windshield of the vehicle that will then be identified as it passes through as RF field at each monitoring location (lane). The AVI System will consist of all equipment necessary, at the lane, to broadcast the RF signal and receive the return signal from the identification device. The system will decode the signal, validate the identification code, validate the ID, append additional information to the code, and transmit the transaction to the Controller for further processing.

2.07 LPR CAMERAS (ALTERNATE)

- A. Furnish and install an LPR system comprised of LPR cameras, software, gantries and/or mounting posts at entry and exit lanes as specified as an alternate to the AVI system.
 - 1. Entrance Lanes:
 - a. Furnish and install LPR cameras on entry lanes.
 - b. Vendor to conduct a review of the existing lane layout to determine optimal camera placement, number of cameras needed, and appropriate infrastructure for mounting camera (i.e. pole, gantry, etc.). Vendor shall furnish specifications and pricing for mounting infrastructure.
 - 2. Exit Lanes:
 - a. Furnish and install LPR cameras on exit lanes.
 - b. Vendor to conduct a review of the existing lane layout to determine optimal camera placement, number of cameras needed, and appropriate infrastructure for mounting camera (i.e. pole, gantry, etc.). Vendor shall furnish specifications and pricing for mounting infrastructure.
 - 3. Reversible Lane:
 - a. Furnish and install LPR cameras on reversible lane.
 - b. Vendor to conduct a review of the existing lane layout to determine optimal camera placement, number of cameras needed, and appropriate infrastructure for mounting camera (i.e. pole, gantry, etc.). Vendor shall furnish specifications and pricing for mounting infrastructure.
 - 4. Vendor to install LPR cameras and provide Owner with specifications for any required lighting for illuminating License Plate Numbers (LPN) and/or canopies to shade cameras from direct sunlight if required.
- B. LPR system shall be fully integrated with PARCS and designed to capture the license plate number of vehicles used by patron to obtain entry to facility.

- 1. If proximity card is used as a redundant credential, LPR system shall tie card number to license plate and store in database.
- 2. Upon exit the LPR system will capture LPN and/or card information and compare against entry information for a match.
- 3. If a match does not occur with LPN information, an alert will be issued to security or other personnel on schedule.
- C. Vendor to provide all required hardware and software necessary to provide a complete and functional LPR subsystem that meets the Owner's required functionality and accuracy.
- D. Maintain LPR images and corresponding LPN in the database for length of time as required by OWNER at which point the LPR image and LPN is purged from the database. Storage duration time between purges shall be programmable by OWNER.
- E. Operation: Normal Entry and Exit
 - 1. Entry: Vehicle LPN to be imaged by LPR system after activation. LPN is checked against the LPR system database inventory for approval as an authorized tenant parker. If a valid result is returned, gate vends and allows holder to enter.
 - 2. Exit: Vehicle crosses over the induction loop in the exit lane and the LPN is captured. LPR system confirms entry/exit sequencing and credential. Upon a successful system verification of a match, parker is allowed to exit.
- F. LPR Review Workstations
 - 1. LPR review workstation hardware to be provided by the OWNER, with all necessary LPR software furnished and installed by Vendor.
- G. Performance Requirements
 - 1. LPR system to meet or exceed the following requirements:
 - a. Capture an image of a vehicle's entire license plate at a 99 percent (99%) capture rate. This capture rate to provide a visual image record of 99% of all vehicle license plates entering the facility.
 - b. The LPR system shall be an on-line system with LPR check on every ACS transaction. Devices at the entrance and exit lanes shall automatically gather the LPR data. The image of the license plate and/or rear end of the vehicle shall be linked to the ACS transaction and stored in the computer database.
 - c. Provide the following read accuracies:
 - 1) The LPR system shall read all LPN characters (sometimes referred to as an N Factor) on license plates with an 85% accuracy. For example, if a LPN contains the characters

"123BTV" (N=6) then in order to achieve an N read the system must recognize "123BTV" exactly. When there is not a match, the system will only allow the parker to proceed under a separate credential.

- 2) The following vehicles shall be classified as exceptions and not counted against accuracy of LPR system performance:
 - a) Vehicle with an obstructed license plate where LPN's are obscured by a physical object such as a trailer hitch, bicycle rack, license plate covering etc.
 - b) Oversized vehicles defined as vehicles that measure more than 15 feet from the centerline of the driver's window to the rear bumper.
 - c) Vehicles without license plates.
 - d) Motorcycles.
- d. Local ambient lighting shall not have any effect on the LPR accuracy regardless of time of day or night. Vendor to advise Owner of any necessary shading or lighting elements required to mitigate the effect of the ambient lighting conditions on the LPR system performance.
- e. Vendor to provide a means to score LPR system accuracy. Images stored on LPR database shall be transferred from sample lanes along with LPR system LPN recognition to a standalone PC for reviewing and determining accuracy percentages. Owner shall be able to select any images stored on the LPR database for scoring purposes. Vendor to furnish all software required to test the LPR system's performance.
- H. Vendor to provide complete system description supported by datasheets, screen shots, reports and other supporting documentation.

2.08 ENTRY STATIONS

- A. General: Each unit shall consist of a minimum 5" display, controller(s), ticket printing and issuing mechanisms. Ticket magazines and printer housed in durable metal cabinet.
- B. Cabinet: Welded construction of 10-gauge aluminum with mounting holes accessible from inside the cabinet. Gasketed access doors for serviceability and loading of tickets with flush-mount T-handle locks; provide two keys per lock. Finish cabinet with two coats of polyurethane-polane vinyl texture enamel in manufacturer's standard color.
 - 1. Provide removable ticket tray, to be located in the base of the cabinet, with a capacity for at least 4,000 fan folded Toledo (or equal) tickets.
- C. Mechanical: The ticket dispensing mechanism shall be of quality constructed material with rust protective coating on exposed parts. A self-sharpening ticket cutter shall be supplied. The dispensing mechanism shall be removable as a unit, and all electrical connections shall be keyed plug. This unit shall use perforated fanfold tickets measuring 2" x 4". The magazine shall be of the removable type with a capacity of not less than 5,000 Toledo (or equal) tickets. At the moment a ticket is issued, it

shall be imprinted with the hour, minute, month and date of issuance. The time recorder shall be constructed to allow for easy replacement of the time-keeping mechanism as a unit.

- D. Electrical: On the approach side of the cabinet a backlit liquid crystal display shall be provided an illuminated clock face shall be readily visible to the customer as they take a ticket. Ticket issuance shall cause a buzzer to sound simultaneously and the ticket to be presented at a height and location permitting easy removal from throat of the machine by the incoming motorist. The time clock shall be driven by a synchronous motor mechanism for independent operation. Supply a cadmium plated connection box for all external connections and provide a 115 V.A.C. grounded convenience outlet, 500-watt heater, heater on/off switch, preset heater thermostat, dispense on/off power switch and clock on/off switch.
- E. Entry station shall:
 - 1. Display date and time.
 - 2. Be field programmable with built-in diagnostics.
 - 3. Be capable of processing credit cards.
 - 4. Have built-in VoIP intercom with call button.
 - 5. Have an n International Bar Code Systems (IBC) Barcode reader shall be mounted to the Entry Station to read 1D and 2D barcodes on pre-printed coupons/validations or displayed on mobile devices.

2.09 INTERCOM SYSTEM

- A. Intercom system to be a VoIP system utilizing a software or hardware-based intercom server system with following features:
 - 1. Intercom system shall provide for two-way communications between intercom call stations at ENS's and EXS's to intercom PC based substation at central security desk.
 - 2. Programming for all intercom features shall be performed through system workstation.
 - 3. Include all required operating software and programming software.
 - 4. Provide one (1) client module licenses (software-based solution) or one (1) intercom masters to enable communications (via PC or master) at remote monitoring stations.
 - 5. Include the following features:

- a. Ability to forward VoIP calls initiated at an intercom station to a land-line or mobile phone number.
- b. Ability to dial and forward calls to a backup number if initial phone number is busy or unanswered within a number of rings. Number of rings to be programmable by OWNER. Include ability to dial two external phone numbers at a minimum.
- c. Provide programmable volume control for each intercom station.
- d. Include ability to provide up to 20 pre-recorded messages at intercom stations.
- e. Messages to be programmed based on select criteria such as input from ENS's, EXS's or PCS readers.
- f. Include ability to queue calls received based on first come, first serve basis.
- 6. Intercom stations to be installed by manufacturer at height to enable a patron to easily access it from a passenger vehicle in a seated position at lane equipment.
- 7. System to comply with current Americans with Disabilities Act requirements.

2.10 FEE COMPUTERS AND CASH DRAWERS

- A. Electrical: The Fee computer shall operate using 115 VAC and the equipment supplier shall provide a constant voltage transformer for the Fee Computer. The Fee Computer shall communicate with the central computer located in the security manager's office.
- B. Programming:
 - 1. The Fee Computer shall be user programmable.
 - 2. Provide a means to program up to 72 cashiers.
 - 3. Cashiers will log-on to operate the Fee Computer by entering up to a 6-digit alpha numeric code and cashier letter.
 - 4. The booth attendant shall be able to validate tickets for discounted parking when verbally communicated by a parking patron.
- C. Reports The system shall be capable of producing the necessary cash, lane, entry/exit, occupancy, length of stay, validation, time card, and statistical reports as requested by the Owner.

2.11 FEE INDICATORS

A. Fee indicator shall be a freestanding pedestal mounted device connected to the fee computer and shall indicate the following utilizing a digital display:

- 1. Amount due.
- 2. Change due.
- 3. Time.
- B. The unit shall operate in a temperature range adequate to the locations indicated. The cabinet shall be weatherproof with a clear impact proof window. A connection cable shall be provided for connection to the fee computer.

2.12 EXIT STATIONS

- A. Exit station features include:
 - 1. Safe, 24VDC low voltage operation with internal batteries for operation during power interruptions.
 - 2. Rust-resistant aluminum or zinc plated steel construction with built-in thermostatically controlled heaters and coolers.
 - 3. Large back-lit LCD displays date, time, and programmable message.
 - 4. Read all entry tickets, expired exit tickets and valid exit tickets.
 - 5. Accept cash, credit cards, debit cards, and validations. It shall process a single ticket at one time using barcode technology.
 - 6. Programmable grace time for exit.
 - 7. Issue a payment receipt upon request.
 - 8. Built-in VoIP with call button.
 - 9. Can operate on-line or off-line.
 - 10. Interfaces directly with all PARCS equipment.
 - 11. An International Bar Code Systems (IBC) Barcode reader shall be mounted to the Exit Station to read 1D and 2D barcodes on pre-printed coupons/validations or displayed on mobile devices.

2.13 VALIDATION SYSTEM

A. Validation system shall be a web-based application hosted by the OWNER that provides secure parking validations using standard web browser to apply/issue validations. Primary features and functionalities of the validation system shall include the following:

- 1. Web-Browser User Page: Allows user or account holder to simply type in ticket number and validation amount which is sent to the system online and in real-time.
- 2. Validation Accountability: System shall provide accurate accountability of all validation activities.
- 3. Real-time Validation Activity: Authorized OWNER's staff shall have ability to view validation activities in real-time from their workstations with secure logins.
- 4. Management reporting: Validation program shall provide on-line monitoring of all validation activities including validation reconciliation and various validation activity reports by individual or groups.
- B. Workstation Web Browser Validation Account Requirements:
 - 1. Validation Account Configuration: Validation account shall be configured with the following features and functionalities:
 - a. Web browser URL for use by merchant or account holders.
 - b. Web browser account holder secure login.
 - c. Validation user page shall include the following:
 - 1) Merchant or Account holder information
 - 2) Validation amount associated with the account
 - 3) User logged in providing the validation
 - 4) Window to type in parking ticket number
 - 5) Verification that parking ticket number is validated including date, time, amount of validation, etc.
 - d. The Validation user page shall include other information such as remaining balance, threshold, status of account, etc.
- C. Vendor to provide complete description of the proposed web-based validation system proposed including datasheets and screen shots.

2.14 PEDESTRIAN ALERT SYSTEM (MAINTAIN EXISTING SYSTEM IF POSSIBLE)

- A. The Pedestrian Alert System shall consist of two weatherproof strobes and one weatherproof sounder located at each vehicular exit from the garages to the street.
 - 1. Strobe Light: Cooper Industries XB13 Series or approved equivalent.
 - 2. Sounder: Cooper Industries Db7 or approved equivalent.
- 2.15 ILLUMINATED LANE CONTROLLERS (ALTERNATE)

- A. Signs to be located at the entry, reversible, and exit lanes at the streets as an alternate. One single faced sign at each lane to view from the exterior of building and one single faced sign at each lane to view from interior of building
- B. Cabinet dimensions 18" H x 18" W x 2.5" D. Color to be standard finish: Duranodic bronz.
- C. Face material to be impact resistant, smoke tinted polycarbonate 1/8" thick.
- D. Standard voltage is 120 VAC.
- E. Message height is 9" messages are " \downarrow " in green wide-angle oval and "X" in red wide-angle oval.
- F. Messages to blank out when turned off.
- 2.16 ILLUMINATED FACILITY SPACES AVAILABLE DISPLAY
 - A. The space counting and parking guidance system shall consist of sensors and/or loop detectors, counters, spaces available display, and a control center for system control.
 - 1. Provide and install the necessary hardware and software for the space counting system to properly function as described in this section.
 - 2. The primary intent of the space count system is to provide parking patrons entering the garage with information on the number of parking spaces available in the garage.
 - 3. The system must be able to consistently detect the presence of a vehicle and provide accurate counts and guidance information.
 - 4. The system shall have the software tools to remotely monitor parking utilization and produce reports in real time.
 - 5. The system shall be able to store historical occupancy data to provide information on past trends in parking activity.
 - 6. A Spaces Available Display will be located at the exterior near the entry lane, the location to be determined. The exact location and mounting of the sign are to be determined.
 - 7. The sensors, and/or loop detectors and counters shall communicate with the signs. Real-time occupancy status will be transmitted to a central parking guidance server.
 - 8. If the system is electric powered, all wiring for the system (power, control, communication, etc.) and conduit will be provided by the Manufacturer of the system. The conduit may be installed exposed if it is impractical to conceal it in the structure.
 - 9. The system shall have a built-in automatic count reset feature.

- 10. The status sign cabinets shall be made of corrosion resistant aluminum with an integrated hinged face.
- 11. The background color of the displays is to be a dark color.
- 12. The display shall indicate "Parking Spaces Available" in the facility in white reflective vinyl. The minimum character height is five (5) inches.
- 13. The system shall provide a real-time LED display of spaces available in green and if the garage is FULL or CLOSED in red. The displays shall have a minimum character height of five (5) inches.
- 14. Face material to be impact resistant and tinted polycarbonate 1/8" thick.
- 15. Standard voltage is 120 VAC.
- 16. Messages to blank out when turned off.
- 2.17 FACILITY MANAGEMENT SYSTEM (FMS)
 - A. General: The PARCS FMS system shall consist of and utilize a network of computers and/or servers, peripherals and software. System software shall provide automatic on-line monitoring and control of all PARCS equipment, supervision, and remote control of peripheral equipment from one or more selected locations via the Cloud. System shall automatically collect data for revenue and activity reporting, access and space control, ticket tracking, and equipment programming.
 - B. Facility Management System Server: HP ProLiant DL380 G7 or comparable; Configured for optimal PRCS performance. The central computer station shall be additionally equipped as follows:
 - 1. Windows Server 2008, 32-bit operating system or higher.
 - 2. Peripherals: Switched-access sharing of PARCS Workstation peripherals.
 - 3. Locking Rack.
 - 4. Surge Protector/Line Filter/Isolator Module: Provide an 8-Outlet (min.) surge protector for the AC line voltage to be used by the PRCS computer system an all peripherals. Surge protection shall include 1-in and 2-out RJ11 telephone/fax. 3550 Joule energy rating (min.). Surge protector shall also filter out EMI/RFI noise with up to 58 dB reduction. Provide a communicator isolator module to prevent damage
 - C. Workstations: The workstations shall have processor meeting or exceeding the following specifications: x86 or x64 CPU (Intel or AMD specification), dual core 2.5+ GHz, 2GB ram, 200+ GB hard drive, 256MB graphics video interface, modem, 4 Ethernet 100/1000 Mbps Networking Ports and a minimum of 5 USB ports. Provide additional ports as required for interconnectivity with other PRCS system equipment. Workstations shall be additionally equipped as follows:
 - 1. Windows 8 operating system or higher

3. Peripherals:

a. Input:

- 1) Keyboard; Wired (USB port interface) with numeric keypad.
- 2) Computer Mouse: Wired (USB port interface), optical, with center/third button with scroll.
- b. Output:
 - 1) Computer Display: Color, 19" flat touchscreen, 0.28 dot pitch or less.
 - 2) Printer: Wired (USB port interface), Laser quality printing on letter-size paper.
- c. Storage:
 - 1) DVD+R drive
- d. Coding Station with printer capable of generating validation chaser tickets.
- 3. Locking Cabinet.
- 4. Surge Protector/Line Filter/Isolator Module: Provide an 8-Outlet (min.) surge protector for the AC line voltage to be used by the PRCS computer system an all peripherals. Surge protection shall include 1-in and 2-out RJ11 telephone/fax. 3550 Joule energy rating (min.). Surge protector shall also filter out EMI/RFI noise with up to 58 dB reduction. Provide a communicator isolator module to prevent damage due to ground loops and/or lightning and keep the communication line's common floating.
- 5. Workstations shall provide the following functionality:
 - a. Allow viewing (in real-time and historically) records of transaction data, generate reports and perform system administrative tasks with appropriate password authorization.
 - b. Provide system alarms at all or selected workstations as programmed and authorized.
 - c. Print reports at local or network printers as specified.
 - d. Allow other applications to run concurrently on the workstation.
- D. Facility Management System Software: The FMS software shall have the following features:
 - 1. System shall utilize an open architecture structure to support, accommodate and provide features and functionalities including but not limited to the following:
 - a. Operating System: Windows Server

- 1) Windows Server 2008 or higher.
- b. Database: Use of Industry standard SQL databases
 - 1) Microsoft SQL Server 2008.
 - 2) Oracle.
- c. Interoperability.
- d. Integration via open communications protocols.
- e. Support standard hardware.
- f. Support separated environments for production and test.
- g. Connection to database server with regular user account instead of Sysadmin or other privileged accounts.
- h. Use of standard setting on servers.
- i. Access of backend database from frontend or middle tier of the application via credential with minimal privileges.
- j. Support customization to both backend and frontend modules with minimum effect on future enhancements and upgrades
- k. Client Application:
 - 1) Shall use Active Directory for authentication and authorization.
 - 2) Browser based client application preferred.
- 2. Communication capabilities with all PARCS equipment for the purposes of monitoring and control.
- 3. Strict security protocols with multiple passwords providing limitations of access.
- 4. Remote (internet) access capabilities.
- 5. System shall accommodate a minimum of sixteen simultaneous users of the FMS without degrading system performance or interference with each other's work.
- 6. Hand-off of all transaction data for general analysis using standard Windows-based applications such as MS Excel, Access and Word.
- 7. User interface by means of a series of graphical menus that shall meet or exceed the following functional requirements:
 - a. Main Menu: A Main Menu shall allow access to sub-menus. Software functionality shall be distributed amongst the sub-menus.

- 1) Sub-Menus: Sub-menus shall include the following:
 - a) System Configuration Menu
 - b) System Monitor Menu
 - c) System Control Menu
 - d) System Programming Menu
 - e) System Device Report Menu
 - f) System Data Manager Report Menu
- E. Graphical Menu Configuration:
 - 1. System must have a Window-based graphical user interface (GUI).
 - a. Physical and remote workstations shall have identical GUI's.
 - b. GUI to provide a user interface with the following capabilities:
 - 1) Access to and ability to view, print or export system reports.
 - 2) Real-time monitoring of all PARCS field devices.
 - 2. System Configuration Menu: The System Configuration Menu shall be as follows:
 - a. Log On: Provide up to minimum of ten user programmable passwords to gain access into the Main Menu and Sub-Menus.
 - b. Set Passwords: Each password can be programmed into any level of the Main Menu or Sub-Menus. Provide name insertion with the password of each person to be programmed.
 - c. Set Message Filters: Provide message filters for the information that is being received by the Central Computer. These filters provide the end user a means of controlling incoming message data from each Card Reader (access granted and egress) and Fee Computer (transaction audit trail). Programming shall provide the following filter options to the end user:
 - 1) Send data to Hard Disk (store).
 - 2) Send data to Printer.
 - 3) Send data to Display.

Note: End user may program any combination of the above filter options.

- d. Set Gate Count System: Provide the following sub-menus for count configuration to all lanes, areas and facilities:
 - 1) Set Lanes: End user will be able to define which auto gates are assigned to a particular facility. Provide a lane assignment menu for the end user to number each auto gate by lane.

- 2) Set Areas: End user will be able to define which areas are assigned to a particular facility. Provide an area assignment menu for the end user to identify the areas by number that are assigned to each facility.
- e. Set Reader Count System: Provide the end user the means of programming the following:
 - 1) Provide differential counters per facility to display the total monthly vehicles that can be in the facility by parker group or card access level at one time. The end user shall be able to program the maximum number of vehicles for each facility and parker group.
- f. Set Time and Date: Provide user setting of current time and date.
- g. Reload ENS with tickets:
 - 1) Facility number.
 - 2) Lane number.
 - 3) Starting ticket number and number of tickets in the stack.
 - Low ticket warning count User will enter a low-ticket number and the system will notify the users when the amount of unused tickets reaches the pre-programmed number.
- 3. Equipment Monitoring Software: Shall allow the end user to monitor the following:
 - a. Monitor operational status of all PARCS devices/equipment provided under this contract.
 - b. Monitor All Lanes: Provide a matrix that will display ALL lanes and will identify the following activity:
 - 1) Lane number.
 - 2) Lane status; open or closed.
 - 3) Vehicle in lane.
 - 4) Ticket in chute.
 - 5) Gate arm up.
 - 6) Gate in over-ride (gate arm locked in up position).
 - 7) Gate failure.
 - 8) Monthly patrons disabled.
 - 9) Transient patrons disabled.
 - 10) Lane on-line or off-line.
 - 11) Operating mode of lane.
 - 12) Low ticket supply.
 - 13) Illegal entrance or exit reverse direction through lane.
 - 14) Backout.
 - c. Monitor Monthly Facility Counts: Provide counters to display the total card users that are in the facility.

- d. Monitor Monthly Peak Counts: Provide counters to display the total card user's peak counts by facility. Record these counts by hour and store them in a daily/monthly peak counts file.
- e. Monitor Transient Peak Counts: Provide counts to display the total transient park counts. Record these counts by hour and store them in a daily transient peak counts file.
- f. Abnormal status conditions shall be flashed on monitor(s) and accompanied by an audible alarm. Display shall continue to flash until abnormal condition is corrected. Audible alarm shall continue until it is turned off by a command issued through monitoring computer(s). Alarms may be acknowledged and turned off through any workstation connected to CMS.
- 4. System Control Menu: The System Control Menu (SCM) shall have the following Sub-Menus and shall allow the user to send these commands to one lane or all lanes on one port or all lanes on all ports:
 - a. SCM/Function Control Menu: The Function Control Menu will have the following features:
 - 1) Set Anti-Passback off.
 - 2) Set Anti-Passback on.
 - 3) Set Passive Anti-Passback on.
 - 4) Set Auto Re-Sync Time: the end user shall program a time when the anti-passback will resync automatically every day.
 - b. SCM/Gate Control Menu: The Gate Control Menu will have the following features:
 - 1) Disable Monthly Card Readers.
 - 2) Enable Monthly Card Readers.
 - 3) Disable Transient Ticket Dispensers.
 - 4) Enable Transient Ticket Dispensers.
 - 5) Tune Loop Detectors.
 - 6) Remote Raise Auto Gate: This command will raise the auto gate and the gate will close after the vehicle enters the facility.
 - c. SCM/Reader Control Menu: The Reader Control Menu shall have the following features:
 - 1) Validate a Single Card I.D.
 - 2) Validate a Group of Card I.D.'s.
 - 3) Void a Single Card I.D.
 - 4) Void a Group of Card I.D.'s.
 - 5) Remote Raise an Auto Gate.
 - 6) Check Status of a Single I.D.
 - 7) Set Reader Time.
 - 8) Set Reader Date.

- 5. System Programming Menu: The System Programming Menu (SPM) shall allow the user to program any card reader auto gate directly from the Central Computer. Provide a means for the end user to create a program, save the program and/or send the program to a group of external devices or an individual device. Provide the following sub-menu's features:
 - a. SPM/Reader Programming Menu: The Reader Programming Menu will have the following features:
 - 1) Program Level Codes: Provide programming for 8 level codes per reader. Level Code One shall be a 24-hour access level. Level codes 2-6 shall be user programmable to operate at different times of the day and different days of the week.
 - 2) Program Reader Options: Provide programming by the end user for the following features:
 - a) Reader open sign from one to 33 seconds.
 - b) Hard anti-passback.
 - c) Timed anti-passback from one to 15 minutes.
 - d) Auto unlock of door or gate controlled by each card reader.
 - e) Provide a means of programming this feature by time of day and day of week.
 - 3) Program Valid I.D. Numbers: Provide a means of programming one card or a group of cards into a one card reader, a group of card readers or all card readers.
 - 4) Card Log: Provide a user programmable card log that will include the following fields:
 - a) I.D. Number
 - b) Status of Card (unused, issued, lost or delinquent)
 - c) Last Name
 - d) First Name
 - e) Middle Initial
 - f) Date last revised and by whom.
 - g) Address
 - h) City
 - i) State
 - j) Zip Code
 - k) Home Telephone Number
 - I) Business Telephone Number
 - m) License Plate #1
 - n) License Plate #2
 - o) Reader location that this I.D. number can be used in.
 - 5) Change I.D. Status: Provide a means for the end user to display and change the Status of the following fields:
 - a) Account Number
 - b) Customer's Last Name

- c) Customer's First Name
- d) Status (issued, lost, unused or delinquent)
- 6) Provide the user the means to search the card log by entering all or the first several characters of the last name, account number, license number, I.D. number or card status. The user may search from the start of the card log, or continue from a certain spot.
- F. REPORTING: CMS reporting subsystem shall upload and consolidate reports. In addition to reports described in other parts of this Section system the following reports and reporting functionality shall be provided (at a minimum):
 - 1. Ability to retrieve and review individual transactions. Parameters shall be defined by authorized user accessing reports.
 - 2. All reports produced shall be capable of being displayed on a monitor or printed from any workstation with the appropriate authorization level.
 - 3. Exporting of reports to Excel, MS Access, converted to a pdf or ASCII file.
 - 4. CMS shall consolidate and retain data for report generation.
 - 5. Reports Menu shall include selections and/or sub-menus as required to provide the following minimum reporting functionality for standard reports generated from each facility's central computer database. The configuration of standard reports may vary from the structure indicated below provided the required minimum reporting functionality is maintained. All report configurations shall be customizable by user-selected options.
 - 6. General Account Information Reporting:
 - a. User Account Report: This report shall list all general account information, including, but not limited to: User Name, Full Name, and I.D. Number.
 - b. User Account Edit Log Report: This report shall list all revisions to a particular user account, what fields were revised, the time/date when each revision took place and who was logged in when the changes were made.
 - c. User Account Edit Summary Report: This report shall list all user accounts that have been edited within a selected time period, what fields were revised, the time/date when each revision took place and who was logged in when the changes were made.
 - d. Patron Account Report: This report shall list all general account information, including, but not limited to: Name, I.D. Number, Address, Phone, E-mail, date account created, account history, and vehicles associated with the account.
 - e. Patron Account Edit Log Report: This report shall list all revisions to a particular user account, what fields were revised, the time/date when each revision took place and who was logged in when the changes were made.

- f. Patron Account Edit Summary Report: This report shall list all user accounts that have been edited within a selected time period, what fields were revised, the time/date when each revision took place and who was logged in when the changes were made.
- g. Patron Vehicle Report: This report shall provide information on all vehicles associated to each patron.
- h. Account-Access-by-User Summary Report: This report shall list all accounts accessed and/or revised by a single user within a specific time period.
- 7. System Status Reporting:
 - a. System Status Summary Report: This report shall list the various system status data with any system alerts or errors flagged for action.
 - b. Holiday Report: This report shall list the holidays that are entered into the system.
- 8. System Activity Reporting: This report shall list facility-specific data pertaining to system activity within a specified date, time period, device and/or message type.
- 9. Patron Activity Reporting:
 - a. System-wide Patron Activity Report (all patron classes).
 - b. Patron Class Activity Report (multiple owner-editable patron classes).
- User Access Log Report: This report shall provide login data within a specified date and time range. Reports shall include, but not be limited to the following: Log IN or OUT Time, User Name, User Number, Action (include Transaction Number if applicable), Date and Time of Day.
- 11. User Timecard Report: This report shall provide detailed data for all Users logged in within the specified time range. The User Timecard Report shall be available on a daily basis. Reports shall include, but not be limited to the following: User Name, User Number, Drawer Number, Start and End Time, Start and End Transaction Numbers, and Elapsed Transactions/Days/Hours/Minutes.
- 12. Facility Reports:
 - a. Device Reporting:
 - 1) Active Port Summary Report: Provide a listing of all active ports on-line to the central computer.
 - 2) Device Reports: All reports required by the Device Report Menu section above shall also be able to be pulled using data retrieved solely from the central computer.
 - 13. Vehicle Count Reporting:

- a. Count Configuration Summary Report: This report shall list all saved Count Differentials Report settings by saved report name (determined by user), last User to revise each report type and date last revised.
- b. Count Differentials Report: This report shall provide single facility or multiple facility activity data (by Zone) for a specified time/date period. The report shall provide capacity, start, minimum, maximum and average counts for monthly, transient and total amounts.
- 14. Statistic Reporting:
 - a. Statistical Report Configuration Summary Report: This report shall list all current Statistical Report settings by saved report name (determined by user), last User to revise each report type and date last revised.
 - b. Statistical Reports: These reports shall include, but not be limited to the following:
 - 1) Entry, Exit and Entry/Exit Statistics
 - 2) Length of Stay Statistics
- 15. Event Log Report shall include at a minimum all modifications/changes to PARCS identifying the authorized user initiating changes. Report shall include date and time of user log on and log off and all actions initiated during logged on period.
- 16. Individual Transactions Report Provide listing of every transaction processed by shift or lane.
- 17. Lane Activity Report Provide a summary report by exit lane of revenue, rate type and transactions type. Time period for report shall be defined by user.
- 18. Lane Volume Report Provide a report of entry and exit for a selectable date and time period.
- 19. Duration of Stay Report Provide duration of stay report based on entry time and length of stay. Time period for report shall be defined by user.
- 20. Backout Ticket Report Provide a list of backout tickets issued by ENS. These are tickets that are issued at an ENS where the patron did not proceed completely through the entrance lane.
- 2.18 UNINTERUPPTIBLE POWER SUPPLY (UPS) By Others
- 2.19 SECURITY CAMERAS MOUNTED AT BOOTHS AND/OR GATES By Others
 - A. The cameras are to view license plate number, driver and the transaction process at the booth or pay station. The cameras must integrate into the existing Avigilon system.

PART 3 - EXECUTION

3.01 EMAMINATION

- A. Verify existing conditions before starting work.
 - 1. Examine areas to receive the parking equipment and verify that conditions are acceptable.
 - 2. Do not proceed with installation of parking equipment until unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Provide specifications and technical drawings for the equipment islands in sufficient time so as not to delay work.
- B. Provide templates for anchor bolts and other items encased in concrete or below finished surfaces in sufficient time as not to delay the work.

3.03 INSTALLATION

- A. Vendor shall submit a detailed transition and implementation plan for the transition from the existing system to the new PARCS. The Implementation Plan shall be a complete plan for implementation, training and testing and shall include provisions for the new PARCS to operate concurrently with the old system until implementation is complete.
- B. General: Install equipment and accessories in accordance with manufacturer's recommendations and final shop drawings, and as specified herein.
- C. Anchor Bolts: Furnish anchor bolts and other connectors required for securing equipment to in-place work.
 - 1. Furnish templates and other devices as necessary for presetting bolts and other anchors to accurate locations.
- D. Detector Loops: Cut ¼-inch x 1 ½-inch deep slots in concrete to the configuration shown on shop drawings. Install loops in accordance with manufacturer's instructions. After testing loop wires, seal slots with manufacturer's recommended sealant.
- E. Furnish and install complete power and communication wiring in compliance with manufacturer's specifications and code requirements. Obtain and pay fees for electrical permits and approvals as required by local agencies.
- F. Protection: Provide final protection necessary to ensure that the equipment will be without damage or deterioration at the time of acceptance.
- G. Electrical Components: If required by the Owner, all electrical components incorporated in sign construction shall be approved and listed by the Underwriter' Laboratories, Inc.
 - 1. All internal wiring shall be insulated, stranded copper, appliance wire, not lighter than No. 16 A.W.G. The insulation shall be thermoplastic of such thickness and composition to provide

satisfactory performance under a continuous maximum temperature of 90 degrees C.

2. Provide internal structural reinforcing for dead and live loads (wind and other) as required for indicated span. Provide access panels on back or front of sign box for access to lighting.

3.04 TESTING/ACCEPTANCE

- A. All equipment is to be tested for compliance to manufacturer's performance standard upon installation. In addition, before acceptance of the complete installation, the following performance standards must be met:
 - 1. All mechanical components must be operational without downtime for a period of ten (10) working days.
 - 2. All electronic equipment must be operational without downtime or programming problems for a complete monthly report cycle.
 - 3. For each downtime period of four hours or more on the mechanical equipment one working day will be added to the acceptance cycle.
 - 4. On electrical equipment, each downtime period of eight hours or programming problem that delays the daily report cycle will add two working days to the acceptance cycle.
 - 5. Upon completion of system testing and before beginning the acceptance cycle, an electronic copy of the manufacturer's operations/maintenance manuals will be provided to the Owner. Manuals shall include, but not be limited to, the following:

a. General manuals of sufficient detail to enable the Owner to operate and maintain the PARCS.

- b. Operations manuals for supervisory personnel describing data collection processing and transmission systems and equipment.
- c. All maintenance manuals.

d. Software programming manuals describing each item of software in the lane equipment and all report programs.

- 6. A subsystem shall be considered unavailable as long as any component of the subsystem is not functioning. The following items which cause a subsystem to become inoperative shall not be deemed as a subsystem or system failure.
 - a. Power outage for a duration in excess of the required duration of the UPS power backup.
 - b. Damage or vandalism caused by a third party.
 - c. Network connectivity issues outside of the PARCS.

- d. Failures caused by a third party.
- e. Act of God.
- 7. Punch list
 - a. Starting with the beginning of installation through Final System Acceptance, the Vendor shall submit a document on a weekly basis showing the status of all outstanding system issues, regardless of severity, including the plan for resolution and estimated completion date.
 - b. All deviations noted during acceptance testing shall be recorded on the Punch list.
- 8. Final System Acceptance
 - a. Final System Acceptance will be submitted by Owner, in writing to the Vendor, upon completion of the following:
 - 1) All PARCS equipment has passed Lane Acceptance Tests and Operational Completion Tests.
 - 2) Verification by Owner of complete resolution of all outstanding items on the Punch List.
 - 3) All spare parts, stock, and manuals are on site and have been approved.
 - 4) All training is complete to Owner's satisfaction.
 - 5) All completed test documentation has been provided to Owner.
 - b. Warranty period for the PARCS will start upon Final System Acceptance.

3.05 ADJUSTING AND CLEANING

- A. Adjust all equipment provided this section so that it operates smoothly, easily and properly. Confirm that locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.
- C. After completing installation of exposed, factory-finished parking equipment, inspect exposed finishes and repair damaged finished to the satisfaction of the Architect.
- D. Remove barrier-gate arms during the construction period to prevent damage, and install them immediately before Substantial Completion.

3.06 INSTRUCTION/SERVICE

- A. The Vendor shall provide operational training classes for all levels of Owner personnel as necessary. If necessary and at the discretion of the Owner, the manufacturer shall also provide technical training classes for servicing the equipment at the facility where the equipment is manufactured. The Owner will select two service personnel to attend the classes.
- B. The Vendor shall submit a list of spare parts and maintain the necessary on-site inventory to restore the system to operation within a two-day period. Owner will approve spare parts list. Spare parts

which are not disposable in nature shall bear the same guarantee that covers materials and workmanship of new components or equipment. Guarantee period shall not commence until spare parts are installed. Spare parts either taken from inventory or supplied from the factory shall be logged in as to date of installation in the Contractor's service log.

- C. System Administrators: System Administrators shall have same basic training as Property Managers. In addition to such training, System Administrators shall be trained to operate CMS and to retrieve, view and create and understand statistical reports which reveal trends in revenue generation, facility utilization, and based on information available from CMS, to perform checks and balances over actions of Supervisors and their subordinates.
 - 1. Three and six months after Final Acceptance, System Administrators shall have one day of additional training.

3.07 MAINTENANCE RECORDS

- A. Vendor shall maintain accurate and up-to-date records of service calls, preventive maintenance operations and equipment failures for each component and sub-system. Records in the form of a log shall become the property of the Owner at the end of the one-year period.
- B. Extension of Maintenance Contract shall be at the option of the Owner. Vendor will notify the Owner for a request to extend sixty (60) days prior to expiration of base term. Increase in cost shall be limited to the percentage increase of the cost of living for that year.

PART 4 - ADDITIONAL EXPENDABLE ITEMS

- 4.01 The Vendor shall provide the following additional items under the Contract, as requested by the Owner.
 - A. 250 AVI Transponders instead of fixed LPR cameras.
 - B. One-year supply crosswise barcode tickets printed to MC specifications.
 - C. One-year supply of receipt paper.

END OF SECTION