CONTRACT

FOR

PARKING REVENUE CONTROL SYSTEMS

ΑT

DENVER INTERNATIONAL AIRPORT

BETWEEN

THE CITY AND COUNTY OF DENVER

AND

ECCL 4:12 LLC dba NextGen Parking LLC

CONTRACT

THIS **CONTRACT**, is made and entered into as of the date stated on the signature page ("Effective Date"), by and between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado ("City"), Party of the First Part, and **ECCL 4:12 LLC dba NextGen Parking LLC**, a company authorized to do business in Colorado ("Contractor"), Party of the Second Part

WITNESSETH:

WHEREAS, the City owns and operates Denver International Airport ("DEN" or the "Airport"), and

WHEREAS, the City owns and operates at the Airport a Parking Revenue Control System ("PRCS"), consisting of mechanical, electrical and electronic hardware and computer software; and

WHEREAS, the City desires to purchase Parking Revenue Control Systems ("PRCS") as well as obtain professional and technical support services for the maintenance and operation of the PRCS to assure their satisfactory operation and to avoid disruptions in the Airport's parking facilities operations; and

WHEREAS, the Contractor is fully qualified and ready, willing and able to provide such goods and services to the City;

NOW, THEREFORE, for and in consideration of the premises and other good and valuable consideration, the parties hereto agree as follows:

SECTION 1 — DEFINITIONS

As used in this Contract, unless the context requires otherwise:

1.01 AIRPORT; DEN

"Airport" or "DEN" means Denver International Airport.

1.02 CONTRACT ADMINISTRATOR

"Contract Administrator" means the person designated by the Chief Executive Officer "CEO" to perform day-to-day administration of this contract for the City. The Contract Administrator designated for this Contract is the City's Director of Transportation Systems ("Director"), or her designee. The CEO or Director may from time to time designate a substitute or successor Contract Administrator by written notice to the Contractor.

1.03 CONTRACTOR EMPLOYEE; CONTRACTOR PERSONNEL

"Contractor employee" or "Contractor personnel" shall include employees and personnel of the Contractor and subcontractors, if any.

1.04 CEO

"CEO" means the Chief Executive Officer City and County of Denver Department of Aviation.

SECTION 2 — SCOPE OF WORK

2.01 SCOPE OF WORK

The Contractor shall be responsible for providing goods and services at DEN as described in **Exhibit A** "Scope of Work", which is attached hereto and incorporated herein by reference, and in accordance with the terms and conditions of this Contract. The Contractor shall furnish all necessary labor, tools, equipment and supplies to perform the required services, except for the equipment and facilities that are specified in this Contract as being the responsibility of the City. The Contractor agrees to provide goods and services onsite at DEN and to maintain in stock throughout the term of this Contract, as it may be extended from time to time, each of the spare parts set forth in the attached **Attachment 3**, "Spare Parts List," which is incorporated herein by this reference. The parties agree this Contract is non-exclusive and the City reserves the right to purchase the same services and materials through other procurements.

2.02 ADDITIONAL SERVICES

The Contractor may also perform services, hereinafter referred to as "Additional Services" or "Change of Services" which relate to the subject matter of this Agreement, but which the Director of Parking and Transportation Systems ("Director") determines to not be described in the Scope of Work or in excess of the requirements of the Scope of Work. Change orders and/or additional Statements of Work (SOWs) will be provided as needed to document work beyond that identified in **Exhibit A**. The Contractor shall be compensated for such Additional Services/Change of Services only if the services and the amount of fees and reimbursable expenses for the services have been authorized in writing in advance by the Director. The total amount of fees and reimbursable expense costs for Additional Services/Change of Services shall not cause this Agreement to exceed the Maximum Contract Liability set forth herein, and in no event shall the approval of Additional Services/Change of Services and the cost of performing them be deemed to constitute an agreement by the City to an increase in the Maximum Contract Liability.

2.02 MANNER OF WORK

The Contract Documents show the general outlines and details of the work encompassed by this Contract. All work under the Contract shall be performed in all respects in strict compliance with the requirements of the Contract Documents. All provisions of the Contract Documents are essential parts of the Contract, and a requirement occurring in one is binding as though occurring in all.

The Contractor shall faithfully perform the work required under this Contract in accordance with standards of care, skill, training, diligence and judgment provided by competent professionals who perform work of a similar nature to the work described in this Contract.

2.03 COORDINATION AND LIAISON

The Contractor agrees to perform its work under this Contract in accordance with the operational requirements of the City's Municipal Airport System, and all work and movement of personnel or

equipment on areas included within the Airport site shall be subject to the regulations and restrictions established by the City or its authorized agents. The Contractor agrees that during the term of this Contract it shall coordinate its work with any interested City agency, any person or firm under contract with the City, and with other governmental agencies which are affected by or interested in any part of the services the Contractor performs under this Contract. The City agrees that during the term of this Contract it shall use reasonable efforts to cause any interested City agency, any person or firm under contract with the City, which are affected by or interested in any part of the services the Contractor performs under this Contract, to promptly respond to any such requests for coordination and to coordinate accordingly in order to facilitate the prompt and expeditions performance of such services.

2.04 SOFTWARE LICENSES (If Applicable)

A. DEFINITIONS: For purposes of this Section 2.04, the following terms have the meanings set forth below:

"Licensed Software" and "Software" refer to each of the computer software products provided by the Contractor to the City. Each Software product consists of both computer software and software documentation (e.g., user manual, technical manual, systems manual, keyboard function strip, and like items). Additions, corrections, updates and enhancements of a Software also fall within the definition of Software. Software refers both to the intangible information comprising the product and, as the context requires, every copy of the information.

"Use" means copying all or any portion of the Licensed Software from storage units or media into a CPU or using any Licensed Software in the course of the operation of any CPU or in support of the use of any CPU or Software, or photocopying any portion of the Software as defined above.

"End User" means a company, firm or individual whose only purpose in obtaining Software is for its own in-house use. Persons providing data processing services commonly known in the industry as Time Sharing or Service Bureaus, or persons intending to resell, trade or barter in the Licensed Software are explicitly excluded from End User status.

- B. GRANT OF SUBLICENSE: Upon delivery of the Licensed Software by the Contractor and payment by the City, the Contractor grants to the City a non-exclusive, nontransferable, revocable sublicense to use the Licensed Software (the "Sublicense"), which Sublicense may be revoked by Contractor upon the City's failure to pay the Contractor as required herein.
- C. SCOPE OF SUBLICENSE: In implementation of this Sublicense, the Contractor shall furnish the City with a copy of the Licensed Software on machine readable media and with associated user instructions and reference documentation, all of which material may be marked with a trade secret notation such as: "The information herein are trade secrets and proprietary properties of the Licensor." The Sublicense granted under and subject to the terms and conditions of this Contract authorizes the City to use the Licensed Software as an End User, and the granting of further sublicenses is not permitted. The City hereby acknowledges that similar software may be licensed, sublicensed or leased to other users.

The City is responsible for the supervision, management and control of its use of the Licensed Software. Except as otherwise provided in this Contract, the City agrees: 1) to not provide the Licensed Software, or any part thereof, or any copies thereof to any third party; 2) to not assign, lease, sublicense or otherwise transfer same, in whole or in part, directly or indirectly; and 3) to use the same degree of care it provides for its own programs to protect such programs as restricted proprietary and confidential programs. The City is responsible to exercise good business practices, procedures and control to monitor the software performance and to notify the Contractor upon verifying any software errors.

D. COPIES/ MODIFICATIONS: The City may make copies of all or any part of the Licensed Software for the City's in-house use. If the Contractor provides services related to updated works, the Contractor shall perform such services at rates and on terms not less favorable than any other similarly situated customer of the Contractor for such similar services. The use of any portion of the Licensed Software included in an updated work shall remain subject to all terms and conditions of this Contract. The City agrees to reproduce and include the proprietary and trade secret notices both in and on every copy of the Licensed Software in any form including partial copies and modifications of the Licensed Software.

2.05 PCI/DSS COMPLIANCE FOR "IN-SCOPE" SERVICES

- A. The Contractor covenants and agrees to comply with Visa's Cardholder Information Security Program/CISP, MasterCard's Security Data Program and SDP Rules, and with all other applicable credit card association rules or rules of member organizations (generally "Association") to the extent they apply to deliverables and activities under the PRCS Scope of Work, and further covenants and agrees to maintain compliance with the Payment Card Industry Data Security Standards (PCI DSS), MasterCard Site Data Protection (SDP), (collectively, the "Security Guidelines") during the Agreement term. Contractor represents and warrants that all of the hardware and software components that it utilizes for the City or uses under this Agreement are and will be PCI DSS and P2PE compliant. Contractor further agrees to exercise reasonable due diligence to ensure that all of its service providers, agents, business partners, contractors, subcontractors and any person or entity that may have access to credit card information under this Agreement maintain compliance with the Security Guidelines and comply in full with the terms and conditions set out in this Section. Contractor further certifies that deliverables described herein are to be implemented in a manner that meets or exceeds P2PEand/or PCI requirements.
- B. The Contractor shall not retain or store CVV2/CVC2 data subsequent to authorization of a credit card transaction, shall prohibit disclosure of any and all cardholder information, and in the event of a compromise of credit card information of any kind, Contractor shall immediately notify the City in writing, and shall provide, at Contractor's sole expense, all necessary and appropriate notification to parties and persons affected by such disclosure and compromise.
- C. Contractor must provide verification to the City, prior to start up and ongoing annually during the term of this Agreement, that all modules of the Contractor's system(s) that interface with or utilize credit card information in any manner or form of collection are

Payment Card Industry Data Security Standards (PCI DSS) compliant.

D. If any Association requires an audit of the Contractor or any of Contractor's Service Providers, agents, business partners, contractors or subcontractors due to a data security compromise event related to this Agreement, Contractor agrees to cooperate with such audit.

SECTION 3 - TERM

3.01 TERM

The term of this Contract shall commence at 12:01 am. M.S.T. on September 2, 2019 and shall terminate at 12:00 a.m. M.S.T. on September 1, 2022, unless earlier terminated in accordance with the Contract Documents.

SECTION 4 – COMPENSATION AND PAYMENT

4.01 COMPENSATION AND INVOICING

The City agrees to pay, and the Contractor agrees to accept as sole compensation for its complete costs incurred and services rendered hereunder, in the amounts indicated in Attachment 7 Payment Milestones, and for costs of Point-to-Point Encryption (P2PE) services as defined in Exhibit A SOW Attachment 11 plus any authorized changes pre-approved by DEN

Payments shall be made to Contractor based upon invoices submitted and work completed by Contractor, which invoices have been approved by City, and subject to the City's maximum contract liability. The Payment Process the Contractor shall follow is found in Exhibit A Scope of Work Part 4.

Work completed shall be based on the approved schedule of values or unit prices, as applicable, and the percent of the Work complete.

The City reserves the right to reject and not pay any invoice or part thereof where the CEO or his/her designee determines that the amount invoiced to date exceeds the amount which should be paid based upon its determination of the work which has been performed. The City, however, shall pay any undisputed items contained in the invoice. Disputes concerning payments under the provisions of this contract shall be resolved by administrative hearing pursuant to the procedures of Section 5-17, Denver Revised Municipal Code. In the event the City does not conclusively substantiate within sixty (60) days from the date an invoice is rejected hereunder that the amount invoiced to date exceeds the amount owed to Contractor, the City shall pay the amount invoiced.

Invoices shall include documentation as required by the Contract Administrator, including the following where applicable:

- A. A brief status report which describes the progress of the work and a summary of the work performed during the period covered by the invoice, including incident reports and other documents evidencing the performance of Additional Services.
- B. A statement of hours spent where billing is based upon hourly rates. Time sheets shall be maintained by the Contractor and shall be available for examination by the City, at the City's request.
- C. The amounts shown on the invoices shall comply with and clearly reference the relevant City authorization of Additional Services, the hourly rate where applicable, and allowable reimbursable expenses.
- E. The signature of an officer of the Contractor, along with such officer's certification that it has examined the invoice and has found it to be correct, shall be included on all invoices.

The obligations of City under this Agreement shall extend only to monies encumbered for the purposes of this Agreement. Contractor acknowledges and understands City does not by this Agreement irrevocably pledge present cash reserves for payments in future fiscal years, and this Agreement is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of City.

The City reserves the right to direct the Contractor to perform only limited portions of the work and the Contractor agrees that it shall not continue work in excess of approved and encumbered amounts without a written notice from the City stating the funding limit and term. If the Contractor chooses to proceed with work prior to receiving such a written notice, then the Contractor shall do so at its own risk without any liability for payment by the City. The City's written notice must be signed by the CEO, otherwise it is invalid, and the Contractor is without authority to proceed. Payments hereunder will be made subject to the multi-year conditions stated above.

4.04 MAXIMUM LIABILITY

- A. Notwithstanding any other provision of this Agreement, in no event shall City be liable for payment for services rendered and expenses incurred by Contractor under the terms of this Agreement for any amount in excess of the sum of **Ten Million Six Hundred Forty-Two Thousand Four Hundred Ninety-One Dollars and No Cents (\$10,642,491.00)** ("Maximum Contract Liability"). Contractor will be performing the services on a time and material basis up to the Maximum Contract Amount. The Maximum Contract Liability may only be increased by amendment to this Contract. All payments under this Contract shall be paid solely and exclusively from the City's "City and County of Denver, Funds of the Airport System" and from no other fund or source.
- B. The obligations of City under this Agreement shall extend only to monies encumbered for the purposes of this Agreement. Contractor acknowledges and understands City does not by this Agreement irrevocably pledge present cash

reserves for payments in future fiscal years, and this Agreement is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of City.

4.05 TIME OF PAYMENT

Subject to the Maximum Contract Amount set forth in section 4.04.A. of this Agreement, Contractor's fees and expenses shall be paid in accordance with this Agreement. Unless otherwise agreed to in writing, Contractor will invoice the City on a regular basis in arrears, and the City will pay each invoice in accordance with Denver's Prompt Pay Ordinance, Denver Revised Municipal Code ("D.R.M.C.") § 20-107, et seq., subject to the Maximum Contract Liability set forth above. Contractor understands and agrees interest and late fees shall be payable by City only to the extent authorized and provided for in City's Prompt Payment Ordinance. Travel and any other expenses are not reimbursable unless Contractor receives prior written approval of the Project Manager and be related to and in furtherance of the purposes of the Contractor's engagement.

SECTION 5 — CONTRACTOR'S PERFORMANCE

5.01 CONTRACTOR PERSONNEL — GENERAL REQUIREMENTS

- A. The Contractor shall at all times provide properly trained and competent personnel in the number and classifications necessary to perform its services in an efficient manner and in accordance with the Contract Documents. The Contractor shall be responsible for the conduct of all the Contractor's personnel at all times. All personnel of the Contractor shall be exclusively dedicated to this Contract while working on site.
- B. The Contractor shall remove from the Airport work site any Contractor employee on, or invited by it onto, the Airport, when the CEO or the Contract Administrator notifies the Contractor in writing that such person: (a) is, in the sole opinion of the CEO or the contract Administrator, incompetent, unfit or disorderly; or (b) has used profane or abusive language or behavior toward any person at the Airport. Such person shall not be reassigned to Airport work by the Contractor, except with the express written consent of the CEO or the Contract Administrator.

5.02 EMPLOYEE DRIVER LICENSES AND RECORDS

- A. Contractor employees driving either City or Contractor provided vehicles under this Contract are required to maintain an excellent driving record. Drivers with a driving record unacceptable to the City's insurance underwriter will be assigned by the Contractor to a non-driving job if available. In addition to any Indemnification requirements in this Contract an employee of the Contractor is involved in an accident in a city vehicle the Contractor shall be responsible for the payment of all damages caused by the Contractor's employee.
- B. The Contractor will review every driver's record quarterly. Drivers with 5 points or more or a pending alcohol related charge against their driving record will not be allowed to drive City or Contractor vehicles. All drivers with an alcohol or drug related charge shall be dealt with in accordance with the provisions of Executive Order No. 94.

C. All Contractor personnel assigned to the Airport who drive vehicles in the course of their work under this Contract must obtain and maintain a Colorado Class "R" driver's license and Airport Identification Badge at all times during their employment at the Airport.

5.03 THE CONTRACTOR'S SUPERVISOR

- A. The Contractor shall provide an on-site Supervisor trained, qualified, and acceptable to the Airport's Contract Administrator, exclusively for this Contract. The Supervisor shall have full authority to act for the Contractor and at all times to carry out the provisions of this Contract. If the Supervisor is absent, the Contractor shall, at all times, provide an equally qualified and competent replacement that has been given full authority to carry out the duties of the positions as required.
- B. The Supervisor shall make sufficient daily inspections to ensure the work is performed as specified. The Supervisor shall use Maintenance Tracking System to assign and track each assignment.
- C. The Contractor agrees that it shall obtain the approval of the Airport's Contract Administrator of the Contractor's proposed Supervisor. The Contractor shall submit a resume of the proposed Supervisor, along with other information reasonably requested by the City, in order to obtain such approval.

5.04 AIRPORT SECURITY

Α. It is a material requirement of this Contract that the Contractor, its officers, authorized officials, employees, agents, subcontractors, and those under its control, will comply with safety, operational, or security measures required of Contractor by the City or Federal Aviation Administration ("FAA") or Transportation Security Administration ("TSA"). If Contractor, its officers, authorized officials, employees, agents, subcontractors or those under its control, fail or refuse to comply with said measures and such non-compliance results in a monetary penalty being assessed against City, then, in addition to any other remedies available to City, Contractor covenants to fully reimburse City any fines or penalties levied against City, and any attorney fees or related costs paid by City as a result of any such violation. This amount must be paid by Contractor within fifteen (15) days from the date of the invoice or written notice. Violation by the Contractor or any of its employees, subcontractors or vendors of any rule, regulation or authorized directive from the City or the TSA with respect to Airport Security shall be grounds for immediate termination by the City of this Contract for cause.

- B. The Contractor shall be responsible for all costs relating to the security check and the preparation of identification badges for each employee. The Contractor, promptly upon notice of award of this Contract, shall meet with the Airport's Assistant Security Manager to establish badging and vehicle permit requirements for Contractor's operations under this Contract. The Contractor shall obtain the proper access authorizations for all of its employees, subcontractors and vendors who will enter the Airport to perform work or make deliveries and shall be responsible for each such person's compliance with all Airport rules and regulations, including without limitation those pertaining to security. Any person who violates such rules may be subject to revocation of his/her access authorization. The failure of the Contractor or any subcontractor to complete any required services hereunder shall not be excused on account of the revocation for good cause of access authorization of any person.
- C. The security status of the Airport is subject to change without notice. If the security status of the Airport changes at any time during the term of this Contract, the Contractor shall take immediate steps to comply with security modifications that occur as a result of the changed status. The Contractor may at any time obtain current information from the Airport Security Office regarding the Airport's security status in relation to the Contractor's operations at the Airport.
- D. The Contractor shall return to the City at the expiration or termination of this Contract, or upon demand by the City, all access keys or access badges issued to it or any subcontractor for any area of the Airport, whether or not restricted. If the Contractor fails to do so, the Contractor shall be liable to reimburse the City for all the City's costs for work required to prevent compromise of the Airport security system. The City may withhold funds in the amount of such costs from any amounts due and payable to the Contractor under this Contract.
- E. Contractor acknowledges that, in the course of performing its work under this Agreement, Contractor may be given access to Sensitive Security Information ("SSI"), as material is described in federal regulations, 49 C.F.R. part 1520. Contractor specifically agrees to comply with all requirements of the applicable federal regulations specifically, 49 C.F.R. Parts 15 and 1520. Contractor understands any questions it may have regarding its obligations with respect to SSI must be referred to the DEN's Security Office.

5.05 SAFETY

- A. The Contractor shall operate at all times under this Contract in compliance with the Occupational Safety and Health Act.
- B. For all operations requiring the placement and movement of the Contractor's equipment, Contractor shall observe and exercise and compel its employees to observe and exercise all necessary caution and discretion so as to avoid injury to persons, damage to property of any and all kinds, and annoyance to or undue interference with the movement of the public and City personnel.

5.06 LAWS, REGULATIONS, TAXES AND PERMITS

- A. The Contractor shall procure all permits and licenses, pay all charges, taxes and fees and give all notices necessary and incidental to the due and lawful prosecution of the work under this Contract. All costs thereof shall be deemed to be included in the prices proposed for the work.
- B. The Contractor, at all times, shall observe and comply with all existing and future federal, state, county, city and other laws, codes, ordinances, rules and regulations including Denver International Airport Rules and Regulations in any manner affecting the conduct of the work, including without limitation the Williams-Steiger Occupational Safety and Health Act of 1970 (Public Law 91-596). If during the term of this Contract the amendment or adoption of any such law significantly impacts the Contractor's ability to perform hereunder by increasing either the cost or effort required, the Contractor shall provide to the City an analysis of such impact and may request an amendment to this Contract to mitigate such impacts.
- C. Without limiting the foregoing, the Contractor shall establish appropriate procedures and controls so that services under this Contract will not be performed by using any alien who is not legally eligible for such employment under United States Immigration laws. Failure to satisfactorily comply with this condition may cause the City to terminate this Contract.

5.07 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

- Α. The Contractor, in conducting any activity on DEN property, shall comply with all applicable airport, local, state, and federal rules, regulations, statutes, laws, and orders (Environmental Requirements). These Environmental Requirements include applicable Environmental Guidelines developed for DEN's Environmental Management System (EMS), as summarized in DEN Rules and Regulations Part 180 (Environmental Guidelines and DEN's Environmental Policy are available at https://www.flydenver.com/sites/default/files/rules/180_environmental.pdf . These Environmental Requirements address, but are not limited to, requirements regarding the storage, use; and disposal of hazardous materials, petroleum products, solid waste, or any other substance; the National Environmental Policy Act (NEPA); and water and air quality regulations. Each entity, including subcontractors and subconsultants, providing products, goods, and/or services on behalf of DEN must be aware of the DEN Environmental Policy, significant environmental aspects, and which of these activities are relevant to the activities conducted by the entity.
- B. The Contractor shall acquire all necessary federal, state, local, and airport permits/approvals and comply with all permit/approval requirements.
- C. The Contractor agrees to ensure that its operations hereunder are conducted in a manner that minimizes environmental impact through appropriate preventive measures. The Contractor agrees that it shall be responsible for any notice of violation from CDPHE, the City and County of Denver or the EPA. The Contractor further agrees that it is responsible for the health and safety of its personnel in connection with such environmental requirements.

D. In the case of a release, spill or leak as a result of the Contractor's activities, the Contractor shall immediately control and remediate the contaminated media to applicable federal, state and local standards. The Contractor agrees that in such event it will immediately clean up all spills and the cleanup material must be disposed of offsite at the Contractor's sole expense. The Contractor agrees that it shall reimburse the City for any penalties and all costs and expenses, including without limitation attorney's fees, incurred by the City as a result of the release or disposal by the Contractor of any pollutant or hazardous material on or about the Airport.

5.08 USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS:

The Contractor, its officers, agents and employees shall cooperate and comply with the provisions of Executive Order No. 94 and Attachment A thereto, incorporated herein by reference, concerning the use, possession or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City's barring the Vendor from City facilities or participating in City operations.

5.09 CITY SMOKING POLICY

Contractor agrees that it will prohibit smoking by its employees and the public in any areas made available to the Contractor hereunder and will not sell or advertise tobacco products. Contractor acknowledges that smoking is not permitted in Airport buildings and facilities except for designated smoking areas. Contractor and its officers, agents and employees shall cooperate and comply with the provisions of the City's Executive Order No. 99 dated December 1, 1993, Executive Order No. 13 dated July 31, 2002, the provisions of Denver Revised Municipal Code, §§ 24-301 to 317 et. seq., and the Colorado Clean Indoor Air Act, C.R.S. §§ 25-14-201 et. seq., and incorporated herein by reference.

5.10 NO SOLICITING

No soliciting for any purpose is allowed on Airport premises by the Contractor's employees. The Contractor shall inform its employees of this Contract requirement prior to the time each such employee shall begin work for the Contractor at Denver International Airport.

5.11 EXISTING UTILITIES AND STRUCTURES

The Contractor shall adequately protect the work, Airport property, adjacent property and the public. In the event of damage to facilities and/or disruption in services at the facilities, as a result of the Contractor's operations or lack thereof when required, the Contractor shall take immediate steps to notify the Contract Administrator and subsequently repair or restore all services to the satisfactory approval of the Contract Administrator. The Contractor shall also provide temporary services to maintain uninterrupted use of the facilities.

All costs involved in making repairs and restoring disrupted service shall be borne by the Contractor, and the Contractor shall be fully responsible for any and all claims resulting from the damage.

The Contract Administrator, at her/his option, may elect to perform such repairs and deduct the cost of such repairs, replacements and outside services from the monthly charges by the Contractor.

SECTION 6 — INDEMNITY; INSURANCE; BONDS

6.01 INSURANCE

- A. Contractor shall obtain and keep in force during the entire term of this Agreement, all of the insurance policies described in City's form of insurance certificate which is attached to this Agreement as **Exhibit C** and incorporated herein. Such insurance coverage includes workers' compensation and employer liability, commercial general liability, business automobile liability, and professional liability. Upon execution of this Agreement, Contractor shall submit to City a fully completed and executed original of the attached insurance certificate form, which specifies the issuing company or companies, policy numbers and policy periods for each required coverage. In addition to the completed and executed certificate, Contractor shall submit a copy of a letter from each company issuing a policy identified on the certificate, confirming the authority of the broker or agent to bind the issuing company, and a valid receipt of payment of premium.
- B. Upon execution of this Contract, the Contractor shall submit to the City an ACORD insurance certificate form, which specifies the issuing company or companies, policy numbers and policy periods for each of the required coverage.
- C. The City's acceptance of any submitted insurance certificate is subject to the approval of the City's Risk Management Administrator. All coverage requirements specified in the certificate shall be enforced unless waived or otherwise modified in writing by the City's Risk Management Administrator.
- D. The Contractor shall comply with all conditions and requirements set forth in the insurance certificate for each of the required coverage during all periods in which coverage is in effect.
- E. Unless specifically excepted in writing by the City's Risk Management Administrator, the Contractor shall obtain a separate certificate from each subcontractor. All coverages for subcontractors shall be subject to all of the requirements set forth in this Agreement and the Contractor shall insure that each subcontractor complies with all of the coverage requirements.

6.02 DEFENSE AND INDEMNIFICATION

- A. The City cannot and by this Contract does not agree to indemnify, hold harmless, exonerate or assume the defense of the Contractor or any other person or entity whatsoever, for any purpose whatsoever.
- B. Contractor agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or relating to the work performed under this

Agreement ("Claims"). This indemnity shall be interpreted in the broadest possible manner to indemnify City for any acts or omissions of Contractor or its subcontractors either passive or active, irrespective of fault, including City's concurrent negligence whether active or passive, except for the sole negligence or willful misconduct of City.

- C. Contractor's duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether Claimant has filed suit on the Claim. Contractor's duty to defend and indemnify City shall arise even if City is the only party sued by claimant.
- D. Contractor will defend any and all Claims which may be brought or threatened against City for which indemnity is owed pursuant to this Section and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy. In addition to the duty to indemnify and hold harmless, Contractor will have the duty to defend City, its agents, employees, and officers from all liabilities, claims, expenses, losses, costs, fines, and damages (including but not limited to attorney's fees and court costs) for which indemnity is owed. The duty to defend under this paragraph is independent and separate from the duty to indemnify, and the duty to defend exists regardless of any ultimate liability of Contractor, City, and any indemnified party. The duty to defend arises immediately upon written presentation of a claim to Contractor for which indemnity is owed.
- D. Insurance coverage requirements specified in this Agreement shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.
- E. This defense and indemnification obligation shall survive the expiration or termination of this Agreement. This defense and indemnification obligation shall survive the expiration or termination of this Agreement.

6.03 GOVERNMENTAL IMMUNITY ACT

The Parties hereto understand and agree that City and County of Denver, its officers, officials and employees are relying on, and do not intend to waive by any provision of this Contract, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, §24-10-101 to 120, Colorado Revised Statutes, or otherwise available to the City and County of Denver, its officers, officials and employees.

6.04 PAYMENT AND PERFORMANCE BOND

- A. A Payment and Performance Bond satisfactory to the City and County of Denver in an amount not less than Four Million Five Hundred Thousand Dollars and No Cents (\$4,500,000.00) is required of the Contractor to guarantee that it will perform the work in strict accordance with Agreement Documents and shall pay all debts incurred under this Agreement. The Surety named in the Bond must be authorized to do business in the State of Colorado. Such BOND may be issued on annually renewable bond forms to be provided by Contractor's Surety Bond Broker.
- B. This Bond must be either renewed annually by the Surety named in the Bond or replaced with an identical Bond, which may be met with a surety bond continuation certificate or be replaced with an identical Bond covering the subsequent year of the Agreement issued by another Surety which has been approved in advance by the CEO. If the CEO does not receive written notice from the Surety in the manner provided in the Bond at least forty-five (45) days before it expires or does not receive a substitute Bond from an approved Surety, then the Contractor shall be in default of this Agreement and the CEO may immediately terminate this Agreement by giving the Contractor written notice of such default unless a renewal or replacement surety bond is provided by Contractor. If the City elects to extend the Agreement for additional periods at the same prices, terms and conditions pursuant to this Agreement, the Contractor shall obtain and submit either an extension of the existing Bond, which may be met with a surety bond continuation certificate or an identical Bond from another Surety that is acceptable to the City.
- C. Under no circumstances shall the City be liable to the Contractor for any costs incurred or payments made by the Contractor to obtain an extension of an existing Bond or a new Bond.
- D. The Payment and Performance Bond form is attached to this Agreement and incorporated herein as **Exhibit E** and may be issued on annually renewable bond forms to be provided by Contractor's Surety Bond Broker. Attorneys-in-Fact who sign a Performance Bond must file with such Bond a certified copy of their Power-of-Attorney to sign such Bond that is certified to include the date of the Bond.

SECTION 7 – SUBCONTRACTING

7.01 SUBCONTRACTING ALLOWED

The Contractor may sublet portions of the Work. No subcontractor shall in turn subcontract any portion of its work; there shall only be one tier of subcontracting.

7.02 OBLIGATIONS OF CONTRACTOR

The Contractor shall be responsible for any acts or omissions of its employees, agents, suppliers, material men and subcontractors. The Contractor shall make available to each proposed subcontractor, prior to the execution of the subcontract, copies of the Contract. In addition, all work performed for the Contractor by a subcontractor shall be pursuant to an agreement between the Contractor and the subcontractor which shall contain provisions that:

- A. Preserve and protect the rights of the City and its funding agencies under the Contract Documents with respect to the work to be performed so that the subcontracting thereof will not prejudice those rights; and
- B. Require that the Subcontractor be bound to the Contractor by the terms of the Contract Documents, that its work be performed in accordance with the requirements of the Contract Documents, and with respect to the work it performs, that it assume toward the Contractor all the obligations and responsibilities the Contractor assumes toward the City.

7.03 APPROVAL OF SUBCONTRACTORS

All subcontractors that the Contractor expects to perform Work under this Contract must be approved in writing by the CEO or the Contract Administrator before the subcontractor begins work. The CEO or the Contract Administrator may refuse to approve a subcontractor for reasons that include, but are not limited to, the following:

- A. Default on a contract within the last five (5) years.
- B. Default on a contract that required that a surety complete the contract under payment or performance bonds issued by the surety.
- C. Debarment within the last five (5) years by a public entity or any organization that has formal debarment proceedings.
- D. Significant or repeated violations of Federal Safety Regulations (OSHA).
- E. Failure to have the specific qualifications listed in the Contract Documents for the work that the subcontractor will perform.
- F. Failure to have the required City or Colorado licenses to perform the work described in the subcontract.
- G. Failure to pay workers the proper wage and benefits or to pay suppliers or subcontractors with reasonable promptness within the last five (5) years.
- H. The Subcontractor or any of its officers or employees are convicted, plead nolo contendere, enter into a formal agreement in which they admit guilt, enter a plea of guilty, or otherwise admit culpability to criminal offenses of bribery, kickbacks, collusive bidding, bid-rigging, antitrust, fraud, obstruction of justice, undue influence, theft, racketeering, extortion or any offense of a similar nature in connection with the Subcontractor's business.

Before the CEO approves any such subcontractor, the Contractor shall submit to the CEO a statement signed by an officer or principal of the Contractor certifying that the Contractor has investigated the qualifications and background of its proposed subcontractors and identifying the existence of any of the problems listed above or certifying that to the best of his/her knowledge the problems listed do not exist.

7.04 NO CONTRACTUAL RELATIONSHIP

The City does not intend that this Section 7, or any other provision of this Contract, be interpreted as creating any contractual relationship between the City and any subcontractor. The City does not intend that its approval of a subcontractor will create in that subcontractor a right to any subcontract. The City's approval of a subcontractor does not relieve the Contractor of its responsibilities to the City for the work to be performed by the subcontractor.

SECTION 8 — WAGES AND SALARIES

8.01 PAYMENT OF PREVAILING WAGES

- A. Pursuant to Section 20-76 of the Denver Revised Municipal Code, the Contractor and each of its subcontractors shall pay every worker, laborer or mechanic employed by it directly upon the site of the work under this Contract the full amounts accrued at the time of payment, computed at wage rates not less than those shown on the current prevailing wage rate schedule for each class of employees performing work for the Contractor and its subcontractors under this Contract. (See Exhibit F) The wages shall be those prevailing as of the date of this Contract, and the Contractor shall post in a prominent and easily accessible place in its work area at the Airport, a copy of the wage rates for the positions or positions to which the prevailing wage ordinance applies. All construction workers, mechanics and other laborers shall be paid at least once per week; nonconstruction workers such as janitorial or custodial workers shall be paid at least twice per month.
- B. The Contractor shall furnish to the City Auditor or his authorized representative, each week during which work is performed under this Contract, a true and correct copy of the payroll records of all workers employed to perform the work, to whom the prevailing wage ordinance applies. All such payroll records shall include information showing the number of hours worked by each worker, the hourly pay of such worker, any deductions made from pay, and the net amount of pay received by such worker for the period covered by the payroll. The payroll record shall be accompanied by a sworn statement of the Contractor that the copy is a true and correct copy of the payroll records of all workers performing such work, either for the Contractor or a subcontractor, that payments were made to the workers as set forth in the payroll records, that no deductions were made other than those set forth in such records, and that all workers were paid the prevailing wages as set forth in this Contract.
- C. If the term of this Contract extends for more than one year, the minimum City prevailing wage rates that contractors and subcontractors shall pay during any subsequent yearly period or portion thereof shall be the wage rates in effect on the yearly anniversary date of this Contract which begins such subsequent period. Decreases in prevailing wages subsequent to the date of this Contract shall not be effective except on the yearly anniversary date of this Contract. In no event shall any increases in prevailing wages after the first anniversary of this Contract result in any increased liability on the part of the City and the possibility and risk of any such increase is assumed by the Contractor.

- D. If the Contractor or any subcontractor fails to pay such wages as required herein, the City Auditor shall not approve any warrant or demand for payment to the Contractor until the Contractor furnishes to the Auditor evidence satisfactory to the Auditor that such wages so required by this Contract have been paid. The Contractor may utilize the procedures set out in D.R.M.C. §20-76(d)(4) to satisfy the requirements of this provision.
- E. If any worker to whom the prevailing wages are to be paid, employed by the Contractor or any subcontractor to perform work hereunder, has not been or is not being paid a rate of wages required by this Section 8, the CEO may by written notice to the Contractor, suspend by a stop-work order or terminate the Contractor's services hereunder, or the part of such services performed by such workers. The issuance of a stop-work order shall not relieve the Contractor or its sureties of any obligations or liabilities to the City under this Contract, including liability to the City for any extra costs incurred by it in obtaining substitute services for Airport facilities while any such stop-work order is in effect or following termination for such cause.
- F. Contractor is subject to D.R.M.C. § 20-112 wherein Contractor is to pay its subcontractors in a timely fashion. A payment is timely if it is mailed to the subcontractor no later than seven (7) days after receipt of any payment from City. Any late payments are subject to a late payment penalty as provided for in the prompt pay ordinance (§§ 20-107 through 20-118).

SECTION 9 - CONTRACT ADMINISTRATION: CONTRACT DOCUMENTS

9.01 AUTHORITY OF THE CONTRACT ADMINISTRATOR

- A. The day to day administration of this Contract is vested in the Airport's Contract Administrator. The Contract Administrator is to have free access to the Contractor's work areas at the Airport. The Contract Administrator will decide any and all questions that may arise as to the quality and acceptability of supplies and equipment furnished and work performed, and as to the manner of performance and rate of progress of the work.
- B. The Contract Administrator may make changes in the specifications of work performed by the Contractor, if such changes do not alter the general nature of the work being performed. Notice to the Contractor of such changes will be made orally if the duration of such changes is less than one week; otherwise, notice will be given in writing.

9.02 CONTRACTOR'S UNSATISFACTORY PERFORMANCE

If, in the reasonable opinion of the CEO, the Contractor's performance under this Contract becomes unsatisfactory, the City shall notify the Contractor in writing, specifying the instances of unsatisfactory performance. The Contractor will have three (3) days from the time of such notice to correct any specific instances of unsatisfactory performance. In the event the unsatisfactory performance is not corrected within the time specified above, the City shall have the immediate right at the Contractor's sole expense to complete the work to its satisfaction and the City shall deduct the cost to cover same from any balances due or to become due the Contractor.

9.03 DISPUTE RESOLUTION

Disputes arising out of this Contract shall be resolved by administrative hearing before the CEO following the procedures outlined in Denver Revised Municipal Code Section 5-17. It is further agreed that no cause of action shall be brought against the City until there has been full compliance with the terms of this Section. The parties agree that the determination resulting from said administrative hearing shall be final, subject only to Contractor's right to appeal the determination under Colorado Rule of Civil Procedure, Rule 106.

9.04 CONTRACT DOCUMENTS; ORDER OF PRECEDENCE

This Contract consists of Sections 1 through 11, which precede the signature page, and the following attachments, which are incorporated herein and made a part hereof by reference:

In the event of an irreconcilable conflict between (i) a provision of Sections 1 through 11 and any of the listed attachments or (ii) between provisions of any attachments, such that it is impossible to give effect to both, the order of precedence to determine which document shall control to resolve such conflict, is as follows, in descending order:

Appendices Standard Federal Assurances

Exhibit A Scope of Work (Includes Attachments)

Exhibit C Certificate of Insurance

Exhibit E Performance Bond

Exhibit F Prevailing Wages

SECTION 10 — DEFAULT; REMEDIES; TERMINATION; WARRANTY

10.01 TERMINATION FOR CONVENIENCE OF THE CITY

- A. City has the right to terminate this Agreement without cause on thirty (30) days prior written notice to Contractor, and with cause on ten (10) days prior written notice to Contractor. In the event of termination by City for cause, Contractor shall be allowed five (5) days to commence remedying its defective performance, and in the event Contractor diligently cures its defective performance to City's satisfaction, within a reasonable time as determined solely by City, then this Agreement shall not terminate. However, nothing herein shall be construed as giving Contractor the right to perform services under this Agreement beyond the time when such services become unsatisfactory to the CEO.
- B. If Contractor is discharged before all the services contemplated hereunder have been completed, or if Contractor's services are for any reason terminated, stopped or discontinued because of the inability of Contractor to provide services in accordance with the terms of this Agreement, Contractor shall be paid only for those services deemed by the CEO satisfactorily performed prior to the time of termination.

C. Upon termination of this Agreement by City, Contractor shall have no claim of any kind whatsoever against City by reason of such termination or by reason of any act incidental thereto, except as follows: if the termination is for the convenience of City, Contractor shall be entitled to reimbursement for the reasonable cost of the work to the date of termination, and reasonable costs of orderly termination, provided request for such reimbursement is made no later than six (6) months from the effective date of termination. Contractor shall not be entitled to loss of anticipated profits or any other consequential damages as a result of any such termination for convenience, and in no event shall the total sums paid exceed the Maximum Contract Liability.

10.02 DEFAULT

The following are events of default under this Contract:

- A. In the reasonable opinion of the CEO, the Contractor fails to perform adequately the services required in the contract.,
- B. In the reasonable opinion of the CEO the Contractor fails to perform the required work within the time stipulated in the contract.
- C. The Contractor is in default under any other contract, purchase order or agreement with the City.
- D. The Contractor becomes insolvent or takes the benefit of any present or future insolvency or bankruptcy statute, or makes a general assignment for the benefit of creditors, or consents to the appointment of a receiver, trustee or liquidator of any or substantially all of its property.
- E. The Contractor transfers its interest under this Contract, without the prior written approval of the City, by reason of death, operation of law, assignment, sublease or otherwise, to any other person, entity or corporation.
- F. The Contractor gives its permission to any person to use for any illegal purpose any portion of the Airport made available to Contractor for its use under this Contract.
- G. The Contractor fails to comply with any of the provisions of this Contract concerning Airport security.
- H. The Contractor or any of its officers or employees are convicted, plead nolo contendere, enter into a formal agreement in which they admit guilt, enter a plea of guilty, or otherwise admit culpability to criminal offenses of bribery, kickbacks, collusive bidding, bid-rigging, antitrust, fraud, obstruction of justice, undue influence, theft, racketeering, extortion, or any offense of a similar nature, in connection with Contractor's business.

I. The Contractor fails to keep, perform and observe any other promise, covenant or agreement set forth in this Contract, and such failure continues for a period of more than 30 days after delivery by the City of a written notice from the CEO of such breach or default, except where a shorter period is specified herein, or where fulfillment of its obligation requires activity over a period of time and Contractor within 10 days of notice commences in good faith to perform whatever may be required to correct its failure to perform and continues such performance without interruption except for causes beyond its control.

10.03 REMEDIES

If Contractor commits an Event of Default, as described in Section 10.02, the City may exercise any one or more of the following remedies:

- A. The City may elect to allow this Contract to continue in full force and effect and to enforce all of City's rights and remedies hereunder.
- B. The City may cancel and terminate this Contract upon giving 30 days written notice to Contractor of its intention to terminate; provided, however, that if the Contractor has committed an Event of Default as defined in Subsections 10.02(E), (F), (G) or (H), termination may be effective either immediately upon notice, or within a stated period of 30 days or less after notice, as determined by the CEO in his/her discretion.
- C. The City may obtain necessary services in the open market, at competitive rates, or otherwise perform or otherwise perform or obtain performance of the services covered by this Contract, at the expense of the Contractor. The City may recover any actual excess costs by: (1) deduction from an unpaid balance; (2) collection against the Contractor's performance bond; or (3) any combination of the two foregoing methods. Nothing herein shall prevent the City from using any other method of collection available to it.

10.04 REMEDIES CUMULATIVE

The remedies provided in this Contract shall be cumulative and shall in no way affect any other remedy available to the City under law or in equity.

10.05 WARRANTY

Warranty information is found in Exhibit A Scope of Work.

SECTION 11- GENERAL CONDITIONS

11.01 LABOR ACTIVITY

If any strike, boycott, picketing, work stoppage, slowdown or other labor activity is directed against the Contractor at the Airport that results in the curtailment or discontinuation of services performed hereunder, the City shall have the right during said period to employ any means legally permissible to have the work performed. This shall include the use of the Contractor's equipment,

and the CEO or his authorized representative in his/her sole discretion shall determine the reasonable value of said equipment for purposes of reimbursement to the Contractor.

11.02 EXAMINATION OF RECORDS

In connection with any services performed hereunder on items of work toward which federal funds may be received the City, the FAA, the Comptroller General of the United States and any other duly authorized representatives shall have access to any books, documents, papers and records of Contractor which are directly pertinent to a specific grant program for the purpose of making audit, examination, excerpts and transcriptions. Contractor further agrees that such records will contain information concerning the hours and specific services performed along with the applicable federal project number.

The Contractor agrees that the CEO, the Auditor of the City or any of their duly authorized representatives, until the expiration of three (3) years after the final payment under this agreement, shall have access to and the right to examine any books, documents, papers and records of the Contractor relating to the Contractor's performance of, or any transactions related to, this Contract.

The Contractor, upon written request by the City, shall make all such documents available for examination within the Denver metropolitan area, or shall pay to the City in full, in advance, travel and related expenses of a City representative to travel to any location outside the Denver area for such examination. Following the travel, expenses shall be reconciled, and any difference between the advance payment and the actual expenses shall be paid by or refunded to the Contractor. Such documents shall be available to the City representative within fourteen calendar days of the date of the written request. The parties agree that any delay in furnishing such records to the City will cause damages to the City, which the parties agree are liquidated in the amount of Three Hundred Fifty Dollars per day for each day the records are unavailable beyond the date established in the City's notice. The Contractor agrees to pay such liquidated damages to the City for each such day the records are unavailable to the City.

11.03 BOND ORDINANCES; GOVERNING LAW; VENUE; SERVICE OF PROCESS

This Contract shall be deemed to have been made in and shall be construed in accordance with the laws of, the State of Colorado and the Charter and Ordinances of the City and County of Denver. This Contract is in all respects subject and subordinate to any and all City bond ordinances applicable to the Denver Municipal Airport System and to any other bond ordinances, which amend, supplement or replace such bond ordinances. Venue for any action hereunder shall be in the City and County of Denver, State of Colorado. The Contractor agrees that any and all notices, pleadings and process may be made by serving two copies of the same upon the Colorado Secretary of State, State Capitol, Denver, Colorado, and by mailing by return mail an additional copy of the same to the Contractor at the address shown herein; that said service shall be considered as valid personal service, and judgment may be taken if, within the time prescribed by Colorado law or Rules of Civil Procedure, appearance, pleading or answer is not made.

11.04 NO DISCRIMINATION IN EMPLOYMENT

In connection with the performance of work under this contract, the Contractor agrees not to refuse to hire, nor to discharge, promote or demote, nor to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin,

gender, age, military status, sexual orientation, gender variance, marital status or physical or mental disability; and the Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

11.05 SMALL BUSINESS ENTERPRISES

Contractor is subject to City's ordinance, DRMC Chapter 28, Article III (MBE/WBE Ordinance) which prohibits discrimination in the awarding of contracts and subcontracts and directs the DSBO Director to establish goals for MBE and WBE participation in the preconstruction and construction of City-owned facilities. The goal for this Agreement is Zero Percent (0%). Project goals must be met with certified MBE and WBE participants or by demonstrating good faith efforts under the MBE/WBE Ordinance. The Contractor must comply with the terms and conditions of the MBE/WBE Ordinance in soliciting and contracting with its sub-contractors and sub-contractors in administering the performance of the work hereunder.

11.06 ASSIGNMENT OF CONTRACT

Contractor shall not assign, pledge or transfer its duties, obligations, and rights under this Agreement, in whole or in part, without first obtaining the written consent of the Project Manager. Any attempt by Contractor to assign or transfer its rights hereunder without such prior written consent shall, at the option of the Project Manager, automatically terminate this Agreement and all rights of Contractor hereunder. Such consent may be granted or denied at the sole and absolute discretion of the Project Manager.

11.07 NO THIRD PARTY BENEFICIARIES

This Contract does not and shall not be deemed or construed to confer upon or grant to any third party or parties any right to claim damages or to bring any suit, action or other proceeding against either the City or the Contractor because of any breach hereof or because of any of the terms, covenants, agreements and conditions herein contained. Any person other than the City or the Contractor receiving any benefit hereunder shall be deemed to be an incidental beneficiary only.

11.08 PATENTS AND TRADEMARKS

A. The Contractor covenants that it is the owner of or fully authorized to use any and all services, processes, machines, articles, marks, names or slogans to be used by it in its operations under or in any way connected with this Contract. The Contractor agrees to save and hold the City, its officers, employees, agents and representatives free and harmless of and from any loss, liability, expenses, cost, suit or claim for damages incurred or brought by any third party in connection with any actual or alleged infringement of any patent, trademark or copyright arising from any alleged or actual unfair competition or other similar claim arising out of the operations of the Contractor under or in any way connected with this Contract.

B. The Contractor agrees that it will not engage in or allow its employees, subcontractors or agents to engage in, any unauthorized use or infringement of any trademark or copyright. The Contractor agrees to save and hold the City free and harmless of and from any loss, liability, expenses, cost, suit or claim for damages incurred or brought by any third party in connection with any infringement by the Contractor or its officers, employees, subcontractors, agents or representatives, of any trademarks or copyrights, arising out of the operations of the Contractor under or in any way connected with this Contract.

11.09 ROYALTIES

The Contractor shall pay all fees or royalties for any patented articles, operations, or construction incorporated in or used in the execution of the work.

11.10 OWNERSHIP OF WORK PRODUCT

All hardware, equipment, personal property, plans, drawings, reports, other submittals, software development, software modifications and other documents provided or submitted to the City or its authorized agents by the Contractor shall, subject to having payment of any outstanding invoices, become and are the property of the City, and the City may, without restriction, make use of such hardware, equipment, personal property, documents and underlying concepts as it sees fit. This paragraph shall not apply to preexisting intellectual property, the source code for computer software if such source code is governed by a separate license agreement between the Contractor and the City, in which instance the license agreement provisions shall govern.

11.11 MASTER PLAN

No liability shall attach to the City, its officers, agents and employees by reason of any efforts or action toward implementation of any present or future master plan for the development or expansion of DEN and the Contractor also waives any right to claim any resulting damages or other consideration.

11.12 STATUS OF CONTRACTOR

The status of the Contractor under this Contract shall be that of an independent contractor retained on a contractual basis to perform services for limited periods of time as described in §9.1.1(E)(x) of the Charter of City and County of Denver, and it is not intended nor shall it be construed that the Contractor, its subcontractors or the employees of the Contractor or subcontractors are employees, officers or agents of the City under the City Charter, D.R.M.C. Chapter 18, or for any purpose whatsoever.

11.13 NO WAIVER OF RIGHTS

No assent, expressed or implied, to any breach of any one or more of the covenants, provisions and agreements of this Contract shall be deemed or taken to be by the City a waiver of any succeeding or other breach.

11.14 NOTICES

Notices concerning termination of this Contract, notices of default, notices of violations of the terms or conditions of this Contract, and other notices of similar importance shall be made:

By Contractor to: CEO City and County of Denver Department of Aviation

8500 Peña Boulevard Denver, CO 80249

By City to: ECCL 4:12 LLC dba Next Gen Parking LLC

4401 S. Pinemont Drive Suite 200

Houston, TX 77041 Attn: John Curtiss

Either party hereto may designate in writing from time to time the address of substitute or supplementary persons within the State of Colorado to receive such notices.

11.15 FEDERAL PROVISIONS

This contract is subject and subordinate to the terms, reservations, restrictions and conditions of any existing or future agreements between the City and the United States, the execution of which has been or may be required as a condition precedent to the transfer of federal rights or property to the City for airport purposes, and the expenditure of federal funds for the extension, expansion or development of Denver International Airport. The provisions of the attached Appendices Nos. 1 and 3 are incorporated herein by reference.

11.16 MODIFICATIONS TO THE WORK SCOPE SPECIFICATIONS

The Contractor agrees that the City may at any time require deletions, additions or modifications to the work, within the general nature of the work being performed hereunder, without invalidating the Contract, by giving written notice thereof to the Contractor prior to the effective date of such deletions, additions or modifications. Temporary work revisions that do not result in any change to the price to be paid by the City for the Contractor's services hereunder may be directed verbally by the City's Contract Administrator; otherwise, work revisions must be directed in writing and signed by the CEO or his/her successor in function in order for the Contractor to be paid for such work.

If prior to the formal issuance by the CEO of a work modification which requires a price adjustment, the Contractor and the City can agree to a contract price adjustment for the change, that agreement will be expressed in the CEO's work modification directive, either as a decrease or an increase to the monthly payment for routine work.

If agreement between the City and the Contractor on price adjustments cannot be reached at the time the work modification is directed by the CEO, the Contractor shall redirect its work as necessary to perform the work modifications. In such event, the Contractor shall be paid for the actual quantity or quantities of such work performed on a time and materials basis at labor rates equivalent to those set forth in the Contractor's Proposal for equivalent types of work, and with the markup for the Contractor's overhead and profit on such work not to exceed 10% of the cost of such time and materials, except as otherwise herein provided.

11.17 TIME IS OF THE ESSENCE

In the performance of this contract by the Contractor, time is of the essence.

11.18 CONFLICT OF INTEREST

The Contractor represents and warrants that it is under no obligation or restriction, nor will the Contractor assume any obligation, which would in any way interfere with or be inconsistent with the services to be furnished by the Contractor under this Contract.

The Contractor agrees that it will fully disclose to the City the source of all parts or components which would be purchased to accomplish any recommendation which the Company makes to the City for modification or addition to the PRCS. The Contractor will also fully disclose to the City any and all relationships existing between or among the Contractor, its officers, directors, shareholders, affiliates and employees and any other company or entity which would receive any benefit from the implementation of such recommended modifications or deletions.

11.19 ADVERTISING AND PUBLIC DISCLOSURES

The Contractor shall not include any reference to this Contract or to work performed hereunder in any of its advertising or public relations materials without first obtaining the written approval of the CEO. However, by execution of this Contract, the City consents to the Contractor's including the Airport in a list of maintenance contracts held by the Contractor, without elaboration. This consent shall continue for the life of this Contract, unless earlier revoked in writing by the CEO. Any oral presentation or written materials related to Denver's Airport shall include only presentation materials which have been approved by the City. Nothing herein, however, shall preclude the transmittal of any information to officials of the City, including without limitation, the Mayor, the CEO, member or members of City Council or the City Auditor.

11.20 PROHIBITION AGAINST EMPLOYMENT OF ILLEGAL ALIENS TO PERFORM WORK UNDER THIS AGREEMENT:

- A. The Contract is subject to Article 17.5 of Title 8, Colorado Revised Statutes and Den. Rev. Municipal Code 20-90 and the Contractor is liable for any violations as provided in said statute and ordinance.
- B. The Contractor certifies that:
 - (1) At the time of its execution of this Contract, it does not knowingly employ or contract with an illegal alien who will perform work under this Contract.
 - (2) It will participate in the E-Verify Program, as defined in § 8 17.5-101(3.7), C.R.S., to confirm the employment eligibility of all employees who are newly hired for employment to perform work under this Contract.
- C. The Contractor also agrees and represents that
 - (1) It shall not knowingly employ or contract with an illegal alien to perform work under the Contract.

- (2) It shall not enter into a contract with a subcontractor or subconsultant that fails to certify to the Contractor that it shall not knowingly employ or contract with an illegal alien to perform work under the Contract.
- (3) It has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Contract, through participation in the E-Verify Program.
- (4) It is prohibited from using either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while performing its obligations under the Contract, and it has complied with all federal requirements regarding the use of the E-Verify program, including, by way of example, requirements related to employee notification and preservation of employee rights.
- (5) If it obtains actual knowledge that a subcontractor or subconsultant performing work under the Contract knowingly employs or contracts with an illegal alien, it will notify such subcontractor and the City within three days. The Contractor will also then terminate such subcontractor or subconsultant if within three days after such notice the subcontractor or subconsultant does not stop employing or contracting with the illegal alien, unless during such three day period the subcontractor or subconsultant has not knowingly employed or contracted with an illegal alien.
- (6) It will comply with any reasonable request made in the course of an investigation by the Colorado Department of Labor and Employment under authority of § 817.5-102(5), C.R.S. or the City Auditor under authority of Den. Rev. Mun. Code 20-90.3.

11.21 COLORADO OPEN RECORDS ACT

Α. The Contractor acknowledges that the City is subject to the provisions of the Colorado Open Records Act, Colorado Revised Statutes §24-72-201 et seq., Contractor agrees that it will fully cooperate with City in the event of a request or legal process arising under such act for the disclosure of any materials or information which Contractor asserts is confidential and exempt from disclosure. All documents prepared or provided by Contractor under this Contract may be subject to the provisions of the Colorado Open Records Act. Any other provision of this Contract notwithstanding, including exhibits, attachments and other documents incorporated into this Contract by reference, all materials, records and information provided by the Contractor to the City shall be considered confidential by the City only to the extent provided in the Open Records Act and the Contractor agrees that any disclosure of information by the City consistent with the provisions of the Open Records Act shall result in no liability of the City. The Contractor agrees that it will fully cooperate with the City in the event of a request for disclosure of such documents or a lawsuit arising under such act for the disclosure of any documents or information, which the Contractor asserts, is confidential and exempt from disclosure.

B. In the event of a request to the City for disclosure of such information, time and circumstances permitting, the City will make a good faith effort to advise the Contractor of such request in order to give the Contractor the opportunity to object to the disclosure of any of material the Contractor may consider confidential. proprietary or otherwise exempt from disclosure. In the event of the filing of a lawsuit to compel disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and the Contractor agrees it will either intervene in such lawsuit to protect materials the Contractor does not wish disclosed, or waive any claim of privilege or confidentiality. If the Contractor chooses to intervene in such a lawsuit and oppose disclosure of any materials, the Contractor agrees to defend, indemnify, and save and hold harmless the City, its officers, agents, and employees, from any claim, damages, expense, loss or costs arising out of the Contractor's intervention including, but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.

11.22 SEVERABILITY

If any of the provisions of this Contract are held to be unenforceable or invalid by any court of competent jurisdiction, the remaining provisions herein that are severable shall not be affected.

11.23 ENTIRE CONTRACT

The parties acknowledge and agree that the provisions contained herein constitute the entire agreement between the parties as to the subject matter hereof, and that all representations made by any officer, agent or employee of the respective parties unless included herein are null and void and of no effect. No alterations, amendments, changes or modifications to this Contract, except those that are expressly reserved herein to the CEO, shall be valid unless they are contained in an instrument which is executed by all the parties with the same formality as this Contract.

11.24 CITY EXECUTION OF CONTRACT

This Agreement is expressly subject to, and shall not become effective or binding on City, until it is fully executed by all signatories of City and County of Denver. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same, and it may be signed electronically by either party in the manner specified by City. B. Contractor consents to the use of electronic signatures by the City. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the City in the manner specified by the city. The parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

[END OF PAGE]

Contract Control Number:

PLANE-201733794-00

Contractor Name:

ECCL 4:12 LLC dba NextGen Parking LLC

By: I des (inter

Name: John Cartisa (please print)

Title: <u>leo * Pa.~e.PAL</u> (please print)

ATTEST: [if required]

By: In Wells

Name: ANN & WELLS
(please print)

Title: <u>Controller</u> (please print)

Contract Control Number:	
IN WITNESS WHEREOF, the parties Denver, Colorado as of	s have set their hands and affixed their seals at
SEAL	CITY AND COUNTY OF DENVER
ATTEST:	By
APPROVED AS TO FORM:	REGISTERED AND COUNTERSIGNED
By	By
	Ву

EXHIBIT A

SCOPE OF WORK

PART 1 – GENERAL

Provide and install an on-line, real-time parking revenue control system (PRCS) for the parking facilities at Denver International Airport. This includes all management, supervision, engineering, labor and testing services including procurement, installation and testing of all equipment, development and installation of software, surveying and documenting existing parking entrance and exits to support installation of new equipment, development of detailed design documents showing all modification to each lane and island. Identifying equipment locations for each lane, developing schedules, coordination of construction, equipment installation and turnover plans, developing interfacing to facilitate the operating of the new equipment with the existing. NextGen will purchase and integrate NextGen's parking systems with systems/software identified by DEN as specified herein. Said systems will enable DEN to achieve its end goal customer experience. These systems may include but are not limited to third party pre-booking, reservation, analytics, count systems, and aggregators. Coordination and support services with DEN general contractor associated with modifications to the existing entrance and exit lanes and assisting DEN Designer of Record associated with the canopy design. NextGen shall also provide access to a commercial service for Point-to-Point-Encryption (P2PE) of payment/credit card transactions from point of transaction origination to acquiring bank. Systems are to operate and meet the following Objectives;

- 1. Automate the PRCS to the fullest extent without reducing customer service:
 - a. Reduce in-lane payments through online booking, reservations and registered parker programs.
 - b. Customer and employee websites for registration, account management, and payment.
 - c. Payment on file for automated charging at exit (public) or per month (employee).
 - d. Employee kiosks for account management and payment.
 - e. Dual-use cashier lanes that are capable of operating in automated mode when not staffed.
 - f. Remote cashiering to process exception transactions in automated lanes.
- 2. Accommodate multiple user groups including public parkers, reserved parkers, prebooking, registered parking program parkers, valet parkers, emergency vehicles, employees and shuttle buses.
 - a. Utilize various parking access credentials for the various user groups.
 - b. Provide flexibility in offering new parking programs and products.
 - c. Accurately document the required financial and statistical data for the parking operation.
 - d. Provide an open, industry standardized API to allow 3rd party application interfaces.
 - e. Intuitive interface for DEN staff and other authorized PRCS users

- 3. Provide for secure transmission of all DEN PRCS credit/payment card transactions using a PCI validated Point-to-Point-Encryption service.
 - a. Supports specified payment brands
 - b. Ensures data security with encryption of card-present (attended & unattended) and card-not-present transaction types from transaction origin to acquiring bank
 - c. Integrates with payment terminals and card readers on installed PRCS equipment
 - d. Integrates with Chase Paymentech merchant service and payment processor
 - e. Provides DEN with access tools for management of credit/payment card activity, support, reporting, reconciliation, and exception processing (credits, refunds, etc.)

All services provided by this contract shall be for DEN Parking facilities as stated in this scope-of-work (SOW) and shall be in accordance with the Summary, Work Breakdown, and Execution sections as stated in this document.

DEN Parking Facilities

- 1. Public Parking Facilities:
 - a. West Garage
 - b. West Garage Short Term
 - c. West Valet
 - d. Hotel Valet
 - e. West Reserved
 - f. West Economy
 - g. East Garage
 - h. East Garage Short Term
 - i. East Valet
 - j. East Reserved
 - k. East Economy
 - I. Pikes Peak
 - m. Mt. Elbert
 - n. 61st and Pena (Report Integration Only)
- 2. Employee Parking Facilities:
 - a. East Employee Nest
 - b. FAA East Employee Nest
 - c. Atrium East Employee Nest
 - d. Airside Employee
 - e. Landside Employee
 - f. West Employee Nest
 - g. Airport Office Building
 - h. Atrium West Police
- 3. Facilities Software Only (No Hardware)
 - a. Wellness Center

- b. Cargo Lot
- c. Loading Dock Road

1.1 SUMMARY

- A. Provide and install fully integrated PRCS components and features as stated below:
 - 1. AVI antenna and reader
 - 2. Entry station
 - 3. Exit station
 - 4. Cashier station
 - 5. Control Center 70"TV monitor
 - 6. Credit card in/out
 - 7. Credential management system for registered parkers (employees and public)
 - a. Website for account management, online payments, and bank card on file for automatic charges
 - b. Kiosks for employee payments
 - c. Permit office point of sale units
 - 8. EMV with P2PE magnetic stripe and chip credit card terminals
 - 9. Facility monitoring system
 - 10. Head-end system
 - 11. Intercom system
 - 12. Lane count system
 - 13. LPR system
 - 14. MLPI system
 - 15. Nested areas
 - 16. Offline validators
 - 17. Online booking reservation system with mobile application DEN will choose the supplier of this application
 - 18. Online pre-booking DEN will choose the supplier of this application.
 - 19. Payment methods:
 - a. Cash
 - b. Check
 - c. Credit cards using EMV with P2PE
 - d. NFC mobile wallet payments
 - e. Auto charge credit card on file
 - f. Auto charge ACH on file
 - 20. Pin-hole camera back end system to record video
 - 21. QR code reader
 - 22. Registered parker loyalty program
 - 23. Remote transaction processing
 - 24. Revenue control management system
 - 25. Standard report package and data exports including auto/scheduled export of data

- 26. Test environment virtual servers and software instance
- 27. Valet parking
- 28. Validations and discounts
- 29. VMS for public entries and exits
- 30. Vehicle detection loops
- 31. Workstations

1.2 WORK BREAKDOWN

- Develop detailed drawings and specifications that implement PRCS system identifying each lane modification, each piece of equipment and their location, software, and interfaces/integrations supplied that meet the performance requirements as specified in this document.
- 2. Configure, monitor, and maintain the PRCS head-end system as detailed in the Head-End support matrix (Attachment 6).
- 3. Provide and maintain all PRCS workstations.
- 4. Provide and install all PRCS equipment as described in this specification and identified in the equipment (see Attachment 1).
- 5. Power
 - a. Examine and accept existing power to the field locations. Identify any additional power infrastructure required.
 - b. Connect all power grounding and power conditioning to equipment that is required for the operation of the system.
 - c. Furnish, install, terminate and test any cable necessary to provide connection from DEN provided power termination point in each lane to the individual components on each lane. Note: All electrical work shall be performed by an electrician under contract with the construction general contractor, unless noted. Any electrical work performed by the NextGen shall be performed by an electrician licensed in the State of Colorado or licensed in a state that has a reciprocity agreement with the State of Colorado.
- 6. Provide and install all software, ancillary components, and materials to provide a complete and functioning PRCS.
- 7. Implement a PCI DSS-compliant PRCS with point-to-point encryption (P2PE).
- 8. Communications
 - a. All communication design shall be subject to DEN approval.
 - b. Examine and accept DEN-provided communication network to the field locations. Identify required additional communication infrastructure, include location(s) and list the end-point infrastructure items needed. The current communication infrastructure to the field locations includes the following
 - i Three VLAN's are used with the existing Conduent PRCS.
 - ii Each lane has Ethernet connections operational today.
 - iii There is one access port connection per lane.
 - c. TCP/IP protocol to be used for communication to all devices.

- 9. Provide and install mounting brackets necessary for the PRCS equipment (mounting structures for AVI, VMS, and LPR components to be installed by DEN).
- 10. Provide submittals as specified herein.
- 11. Coordinate and confirm final and precise layout of PRCS equipment, mounting structures, conduits, stubs, and anchor bolts with DEN prior to installation.
- 12. Install all Contractor-supplied equipment and the interconnection with any DEN-supplied equipment.
- 13. Authorize and accept responsibility for application of power to equipment and initiation of operation.
- 14. Remove existing arrow signs in the entry lanes and store in a location to be provided by DEN.
- 15. Mount variable message signs overhead except for oversized lanes, which are pole mounted.
- 16. Remove existing exit lane variable message signs and store in a location to be provided by DFN
- 17. Remove the existing ticket encoder from the hotel valet office and store in a location to be provided by DEN.
- 18. Install new gates located in all revenue control lots.
- 19. Saw cut, wrap install & seal new vehicle detector loops. or provide and coordinate installation of pre-formed loops as appropriate where concrete in lanes is repoured/replaced.
 - a. Loop functionality:
 - i Detect vehicular presence, legal entry, legal exit, illegal exit, illegal entry, and back-out.
 - ii Detect stolen tickets in both "A" and "ABA" backouts.
 - iii Provide tailgate recognition system functionality.
- 20. Run all initial diagnostics and system testing necessary to provide a complete working system.
- 21. Attend construction meetings, provide schedules as requested, and schedule fieldwork to be coordinated with DEN and DEN General Contractor.
- 22. Test equipment in accordance with this specification.
- 23. Provide as-built drawings, operating manuals, maintenance procedures manuals, training materials and training sessions as specified herein.
- 24. Provide warranty services as required.
- 25. Provide access to and integration of systems and components to securely process P2PE credit/payment card transactions.

1.3 WORK EXCLUDED

- 1. DEN will provide, maintain, and monitor the local DEN PRCS communication network up to each lane for each TCP/IP enabled component.
- 2. DEN will provide and maintain UPS units for public entry and exit lanes
- 3. DEN will remove existing lane bollards and replace at the location specified by NextGen

- 4. DEN will remove existing cashier booths and install new ones as required by the project
- 5. DEN will remove all Conduent supplied equipment except items listed in Section 1.2
- 6. DEN will provide new fiber, power and conduit needed for the new PRCS as required
- 7. DEN will provide civil infrastructure modifications necessary for the new PRCS. This includes the following.
 - a. Repair and modify existing islands
 - b. Install AVI mounting structure for all lanes
- 8. DEN will provide and install the infrastructure and overhead canopies as required for the project
- 9. DEN will provide and administer a software application that will serve as the central repository for contract documents
- 10. Den will provide the space for training as well as training workstations and network connections for Contractor-provided training cashier stations.

PART 2 - PRODUCTS

2.1 DEN-Supplied and Existing Products

- A. Communication Network: DEN will provide and manage the communication network
- B. Bollards: DEN will provide bollards
 - 1. Contractor to provide DEN with bollard specifications and drawings identifying bollard placement. Contractor will be responsible for verifying final location in the field.
- C. AVI poles: DEN will provide and install AVI mounting structures in all locations specified by Contractor.
 - 1. NextGen to provide DEN drawings specifications for pole placement.

D. Barrier Gates:

- 1. See Equipment Matrix (Attachment 1) for the total barrier gates required by this project.
- 2. Provide and install new barrier gates at certain entry and exit lanes, as indicated on the Equipment Matrix (See Attachment 1)
 - a. All gates referenced in this specification section shall contain the following:
 - i Aluminum or fiberglass gate arm with pad along the bottom of the arm to prevent vehicle damage
 - b. Electronically controlled rebound feature
 - c. Gate arm length of at least ten feet
 - d. Single piece gate arm or articulated as required by height limitations
- 3. Barrier gate shall have enough power/resistance to ensure they cannot manually be forced open.
- 4. Gate controllers with the following features and functionalities:
 - a. Microprocessor controlled and communication of gate status and functions to the PRCS workstations.

- b. Directional logic with electronic outputs to alarms, counters and to report atypical lane activity to PRCS.
- c. Ability to test gate operability and controller programming on-site without use of special diagnostic equipment.
- d. "AUTO-MANUAL" switch, and "ON-OFF" switch for gate.
- e. Contains power supplies, dust-proof relays, and other circuit components to control gate.
- f. Receive inputs from the lane controller device and open after receiving the appropriate signal and close after the vehicle passes over the closing loop.
- g. Receive commands from the PRCS workstations for remote opening and closing of the barrier gate.
- 5. Barrier gate installed at all lanes shall fail to the closed position in an event there is a power failure and the UPS is no longer able to provide sufficient power to operate the lane.

E. Head End Equipment:

- DEN will provide the physical head-end equipment to host the PRCS hardware. DEN will install, configure, monitor and maintain the PRCS head-end system as detailed in the Head-End Support Matrix (Attachment 5).
- F. Bank/Credit Card Acceptance and Transaction Processing:
 - 1. DEN will maintain an approved merchant service account Chase Paymentech or other supported acquiring platform.
 - 2. DEN will remain the Merchant of Record (MoR) for payment card services and retains all compliance responsibilities pertaining thereto.

2.2 **Equipment Locations and Quantities**

A. Provide equipment as defined herein and in the Equipment Matrix (Attachment 1)

2.3 <u>Software</u>

- A. Provide all software and software licensing required by the PRCS.
- B. Provide and implement the following fully integrated PRCS application software components as specified in DEN's Request for Proposal:
 - 1. Revenue Control Management System with
 - a. Validation & discounting features
 - b. Remote transaction processing functionality
 - 2. Facility Monitoring System with
 - a. Lane (vehicle) count capabilities
 - b. Control center features & functionality for overall facility management
 - 3. Credential Management System for registered parkers (employees & public) with

- a. Website for account management, online payments, bank card on file charges
- 4. License Plate Recognition Software
- 5. Mobile License Plate Inventory Software
- 6. Online Booking Reservation system with mobile application
- 7. Registered Parker loyalty program
- 8. Valet Parking System
- C. Design documents for baseline software will be provided and reviewed with DEN at the preliminary design workshop. During the preliminary design workshop, NextGen will review the configuration setting options with DEN to determine and document the settings for DEN's parking operation. These setting will be finalized in the final design workshop and configured in the PRCS Test Environment.
- D. Unless specified elsewhere, provide the latest available software version at the time of system implementation for all third-party software.
- E. NextGen will provide Parking Active Directory Infrastructure.
- F. Make any necessary modifications, and provide documentation of such modifications, to existing third party software programs that NextGen adopts for the system. Should NextGen and the software manufacturer be separate entities, the software modifications will not preclude the purchase of a standard maintenance and service contract from the manufacturer.
- G. Provide software maintenance for all third-party software naming DEN as the software contact. Provide maintenance agreements throughout the duration of the warranty period.
- H. Provide any necessary perpetual licenses and/or authorization for all PRCS related software including, but not limited to, operating systems, application software, development language, peripheral software, and PRCS hardware diagnostic software. If available, provide a site license to DEN, meaning usage of the license is unrestricted, regardless of the physical locations where the software may be used.
- I. Provide licenses that cover future updates as required by these specifications.
- J. Provide software documentation in electronic form to DEN prior to commencement of system testing. Make ongoing access to updated documentation continuously available in downloadable form.
- K. Database Management System (DMS)
 - 1. Provide application software consisting of software to provide complete operation of the PRCS and include the DMS.
 - 2. Maintain data recorded by the PRCS in files that are in ODBC compatible format Operating System Platform
- L. Operating System Platform
 - 1. Operating system software consisting of software to support system setup, system operation, routine hard drive backups, diagnostics, and other maintenance routines.
 - 2. Ensure the PRCS software is supported on the most current version of the operating system within a reasonable period after its commercial release. Upon successful

completion of Contractor testing, recommend and support installation of O/S patches and upgrades subject to DEN's concurrence.

M. PRCS Application Software:

- 1. Install and configure all application software and firmware required by the PRCS with all software licenses registered to DEN.
- 2. Browser-based and web-browser enabled such that the PRCS is accessible from any webenabled device using authorized login credentials.
- 3. Allow multiple groups and roles that govern individual access to the system. The assignment of a group/role will control access to the various modules of the PRCS, and if the access is update or to view only.
- 4. Access rights to the system for the various groups and roles will be defined during implementation.
- 5. Manage, display, and report all PRCS-related activity as outlined in this functional specification.
- 6. Graphical user interface that is intuitive and user friendly.
- 7. Audit trail for the use of central controls within the PRCS database by user ID, time, device controlled and action taken.
- 8. Configurable parking rates, grace periods, and time increment changes from system workstations. Configuration access to be restricted to DEN-designated users with proper authorization.
- 9. Audit trail for all parking rate, grace period and time increment changes
- Remote communication with all devices in real-time for a general broadcast of information (e.g. rate changes or time increment changes) or software update and an ability to communicate to a single device to upload information or software.
- 11. Correct calculation and processing of parking fees during a transition:
 - a. PRCS system time shall be automatically synchronized with DEN's Network Time Protocol server
 - b. from daylight savings time to standard time, and vice versa
 - c. at the beginning of March during leap years (e.g., when there is a February 29th).
 - d. from one rate to another (e.g., rate has an effective date so that Customers are charged a parking fee based upon the parking fee that was current at the entry date and time, not the exit date and time, allow the new rate to be either less than or greater than the new rate).
- 12. Programmable rate structure
- 13. Ability to reconcile cash revenue collected through the PRCS to cashier activity.
- 14. Ability to reconcile credit card revenue collected through the PRCS to the clearinghouse (Payment Tech) bank deposits.
- 15. Ability to reconcile all revenue collected by third parties to the corresponding PRCS exit transactions.
- 16. Ability to audit cashier shifts to reconcile cash/credit sales, validations, exception transactions, and lane counts to transactions processed per shift.
- 17. Ability to allow relief cashiers with separate shift reporting.

18. Ability to audit remote cashier activity (remote exception transaction processing, validations, gate vends).

2.4 **Equipment and Subsystems**

- A. Provide newly manufactured equipment and associated materials for the PRCS with exception for the existing PRCS are to be reused as identified in the Equipment Matrix (See Attachment 1).
- B. All equipment performing a like function and of the same part number to be fully interchangeable without the requirement for physical modifications.
- C. Provide device autonomy such that no single point of failure of a device causes an operational failure of surrounding devices.
- D. Application and Data Servers
 - The PRCS servers shall reside on DEN's network. DEN's network administrator based upon a "need to know" decision shall establish an appropriate user-level password system. DEN shall have complete ability to add to, delete from, or revise the user roles and passwords that are established by the network administrator.
 - 2. PRCS servers to contain all PRCS application and database software that is associated with PRCS operation, data storage, and reports.
 - 3. Utilize TCP/IP for data communication.
 - 4. Installed and configure all necessary software on the servers with all required system software licenses registered to DEN.
 - 5. Backup and Archiving
 - a. Contractor is responsible for backup and archiving
 - b. Perform backups and offsite storage location
 - c. Keep all data in active database for 90 days including LPR plate images
 - d. Archive all PARCS data for rolling 7 years

E. Credit Card Processing Subsystem

- 1. Provide a PCI validated Point-to-Point Encrypted (P2PE) credit card processing subsystem with certified EMV readers which support NFC Payments. This shall include access to commercial services of a PCI validated P2PE solution provider (Payment Express or equal) for processing of credit/payment card transactions from both attended and unattended terminals as well as on-line transactions from e-commerce applications (loyalty, prebooking, etc.) and card-on-file transactions from employees, contract parkers, and others.
- 2. Credit card terminals will support off-line transactions subject to the implementation of floor limits, in the event of processor outages or interruption of network communications.
- 3. Accept at a minimum the following types of credit card payments:
 - a. VISA
 - b. MasterCard
 - c. American Express
 - d. Discover
 - e. Bank debit cards with credit card logo

- 4. Provide a PCI compliant credit card processing subsystem such that no Contractor-provided maintenance, operations, product, or solution will prevent DEN from achieving and maintaining PCI compliance in its parking operation. The Credit Card Processing Subsystem provided by NextGen for DEN's PRCS system will limit the scope for DEN's PCI DSS, independent QSA verification of which is to be provided.
 - a. No software provided by NextGen shall store, process, or transmit a Primary Account Number (PAN). NextGen shall provide an Attestation of Compliance (AOC) for same from vendors whose system components are in any manner associated with payment card transactions.
 - b. NextGen shall provide an independent QSA assessment verifying all sub-requirements of PCI standards including PCI DSS, PA DSS, and P2PE are either complied with, not applicable, or out-of-scope for DEN's PRCS system. Such report shall be presented by NextGen not more than thirty (30) days after the date of award of this contract.
 - c. NextGen shall provide documentation to attest to a P2PE installation that supports PCI compliance following the Payment Express P2PE Implementation Manual.
- 5. PRCS credit card processing subsystem must maintain standards outlined above and herein for new deployments and be upgradable to then current standards for the life of the system.
- 6. PRCS credit card processing subsystem will be implemented utilizing DEN's existing merchant service provider, Payment Tech.

F. AVI antenna and reader for:

- Shuttle buses
- 2. Employee lanes
- 3. Public lanes
- 4. Valet vehicle storage access
- 5. Registered parker program customers using their Denver E470 toll tags as an access credential (not for payment, however the read can be used to calculate payment)
- G. Entry Station with pinhole camera dispenses paper ticket, can be bar code or magnetic stripe
- H. Exit Station with pinhole camera
- I. Cashier Station EMV credit card terminal will be exterior mounted below the cashier window
- J. Exit Stations In Lieu of Booth Transaction Panel with pinhole camera. Provide exit stations, located prior to the cashier booths, in lieu of booth transaction panels, that provide all the requirements of the booth transaction panel.

K. Control Center

- 1. Facility monitoring system with alarms and equipment activation functionality
 - a. 70"TV monitor mounted on the wall
- 2. LPR reviews
- 3. Remote transaction processing
- 4. Subsystem lookups for customer assistance

- a. AVI
- b. Online reservations
- c. Hotel event credentials
- d. Validations
- e. Credit card in/out
- 5. Workstations to perform tasks 1-4
- 6. Intercoms
- L. Credit Card In/Out installed only at Pikes Peak and Mt. Elbert parking lots
- M. Credential Management System for Employees
 - 1. Employees will go online for permit application, account changes, pay online, pay at a kiosk, or set up automatic payments with a bank card on file.
 - 2. Permit Office Point-of-Sale (POS) units
 - a. Will be used to process tow fees, abandoned vehicle fees, and wellness center fees. Operator inputs the amount of the fee, type of fee, and processes the payment through the POS.
 - b. POS will only accept credit card and cash payments.
 - c. POS will not process permit payments.
 - d. POS will have proximity card reader and a magnetic stripe reader to read the employee security badge to confirm active employment.
 - 3. Five kiosk locations for employee payments, 1 kiosk each in: Permit Parking Sales Office, AC building; A, B, & C Concourse at center core train stop.
- N. Credential Management System for Registered Parkers
 - 1. Provide an online website portal, either customized or white label, that allows users to register, manage and review their accounts and obtain receipts.
 - 2. Store customer credit cards on file (encrypted/tokenized) for recurring payment and payper-use charges after exiting in near-real time.
 - 3. Utilizes various access credentials, including the Colorado E470 Transponder. (Read only, no payment integration with the tolling authority.)
 - 4. Register their existing personal toll AVI transponders which will serve as a credential that will grant access, allow egress, and charge parking fees via the RPP system.
 - 5. Link from E470 Tolling Authority to DEN's RPP website Track and report all account activity including payments, account balance and parking events that can be access via the web portal.
- O. Registered Parker Loyalty Program
 - 1. The registered parker system will support a customer loyalty program that allows registered parkers to accrue rewards for parking.
 - 2. Interfaces with additional 3rd party loyalty programs using credentials provided by the customer (QR code, AVI transponder, license plate) will be provided as future options at additional cost.
 - 3. The loyalty program will support automated point accumulation and redemption.

- 4. Loyalty Program to be fully integrated and online with the Registered Parker Program and PRCS. All transaction and revenue activity recorded by the loyalty program will be fully reportable within the PRCS.
- 5. All software license, setup, and customization fees are included. No transaction fees will apply. Ongoing software support costs will be incorporated into the Maintenance & Support Services Contract.
- P. Facility Counts counts by product but not by level. Signage, level counts, website, and mobile app associated with parking space counts and parking availability are not included in this project and are deferred to the future Parking Guidance System project.
 - 1. Obtain counts from all entry and exit points
 - 2. Provide directional logic (i.e. a vehicle entering the parking area through an entrance lane or through an exit lane is counted as an inbound vehicle; same logic for exit counts.)
 - 3. Provide available and occupied space inventory on a PRCS workstation
 - 4. Counts can be manually changed.
 - 5. Provide counts for each parking product including separate counts for online booking reservations and pre- booking.

Q. Facility Monitoring System

- Equipment status monitoring ability to view all the parking status of all DEN facilities in one screen
- 2. Status alarms
- 3. Equipment activation functionality (close/open gates, lanes)
- 4. Occupancy status
- 5. Event log

R. Head-End System

1. Configure, monitor, and maintain all PRCS head-end components as detailed in the Head-End support matrix (Attachment 6).

S. Intercom System

- 1. Public lanes: VOIP Intercom feed to intercom base units at the Control Center for Remote Cashier/FMS/LPR review.
- 2. Employee lanes: VOIP Intercom feed to telephones in the Permit Office during normal business hours and to the Control Center after business hours.
- 3. Intercom base units and headsets for each Control Center workstation.
- 4. Programming server for all intercom features performed through networked workstation.
- 5. Programmed configuration of intercom stations and system features stored in non-volatile memory.
- 6. System includes all software and hardware required for programming system, including:
 - a. Individually programmable volume control for each intercom base station.
 - b. Permit Office substations programmed to call DEN-designated telephone number.
 - c. Call forwarding feature for individual stations or all stations to re-direct calls to another DEN designated telephone phone number.

T. LPR System

- 1. Pre-capture lane configuration at all entries and exits.
- 2. Frictionless processing allowing LPN as an access credential for registered parkers and prebooking.
- 3. Furnish and install LPR at all public entry and exit lanes.
- 4. The term "LPR database" refers to a database that is part of the PRCS central database.
- 5. The LPR subsystem consists of all hardware and software necessary to provide a complete and functional LPR subsystem that achieves DEN's required functionality and accuracy, and that does not adversely affect any function of the PRCS.
- 6. Provide a LPR subsystem that is fully interfaced and integrated into the PRCS, including tying the LPN captured at entry to the unique ticket identification (or other entry credential information) for every transaction as well as registering LPNs to serve as the entry credential. Should the entry information need to be obtained at an exit station to process the transaction (i.e. lost ticket, unreadable, etc.), both the LPN and ticket shall be removed from their respective active inventories once the vehicle has exited.
- 7. Provide "frictionless" transaction processing for transactions where a valid LPN match is made for the entry and exits as follows:
 - a. Registered LPN: LPN can be registered as an access credential with active, passive, or passback rules enforced, configurable by DEN. When a registered LPN in the proper pass-back sequence is recognized at the entry or exit, the gate shall automatically vend without the patron having to interact with the entry station/exit station/cashier station. Patrons with registered LPNs shall also be able to have redundant credentials, including barcode and magnetic stripe, that they can use interchangeably in the event that the LPR system fails to obtain a valid read of the LPN. Pass-back rules shall apply to the user account regardless of the sequence in which different credentials are utilized.
 - b. Grace ticket: For a standard ticketed entry transaction where the LPN was successfully captured at entry, the customer proceeds to the exit within the free grace period, and where the LPN is successfully matched at exit, the gate shall automatically vend without the patron having to interact with the entry station/exit station/cashier station.
 - c. Validated ticket: For a standard ticketed entry transaction where the LPN was successfully captured at entry, the customer has their ticket electronically validated in the system for 100% of the fee, and where the LPN is successfully matched at exit, the gate shall automatically vend without the patron having to interact with the entry station/exit station/cashier station.
 - d. Barcode or magnetic stripe credential (LPN not registered): For a valid credential entry transaction where the LPN was successfully captured at entry, and where the LPN is successfully matched at exit, the gate shall automatically vend without the patron having to interact with the entry station/exit station/cashier station. Passback status shall be updated for the credential account regardless if the patron was allowed to exit via LPN or if they use their credential.

8. Maintain transient LPR images and LPN in the active database for 90 days at which point the LPR image is purged from the database while all other data associated with the transaction remains intact.

U. License Plate Reader (LPR) Cameras

- 1. Provide LPR cameras in all public entry/exit lanes as depicted on the Drawings and Equipment Matrix (Attachment 1).
- 2. Furnish and install image capture cameras including any lights or shade canopies necessary at all public entry and exit lanes to provide specified system functionality.
- 3. Provide theft deterrent and vandal resistant housings that meet applicable code requirements for outdoor equipment.
- 4. Provide the exact location of each device, subject to DEN approval.
- 5. Entry and exit lane layouts are to be pre-capture, meaning that the cameras are placed such that a vehicle's LPN is captured prior to the vehicle pulling up to the entry station, exit station, or cashier station.

V. LPR Image Review Workstations (IRW)

- 1. IRWs to be provided by NextGen with all necessary LPR software.
- 2. Provide an operator with the ability to review and correct LPR data and manage LPR exception transactions at the exits.
- 3. Automatically send correction and exception transactions to the first available IRW and remove the exception from all system workstations after it has been successfully resolved.
- 4. Exit transactions will be given higher priority than entry transactions for review at all IRW's.
- 5. Provide user configurable threshold that determines when reviews are sent to the IRW.
- 6. Capability of reviewing and correcting entry images after the fact; that is after the vehicle has entered the parking facility. No time limit shall be stipulated for after the fact entry lane LPN correction, therefore, entry lane corrections can be made during off-peak transaction processing time.
- 7. Provide ability to enable or disable LPR enforcement through a simple graphical user interface process on a PRCS workstation with proper access credentials. When LPR enforcement is disabled LPR exceptions and violations will be recorded as events, however the alarms will not be sent to an IRW for operator intervention. Whether LPR enforcement is enabled or disable all LPR events shall be reportable.
- 8. Provide remote processing of exception transactions (e.g. Lost Ticket, Unreadable, etc.) by authorized users from any IRW. The authorized user shall have the ability to use the LPR data sent from the lane to the IRW to verify entry information and transmit the entry information to the exit station for automated calculation of the appropriate parking fee.
- 9. DEN shall provide protection for the LPR cameras from vehicle strikes both from vehicles pulling forward as well as from reversing vehicles. Vehicle protection shall include but may not be limited to metal bollards and concrete barriers.

W. Mobile License Plate Inventory

1. Unit will alarm when a read is below the confidence threshold and allow the user to input the correct license plate number.

2. Includes error prevention features such as the LPR retaining data for plate numbers that disappear then reappear in the same location the next day.

X. Nested areas

- 1. Timing feature for access restrictions
- 2. Separate counts
- Y. Offline validators encodes a discount onto a paper ticket
- Z. Online booking reservation system (baseline) with mobile application. Additional 3rd party parking reservation systems of DEN's choice will be integrated with the baseline party system as future options at additional cost.
 - 1. Integrates with DEN's website
 - 2. The online booking solution will interface with the gateway contracted by DEN. The online booking contractor will provide the interface to DEN's payment gateway. No credit card data will transmit through the online booking applications or the PRCS. When a customer is ready to pay for prebooked parking, the online booking system will take the customer to the payment gateway website to perform the credit card payment. As such, the payment gateway has responsibility for PCI DSS compliance for online booking reservations.
 - 3. Support yield management features
 - 4. Support demand-based pricing
 - 5. Ability to upsell
 - 6. Ability to bundle products
 - 7. Accept reservations and bank card payments on DEN approved websites
 - 8. Integrated with the PRCS to compute overstays and collect overstay fees at exit
 - 9. Integrated with the PRCS for real-time updates of upcoming reservations to manage occupancy
 - 10. Integrated with the PRCS for real-time updates of occupancy figures
 - 11. Identifiers for access QR code, license plate, others that are available (toll tag, registered parker AVI)

AA. Payment methods:

- 1. Cash
- 2. Check
- 3. Credit card magnetic stripe and EMV enabled chip credit cards with P2PE when applicable.
- 4. NFC mobile wallet payments
- 5. Auto charge credit card on file
- 6. Auto charge ACH on file
- BB. Pin-hole camera back end system to record video
 - 1. Retain video for a rolling 30 day.
- CC. QR code reader used for discounts and access identifiers

DD. Remote Transaction Processing

- Provides remote cashiering that processes exception transactions in staffed and unstaffed exit lanes.
- 2. Lost Ticket LPR lookup and sends fee to the lane. Closes ticket.
- 3. Lost ticket LPI lookup and sends fee to the lane. Closes ticket.
- 4. Damaged ticket lookup and sends fee to the lane. Closes ticket.
- 5. Entry date input and sends fee to the lane.
- 6. Apply a discount to a ticket.
- 7. Remote cashier reports to audit manual input.
- 8. Remote transaction authorization.

EE. Rates

- Rates set by access credential
- 2. Rates set by day of the week
- 3. Rates set by time of day
- 4. Different Rate based on Entry/Exit Dates &/or Times
- 5. Different Rate based on Validation
- 6. Provides discounts allowing a dollar value discount per time increment (i.e. discount per hour, per day, per week).
- 7. Rates set by month or volume
- 8. Surcharges

FF. Standard report package and data exports to .csv and .xlsx file formats

GG. Valet Parking

- 1. Handheld devices are integrated with the PARCS.
- 2. Handheld check-in and provides a 3-part ticket, one part used by valet runner for access to the gated vehicle storage areas
- 3. Handheld check-in allows option to pay at valet
- 4. Handheld with camera and damage tracking software
- 5. Handheld device can read a QR code to process a PARCS discount/promotion.
- 6. Central Cashier Station
- 7. Customer call, text for vehicle pickup
- 8. Interface with flight arrivals database
- 9. Valet Operational Overview
 - a. General Configuration for All Valet Operations
 - i All valet entry and exit lanes will be equipped with bar code readers for the valet staff to use and also with AVIs for DEN vehicles.

b. West Valet Operation

- i Upon entry, a valet staff checks in the customer using a valet handheld unit.
- ii The handheld should recognize a pre-printed barcode document for the customer, the vehicle keys, and the vehicle. The vehicle portion will be scanned by the valet runners to enter and exit the gated vehicle storage

areas. This allows the vehicle movement to be tracked by the valet ticket number.

iii Vehicle storage:

- a. Exit Level 4 to access Level 3 storage which has one entry lane and one exit equipped with a gate and barcode reader (ID 20-21 on Equipment Matrix Attachment 1).
- b. Level 4 storage has one entry lane and one exit lane equipped with a gate and barcode reader (ID 22 & 23 on Equipment Matrix – Attachment 1).
- iv Customers will call or text the valet for pick-up notification.
- v Payments
 - a) Central cashier stations will process all transactions that in-lane cashier stations can process except towed vehicles.
- vi Customer free exit gate on Level 4 (ID 24 on Equipment Matrix- Attachment 1).

c. East Valet Operation

- Upon entry, a valet staff checks in the customer using a valet handheld unit. The check-in process needs to incorporate the entry ticket pulled or credential used to enter, AVI tag, toll tag, online reservation identifier.
- The handheld device should recognize a pre-printed barcode document, for the customer, the vehicle keys, and the vehicle. This allows the vehicle movement to be tracked by the valet ticket number.
- iii Customers will call or text the valet for pick-up notification.
- iv Payments
 - 1. Central cashier stations will process all transactions that in-lane cashier station can process except towed vehicles.
- v Customer free exit gate on Level 4 (ID 67 on Equipment Matrix Attachment 1)
- d. New Lanes to Accommodate Hotel Drop-Off and Self Park
 - Customers can drop off guests at the hotel curbside without going through any gated lanes. Beyond the hotel curb a customer can drive west through a new gated entry lane equipped with an entry station (ID 26 on the Equipment Matrix).
 - ii A new gated exit lane is added to require self-park customers to exit through the West Garage exit plaza to pay. The new lane is equipped with a barcode reader and AVI to accommodate valet runners and DEN operational vehicles returning to the hotel curb (ID 27 on the Equipment Matrix).
 - iii A new gate will be installed on the road south of West Garage Mod 4 to allow valet runners to return customer vehicles to the hotel. This lane is equipped with a bar code reader and gate (ID 30 on Equipment Matrix).
 - iv DEN will construct the new islands for the lanes. NextGen will provide the PRCS power and communication requirements, review the design documents, and provide any changes needed to for the PRCS.

- v Entry gate to storage are equipped with barcode for valet runners and AVI for City vehicles.
- vi Exit gate from storage area equipped with barcode for valet runners and AVI for City vehicles.

HH. Validations and Discounts

- 1. Create, process, and track fee discounts and validations electronically within the PRCS
- 2. Provide methods to create and distribute validations to customers
- 3. Online validations applied to entry media record by inputting or scanning the entry media number into a web browser on a pc or mobile phone app
- 4. Provide methods to validate hotel event guest parking and a report of validation usage by event for billing purposes (billing software is excluded from this project)
- 5. Provides percentage discounts
- 6. Provides time/hourly discounts
- 7. Provides discounts that use a different rate to compute the parking fee
- 8. Provide a QR code to email or download from the airports website
- 9. Email promo codes to registered parkers
- 10. Surcharge fees allowing a fixed fee that is charged in addition to the parking fee
- 11. Offline device to encode pre-programmed discounts on parking ticket
- II. Variable Message Signs for public entries and exits

JJ. PRCS Workstations

- 1. Provide and maintain workstations and all software and licensing to support the PRCS workstations Control Center functions such as LPR reviews, remote cashiering, and equipment monitoring and activation functionality.
- 2. All other functionality including registered parker software for employees and public, online validation modules, and system reports can be accessed from a web browser and to not require dedicated workstations.

2.5 Integrations and Interfaces

- A. The PRCS shall provide an API or file transfer of PRCS data for the other applications to pull into their systems. NextGen will provide the PRCS data in a standard format that can be received by the interfacing application. NextGen is not responsible for modifying the receiving application software to receive the PRCS data.
- B. Contractor shall be fully responsible to import any existing customer data into the new PRCS. The Xerox Cyber Country point-of-sale version 6.1.1.2 is currently used for accounting and sales of permits for the existing employee accounts and DEN vehicle AVI accounts. Should manual entry be required, NextGen shall provide the resources to fully complete the manual import.
- C. DEN will specify further integrations with future reservation systems, aggregators, or other customer facing systems of our choice.
- D. The PRCS shall provide the following integrations and interfaces: See Attachment 2.
- E. NextGen shall conduct preliminary design workshops with DEN to obtain additional information needed to complete the interface development. After the preliminary workshops, NextGen will

- submit a preliminary design document for programming and development of the desired features and functionality for each interface. NextGen will conduct final design workshops to review the final interface designs for DEN's approval.
- F. DEN will have the appropriate staff and other representatives available to provide NextGen with the information needed to design, build, and test the interfaces.
- G. Estimated costs for development of interface specifications as well as programming for the interfaces and integrations themselves are included in proposed pricing. Unless interface specifications reflect a substantial difference from assumptions used for estimates, no additional charges are anticipated for development and delivery of the above interfaces/integrations.

2.6 PRCS Test Environment

- A. Provide a PRCS Test Environment in DEN designated area to facilitate testing of new or modified PRCS functionalities and software changes prior to implementation in the PRCS production environment.
- B. Utilize the same PRCS application software as the production environment with the ability to implement upgrades, patches, and other software changes without impacting the production environment.
- C. Provide and install PRCS field devices, or DEN's approved simulations of certain PRCS devices, dedicated for testing purposes that mirror the functionalities of the devices in the production environment. Test environment field devices include:
 - 1. One (1) Test Server and Software
 - 2. One (1) Entry Station
 - 3. One (1) Cashier Station with Exit Station configured in lieu of a Booth Transaction Panel
 - 4. One (1) Exit Station
 - 5. Two (2) LPR Cameras
 - 6. Two (2) AVI Antennas
 - 7. Install three (3) Magnetic barrier gates provided by DEN
- D. Coordinate with designated DEN to implement, document, and test all software modifications in the test environment prior to implementing the changes in the production environment.

2.7 Related Requirements

- A. The provisions of the Contract Documents apply to the work of this Section.
- B. Design and operation of the PRCS shall conform to the following references codes, regulations, and standards as applicable:
 - 1. National Electrical Code (NEC)
 - 2. Electronic Industry Association ANSI/EIA
 - 3. National Electrical Manufacturers Association (NEMA)
 - 4. Underwriters Laboratories UL 294, UL 639, UL 1037, UL 1076
 - 5. National Fire Protection Association (NFPA)
 - 6. Federal Communications Commission (FCC) 47 CFR Part 15 and 90
 - 7. Payment Card Industry Data Security Standard (PCI DSS) Version 3.2

8. Applicable Federal, State, and Local Laws, Regulation, and Codes

2.8 Informational and Closeout Submittals

- A. Submit in accordance with the Contract Documents.
- B. All submittal approvals, comments and rejections will be returned to NextGen by DEN's designated representative with requests for resubmittal as appropriate. Resubmit as required until submittal is approved by DEN's designated representative.

C. Submittals include:

- 1. Shop Drawings to be submitted within 30 days of contract award. Drawings will specify manufacturers requirements with sufficient detail to allow DEN to bid the site work to general contractors including:
 - a. All site modification for each lane, recommending demolition of and modifications to existing structures. All structural modifications to be specified, including rebar details, will be the responsibility of a DEN-designated and retained engineer. All materials shall be in compliance with DEN technical specification.
 - b. Mounting details for PRCS equipment, per manufacturer recommendations
 - c. Wiring diagrams detailing wiring requirements for power, signal and control systems. NextGen will specify power, conduit, and network capacity requirements. DEN will be responsible for defining add/move/change requirements from existing conditions.
 - d. Clearly indicate work that is "not in contract"
 - e. DEN is responsible for defining locations for electrical and communications connection points and pathways including conduit runs, network access points, power panels and circuits, and server location.
- 2. Samples: submit samples of tickets, reports, and other items requiring selection as part of the system design review meeting.
- 3. Training Plan: Submit a proposed instruction schedule as part of the system design review meeting. DEN shall tentatively approve or suggest changes to the training schedule at that time. Fourteen calendar days prior to each instruction session, NextGen shall submit a training plan of where and how training sessions are conducted, a copy of the instruction materials, equipment needed and provided, and approximate duration of the session. Ample time shall be allotted within each session for NextGen to fully describe and demonstrate all aspects of the PRCS, and allow DEN personnel to have hands-on experience with the PRCS.
- 4. Testing Plan to be submitted as part of the system design review meeting:
 - a. Plan for testing all system functionalities that are described in this Functional Specification as well as any other functionalities performed by the system (e.g. standard functionalities included in the PRCS) that are not specifically described within this Functional Specification.
 - b. DEN to return review comments to NextGen, and Contractor to incorporate DEN's review comments into the Test Procedures. Resubmit the revised document for verification that all comments have been incorporated. Approved document will be termed the Test Procedures Document.

- c. Approval of finalized Test Procedures Document is required prior to commencement of any test.
- d. Develop all test procedures for the tests that are listed below:
 - i. Test Environment/Factory Acceptance Test (FAT)
 - ii. Server Acceptance Test
 - iii. Bankcard Acceptance Test (BAT)
 - iv. Lane Acceptance Test (LAT)
 - v. System Acceptance Test (SAT)
- 5. Phasing Plan: Incorporate DEN comments to the Transition Plan, Training Plan, and Testing Plan received during the system design review and submit a detailed Phasing Plan 30 day prior to installation to include:
 - a. Revised schedule in Gantt format with milestone dates clearly identified, task start and completion dates, lane-by-lane installation dates, training dates, and testing dates.
 - i. Milestone Dates see Attachment 6
 - b. Description of the installation and testing. Description of phasing to decommission each lane, install new field devices, perform LAT, and activate for public use.
 - c. Description for parking operational impacts during the transition from the old PRCS to the new PRCS. This includes a transition plan for the Employee Parking System.
- 6. PRCS Manuals to be submitted 30 days prior to commencement of FAT: DEN to review the structure and contents of the manuals and return comments to NextGen. Contractor to incorporate all comments into revised manuals. Contractor to submit the revised manuals for approval prior to commencing system testing. Submit the following manuals in both hardcopy and electronic (PDF or Microsoft Word) format:
 - a. PRCS user manuals
 - b. PRCS subsystem manuals
 - c. PRCS maintenance procedures manual
 - d. Training manuals
- 7. Disaster Recovery Plan submitted 30 days prior to commencement of LAT: The plan shall provide the step-by-step procedures for disaster recovery for each point of failure. These procedures shall be comprehensive.
 - a. The first steps are in diagnostics. The remaining steps provide procedure for resolution to bring the system back to full operational status.
 - b. Should disaster occur immediately following, or as a result of, a patch or software update the disaster recovery plan returns the system to the software version in effect prior to the patch or update being applied.
 - c. Points of failure include each component and sub-components in complex units, such as servers.
 - d. The disaster recovery plan shall include requirements for and location of spares.
- 8. Copies of all licenses, registrations, documentation, disks and other media as may have been included with those commercially available software packages provided with system

- to be submitted prior to commencement of testing. In addition, ensure that all licenses, registrations and warranties have been transferred to DEN prior to final software turnover.
- 9. As-Built Documentation: Within 30 days of Final System Acceptance, submit as-built documentation of all systems and components installed as part of the PRCS. Include depiction of the actual installed conditions of all equipment and cabling components and configuration settings upon the completion of any acceptance test. NextGen shall update the most recent as-built documentation submitted as further changes occur in the field or as a result of a patch or upgrade to an installed system throughout the warranty period.
- 10. Provide a list of all TCP/IP devices with each device's IP address, MAC address, and general description of the installation location.

2.9 Maintenance Material Submittals

- A. Spare Parts: Deliver spare parts per the approved spare parts list (See Attachment 3), complete and ready to use, prior to commencement of testing. Maintain inventory of spare components at this level as components are used during warranty period.
 - 1. Spare parts are to be maintain under the submitted maintenance procedures manual.
 - 2. DEN reserves the right to order additional parts and manage the PRCS spare parts inventory as required to maintain the system.
 - 3. DEN reserves the right to modify the spare parts inventory throughout the term of the Contract.
 - 4. DEN will provide a storage location for spare parts, exact location to be identified by DEN. Contractor to have access to the spare parts inventory and is responsible for ordering replacement components or parts during the implementation and warranty period as components or parts are used.
 - 5. All equipment and parts to be newly manufactured and never installed in any other operational system other than for factory test purposes.
 - 6. Provide an itemized list of manufacturer's part numbers, model numbers, pricing, supplier's address, supplier's telephone numbers, and any single source components when delivered to the project site.
 - 7. Provide a process for tracking the inventory and usage of spare parts.
- B. Stock: Furnish a 6-month supply of operating stock items prior to commencement of testing. Estimated quantities are:
 - 1. 2 million DEN approved parking tickets for entry station.
 - 2. 2 million DEN approved receipt tickets or roll stock for equivalent number of transactions for exit station, cashier station, and booth transaction panel.
 - 3. One hundred thousand approved parking tickets (different color) for exception tickets

C. Equipment Keys

- 1. Provide eleven (11) sets of keys for each unit of equipment that is stocked with tickets.
- 2. Provide nine (9) sets of master keys for all locks.
- 3. All equipment and enclosures of the same type (entry station, exit station, etc.) have the same key and equipment of different types have different keys.

- 4. Keys are unique to this project; other equipment supplied by the same manufacturer in the region uses different keys.
- 5. If a special tool is required to perform any function on the PRCS during the normal course of business and/or maintenance, provide three of these tools.

2.10 Quality Assurance

- A. All PRCS components and their installation shall comply with all laws, ordinances, codes, rules, and regulations of public authorities having jurisdiction over this part of the work. It shall be the responsibility of NextGen to meet these and all other current technical, performance, and safety standards that are applicable to all components and to the entire system, even when not specifically referenced.
- B. The PRCS shall be an open-architecture system where all interfaces (hardware and software) conform to national and International Organization for Standardization (ISO) standards.
- C. All materials and equipment shall be listed, labeled or certified by a nationally recognized testing laboratory to meet Underwriters Laboratories, Inc. (UL), standards where test standards have been established.
 - 1. Equipment and materials which are not covered by UL Standards may be considered provided equipment and material is listed, labeled, certified or otherwise determined to meet safety requirements of a nationally recognized testing laboratory.
 - 2. Equipment of a class for which no nationally recognized testing laboratory accepts, certifies, lists, labels, or determines to be safe, will be considered if inspected or tested in accordance with national industrial standards, such as NEMA, or ANSI. Evidence of compliance shall include certified test reports and definitive product data.
- D. Equipment housings, conduits, and junction boxes exposed to weather (any location not in a conditioned environment) shall meet or exceed NEMA 4 or IP65 standards to be moisture-proof and shall provide sufficient protection so that the components continue to function without moisture, dust, particle, heat, or cold-related interruption. Components that do not meet NEMA 4 or IP65 standards or better may be considered if implemented with supplemental environmental controls such as air conditioners and dehumidifiers.
- E. The PRCS will maintain the performance levels submitted by NextGen on the Performance Standards Form (Attachment 10). During the installation period the PRCS environment is not stabilized and the performance levels may not always be achieved. Once the PRCS installation is stabilized, which is at the start of the SAT, the performance levels must be achieved. The actual performance levels will be confirmed as part of the System Acceptance Test (SAT). During the Warranty period DEN may request a performance report from the Contractor as needed.

2.11 Delivery, Storage, and Handling

- A. Contractor shall be responsible for insuring all shipped items. Any items damaged during shipping shall be replaced and shipped to the project site, by expedited means if requested, at no additional cost to DEN.
- B. DEN shall provide NextGen with a designated storage/staging area for PRCS equipment that has not been installed.

- C. Deliver equipment to site in manufacturer's original containers to prevent damage and marked for easy identification.
- D. Contractor shall receive, inspect and sign for all deliveries.
- E. It is NextGen's responsibility to protect the equipment from theft and damage until final acceptance including installation of fencing, locks, and any other security provisions. Should the stored equipment be stolen or damaged prior to final acceptance, NextGen shall replace the equipment at no additional cost to DEN.
- F. Contractor shall be responsible for handling and transporting all equipment from the designated storage/staging area to its' final operating location.

2.12 Project/Site Conditions

- A. Environmental Conditions: All field equipment and components shall be fully protected from the ambient environment when installed in the proper housing provided by NextGen. Operation of the equipment shall not be affected in any way by weather conditions typical to Denver, Colorado area.
- B. Provide a system such that environmental conditions in a cabinet do not cause failure of the installed electronics.
- C. Electrostatic and electromagnetic forces within the environment, e.g., non-direct lightning strikes, or other types of power interference shall have no effect upon the integrity or operation of the PRCS.
 - 1. Present solution for preventing power interference for DEN approval prior to implementation.
 - 2. Provide lightning protection through surge arrestors or earthen ground rods or a combination thereof for the PRCS. Determine, based upon the PRCS manufacturer's system requirements, the appropriate lightning protection method to use for the location where the equipment is installed.
 - 3. Provide equipment that is UL-approved for use as part of a master labeled lightning protection system and marked in accordance with UL procedures.
- D. Concrete islands or pads containing PRCS equipment will not be placed until stub ups, equipment locations and any necessary anchor bolts are properly placed and verified by NextGen. Any conflicts with installation at a particular location must be resolved prior to pouring lanes and pads for PRCS equipment.

2.13 **Project Sequencing**

- A. Propose sequencing in the Project Schedule that achieves full implementation and acceptance of the PRCS in accordance with the Contract Documents, including these functional specifications.
- B. Adhere to the lane closure limitations as defined by DEN.
- C. Project sequencing, after contract has been executed, will occur in the following order, unless directed by DEN:
 - 1. Project kickoff meeting on site DEN (within 2 weeks of NTP for Mobilization)
 - 2. Equipment orders placed

- 3. Contractor submit System Design Documents (SDD's)
- 4. System Design Review (SDR) meeting on site DEN (within 30 days of contract award)
- 5. DEN approval of Design Review submittals
- 6. Receive & install Test Environment
- 7. Deliver spares & consumables as specified
- 8. Conduct Factory Acceptance/Bank Card Acceptance/Test Environment Acceptance Tests
 - a. Demonstrate, test & accept Test Environment with baseline application software
- 9. Workshops to develop & finalize specifications to define interface requirements, application and configuration settings specific to DEN operations
- 10. Build interfaces and implement final system configuration settings for DEN operations
- 11. Install Control Center components & software; validate against Test Environment & accept
- 12. Install Permit Office components & software; validate against Test Environment & accept
- 13. Install Registered Parker (CMS) software for employees; validate in Test Environment & accept
- 14. Build employee Access Control System, implement parameters, validate in Test Environment
- 15. Import employee parking access credentials; implement badge security system interface & accept
- 16. Implement interfaces specific to management & control of employee parking
- 17. Install Validation System components & software; validate in Test Environment & accept
- 18. Build Lane Count/Facility Transaction System; validate in Test Environment & accept
- 19. Install Registered Parker (CMS) software for public customers; validate in Test Environment, accept
- 20. Install Loyalty Program software; validate in Test Environment & accept
- 21. Install On-Line Parking Reservation System; validate in Test Environment & accept
- 22. Complete & install remaining development items; validate in Test Environment & accept
- 23. Build Production Server and Perform Server Acceptance Test
- 24. Migrate all parking software & interfaces to production server (with virtual environment pre-test)
- 25. Commence installation of lane equipment in employee parking facilities, sequence to be agreed
- 26. Finalize revenue control system operating parameters
- 27. Commence installation of lane equipment in Mt. Elbert lot
- 28. Continue installation of lane equipment in remaining public facilities, sequence to be agreed
- 29. Install Valet Parking components & software; test & accept
- 30. Install Mobile License Plate Inventory System; test & accept
- 31. Complete training (on going since employee parking implementation)
- 32. Complete punch list items
- 33. Complete delivery of all remaining project documentation; review & approve
- 34. Commence/Complete System Acceptance Test (SAT)
- 35. Commence warranty

2.14 Administrative Requirements

- A. System Design Review (SDR): Conduct a SDR meeting at DEN within thirty (30) days of contract award (after final contract negotiations) to review NextGen's System Design Documents (SDD). SDDs include the following Proposal Submittals and Informational Submittals:
 - 1. Product Data Submittals
 - 2. Typical Lane Layouts
 - 3. Project Schedule
 - 4. Technical Approach
 - 5. Transition Plan
 - 6. Samples
 - 7. Training Plan
 - 8. Testing Plan
- B. Pre-Installation Meeting: Conduct a meeting at the project site thirty (30) days in advance of time scheduled for work to proceed to review requirements and conditions that could interfere with successful PRCS implementation. All parties concerned with PRCS installation including electrical, communications, concrete/asphalt work, or others who are required to coordinate work should attend. Include DEN or their respective representatives. At a minimum, cover:
 - 1. Required preparatory work
 - 2. Review installation and implementation schedule
 - 3. Review testing and acceptance procedures

2.15 Source Quality Control

- A. Internal Contractor Tests
 - All equipment to have successfully passed formal manufacturing tests and quality
 assurance inspections to validate compliance with these functional specifications prior to
 the start of installation. Records for formal internal Contractor testing and inspection for
 performance, materials quality and/or workmanship to be maintained by NextGen and
 submitted to DEN prior to the start of installation or at any point during the execution of
 the Contract.
 - 2. Have readily available proof of product reliability analysis and testing should reliability become a problem at any time from the beginning of installation testing through the final operational test period.
- B. Factory Acceptance Test (FAT)
 - Conduct a series of FATs to verify the functional performance of all systems, subsystems, and components of the PRCS to ensure adherence to these functional specifications, prior to installing any equipment at the Airport. The first FAT will be for the baseline PRCS system. Additional FATs will be conducted to test subsystems and interfaces.
 - 2. Demonstrate the performance of the PRCS at the DEN Test Environment.

- 3. Configure a lane of each type with all applicable components, or stand-alone device if the particular device is not part of an entry/exit lane (e.g. server, workstations, etc.), to simulate the configuration as installed at the Airport.
- 4. Provide all ancillary items necessary to complete the FATs including setting up a credit card Test Environment for testing purposes; supply credit cards of all types for testing; provide all ticket and ticketless media needed for each transaction type; and provide all keys to access equipment housings.
- 5. All systems, subsystems, and components of the baseline PRCS must successfully complete the FAT prior to the shipment of any equipment to the project site.
- 6. Installation of any PRCS equipment at the Airport that has failed a FAT is prohibited.
- 7. Successful completion of a FAT is accomplished when all systems, subsystems, and components have passed their respective test procedures and all test documents have been signed by DEN and NextGen. Minor deviations are not to be considered grounds for failure of a FAT. Major deviations found during the FAT result in the retest of the respective equipment, software, or subsystem before the FAT is considered successfully complete.
- 8. Provide to DEN a plan for each FAT in accordance with the submittal guidelines. Provide test procedures for each lane type or device type and test procedures to include:
 - a. narrative describing the general procedures to be followed;
 - b. definition of all minor and major deviation types;
 - c. checklist of all items necessary to conduct the test (e.g. unpaid tickets, license plates, exceptions tickets, credit cards, transponders, equipment keys, etc.);
 - d. checklist for the components of each lane or device;
 - e. signature page for all FAT participants' signatures;
 - f. step by step instructions for testing each functionality;
 - g. tests for verifying reports;
 - h. area within each test section to denote "pass" or "fail"; and
 - i. section for listing and describing test deviations.
- 9. DEN will have designated representatives participate in each FAT.

PART 3 - Execution

3.1 Examination

- A. Site Verification of Conditions: Verify all existing conditions in the field prior to implementation. In the event that conditions in the field are different from the conditions described and shown in the Drawings, NextGen shall notify DEN in writing of the exact differences and shall inform DEN in writing of any implications the differences have on the project.
- B. Verify that all required PRCS conduits and wiring are properly located and installed prior to installing PRCS equipment.

C. Examine substrates, areas, and conditions for compliance with requirements for installation tolerances, including equipment bases; accurate placement, pattern, and orientation of anchor bolts; critical dimensions; and other conditions affecting performance of the Work.

3.2 Installation

- A. During installation through Final Acceptance, NextGen shall provide sufficient staffing levels to meet the installation schedule, perform repairs and preventative maintenance on installed equipment, and participate in all field quality control and acceptance testing.
- B. Adhere to the phasing limitations in the Drawing notes.
- C. Verify that the installation locations are prepared and ready to have the equipment installation completed. NextGen will notify DEN, in writing, if they find the location where the equipment is to be installed is not ready to accept installation due to unfinished work outside of NextGen's scope of work. (Email notifications are acceptable for this requirement.) The written notification is to provide details and address the elements that need to be completed to allow the equipment to be installed. Note: for Delay Damages, refer to CCD, Department of Aviation Standard Specifications for Construction, Section 603 DELAY DAMAGES.
- D. Proceed with installation only after unsatisfactory conditions have been remedied.
- E. Install all PRCS equipment per equipment manufacturer recommendations.
- F. Any patches, upgrades, updates, or modifications to the PRCS software during the installation period require appropriate documentation and DEN approval before the modification is made.
- G. During installation and the warranty period, DEN will attempt to make available to NextGen an area to serve as an office/work area for the technicians that support the system. It is the responsibility of the on-site technicians to keep the office/work area clean and free of all hazards.

H. Project Schedule

- 1. Develop and submit a preliminary base line project schedule in Microsoft Projects for DEN to review and approve 2 weeks after NextGen receives an executed contract. Project schedule beginning with Notice to Proceed and continuing through final system acceptance. It should show the logic on how the project will be completed, displaying each phase and their associated activities. Upon approval of this temporary schedule, Contractor shall submit their formal schedule for the project for DEN to review and approve. Once approved, this schedule will be established as the official base line schedule and will be used and updated monthly to reflect actual project activities.
- 2. Present 4-week look-ahead project schedule at each weekly construction meeting. Schedule should show detail work accomplished in the past week, and upcoming work in the next 3 weeks.
- 3. Update all task and milestone percent completes on a weekly basis.

I. PRCS System Access

- During installation, warranty, and post-warranty, real-time communication between the PRCS servers and NextGen's software support team for supporting the system may be required. This communication will be via a DEN-provided VPN connection and will be required to go through the firewall to get onto DEN's network to access the PRCS servers.
- 2. Multi-factor authentication shall be required for remote access.

- 3. Coordinate with DEN to obtain VPN access to DEN network and set up user accounts. Accounts shall not be persistent. All access is to be requested with a duration and task list when required.
- 4. Each individual accessing DEN's network is required to have an account. Group accounts are prohibited.

3.3 Field Quality Control/Acceptance Testing

A. Test Environment Acceptance Test

1. Conduct a Test Environment Acceptance Test with DEN and its representatives to demonstrate that the Test Environment equipment, application, and server complies with the specification requirements. The FAT (Section 2.15.B) will serve as the Test Environment Acceptance Test.

B. Server Acceptance Test

- 1. Conduct a Server Acceptance Test with DEN and its representatives to demonstrate that
 the production primary servers and redundant servers comply with the specification
 requirements. The Server Acceptance Test will occur in the sequence defined above and
 in accordance with test procedures defined during the System Design Review.
- 2. Server communication with the field equipment
- 3. Server failover functionality
- 4. Offline functionality when lanes are disconnected from the servers

C. Bank Card Acceptance Test (BAT)

- Conduct a Bank Card Acceptance Test with DEN and its representatives, the payment gateway provider, and the clearinghouse to demonstrate that bank card processing complies with the Contract.
- 2. The BAT will test communication from the Test Environment exit lane bank card terminal to the payment gateway and the clearinghouse.
- 3. Each credit card type will be presented at the Test Environment cashier and exit production lane stations' bank card terminals and the payment gateway provider and clearinghouse will confirm that the transactions were transmitted along with the transaction detail.
- 4. Online and offline testing will be conducted at the BAT.
- 5. Offline testing will include:
 - a. Loss of network communications from the payment devices
 - b. Simulation of gateway or clearinghouse outages.

D. Lane Acceptance Test (LAT)

- Conduct LATs as a demonstration to DEN or its' representatives that the installed equipment complies with the Contract, NextGen's product data, and to other documentation, such as user manuals.
- 2. When a PRCS equipment location installation has been completed, NextGen shall conduct its internal testing of the installed equipment. Internal testing shall follow the identical LAT test procedures that shall be used during LATs observed by DEN.

- 3. Upon successful completion of NextGen's test, NextGen and DEN will perform the LAT to verify performance. The LAT shall only be observed by DEN after a fully completed and signed test script verifying that a successful completion of NextGen's internal lane testing is submitted. Signed internal test scripts shall be submitted at least one calendar day prior to the scheduled test with DEN.
- 4. LATs shall be conducted for each PRCS entry lane, exit lane, and nested lanes and shall include tests of PRCS equipment and software. NextGen shall not activate the system for service until all LATs have been successfully completed for each lane or device and DEN has notified NextGen that it is ready to put the equipment into operation.
- 5. NextGen shall provide test procedure documents for LATs as part of the Test Plan in accordance to the submittal guidelines. LAT Test Procedures Documents shall be provided for each count location type and test procedures shall include the following sections:
 - a. Narrative describing the general procedures to be followed
 - b. Definition of all minor and major deviation types
 - c. Checklist of all items necessary to conduct the test (e.g. PRCS devices included in the test, consumables, validations, credit cards for payments, vehicles, etc.)
 - d. Checklist for the components of each PRCS equipment location
 - e. Signature page for all LAT participants' signatures
 - f. Step by step instructions for testing each functionality
 - g. Tests for verifying the reporting requirements
 - h. Area within each test section to denote "pass" or "fail"
 - i. Section for listing and describing test deviations
- 6. NextGen shall provide all ancillary items necessary to complete the LATs for testing purposes. In addition, NextGen shall make available sufficient personnel to perform the LAT in an efficient and timely manner.
- 7. The LAT shall be considered successfully completed when all components have passed their respective test procedures and all test documents have been signed by DEN and Contractor. Minor deviations resulting in the creation of punch list items shall not be considered grounds for failure of the overall LAT. Major deviations found during the LAT shall result in the retest of the lane or device. NextGen shall agree to credit DEN from its total contract value for any travel and/or labor costs incurred by DEN or its representatives as a result of additional effort required to retest failed devices.
- 8. Minor deviations are any failure that does not affect system functionality, fee calculation accuracy, transaction count accuracy, exception count accuracy, active ticket inventory accuracy (system vs. actual), transaction processing, credit card processing, calculations, or report accuracy.
- Major deviations are any failures that affect system functionality, fee calculation accuracy, transaction count accuracy, exception count accuracy, active ticket inventory accuracy (system vs. actual), transaction processing, credit card processing, calculations, or report accuracy.

E. System Acceptance Test (SAT)

1. The SAT shall be comprised of all equipment, systems, and subsystems performing under actual conditions, e.g., Customer use, normal activity recording, and reporting procedures.

- This SAT shall demonstrate, over a period of 30 consecutive calendar days, the successful performance of all aspects of the PRCS.
- 2. During the SAT only routine maintenance procedures, as defined by the preventative maintenance procedures manual and according to industry standards, shall be permitted. All other maintenance procedures shall be approved in writing by DEN before they are performed; otherwise, they shall constitute a failure of the SAT and a mandatory restart.
- 3. System and equipment re-boots are not permitted during the SAT without DEN's advance approval of which events may result in allowing a re-boot.
- 4. Any failure during the SAT that requires NextGen to be onsite after hours will be at NextGen's expense and not charged to DEN for any labor or parts used.
- 5. The DEN reserves the right to be present for all maintenance services during the SAT.
- 6. For purposes of the SAT, a subsystem is defined to be any one of the following:
 - a. PRCS Application Software
 - b. PRCS Head End System
 - c. PRCS Entry Lanes
 - d. PRCS Exit Lanes
 - e. AVI System and Credential Management Software
 - f. LPR Application Software
 - g. Valet Application Software
 - h. Online Booking Application Software
 - i. VMS Signs and Software
 - j. Credit Card System (includes transaction processing service from P2PE provider)
 - k. Registered Parker Software and Hardware
 - I. Loyalty Program Application Software
 - m. Intercom System
 - n. Pinhole Camera System
 - o. PRCS Reporting System
- 7. The SAT shall begin after successful completion of all LATs on a date mutually selected and agreed to in writing by DEN and NextGen at a time designated by DEN. The SAT monitors system performance of the entire system operating as a single unit. NextGen shall submit a SAT test document as part of their Test Plan in accordance with the submittal requirements. SAT test documents are intended to outline procedures for monitoring the overall performance of the PRCS and shall not include test procedures for individual components. The SAT test documents shall include:
 - a. Narrative describing the general procedures to be followed
 - b. Methodology for calculation of downtime and accuracy for the various PRCS components
 - c. Electronic tracking document to be used during the SAT period for documenting failures and downtime
- 8. A daily report of all system failures will be submitted to DEN for the prior day's activity in a format approved by DEN.
- 9. The SAT shall continue for 30 consecutive 24-hour periods during which all the performance criteria, stated below, shall have been met. If during the 30-day period the

system fails to meet any one of the following specified performance criteria, the test shall begin anew on a day agreed upon by DEN and NextGen. NextGen shall agree to credit DEN from its total contract value for any travel and/or labor costs incurred by DEN as a result of retesting the system.

- 10. The performance criteria for successful completion of the SAT shall include:
 - a. No individual subsystem shall be operationally unavailable for four or more hours cumulative during the 30-day test period.
 - b. No individual subsystem shall be operationally unavailable for more than two consecutive hours.
 - c. If any single component fails more than once during the 30-day period for the same reason, it shall be replaced upon the second failure with a newly manufactured component of the same type and the test shall continue.
 - d. No component of a given type shall fail more than three times during the 30-day test period for the same reason. Upon the fourth failure, all components of that type shall be replaced or modified to correct the common deficiency, and the test shall be restarted from the beginning.
- 11. In addition to the PRCS reports generated during the SAT, NextGen shall provide to DEN a one (1) page summary report that clearly provides the overall percentage of system downtime and causes of that downtime including any service outages of P2PE solution provider relevant to the processing of DEN payment/debit transactions
- 12. NextGen shall provide to DEN a corrective action report that provides a detailed description of each failure that occurs during the SAT. The corrective action report shall include the type of failure, why the failure occurred, what was done to remedy the failure, and whether or not the failure resulted in a restart of the SAT.
- 13. A subsystem shall be considered unavailable as long as any major component of the subsystem is not functioning.
- 14. An inoperative subsystem shall not be deemed unavailable if it has become inoperative because of:
 - a. Outage of line power beyond required duration of UPS power backup
 - b. Malicious damage or vandalism to a component(s) by employees, customers or others
 - c. Server Hardware malfunctions or Network connectivity issues beyond the PRCS
 - d. PRCS failures due to issues and/or failures outside of NextGen's control
 - e. Failures caused by a 3rd party
 - f. Act of God
- 15. Should a failure occur in the system that is caused by normal hardware failure, it shall be repaired and the test resumed with downtime accrued. Where the failure causes inadequate test data to be collected or a loss of test data, then the test shall be restarted from a point where it can be successfully completed with data to verify compliance with the Contract and the test procedures document.
- 16. Should a failure occur that requires repair both during and after business hours, NextGen shall cover the full cost of the repair including labor and materials. The exception to this is repairs due to causes outlined in 14.a-f above.

- 17. If the system "crashes" during a test, then the test shall be stopped. "Crash" is defined as a failure in which the PRCS cannot properly process vehicles or record transactions. NextGen shall analyze the cause of the system "crash," document the cause in a system problem report, responsively repair the flaw, and document the repair in a corrective action report.
- 18. Where corrective action impacts delivered documentation, the documentation shall be corrected prior to Final System Acceptance.
- 19. Upon formal written approval of the corrective action report by DEN, testing may continue if a problem has been encountered as long as NextGen can clearly demonstrate that the failure is associated only with one function of the system, corrective action has been taken to remedy the failure, and the corrective action shall not impact other areas of the system.
- 20. Where the system does not perform a function or incorrectly performs the function, but the system does not crash, testing may continue, as long as the function is corrected and all of the following conditions are met:
 - a. The functionality of processing vehicles and recording transactions works properly according to the Contract
 - b. No personnel, vehicle or driver safety issues exist
 - c. PRCS applications continue to function normally
 - d. Failure does not cause loss or contamination of data
 - e. All reports are 100% accurate.
- 21. Where the above criteria are not met, the test shall be stopped and corrective action taken and verified prior to testing restart.
- 22. During the test, the continued availability of the system shall be demonstrated. Where a failure occurs that causes data loss, system instability (crash), and/or contamination of the data and the database, NextGen shall immediately correct the problem. Testing shall continue until a consecutive 30-day period of stable operation is achieved. Stability is defined as the proper functioning of the PRCS with a failure having no impact on the continued system operation or on the integrity of data.

F. Punch List

- 1. Starting with the beginning of installation through Final System Acceptance, NextGen 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.
- 2. All deviations noted during acceptance testing shall be recorded on the Punch List.
- 3. Items which are outstanding and NextGen is unable to accomplish, due to either inaction on DEN's part or omission of any separate contractor, direct suspension of the Work, strikes, lockouts, fire, unusual delay by common carriers, unavoidable causalities or other any other causes beyond NextGen's control, with DEN's Agreement, will be recorded and reported but not included in the Punch List as Final System Acceptance criteria.

G. Substantial and Final System Acceptance

 When NextGen considers that the Project is substantially complete to the required stage, meaning the Project has progressed to the point that DEN can beneficially utilize the Project for which it is intended. It complies with all applicable codes and regulations. All required testing has been performed and accepted by DEN, NextGen shall notify the DEN Project Manage in writing that the Project is complete to the required stage and is ready for inspection and development of a punch list. Upon completion of the DEN's final Inspection and it is determined that the Project is complete in accordance with the Contract and all submittals, as-builts and record documents have been completed and accepted, all Change Orders executed, and all other Contract Requirement, except for possible future warranty and guarantee work has been accomplished, DEN's Director shall issue a document evidencing Final Acceptance.

DEN shall not authorize final payment (retainage) until all items on the punchlist have been completed, a document evidencing Final Acceptance is issued, all items on the close-out checklist are complete and the Notice of Final Settlement has been published. If the Project is substantially completed, but Completion thereof is prevented by the unavailability of materials, or the caused beyond the control of NextGen, and if consistent with any applicable bond ordinance, DEN, in its sole discretion, may release to NextGen all amounts due except for retainage of two (2) times the cost of completing the unfinished Work, as estimated by the DEN.

3.4 Service Level Performance Requirements

A. Preventative Maintenance

- During installation through the Warranty, NextGen will complete no less than ninety-eight percent (98%) of all Preventative Maintenance scheduled during the month. Percentages will be calculated on the total number of Preventative Maintenance tasks scheduled for just that month and the total number of Preventative Maintenance tasks fully completed in the month even if the scheduled maintenance is a monthly, quarterly, or annual maintenance requirement.
- 2. For each percentage point, below 98% of the total scheduled preventative maintenance tasks completed by NextGen, NextGen's monthly retainage invoice will be reduced by 5% of its total invoice amount.
- 3. Partial completion of a scheduled Preventative Maintenance item will not meet this requirement and will not meet DEN's standards of fully completed. Any month that falls below this level will require a written justification from NextGen.
- 4. Factors beyond the control of NextGen, such as unexpected delays in parts, delays due to accidents or damage created at no fault of NextGen, severe weather and unusual traffic volume during the holiday seasons will be thoroughly documented in the Maintenance Log and reported to DEN the next business day. DEN retains the right to determine if the non-performance was beyond NextGen's control and is a valid reason for non-performance.

B. Emergency Service Maintenance

1. During installation through the Warranty, NextGen will provide a singular method of notification to be used for emergency contact information. The method of notification will provide a means of tracking the date and time the message was delivered. Examples of some documented communication include service desk calls ticket number or email.

- 2. NextGen will provide a response call within 30 minutes of all emergency maintenance notifications. Performance will be calculated as the total number of response calls returned to DEN within 30 minutes divided by the total emergency notifications placed in one month.
- 3. For each percentage point below 95% of total emergency maintenance calls that NextGen does not respond to within 30 minutes, NextGen's monthly retainage invoice will be reduced by 5% of its invoice amount. For example, if the Maintenance Tracking System indicates that NextGen responded within 30 minutes to 93% of all emergency maintenance calls, NextGen's monthly EM invoice amount will be reduced by 10%.
- 4. Resolution of the situation within four (4) hours after notification is required in all situations. A temporary solution is acceptable in the event replacement parts are not available in inventory. Performance will be calculated as the total number of emergency events resolved within 4 hours divided by the total emergency notifications placed in one month.
- 5. For each percentage point below 95% of the total emergency maintenance calls that NextGen does not resolve within 4 hours, NextGen's monthly retainage invoice will be reduced by 5% of its invoice amount, unless DEN agrees that there were factors beyond NextGen's control that prevented them from performing. For example, if the Maintenance Tracking System indicates that NextGen resolved 93% of all emergency maintenance calls within 4 hours or less, NextGen's monthly invoice will be reduced by 10%.
- 6. Factors beyond the control of NextGen, such as unexpected delays in parts, accidents, severe weather, and unusual traffic, will be thoroughly documented in the Maintenance Log and reported to DEN the next business day. DEN may grant relief for the service hour requirement after reviewing these factors.
- 7. DEN will co-operate with NextGen to fully explore any concerns regarding service and performance standards.
- 8. DEN will notify NextGen in writing of performance problems with respect to the service standards within 20 days after the end of each month based on the performance reports from the maintenance tracking system.
- 9. NextGen will be given 30 days from receipt of notification to take corrective actions with respect to the problem identified by DEN or request relief.

C. PRCS Performance Standards

- 1. Starting at the System Acceptance Test through the Warranty Period, NextGen will meet the performance standards in Attachment 10. If DEN consider the PRCS to be performing below the Attachment 10 performance standards, DEN and NextGen will document performance for the devices/components not meeting the performance standards to confirm that actual performance is below the contractual standards.
- 2. For hardware issues, NextGen will have seven (7) calendar days to bring the performance up to standard.
- 3. For software issues, NextGen will have ninety (90) calendar days to bring performance up to standard.
- 4. Failure to meet the performance standards will result in a penalty of \$50 for each day beyond the allowed calendar days.
- 5. NextGen may submit the remediation plan and reason for delays beyond the allowed days, and DEN may waive any penalties.
- 6. Accumulated penalties will be deducted from NextGen's monthly retainage invoice.

D. Lost Revenue Penalty

- NextGen will reimburse DEN for verified lost revenue that is a direct result of the PRCS not performing within the Performance Standards defined in Attachment 10, when the cause of failure is due to NextGen's products and/or services and not due to DEN's actions.
- 2. In addition, NextGen will reimburse DEN for lost verified revenue due to NextGen's negligence for errors in installation and configuration that directly results in lost revenue. This lost revenue amount will be deducted from NextGen's monthly invoice retainage amount. Should this lost revenue amount exceed the monthly retainage amount, then DEN may elect to carry over the outstanding balance to the next month's payment application or request direct reimbursement from NextGen.

E. Credit Card Processing Subsystem – Point-to-Point-Encryption (P2PE) Service

- 1. NextGen will ensure that availability of the Point-to-Point-Encryption service is maintained at the same 99.90% uptime level as other critical components of DEN's PRCS.
- 2. P2PE service availability (uptime/downtime) will be measured and reported monthly with other performance reports required below.
- 3. P2PE downtime will consist of unscheduled outages of P2PE services to DEN as reported by the service provider. The following factors which may affect DEN's ability to process P2PE payment transactions will not be considered downtime for purposes of calculating and reporting P2PE service uptime availability:
 - i. DEN Local Area Network (LAN) outages or other performance factors
 - ii. Internet outages or interruptions of availability
 - iii. Credit card terminal/reader malfunctions
 - iv. Chase Paymentech outages or interruptions of processor service availability
- 4. NextGen will act as the primary technical contact responsible for implementation and technical support of the P2PE subsystem. Service standards and response requirements will be as described above for Emergency Service and below for service during installation, Warranty, and Post-Warranty periods.
- 5. DEN may assess a penalty of \$50 for each 0.1% that the P2PE service uptime is below the 99.9% requirement. Additionally, DEN may recover verified revenues lost during P2PE service outages subject to the following:
 - i. DEN implements a \$250 floor limit for off line transactions during service outages
 - ii. Off line payments made during service outages which are later processed when service is restored are not considered lost revenues.
 - iii. NextGen participates in verification of revenues lost during P2PE service outages

F. Monthly Performance Reports Penalty

- 1. NextGen will provide all monthly maintenance, service, and performance reports within twenty (20) calendar days following the end of each month.
- 2. DEN will determine the number of days each report is late.
- 3. A penalty of \$50.00 will be assessed for each late day.
- 4. Assessed penalties will be deducted from NextGen's monthly retainage invoice.

G. Penalties

1. With regards to penalties associated with this section, the following shall apply.

- i. Penalty assessment will result in a deduction related to NextGen's monthly billing of retainage. DEN maintains control of retainage until the Project is finally accepted by DEN and a Certificated of Final Acceptance has been executed and issued. No retainage can be released until this requirement has been made.
- ii. For this project, NextGen will bill retainage in 12 equal payments. Should NextGen fail to meet any of the requirements as stated in this section, the percentage and penalty fees stated will be withheld from that monthly retainage invoice and will not be release until the specific requirement is met to the satisfaction of DEN.
- iii. Should NextGen failed to meet multiple service level performance requirements, the total percentage amount and total penalty fee associated with each of the failed requirement will be withheld from that particular monthly invoice.

3.5 Instruction and Training

- A. By means of instructional classes augmented by individual instruction as necessary, NextGen shall fully instruct DEN's designated staff in the operation, adjustment, and maintenance of all products, equipment, and systems.
- B. Coordinate scheduling of instruction and training classes with DEN to avoid conflicts and peakperiod personnel demands. Submit a proposed instruction schedule at a joint meeting conducted prior to equipment installation. DEN will tentatively approve or suggest changes to the training schedule at that time.
- C. Submit an outline of the instruction material and approximate duration of the session. Ample time shall be allotted within each session for NextGen to fully describe and demonstrate all aspects of the PRCS, and allow DEN personnel to have hands-on experience with the PRCS.
- D. All instruction courses to consist of classroom instruction and actual "hands-on" experience. Classes to be set up in a room designated by DEN. Provide one instructor for the duration of each program.
- E. The instructor shall speak fluent English in a clear and precise manner.
- F. The class material shall include schematics, as well as an overview and descriptions of the equipment.
- G. NextGen shall provide all documentation required for instructing DEN personnel. DEN retains the right to copy training materials as frequently as required for ongoing internal use only.
- H. An instructional notebook or user's manual shall accompany every instruction course. NextGen shall submit a hardcopy of the user's manual per the submittal guidelines. In addition, all manuals (instruction and maintenance) shall be submitted in electronic format (.PDF) on a CD-ROM, DVD or USB thumb drive. The user's manuals shall be written in common English with appropriate photos, diagrams, and schematics to supplement the text.
- I. Contractor shall provide two temporary cashier stations in the training room to facilitate training.
- J. Training classes to be provided for the following groups and subsystems:
 - 1. Cashiers
 - 2. Supervisors
 - 3. MLPI Staff and Administrators
 - 4. Control Center Staff:
 - a. LPR Image Reviews
 - b. Remote Transaction Processing

- c. Validations
- d. Facility Monitoring
- e. Intercoms
- f. Subsystem lookups for customer assistance
- g. Gate Vends
- 5. Credential Management System Administrators
- 6. Valet Operations Staff and Administrators
- 7. Online Booking Reservation System Administrators
- 8. Loyalty Program
- 9. Validation Systems
- 10. System Administrators and Management
- 11. Accounting/Audit
- 12. Maintenance Staff
- 13. Employee Parking Staff

3.6 **Equipment Protection**

- A. All above ground equipment components installed near drive isles shall be protected from damage by vehicular movements by protective bollards or other barriers as recommended and shown on the drawing developed by NextGen. NextGen is responsible for final bollard location to ensure installed bollard does not prevent access to the PRCS devices or interfere with the travel path of PRCS access doors.
- B. Each above ground island-mounted device shall be protected by one or more bollards.
- C. All final location of bollards shall be submitted to DEN for review and approval.

3.7 Warranty

- A. Warranty period on the PRCS starts upon notification from DEN of Final System Acceptance.
- B. The Warranty period begins the day of the Final System Acceptance signoff by DEN. Warranty all parts, materials, and workmanship for a period of 12 months from when the Warranty period begins. All costs (parts, labor, maintenance, software support, warranty repairs, Contractor travel time, Contractor expenses, etc.) incurred during the warranty period to be provided without additional cost to DEN
- C. Costs (time and material) for repair or parts replacement, components, etc., damaged or rendered unserviceable due to apparent and provable misuse, abuse, vandalism or negligence by DEN or the using public are excluded as a warranty item. Also excluded from the warranty are damages due to Acts of God. NextGen costs related to these non-warranty repairs can be invoiced to DEN on a time and materials basis.
- D. Maintain all systems' hardware that are operating prior to starting the warranty period. Maintenance services to be defined within the Manufacturer's recommended maintenance procedures manual submitted as accepted by DEN. Provide emergency maintenance service between the 00.00 and 06:00, prior to the start of the warranty service.
- E. Warranty Support Staff

- 1. Provide maintenance services twenty-four (24) hours per day, seven (7) days per week, three hundred sixty-five (365) days per year.
 - a. Provide local support staff dedicated to supporting this project only. Support staff will be onsite from 06:00 to 23:59 three hundred sixty-five (365) days per year.
 - b. Provide emergency maintenance service between 00:00 to 06:00, three hundred sixty-five (365) days per year.
- 2. Dedicated support staff shall be fully factory-trained and certified by the PRCS manufacturer.
- 3. The DEN's preference is to retain the current PRCS support staff at DEN to support the new PRCS.
- 4. Non-DEN dedicated support staff shall have been employed by NextGen or PRCS manufacturer providing similar support services for a minimum of two (2) years prior to the beginning of the warranty period.
- 5. Resumes and qualifications of dedicated support staff shall be submitted as part of the key personnel information included in the Proposal.
- 6. DEN reserves the right to interview and approve or reject all dedicated support staff proposed by NextGen.

F. Preventive Maintenance Service during the Warranty Period:

- 1. Provide preventive maintenance services for all systems throughout the warranty period. Preventive maintenance procedures and frequencies to be defined within the Manufacturer's recommended maintenance procedures manual submitted with the Proposal as modified and accepted by DEN.
- 2. Preventive maintenance services include but are not limited to inspection, testing, necessary adjustment, alignments, calibration, parts cleaning, replacement of consumables, battery refresh, communication system maintenance, server administration and database administration of the PRCS provided by NextGen.
- 3. Perform all preventative maintenance at non-peak periods during regular business hours.

G. Emergency Maintenance Service during the Warranty Period:

- Conditions requiring emergency maintenance services by NextGen are conditions in which
 a lane, PRCS device, or group of devices become unusable due to malfunction, failure, or
 damage.
- 2. Provide a singular method of notification to be used for emergency contact information (ex: telephone or email). Acknowledge receipt of any emergency service request within 30 minutes of notification by DEN.
- 3. Begin emergency repair service within two (2) hours of the initial emergency service request by DEN (VPN or onsite).
- 4. Resolution of the situation within four (4) hours after notification is required in all situations. A temporary solution is acceptable in the event replacement parts are not available in inventory.
- 5. Factors beyond the control of NextGen, such as unexpected delays in parts, accidents, severe weather, and unusual traffic, require thorough documentation to be submitted to

DEN the next business day. DEN may grant relief for the service hour requirement after reviewing these factors.

H. Software Support during the Warranty Period:

- 1. Provide software support twenty-four (24) hours per day, seven (7) days per week, three hundred sixty-five (365) days per year.
- 2. Provide on-site and remote software support for PRCS software and all 3rd party software applications.
- 3. Provide 24/7 hotline telephone software support.
- 4. Make available to DEN normal PRCS software improvement releases (updates) when they become available at no additional cost to DEN.
- 5. Provide all PRCS software patches and updates free of charge during the warranty period; however, DEN reserves the option of implementing the updates or not. Provide documentation seven calendar days prior to all PRCS software modifications, patches, updates, and upgrades, that describes:
 - a. Patch/update release designation
 - b. Proposed date and time of implementation
 - c. Detailed description of what the patch/update accomplishes
 - d. Full disaster recovery procedures that return the system to its pre-patch/update condition
- 6. Fully comply with DEN's change management procedures for all software patches, upgrades and updates.
- 7. Coordinate the testing and implementation of all patches, upgrades and updates with DEN. PRCS Database and PRCS application software maintenance to be performed remotely or on-site as approved by DEN.
- 8. Support upgrades to the PRCS application based on operating system patch and upgrade requirements. (For example, if the PRCS runs on a Microsoft operating system, patch the PRCS software according to the Microsoft patch and upgrade schedule without breaking any application. If Microsoft decommissions an operating system, NextGen must be capable of releasing code compatible with next operating system upgrade prior to Microsoft ending support for current operating system.)
- 9. If at any time NextGen ceases to do business or ceases to make their PRCS software product commercially available, DEN will assume full ownership of the PRCS software. Thirty (30) days prior to ceasing to do business, NextGen shall provide the most current version of the PRCS software source code to DEN.
- 10. Provide corrective patches and upgrades in the event security vulnerability or system availability issues are discovered.

I. Warranty Maintenance Documentation and Reporting

- 1. NextGen shall provide and utilize a Maintenance Tracking System to monitor and record all scheduled, requested, and performed maintenance services.
- 2. NextGen shall fill in all required fields, completely, for all Preventative Maintenance and Repair Services scheduled and performed. At a minimum, the Maintenance Tracking System shall include:

- a. Unique work order number
- b. Device ID or component to be serviced
- c. Identification of the problem/service to be performed
- d. Date/time failure reported
- e. Reporting party
- f. Assigned technician
- g. Corrective action code
- h. Description of corrective action
- i. Identification of replaced modules/parts or software patches/upgrades made
- j. Date/time corrective action was tested and verified to be operational
- 3. The Maintenance Tracking System database shall be kept on a component-by-component basis according to equipment number or component type. A component shall be defined as the major items within the PARCS, e.g. barrier gate, lane controller, workstation, etc. The maintenance database shall include a parameter driven reporting feature (by date, by component type, by specific module, by problem type) and inventory reports.
- 4. The maintenance database shall also record all software and hardware updates.
- 5. The maintenance database shall be accessible by DEN at any time during the warranty period.
- 6. Thirty (30) days after the end of the Warranty period, NextGen shall provide to DEN the data in the maintenance database in a file format that allows import into DEN's work order system.
- 7. Maintenance Reporting:
 - a. All reporting requirements shall be determined at the time of Contract start.
 - b. The DEN shall approve the maintenance report formats.
 - c. The reporting system provides, at a minimum, the following reports:
 - i. A Weekly Out-of-Service Report, indicating how long any lane was out of order.
 - ii. A monthly Repair Service report.
 - iii. A monthly report of all preventative maintenance performed.
 - iv. A monthly Maintenance Report in DEN-approved format to designated personnel during the Contract period.

3.8 <u>Post-Warranty Maintenance Services -</u>

- A. Post-warranty maintenance service is not part of this contract.
- B. Service Level Performance Requirements
 - 1. DEN reserves the right to exercise the option for these service for the cost that was submitted to DEN as part of NextGen's original proposal.

4.0 Payment Process and Application for Payment

- A. To receive compensation for work performed in a specific monthly, NextGen shall submit a complete application for payment on the day of each of each month designated by the DEN Project Manager. The application for payment shall be submitted in Unifier and include as an attachment, Payment Application Form (Attachment 8). Applications for payment shall be based on the approved Schedule of Values (Attachment 9) as described in section 4.0.B. Progress payments for performance of any work shall be based on completed work estimates and subject to the following requirements:
 - 1. Next Gen shall submit a complete application for payment for work estimates performed during the specified billing period.
 - 2. Each submitted estimate shall specify the percent of the work completed. This percentage shall be agreed upon between NextGen and DEN PM. It shall be certified by NextGen's Project Engineer/Manager.
 - 3. Each estimate of work completed shall be accompanied by a completed schedule of values that has been approved by DEN.
 - 4. The estimate of the percentage of work completed shall constitute a representation by NextGen to the City that the work has progressed to the point indicated; that the quality of the work covered by the estimate is in accordance with the Contract Documents; and the payments required will be used to discharge such obligation unless previously discharged' and that NextGen is entitled to payment in the amount requested.
 - 5. NextGen warrants that:
 - a. Title to work covered by an estimate of work completed will pass to the City by incorporation into the completed work.
 - b. Work covered by previous estimates of work completed will have been acquired byNextGen, or any other person or entity performing work at the work site or furnishing material or equipment for the Project and that no work covered by the estimate is subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by NextGen or such other person or entity.
 - c. Approval of an estimate of work completed or actual payment shall not foreclose the right of the City to examine the books and records of NextGen to determine the correctness and accuracy of any estimated item.
 - d. All pay applications shall be submitted to DEN for review and approval using Oracle's Unifier.
 - e. Once the pay application has been approved in Unifier by DEN, all pay applications are to be processed through Textura. Contractor shall be responsible for performing this action.

B. Schedule of Values

1. NextGen shall furnish to the DEN PM, for review and approval, no later than thirty (30) days prior to the issuance of the first pay application a schedule of values. The Schedule of Values shall show the amount included for each principal category of work and shall be in proper balance. No pay application shall be submitted until the submitted Schedule of Values is approved by the PM. The Schedule of Values shall be submitted in accordance with the format as shown on Attachment 9. Contractor shall submit the Schedule of Values for review and approval through Unifier.

ATTACHMENTS

- 1. Attachment 1 PRCS Equipment Matrix
- 2. Attachment 2 PRCS Integration and Interfaces
- 3. Attachment 3 Spare Parts
- 4. Attachment 4 PRCS Features and Demonstration List
- 5. Attachment 5 Head-End Support Matrix
- 6. Attachment 6 Milestone Schedule
- 7. Attachment 7– Payment Milestone
- 8. Attachment 8 Pay Application Form
- 9. Attachment 9 Schedule of Values Form
- 10. Attachment 10 Performance Standards
- 11. Attachment 11 Point-to-Point-Encryption (P2PE) Service

																			s and Revenue																					
			Lane Typ	ie						Lan	e Equipment	(Blue: Non-PO	E Ethernet,	Red: POE,	Change Order:	: Green)															Equipmen	nt						Si	igns	Comments
New Facility	Lane # (left to right facing the lane plaza)	Entry	Nest Ne		Entry Station (IN+)	Exit Station (Out+)	-in Pre-fo			LDD	EMV/NFC Credit Card	2D Barcode In	tercom Pin	holo	Total F	Required lumber of	Valet Barcode Reader	AVI Reader -		CR120 for AVI/Inter	UPS	Barrier Gate (H)	lew Gates n Change	QR Reader Ce		/IV/NFC	2D Into	ercom	Permit Kiosk Interc		Vall-	Validation	Offline Validator	Work Stations in		Valet Hand-	MLPI Vehicle	Entry Lane VMS	Exit Lane	
10#	piazay		Entry	XIL	(IN+)	(Out+)	pps Loop	ps (MI	PS) Panel (Out+)	1	Reader	Reader	Ca	mera	Drops	POE	(requires 2 E)	All new	& Intercom	com/HID	(B)	All New	Order	accessories Sta	ation R	leader	Reader Ph	ones	Heads	set Mo	onitor	Scanners	validator	Proposal	l added	Helds	Units	(D)		
1 DEN Offices	NA														16																	1	1		14					100% validations up to 24 hours.
2 DEN Permit Office	NA														15										3	3	3	3	0			1	1	2						Central Cashier Station is used for tow charges and abandoned vehicle fees; not for permit
3 AC Building	NA														1														1						+		<u> </u>			payments.
4 A Concourse Center Core Train Stop	NA														1														1											
5 B Concourse Center Core Train Stop	NA														1														1											
6 C Concourse Center Core Train Stop	NA														1											_			1								<u> </u>			
7 Parking Operator Office	NA							0)						30				+						1	1	1								23	-	6			Workstations are for LPR reviews, Remote
8 Control Center	NA														15														7		1			8						Cashiering, Facility Monitoring, Toll tag lookups, Permit & credential lookups, Intercom/pinhole camera activity.
9 West Garage Entry Plaza	10	1			1	3	3			1		1	1	1	6	2					1		1															1		
10 West Garage Entry Plaza	11	1			1	3	3			1		1	1	1	6	2					1		1															1		
11 West Garage Entry Plaza	12	1			1	3				1		1		1	6	2					1		1															1		
12 West Garage Entry Plaza 13 West Garage Entry Plaza	76 77	1			1	3				1		1	1	1	7	2		1			1		1															1		
14 West Garage Entry Plaza	78	1			1	3				1				1	7	2		1			1		1															1		
15 West Garage Entry Plaza - Dedicated Hotel	79	All items d	eleted from	n this row, pe	er 2/22/18 m	eeting @ DEN. Leav	e existing AV	'I as is, not o	connected to PA	ARCS.					0			NIC																						NOT IN CONTRACT, 2/22/18
16 West Garage Short Term Level 4 Entry	19	1			2	3				1		2	2	2	9	3		1			2		1																	Add 2nd Entry Station per 2/22/18
17 West Garage Short Term Level 4 Free Exit 18 Valet Office - West Garage	No #			1		2	!						1		3	2			1		1	1			1	1	1									8				Intercom only free exit.
19 Valet Office - West Garage	89														3												1								\pm		=			
20 Valet West Garage Vehicle Storage Entry- Level			1			2						1	1		5	2	1	1		1	1	1													4		4			+
21 Valet West Garage Vehicle Storage Exit- Level 3 22 Valet West Garage Vehicle Storage Entry- Level			1	1		2						1	1		5	2	1	1		1	1	1																		
23 Valet West Garage Vehicle Storage Exit- Level 4				1		2						1	1		5	2	1	1		1	1	1															\vdash			
24 Valet West Garage Free Exit- Level 4	No#			1	0	0 2	2								0							1																		
25 Hotel Valet Office	NA														0																					0				
West Garage Mod 4 Public Entry - north road past hotel valet drop-off	New	1			1	3	3			1		1	1	1	7	3	1	1			1	1																		These two lanes are recently installed between Mod 3 & Mod 4. LPR/ticket entry, but AVI only
West Garage Mod 4 Shuttle Exit - north road past hotel valet drop-off	New			1		2						1	1		5	2	1	1		1	1	1																		exit. Items modified per 2/22/18 meeting @ DEN. These 2 lanes need to read CVPS barcode ticket for runners.
28 Level 1 Mod 4 Hotel Valet Vehicle Storage Entry	18		1			2						1	1		5	2	1	1		1	1	1																		CR120s to have CVPS barcode reader for
Level 1 Mod 4 Hotel Valet Vehicle Storage			-																																+	-	-			runners. Ceiling mounted AVI, needs CR120. Or, utilize existing Pedestal & Transcore enclosure
29 Exit	No#			1		2	!					1	1		5	2	1	1		1	1	1																		as EXX120. Used by hotel valet runners to return the
Hotel Valet Exit - south road return to hotel for valet runners	New		:	1		2	!					1	1		5	2	1	1		1	1	1																		vehicle to the hotel entry. CR120s to have CVPS barcode reader for runners. New Arm/Post for
31 T1 Road Garage Mod 4 Nested Exit	TBD		:	1		2	2						1		4	2		1		1	1	1																		AVI.
32 T1 Road Garage Mod 4 Nested Entry	TBD		1			2							1		4	2		1		1	1	1																		These lanes are NOT new. Need to add pedesta
33 T1 Road West Nested Exit	TBD			1		2							1		4	2		1		1	1	1														4				to raise CR120 by 6 - 8 inches.
34 T1 Road West Nested Entry	TBD		1			2							1		4	2		1		1	1	1																		Booth is in the parking office. Cashier EMV/NFC
35 West Garage Exit Plaza	60			1		3	3	1	1 1	1	2	2	1	1	9	2		0			2	1																	1	is mounted outside below booth window. Booth transaction panel also includes an EMV/NFC reader on panel. The 2D barcode reader for the cashier station is located inside the booth. There is also a 2D barcode reader or transaction panel.
36 West Garage Exit Plaza	61			1		1 3	3			1	1	1	1	1	8	3		1			1	1																	1	
37 West Garage Exit Plaza	62			1		1 3				1	1	1		1	8	3		1			1	1																	1	
38 West Garage Exit Plaza 39 West Garage Exit Plaza	63			1		1 3	3			1	1	1	1	1	7	2					1	1																	1	
40 West Garage Exit Plaza	65			1		1 3				1	1	1		1	7	2					1	1																	1	
41 West Garage Exit Plaza	66			1		1 3	3			1	1	1	1	1	7	2					1	1																	1	
42 West Garage Exit Plaza	67			1		3	3	1	1 1	1	2	2	1	1	9	2		0			2	1																	1	
43 West Garage Exit Plaza	68			1		1 3				1	1	1		1	8	3		1			1	1																	1	
44 West Garage Exit Plaza	69			1		1 3				1	1	1		1	8	3		1			1	1																	1	
45 West Garage Exit Plaza 46 West Garage Exit Plaza	70 71			1		1 3				1	1	1		1	7	2					1	1																	1	
47 West Garage Exit Plaza	72			1		1	3			1	1	1		1	7	2					1	1																	1	
48 West Garage Exit Plaza	73			1			3	1	1 1	1	2	2	1	1	9	2					2	1																	1	
49 West Garage Exit Plaza	74			1		1 3	3			1	1	1	1	1	8	3		1			1	1																	1	
50 West Garage Exit Plaza	75			1		1 3	3			1	1	1	1	1	8	3		1			1	1																	1	

																		and Revenue																	
			Lane Typ	oe .						Lane E	quipment (Blu	ue: Non-POE	Ethernet, R	ed: POE, Change (Order: Green			· ·									Office Equip						S	igns	Comments
	Lane #															Valet		Pedestal		T.				al Cashier Statio	on	Permit Office	Parking Ops Office								
New ID#	facing the lane plaza)		Nest Ne Entry E	est xit Exi	t Statio (IN+)	y Exit Station (Out+)	Cut-in Loops	Pre-form Loops Cashid Statio (MPS	er Booth Trans Panel (Out+)	LPR		2D arcode Reader	Pin-l Cam		Require Number POE	d Barcode of Reader	AVI Reader All new		CR120 for AVI/Inter com/HID	UPS Ga	nte (H) I New Order	QR Reade ge & accessorie	Cashier Station	Credit Ba	rcode F	reed to Phones Permi Kiosk	t Intercom Panel with Headset Wall-Mounted Monitor	E-Validation Scanners	Offline Validator	Work Stations in Proposal	Stations	Valet Hand- Helds	MLPI Entry Vehicle Units (D)		
51 West Economy Entry Plaza (Employee/Public)	131	1					3			1		1	1	6	2		1	0	1	1	1												1		Public and Employee
52 West Economy Entry Plaza	15	1			1		3			1		1	1 1	. 7	3		1			1	1												1		
53 West Economy Entry Plaza	16	1			1		3			1		1	1 1	7	3		1			1	1												1		
54 West Economy Exit Plaza	80			1			3	1	1	1	2	2	1 1	9	2						1													1	
55 West Economy Exit Plaza	81			1			3	1	1	1	2		1 1		2						1													1	
56 West Economy Exit Plaza	82			1		1	3			1	1		1 1		3		1	1			1													1	
57 West Economy Exit Plaza	83			1		1	3			1	1		1 1		3		1				1													1	
58 East Garage Entry Plaza	1	1			1			3		1			1 1		2					1	1												1		
59 East Garage Entry Plaza	2	1			1			3		1			1 1		2					1	1												1		
60 East Garage Entry Plaza	112	1			1			3		1			1 1		3		1			1	1												1		
61 East Garage Entry Plaza 62 East Garage Short Term Level 4 Entry	9	1			2		3	3		1			2 2		3		1			2	1												1		
63 East Garage Short Term Level 4 Entry	No#	1		1	2		2			1			1	2	1		1	1			1														Free exit with intercom only.
64 Valet Office - East Garage	No #			-									-	3	1			1		•	1		1	1	1							8			The exit with intercontrolly.
65 Valet Office - East Garage	58		+ +			+								3						+			1		1										
66 Valet East Garage Entry - Level 4	4							extGen to remove	existing equipm	ent. No				0									-	-	-										
67 Valet East Garage Entry - Level 4	No #				new equ	uipment will be	e installed.							0							1														+
68 East Garage Surface Lot Nested Entry	New				TL.	wo lores !		2/18 meeting @ DE	N. Not in	ot or -t'				0																					
69 East Garage Surface Lot Nested Exit	New						ot exist per 2/2. ify. Potential du		N. Not in contra	act as off				0																					Duplicates confirmed
70 T1 Road HTC East Nested Entry	TBD		1				2						1	4	2		1		1	1	1														
71 T1 Road HTC East Nested Exit	TBD			1			2						1	4	2	_	1				1														
72 T1 Road East Nested Entry 73 T1 Road East Nested Exit	TBD		1	1			2						1	4	2		1		1		1														_
74 East Garage Exit Plaza	30			1			2	3 1	1	1	2		1 1		3		0		-		1													1	
75 East Garage Exit Plaza	31			1		1		3		1	1		1 1		3		1				1													1	
76 East Garage Exit Plaza	32			1		1		3		1	1		1 1		3		1				1													1	
77 East Garage Exit Plaza	33			1		1		3		1	1	1	1 1		2						1													1	
78 East Garage Exit Plaza	34			1		1		3		1	1	1	1 1	7	2					1	1													1	
79 East Garage Exit Plaza	35			1				3 1	1	1	2	2	1 1	9	3		0			2	1													1	
80 East Garage Exit Plaza	36			1		1		3		1	1	1	1 1	. 8	3		1			1	1													1	
81 East Garage Exit Plaza	37			1		1		3		1	1	1	1 1	8	3		1			1	1													1	
82 East Garage Exit Plaza	38			1		1		3		1	1	1	1 1	. 7	2					1	1													1	
83 East Garage Exit Plaza	39			1		1		3		1	1	1	1 1	7	2					1	1													1	
84 East Garage Exit Plaza	40			1		1		3		1	1	1	1 1	. 8	3		1			1	1													1	
85 East Garage Exit Plaza	41			1		1		3		1	1	1	1 1	. 8	3		1			1	1													1	
86 East Economy Entry Plaza (Employee/Public)	111	1					2			1		1	1	6	2		1		1	1	1												1		Lane may be used by the public in the future
87 East Economy Entry Plaza	6	1			1		3			1			1 1		3		1				1												1		
88 East Economy Entry Plaza	7	1			1		3			1			1 1		3		1				1												1		
89 East Economy Exit Plaza	50			1			3	1		1	2		1 1		2						1													1	
90 East Economy Exit Plaza	51			1			3	1	1	1	2			9	2						1													1	
91 East Economy Exit Plaza 92 East Economy Exit Plaza	52 53			1		1				1	1		1 1		3		1				1													1	
93 Pikes Peak Entry Plaza East	20	1		1	1		3	3		1	1		1 1		3		1			1	1												1	1	
94 Pikes Peak Entry Plaza East	21	1			1			3		1	1		1 1		3		1			1	1												1		
95 Pikes Peak Entry Plaza East (Bus)	441	1						2					1	4	2		1			1	1														
96 Pikes Peak Entry Plaza West	22	1			1			3		1	1		1 1		3		1			1	1												1		
97 Pikes Peak Entry Plaza West	23	1			1			3		1	1		1 1		3		1			1	1												1		
98 Pikes Peak Entry Plaza West (Bus)	203	1						2					1	4	2		1	+		1	1														
99 Pikes Peak Exit Plaza East	90			1		1		3		1	1	1	1 1	7	2					1	1													1	
100 Pikes Peak Exit Plaza East	91			1		1		3		1	1	1	1 1	. 8	3		1			1	1													1	
101 Pikes Peak Exit Plaza East	92			1		1		3		1	1	1	1 1	1 8	3		1			1	1													1	
102 Pikes Peak Exit Plaza East	93			1				3 1	1	1	2	2	1 1	9	2					2	1													1	
103 Pikes Peak Exit Plaza East	94			1				3 1	1	1	2		1 1	9	3		0			2	1													1	
104 Pikes Peak Exit Plaza East	95			1		1		3		1	1		1 1	8	3		1			1	1													1	
105 Pikes Peak Exit Plaza East (Bus)	442			1				2					1	4	3		1			1	1														
106 Pikes Peak Exit Plaza West (Bus)	204			1				2					1	4	3		1			1	1														
107 Mt. Elbert Entry Plaza - covered lane	24	1			1		3			1	1	1	1 1	8	3		1			1	1												1		

Denver International Airport Parking Access and Revenue Control System

																		At	tachment 1	l - PRCS Equip	ment Matrix																		
			Lane Ty	ype							Lane E	quipment (Blue: Non-l	OE Ether	net, Red: Po	OE, Change Or	der: Green)								Centro	al Cashier Station	Perm	it Office		Office Equip							Sig	gns	Comments
New Facility	Lane # (left to right facing the land plaza)		Nest Entry	Nest Exit	Exit	Entry Exit Station Statio (IN+) (Out-	Cut Loc	t-in Pre-form ops Loops	Cashier Station (MPS)	Booth Trans Panel (Out+)	LPR	EMV/NFC Credit Card Reader	2D Barcode Reader	Intercom	Pin-hole Camera	Total Ethernet Drops	Required Number o POE		AVI Reader - All new	Pedestal for C Barcode & & Intercom	CR120 for AVI/Inter com/HID	JPS Gat (B) All	rier (H) in Change Jew Order a	QR Reader & accessories		EMV/NFC Credit Card Reader) Intercom		Intercom	Wall- Mounted Monitor		Offline Validator	Work Stations in Proposal	Work Stations added	Valet Hand- Helds	MLPI Vehicle Units	Entry Lane VMS (D)	Exit Lane VMS	
108 Mt. Elbert Entry Plaza - covered lane	25	1				1		3			1	1	1	1	1	7	2					1	1														1		
109 Mt. Elbert Entry Plaza	26	1				1	:	3			1	1	1	1	1	8	3		1			1	1														1		
110 Mt. Elbert Entry (Bus)	67	1						2						1		4	3		1		1	1	1																
111 Mt. Elbert Exit Plaza North East	42				1			3	1	1	1	2	2	1	1	9	2					2	1															1	
112 Mt. Elbert Exit Plaza North East	43				1	1		3			1	1	1	1	1	8	3		1			1	1															1	
113 Mt. Elbert Exit Plaza North East	44				1	1		3			1	1	1	1	1	8	3		1			1	1															1 E	thernet drops need to be adjusted?
114 Mt. Elbert Exit Plaza South East	45				1		:	3	1	1	1	2	2	1	1	9	2					2	1															1	
115 Mt. Elbert Exit Plaza South East	46				1	1	:	3			1	1	1	1	1	8	3		1			1	1															1	
116 Mt. Elbert Exit Plaza South East	47				1	1	:	3			1	1	1	1	1	8	3		1			1	1															1 E	thernet drops need to be adjusted?
117 Mt. Elbert Exit (Bus)	68				1			2						1		4	2		1		1	1	1																
118 Employee East Nested Entry	411		1											1		4	2		1		1	1																	
119 Employee East Nested Exit	412			1				2						1		4	2		1		1	1																	
120 FAA East Employee Nested Entry	311		1					2						1		4	2		1			1																	
121 FAA East Employee Nested Exit	312			1				2						1		4	2		1		1	1																	
122 Atrium East Employee Nested Entry	511		1				:	2						1		4	2		1		1	1																	
123 Atrium East Employee Nested Exit	512			1			:	2						1		4	2		1		1	1																	
124 Airside Employee Parking Entry	471	1					:	2						1		4	2		1		1	1																	
125 Airside Employee Parking Entry	472	1					:	2						1		4	2		1		1	1																	
126 Airside Employee Parking Entry	473	1					:	2						1		4	2		1		1	1																	
127 Airside Employee Parking Entry	474	1					:	2						1		4	2		1		1	1																	
128 Airside Employee Parking Entry	475	1					:	2						1		4	2		1		1	1																	
129 Airside Employee Parking Exit	481				1		:	2						1		4	2		1		1	1																	
130 Airside Employee Parking Exit	482				1		:	2						1		4	2		1		1	1																	
131 Airside Employee Parking Exit	483				1		:	2						1		4	2		1		1	1																	
132 Airside Employee Parking Exit	484				1		:	2						1		4	2		1		1	1																	
133 Airside Employee Parking Exit	485				1		:	2						1		4	2		1		1	1																	
134 Landside Employee Parking Entry	451	1					:	2						1		4	2		1		1	1																	
135 Landside Employee Parking Entry	452	1					:	2						1		4	2		1		1	1																	
136 Landside Employee Parking Entry	453	1					-	2						1		4	2		1		1	1																	
137 Landside Employee Parking Entry	454	1					:	2						1		4	2		1		1	1																	
138 Landside Employee Parking Exit	461				1			2						1		4	2		1		1	1																	
139 Landside Employee Parking Exit	462				1		:	2						1		4	2		1		1	1																	
140 Landside Employee Parking Exit	463				1			2						1		4	2		1		1	1																	
141 Landside Employee Parking Exit	464				1			2						1		4	2		1																				
142 West Employee Entry	421		1					2						1		4	2		1			1																	
143 West Employee Exit	422			1				2						1		4	2		1																				
144 Airport Office Building Entry 5A	302	1						2						1		4	2		1																				
145 Airport Office Building Entry 5B	301	1						2						1		4	2		1			1																	
146 Airport Office Building Exit 5A	304				1			2						1		4	2		1				l.																
147 Airport Office Building Exit 5B	303				1			2						1		4	2		1																				
148 Reserved Parking West - Nested Entry	New		1			1					1		1	1	1	6	3		1																				lew construction
149 Reserved Parking West - Nested Exit	New			1		1					1	1	1	1	1	7	3		1			1																	lew construction. Credit Card Reader needed
150 Reserved Parking East - Nested Entry	New		1			1					1		1	1	1	6	3		1																				lew construction
151 Reserved Parking East - Nested Exit	New			1		1		3			1	1	1	1	1	7	3		1																			ľ	lew construction. Credit Card Reader needed
152 Test Environment		1				1 1			1	1	2	4	6	5	5	23	12		2				;																
153 West Garage Level I - D/E Atrium Level I	New	1	1					2						1		3	2		1		1	1																l:	rems agrred upon per 4/17/19 meeting.
154 Welliness Center Door Readers	Door	1			1											4								2															
Spares																																							
Totals		43	14	16	65	29 38	24	48 99	14	14	80	74	107	140	83	938	326	9	102	2	57	152 9	8 40	2	8	8 8	3	4	7	1	2	2	10	37	16	6	23	48	
	1						+																																
(A) Not used	+																	-1	+	-					-	+	-	-	-	1	+	+		-	1	1	-		

(A) Not used (B) Not used

Command center workstations are for LPR reviews; remote transaction processing; equipment monitoring; and subsystem lookups for customer assistance for AVI, online reservations, hotel permit, validation, and credit card in/out.

(C)
Permit workstations include point-of-sale functionality as defined in the technical specification.

All other workstations are to view activity and run reports but not perform operational tasks. If this can be done on an internet browser without dedicated workstations then additional workstation hardware is not required.

⁽D) Remove existing arrow signs in the entry lanes and replace with new VMS signs. Mount VMS signs overhead except for oversized lanes, which are pole mounted. DEN to install entry lane canopies.

(E) Remove existing exit lane variable message signs.

(F) Remove the existing its dicket encoder from the hotel valet office (not in NextGen scope)

(G) Booth removal and booth replacements will be done by DEN.

Denver International Airport Parking Access and Revenue Control System

		Attachment 1 - PRCS Equipment Matrix	
	Lane Type	Lane Equipment (Blue: Non-POE Ethernet, Red: POE, Change Order: Green) Central Cashier Station Permit Office Parking Ops Office Parking Ops Office	ents
Lane # (left to right) New Facility facing the lan plaza)	e Entry Nest Nest Exit	Entry Station (IN+) Exit Lane (IN+) Ex	
(H) All gates are new.		6/25/21	2019

(I) All AVI antennas are new.

	Denver Internat		IMENT 2 ort PRCS Interfaces/Exports
ID#	Description	Frequency	Data to be Communicated
1	Link from E470 Tolling Authority website to DEN's registered parker website	Real-time	On the toll website, toll tag holders check box to enroll at DEN and this takes them to DEN's registered parker program website to complete enrollment in DEN's program.
2	Employee badge security system interface	Daily	Badge number and date of termination to automatically deactivate the parking access credential. For non-badged employees, provide a means through the website for employers and employees to terminate a permit.
3	Bulk Sales Permit Export to Workday Invoicing App	Monthly	Active permits by rate by tenant
4	Bulk Sales Permit Payments in Workday to PARCS CMS Interface	Daily	Active permits by rate by tenant
5	LPR to Cashier Station Lookup	Real-time	Public lanes
6	Frictionless LPR - recognize LPR for registered parkers, reservations with no overstay	Real-time	Public lanes
7	Valet to PARCS	Real-time	Occupancy (rollup and prebooked) is real-time to update monitoring workstations, signage, website, mobile app. Prebooked valet interfaces with valet application to allow for prebooked parking and services. Valet transaction detail (location, entry time, exit time, fee, payment method, duration) can be transmitted to PRCS daily.
8	Online Booking Reservation System and Mobile App	Real-time	Integrated application being provided. No interface required. Interfaces to additional 3rd party pre-booking systems optional, additional cost
9	Loyalty Program (existing, online booking, or separate)	Real-time	Integrated application being provided. No interface required. Interfaces to additional 3rd party loyalty systems optional, additional cost
10	PARCS to Microsoft BI data analysis solutions	Daily	Import transaction information, occupancies, license plate # and state, PII from online activity for public and employees. Direct connect with API that's Microsoft compatible and interface with SSIS 2012 or greater.
11	PARCS to Workday General Ledger	Daily	Send net revenue in total (what was collected) and prepaid revenue exited from PARCS to the GL.
12	PARCS to Salesforce® customer management app	Daily	LP, date, time, facility location, duration, access credential used (reservation) or AVI tag.
13	Passport and T2 Systems 61st and Pena public parking facility data to PARCS	Daily	Entry/exit times, duration, fee paid, license plate number
14	Sales Channel Transactions/PARCS Reports Interface	Daily	Includes Online Booking and any other parking sales channel.



Denver International Airport

Parking Access and Revenue Control System ATTACHMENT NO. 3 - Spare Parts

	S	pare Parts		
Description	Units	Unit Cost	Extended Cost	Comments
Spare Parts				
Designa Entry Station	3	\$ 8,391	\$ 25,173	Designa
Designa Exit Station	3	8,001	24,003	Designa
Designa Cashier Station	1	8,601	8,601	Designa
Designa Electronic Validation Scanners	1	1,914	1,914	Designa
Designa Offline Validation Encoders	1	2,218	2,218	Designa
Designa Cashier Fee Display	1	1,079	1,079	Designa
Designa Bar Code Scanner	2	731	1,462	Designa
Designa Bar Code Scanner Interface board	1	185	185	Designa
Designa Multicon Side & Middle w printer	4	9,218	36,872	Designa
Designa Multicon Side & Middle MPS	1	9,218	9,218	Designa
Designa Receipt Printer OUT+	4	1,218	4,872	Designa
Designa PCB Midi P-USI	4	348	1,392	Designa
Designa TCC Type SCC	4	1,740	6,960	Designa
Designa PCB Weigand Interface	4	470	1,880	Designa
Designa CR120	2	3,626	7,252	Designa
Designa Barrier Gate	4	3,105	12,420	Designa
Designa TFT Display	4	375	1,500	Designa
Quercus License Plate Recognition Camera	3	6,255	18,765	Quercus
Permit Customer Kiosks	1	16,839	16,839	TBD
PX EMV Reader Attended	3	1,843	5,529	Payment Express
PX EMV Reader Unattended	3	2,443	7,329	Payment Express
Daktronics Sign Module and Sata Cable	2	913	1,826	Daktronics
Daktronics Sign I/O Module	1	680	680	Daktronics
Star AVI Antenna/Reader	6	4,182	25,092	Star
Commend ET-908H Intercom Station	4	612	2,448	Commend
Commend EE-972AS Intercom Control Station	1	1,689	1,689	Commend
Commend Intercom Headset	4	44	176	Commend
CVPS Valet Handheld Unit	1	2,890	2,890	CPVS
Inex Tech LPI Vehicle Power Unit	1	1,731	1,731	Inex/Zamir
	Spare Parts Total		\$ 231,995	

ATTACHMENT 4 PRCS - DEMONSTRATION LIST

Denver International Airport Parking Access and Revenue Control System Onsite Demonstration List



			Featu	res Matrix Res	ponses in Pro	posal		Onsite Demonstration			
	DEN Follow-up Items				New Dev	elopment					
Ref ID	PRICS Feature to be Demonstrated	✓ If Able to Demonstrate This Feature	✓ If Feature is included in Base Price	✓ If Feature is included in Optional Price	✓ If Feature Will be Developed for this Project	Quarter & Year of Developmen t	✓ If Feature Will Not be Provided	Demonstration Notes October 4, 2017	Notes from 1/22/18 Meeting with DEN and NextGen	Requires Follow-Up	Final Comments
	Entry Station - Review hardware features										Priced & included in deliverable
2	Transaction instructional voice prompting	Y	N	Y	Existing			Available with the addition of an MP3 player	Need pricing		configuration.
3	LPR on for all transactions	Υ	Υ								
4	Pinhole camera	Y	Y					Live fee. Included video server with DVR storage per the spec.	Yes Included. NG wants further discussion on this. Herald: Observe customer, see their documentation. NG: Important for an over-the-should view to see what the customer is doing.		Priced & included in deliverable configuration.
5	Screen space available for DEN images and messaging	Y	N	Υ	Existing			Available with 6.4" TFT graphical display shared with instructional messaging. Can customize messaging but not separate area dedicated to DEN messaging.			Priced & included in deliverable configuration.
6	Double-stack ticket capacity	Υ	N	Υ	Existing			Available with the addition of a second Ticket stack. 5,000 each, both are fed into the reader and auto switch over when one runs out. 'Event alarm for open door. Event alarm for low ticket that includes a counter showing number of tickets available in the unit.			
7	Multi language feature on and off	Y	N	Υ	Existing			Available with 6.4" TFT graphical display. Customer selects language button on device. Supports up to 5 languages. When language is changed, audible voice prompt changes language as well.			Priced & included in deliverable configuration.
8	Entry Media:							Demo'd mag stripe (4 way direction). Also have bar code. Recommend mag because it retains info and vals on the ticket.	Proposal is priced on magstripe because it provides offline validation functionality. Barcode would be slightly more. DEN is fine with magstripe.		Magstripe is to be delivered.
9	Paper ticket	Υ	Υ					All cards have chips so didn't demonstrate but it reads			
10	Magnetic stripe credit card in/out virtual ticket	Υ	Υ					both mag and QR code.			
11	EMV credit card in/out virtual ticket	Y	Y					Can configure reader to read chip first then mag or the other order. Same reader for the chip and the mag stripe.			
12	QR code in on paper QR code in on mobile phone	Y	Y								
14	AVI transponder	Y	Y								
15	Stolen Ticket Detection/Invalidation and observe alarm at control workstation. Will confirm blocked at Exit Station during the Exist Station Test	Y	Y					Parking swindler			
16	Back-Out Ticket Retraction/Invalidation	Y	Υ								
17	Barrier Gate - Review hardware features							Gate 1209. Gate broken alarm. Heater is optional and included in DEN pricing. Fans for hot weather included in pricing too.	Included in standard config. NG: If a car rolls thru the lane it activates an alarm. If manually raise gate it's recorded. No door alarm needed.		Noted.
18	Rebound functionality	Υ	Υ					Gate stop immediately, stop and raise slightly, or stop and raise up completely			
19	Able to determine how many gate raises were performed from workstations for a selectable time period	Υ	Υ						See 127 and 128. ilogs tracks manual gate openings. No std report but can pull the information by location. Could create a custom report. No added price.		NG concurs
20	Exit Station - Review hardware features							No alarm for exit station door open. Only for ticket entry station and POF. This is an option that is not included.	No risk. DEN doesn't want this so don't need price.		Noted.
21	Transaction instructional voice prompting	Υ	N	Υ	Existing			Configurable for any timing and message and language.			
22	LPR on for all transactions	Y	Υ								
23	Pinhole camera	Υ	Υ								
24	Multi language feature on and off	У	N	Υ	Existing			Language on screen and voice, didn't demonstrate voice, just text. Can adjust volume w screwdriver. When language is changed, audible voice prompt changes language as well.			Priced & included in deliverable configuration.
25	Screen space available for DEN images and messaging	у	N	Υ	Existing			Available with 6.4" TFT graphical display. Customizability is limited.			Priced & included in deliverable configuration.
26	Define what information can be printed on the ticket - LP #, last 4 of credit card, credit card type, discount \$, discount account	Υ	Y					The amount paid can be printed on the Ticket as an option. Have up to 10 lines to print. Can't print ct Pupe, last d digits for exit station. This is on the receipt. The ticket is ingested at the exit and not used so not significant. Ink ribbon printer or thermal receipt paper.			Noted.
27	Exits Paid with a Credit Card:							Demo transactions were sent to a test server, so all are declined.			
28	Paper ticket	Υ	Υ					Magstripe ticket proposed. Barcode ticket optional.			Magstripe is to be delivered.
29	Paper ticket with discount encoded on the ticket	Y	Υ					Validated with ¹ / _a TCU offline clamshell for full validation			
	1				l	1	L				l .

Ref ID #	PRCS Feature to be Demonstrated	✓ If Able to Demonstrate This Feature	✓ If Feature is included in Base Price	✓ If Feature is included in Optional Price	✓ If Feature Will be Developed for this Project	Quarter & Year of Developmen t	✓ If Feature Will Not be Provided	Demonstration Notes October 4, 2017	Notes from 1/22/18 Meeting with DEN and NextGen	Requires Follow-Up	Final Comments
	Magnetic stripe credit card in/out virtual ticket EMV credit card in/out virtual ticket	Y	Y								
	QR code discount used with a paper ticket	Y	Y					QR code on a phone			
33	QR code discount used with a credit card in/out virtual ticket	N	N					Can't present a validation prior to inserting the credit card (reader is not activated until ticket is inserted). Violates PCI to do an electronic validation. Could develop a one-time ticket use.	Conn - As CC inserted, transactions are completed immediately w/o giving chance to use BC discount. Herald - Cannot do any discount for CICO. Michele-Other systems have this feature. Ask & display if there is a discount before instant transaction. John - Will ask Designa to add this feature. Herald: Have a car in the lane with LPR, why not start trans with LPR and not CCIO?		Not in scope.
	QR code reservation identifier with no overstay	Υ	Υ								
35	QR code reservation identifier with overstay	Υ	Υ								
36	Exit with paper ticket and NFC mobile payment	Υ	Υ					Have feature but didn't have time to configure NFC payment at demo.	EMV readers has built-in NFC reader and is part of the proposed price.		Priced & included in deliverable
<u> </u>	Exit with AVI transponder with credit card on file for pay-							,			configuration. Priced & included in deliverable
37	per-use ,	Υ	Υ					Demo'd a non-revenue AVI first -ok	Included in iLog for registered parkers.		configuration.
38	Define receipt options at exit (auto, on request, based on exit media type)	Υ	Υ					Receipts are available for payments made by Credit Card at Exit on request only or automatically for every transaction. Definable by credit card type.			To be defined.
39	Stolen ticket - show recorded in Event Log and blocked at	γ	Υ								
	exit Booth Transaction Panel	*									
	Transaction instructional voice prompting	Υ	N	Υ	Existing			Available with the addition of an MP3 player			
	LPR on for all transactions	Y	Y								
43	Pinhole camera	Υ	Υ								
44	Multi language feature on and off	У	N	Υ	Existing			Available with the addition of an MP3 player			
45	Define what information can be printed on the ticket - LP #, last 4 of credit card, credit card type, discount \$,	Υ	Υ					The amount paid can be printed on the Ticket as an option. As standard there is no printing on a Ticket at			
7.5	discount account	['						Exit			
	Exits Paid with a Credit Card:										
	Paper ticket	Y	Y								
	Paper ticket with discount encoded discount	Y	Y								
50	Magnetic stripe credit card in/out virtual ticket EMV credit card in/out virtual ticket	Y	Y								
51	QR code discount used with a paper ticket	Y	Y								
52	QR code discount used with a credit card in/out virtual	Y	Υ								
	ticket										
	QR code reservation identifier with overstay	Y	Y								
	QR code reservation with overstay Exit with paper ticket and NFC mobile payment	Y	Y								
56	Define receipt options at exit (auto, on request, based on exit media type).	Υ	Υ					Receipts are available for payments made by Credit Card at Exit on request only or automatically for every transaction			
57	Stolen ticket - show recorded in Event Log and blocked at	Υ	Υ								
	exit							Damo standard MDS have a BC station but did-to-			
58	Cashier Station - Review hardware features							Demo standard MPS, have a PC station but didn't have it available in time for the demo.			
59	LPR on for all transactions	Υ	Υ					Not used during demonstration			
60	Dual cash drawer functionality with shift breaks	N	N	Y	Y			NextGen can add if you want it but not included in standard or in DEN scope.	Dorothy: DEN doesn't need it.		Not in scope.
61	Print end-of-shift tape	Υ	Υ								
<u> </u>	S. S. Sime tape	*	•						Printers not included in OUT+ exit station. For exit stations, DEN counts		
62	Define what information can be printed on the ticket - LP #, last 4 of credit card, credit card type, discount \$, discount account	Υ	Υ					The paid amount can be printed on the Ticket as a configurable option. Can add LP printed on receipts.	Finites not included in 100 + exit sealous. For exit sealous, Devicionistickets and match randomly - don't need info printed. Need at cashier station, can do without added cost. Can print the LP in the ticket at entry and cashier station exit and receipt at XT and MPS.		Printers priced & included.
	Exit paid with cash	Υ	Υ								
	Exit paid with check Split payment - credit/credit	Y N	Y N	N	N		Υ	Not currently supported			
	Split payment - cash/credit	N	N	N	N		Y	Not currently supported			
67	Exits Paid with a Credit Card: Mag, EMV, and RFID										
68	Paper ticket	Υ	Υ								
69	Paper ticket with discount encoded discount	Y	Y					Can add the fee to be printed on the ticket. Can't print discount on the ticket. Receipt shows the net fee.	NextGen will research, if this is configurable, will confirm.		Discounts to be printed on tickets processed by cashiers at Manual Pay Stations (MPS).
70	Magnetic stripe credit card in/out virtual ticket	Υ	Υ					See mag strip comment at entry and exit station			
-								Read the cr card and displayed the fee. Didn't process			
71	EMV credit card in/out virtual ticket	Υ	Υ					credit card because it was a test server.			
72	QR code discount used with a paper ticket QR code discount used with a credit card in/out virtual ticket	N N	N N					Not available.			Not in scope.
74	QR code reservation identifier with no overstay	Υ	Υ					Only shows amount paid, not full fee.			
75	QR code reservation identifier with overstay	Υ	Υ								
76	Exit with paper ticket and NFC mobile payment	Υ	Υ					Available but not demonstrated.			Priced & included in deliverable configuration.
77	Exit with AVI transponder (not connected or recorded in cashier shift activity)	Υ	Υ								
78	Define receipt options at exit (auto, on request, based on exit media type)	Υ	Υ					Receipts can be issued automatically or on request			
79	Stolen ticket - show recorded in Event Log and blocked at exit	Υ	Υ					2			

Ref ID	PRCS Feature to be Demonstrated	✓ If Able to Demonstrate This Feature	✓ If Feature is included in Base Price	✓ If Feature is included in Optional Price	✓ If Feature Will be Developed for this Project	Quarter & Year of Developmen t	✓ If Feature Will Not be Provided	Demonstration Notes October 4, 2017	Notes from 1/22/18 Meeting with DEN and NextGen	Requires Follow-Up	Final Comments
80	Damaged ticket - cashier input to process (will do this via Remote Transaction Processing later)	Y	Y					Replacement ticket function: press key, input ticket number, creates replacement ticket, insert replacement, displays the fee. Replacement tix has entry time printed it.			
81	Damaged ticket - define if there are fields for cashier to enter additional transaction information and how information retrieved later	N	N	N	Υ			Not needed			
82	Insufficient Funds transaction partial payment - define if there are fields for cashier to enter additional transaction information and how information retrieved later	N	N	N	Υ			Future unscheduled development			
83	Insufficient Fund payment received process	N	N	N	Υ			Future unscheduled development			
84	Insufficient Fund reports to track transactions, payments, and unpaid ISFs	N	N	N	Υ			Future unscheduled development			
85	Towed vehicle transaction (allows two tickets to be processed in one transaction)	N	N	N	Υ			Future unscheduled development Only one transaction can be paid per gate raise. Dual transaction functionality will be developed.			This is a requirement and must be completed for system acceptance.
86	Collecting a towed vehicle parking fee and surcharge fee	Υ	Y					Development. Now can read the ticket and add a flat fee via a Special rate on the MPS. Gate will vend. Can't process 2 tickets in 1 transaction.			
89	Features for shift breaks and relief cashiers using dual cash drawers (moved placement of this item to allow for smoother demonstration of relief cashier before printing the Cashier Shift Report)	Y	Y					Original cashier must close out, no relief cashier functionality. If close out then will have 2 shifts.			
87	Cashier shift report sample	Υ	Υ								
88	Panic alarm feature	N	N	N	Υ			Generates an alarm in system and can be sent to a PARCS workstation or to any external system			
	Exception transaction report for a cashier shift Discount/validation report for a cashier shift	N N	N N	N N	Y Y			Future unscheduled development Future unscheduled development			
	Central Management System	.,	, ,	IN				ratare discheduled development			
93	Fully host cloud-based head-end solution	Y	Y					Hosted but not cloud-based. Running since 2008, 2000 sites Data center hosted in Kiel and also in Bonn by Designa. Germany, AUS, Netherland, England, US. No delay and stable at any location. 500mli trans w/ system. All systems run on 1 server in Frankfort in their environment and same in Australia. Designa does monitoring, Proposed cloud with US datacenter. Cloud offering 2 servers in two physical locations. However DEN wants. Built on Microsoft structure.	DEN to decide. Should have a meeting with IT group to discuss. Spec stated preference for cloud to minimize onsite footprint. Primary server, secondary server is synchronized to primary. Advantage to local primary server - not dependent on broadband comm offsite.		Not elected.
94	Local head-end system includes redundant servers	Y	Y					Designa can fully monitor local servers and/or cloud servers. Flexible to do whatever DEN wants. NYNJ in local datacenter with both NY and Designa monitoring.			
95	All system functionality can be accessed from a web browser	N	N	N	N			Fully browser based except for stolen ticket and LPR exceptions handled from an LPR review workstation.			
96	Reports can be accessed from a web browser	Y	Y					Different layers to access reports and data: Designa ABACUS, control room and dashboard are in Parking HQ.			
97	AVI transponders and toll tag credentials and accounts can be activated/deactivated from a workstation	Υ	Υ								
98	How long after an event takes place (entry, payment, exit transaction, permit registration, close of cashier shift) will it be active/available in the system and reports?	Y	Y					Configure when data is loaded into the database for reports. Activate/deactivate credentials immediately sent to lanes. There is no deletion or compaction of data. There is no deletion or compaction of data dependent only on the storage capacity of the Server environment and the size limitations of the SQL database. Transactions post immediately. 3 mins for reservations but user definable.			
99	Using a completed transaction from the demo, show how to trace activity for a paper ticket from entry to exit	Y	Υ					Input credential number and get card history in Event Details tab of Manage Cards app. Same for a paper ticket - shows complete history. For prebooking can display all customer information if desired.			
100	Using a completed transaction from the demo, show how to trace activity for an AVI transponder from entry to exit	Y	Υ								
101	Using a completed transaction from the demo, show how to trace activity for an online reservation from booking to entry to exit	Υ	Υ					3			

Ref ID	PRCS Feature to be Demonstrated	✓ If Able to Demonstrate This Feature	✓ If Feature is included in Base Price	✓ If Feature is included in Optional Price	✓ If Feature Will be Developed for this Project	Quarter & Year of Developmen t	✓ If Feature Will Not be Provided	Demonstration Notes October 4, 2017	Notes from 1/22/18 Meeting with DEN and NextGen	Requires Follow-Up	Final Comments
102	System changes are recorded by user ID with date/time	Y	Υ					Found via Designa Change Log. Easy to find.			
103	Rates:							Win Tariff: Tariff, Limit, Flat rate, Early Hur, Early Bird, Change list - weekday and public holidays, CL allocation, tariff test. Change flow 1) allocation [payment type - ltd to 255, so each tix can have 255 pmts associated with it] 2) change lists 3) Tariff Have rate test feature. Prebooking can use prebooking rates in Designa system too. Only system with single source for roll-up			
104	Show available rate structures and how to change a rate	Υ	Υ					and prebooking rates Rate test tool shows how any transaction's fee was			
								calculated by step.			
	Rates set by access credential Rates set by day of the week	Y	Y								
	Rates set by time of day	Y	Υ								
108	Different rate based on entry/exit dates &/or times	Υ	Υ					Calendar set up. Have for both entry and exit (fly in window and a fly out window). Rates can be based on standard system rates, or dynamically adjusted to pre-booking system rates.			
109	Different rate based on validation	Υ	Υ					TCU encoded on the ticket			
110	Provides discounts allowing a dollar value discount per time increment (i.e. discount per hour, per day, per week)	Υ	Υ								
	Rates set by month Surcharges can be added to a transaction	Y	Y								
	Offline Functionality (per individual lane):										
114	Define the offline functionality for entry stations, exit stations, cashier stations, and booth transaction panels	Υ	Y					Terminals will operate off-line until communications is restored			
115	Define how many transactions the EMV credit card terminals can store and forward	Υ	Υ					1,000 configurable up to 3,000			
116	Define how many transactions each lane device (entry station, exit station, booth transaction panel, and cashier station) can store and upload	Y	Υ					2,000			
117	Define the offline functionality for LPR	Y	N					LPR does not function offline			
118	Define the offline functionality for employee permits and AVI credentials	Y	N					Offline functionality for access credentials limited to gate vend upon all credential presented			
119	Define the offline functionality for validation methods	Y	Y					Web based validations would not be applied if the Exit was off-line to the Server. Off-line Validation units record the validation on the Ticket and these validations would still be actioned if the Exit was off-line.			
120	Define the offline functionality for online reservation entry/exits	Υ	Υ					Pre-booking data would be unable to be checked if the Entry was off-line.			
								End y was on-line.			
121	Control Center										
122	Equipment status monitoring views and features	Υ	Y					Current DEN Xerox hardware can feed into ilogs parking HQ control center for monitoring. Send a work order ticket until fulfilled with both new and old system. Showed display by car park but can have a global map display. Fully web-enabled. Extensive details for every event with tracking and comment tools for every event, configurable.	Will provide a global view as part of the contract. Michele: does not have to be maps w/ roads but needs to show each facility with drill downs in each facility. Conn - iLogs does it.		
123	System alarm features - assigned by user, prioritization, text/mails, documentation of alarms	Y	Y					Sends messages to smart phone. Set priority for alarms. Will send MPS msgs from POF since didn't have time to configure the MPS for all exception types.			
124	Low ticket stock alarm and alarm acknowledgement features and documentation	Υ	Y								
125	No ticket stock alarm	Υ	Y								
126	Equipment activation - gate open/close, lane open/close, etc.	Y	Y					Replace tix, lost tix, open/close barrier, reset etc. standard functions available, view pinhole camera video on workstation. When an intercom call comes in, all device errors are displayed on the screen, same for registered parkers by access identifier all information displayed. Manual gate opens can be required to prompt for a comment.			
127	Show how to find the number of gate vends made from a workstation in a week	Υ	Y					Comment fields - configurable. Search in FMS module, displays, and get a report too. Filterable for any system event.	Refer to #19		
128	Show how to find the number of gate vends made at the gate	Y	Y					Is recorded if have a switch in gate housing - standard	Refer to #19		
	switch in a week System event log and filter/report features	Y	Y					feature. Dashboard KPI's of % service performed, list of items to be addressed (work ticket). Also 2 journal .windows - incidents and acknowledge incidents, call queues log too. Can input comments, subevents, history. Strong module to display and manage maint needs, assignments, a4d status activity.			

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130	Pinhole camera workstation view	Y	Y		Troject						
131	Control Center intercom panel	Y	Y					Links equipment to intercom so answer intercom calls through the phone			
	Facility Counts Spaces available/occupied views	Y	Y								
134	Space counts for online reservations	Y	Y					Spaces available and also arrived. Can display by			
	Manual changes to space counts	Y	Y					product.			
136	Remote Transaction Processing for an Exit Station: Done in FMS - auto pops up device when intercom is used, all done in Replacement Ticket feature of each device.										
137	Provides remote cashiering that processes exception transactions in staffed and unstaffed exit lanes	Υ	Υ					Cashier station RETP demonstrated on POF, not configured on cashier station from demo.			Priced & included in deliverable configuration.
138	Lost Ticket LPR lookup and sends fee to the lane. Closes ticket	Y	Y					Replacement ticket - entered plate number. JB7718 Paid w QR code Can turn on LPR camera to view the plate. Configured to appear in the workstation. When intercom is used that lane appears on the control center workstation automatically. Can have the plate to auto populate when Replacement Tix is selected. This is included in the proposal.	Concur. Also, closes ticket when the lost ticket is found via plate. Thick client workstation in control room. Not browser-based.		om garavan.
139	Lost ticket LPI lookup and sends fee to the lane. Closes ticket	Υ	Υ					Integration to LPI is included but not developed yet to	Confirmed. Included in iLog package, being developed.		
140	Damaged ticket lookup and sends fee to the lane. Closes ticket	Y	Υ					have this auto populate. Can input ticket sequence number.			
	Entry date input and sends fee to the lane.	Y	Y					Can input entry date/time. Pd w/ voucher.			
	Apply a discount to a ticket							Fee \$1.50, discount \$1:was done by entering a flat fee of what to charge and send to the lane. Can add fix			
.42	Can send a flat fee to the lane too - demo but it didn't work.	Y	Y					discount rate to the Replacement Ticket box that performs RETP.			
143	Remote cashier reports to audit manual input done by remote transaction processing operators	Y	Y					Not Available. Need to develop. Included in price.	Manual info only. NG to research customers, believe it is standard audit procedure. Michele: Expects NG to provide this feature. Only needs to provide information that in manually entered for auditing. NG will provide this feature as part of the proposed price.		To be provided in Reports as specified.
144	Remote transaction authorization (supervisor authorizes a cashier transaction from a PRCS workstation)	N	N					Designa didn't understand this item. Don't have this feature.	Conn - will provide and research.		Not included, requirement needs clarification.
145	Remote Transaction Processing for a Booth Transaction Panel:										
146	Provides remote cashiering that processes exception transactions in staffed and unstaffed exit lanes.	Υ	Υ								
.47	Lost Ticket LPR lookup and sends fee to the lane. Closes ticket.	Y	Υ								
48	Lost ticket LPI lookup and sends fee to the lane. Closes ticket.	Y	Υ								
49	Damaged ticket lookup and sends fee to the lane. Closes ticket.	Υ	Υ								
	Entry date input and sends fee to the lane.	Y	Υ								
51	Apply a discount to a ticket. Remote cashier reports to audit manual input done by remote	Υ	Υ								
152	transaction processing operators	Y	Y								
153	Remote transaction authorization (supervisor authorizes a cashier transaction from a PRCS workstation)	Y	Υ								
L54	Remote Transaction Processing for a Cashier Station:							Sent to POF, which is the same as an exit column. Have never done at an MPS			
155	Lost Ticket LPR lookup and sends fee to the lane. Closes ticket	Υ	Υ					Available but not demonstrated.	NG: Confirmed. Will close the ticket too.		Priced & included in deliverable
156	Lost ticket LPI lookup and sends fee to the lane. Closes ticket	Y	Y					Not Available. Need to develop. Included in price.	NG: Confirmed but won't close the ticket. LPI not integrated to the ticket. Requires development		configuration. If LP is not tied to specific ticket in DB, unable to determine which ticket to close.
157	Damaged ticket lookup and sends fee to the lane. Closes ticket	Y	Y					Available but not demonstrated.	NG: Confirmed but unsure how it records so will look into it. This info gets into the database so can be accessed. Uses the same process and LPR - can use plate or ticket sequence. Not recorded as a lost because found it. NG to see how unreadable tickets are recorded.		Priced & included in deliverable configuration.
158	Entry date input and sends fee to the lane.	Y	Υ					Available but not demonstrated.	NG: Confirmed. Can be restricted too.		Priced & included in deliverable configuration.
159	Apply a discount to a ticket	Υ	Y					Available but not demonstrated.	Conn - Use an online validation to apply it. Apply remotely.		Priced & included in deliverable configuration.
.60	Remote cashier reports to audit manual input done by remote transaction processing operators	Y	Y					Not Available. Need to develop. Included in price.			To be provided in Reports as specified.
161	Remote transaction authorization (supervisor authorizes a cashier transaction from a PRCS workstation)	N	N					Not Available.			Not in scope.

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163	Lost /Unreadable AVI/toll tag lookup - in/out status, account status, reset vehicle presence to in or Out	Y	Y					Hit intercom, displays device, select event with entry media info, right click and takes to the screens that shows credential valid dates, history, plinhole and LPR views, and reset card. When an intercom call is received, all acount details are automatically presented to assist in reviewer's decision.			
164	Employee permit lookup - in/out status, account status, reset vehicle presence to In or Out	Υ	Υ					Same regardless of credential type including 3rd party Online booking systems. When an intercom call is received, all account details are automatically presented to assist in reviewer's decision.			
165	Online reservation lookup	Y	Y					When an intercom call is received, all account details are automatically presented to assist in reviewer's decision.			
166	Lost/unreadable online booking transaction identifier (QR code, toll tag, license plate)	Y	Υ								
167	Unreadable credit card in/out (CCIO) transaction without LPR match	Υ	Υ					Entry look up via LPR only			
168	For unreadable or lost CCIO transaction not processed with LPR, change the transaction record to 'Out' status after transaction is processed	Υ	Υ								
169	Validation lookup (validation incorrect or not appearing on the entry record or entry ticket)	Y	Υ								
170	Process to provide a customer a receipt after exiting	Y	Y					Shows receipt details when call up the ticket. Can use Card Filter feature to find receipt by, LP #, by time, lane, by th number, check to see if can find by a credit card number. Print a PDF file and then separately attached to an email. Receipt details are displayed with the ticket record. Many filters to find the ticket. Can email directly from the lookup.	NG: Not emailed automatically.		
171	Credential Management System for Registered Parkers (Employee & Public)							One platform for all - employees, registered parkers, OBS, loyalty			
172	Customer Experience - Review Kiosk Hardware Features							Touchscreen, demo the screen but didn't have actual hardware available. Standard off the shelf with P2PE reader on device to keep network out of scope. Can add a badge reader, barcode reader, NFC reader on klosk buy key fob (5.10) and put own logo. Change payment data. DEN wants to add on to current klosks or new ones in the spec. What operating system do they have? If enter a credit card into klosk then it comes into PCI scope. Login to klosk available by username, badge, or proprietary FOB.	NG: Base price is a kiosk w/ capabilities same as a home pc but locked down. Can integrate with other readers (cc reader, Prox). DEN: See lost and found kiosk. May want a reader for employee badge, but not all have badges and will require employer to authorize the men. MG: Customer development will be done. Functions and features need to be discussed and decided.		Klosk design & configuration to be defined & specified during workshop.
173	Website for registered parkers - airport employees, employers, and public customers.	Y	Y								
174a	Website allows credential enrollment, cancellation. Account information changes	Υ	Υ					Any identifier. Cancellations can go to admin approval. All records in database are retained after closed.			
174b											
174c											
175	Website allows documents to be submitted such as a copy of employee badge or driver's license	Y	Y					Can make enrollment contingent on documents provided. Can change requirements by product. Can email and down info when onsite too.			
	Website allows account changes/updates. Website accepts bankcard payments.	Y Y	Y Y								
178	Website retains bankcards on file for automatic monthly charges.	Y	Υ								
179	Website retains banks account on file (ACH) for automatic monthly charges.	Υ	Υ								
180	Website retains bankcards on file for automatic pay-per-use charges.	Υ	Υ								
181	Administrator Experience							Employees register or import data and employees login to set password. Can see all customer history for employee, registered, reservations in one place.			
182	Website provides an administrator screen to manage accounts and modify activation/termination dates.	Υ	Υ					Displays history and type of ID's used - customer can have multiple id's at once. Can assign attributes to customer accounts.			
183	Website provides an administrator screen to approve/decline permit requests.	Y	Y					DEN can have pay per exit (done in real time at exit, email receipt and customer can look up online to view activity and get a receipt too), invoice. Can set functions by user login. Maps to Active Directory.			
184	Website provides an administrator screen to view changes made to accounts by customers.	Y	Υ								
185	Process for new enrollment with AVI transponder	Y	Υ					AVI toll and non-AVI toll or any identifier are all enrolled the same.			

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186	Process for new enrollment with toll tag	Y	Υ		Project						
	Customer account modifications	Y	Y								
188	Cancel an account	Y	Y								
189	Charge a fee for staying in a facility past the allowable time	Y	Y								
190	Send emails to a customer group	Y	Y					B2B module, Campaigns option, select customer groups, execute sending emails. All that are registered in system can group and send emails from the application. Can import and export addresses too - sel emails. Have to create email campaign letters in html. Designa provides a template and can modify. Can provide wyzwig for changes. Can send automatic email reminders (expire cc, upsales) Email groups are easily imported and exported from third party systems as well as internal lists.			
191	Timed nested areas with violations alerts and reports.	Υ	Υ								
192	Registered parkers can register multiple 6C tags but only allow on in a parking facility at time.	Υ	Υ								
193	Accounts with a limited number of credentials allowed in the parking facilities at one time. Access is blocked for account credentials exceeding the allowed number or access is allowed and contracted rates are charged for credentials exceeding the allowed number.	Y	Y								
194	Set access restrictions by facility, master account, sub account, and individual credential for time of day and day of week parameters.	Y	Υ					Company can have unlimited accounts under it. Admin rights can be by group w master approval (DEN).			
195	Provides hard and soft passback set by individual credential, group, and facility.	Y	Y					Set passback in the product and group settings. Wasn't configured for demo. But provides both hard and soft passback. Designa defines group settings during the project. DEN can reset this later.			
196	Can reset credential status for individual, group, and by facility.	Y	Υ					Have a first time grace upon enrollment.			
197	Interface with PARCS to check credential validity at the time of entry.	Y	Υ					Have a log of interface events to research for troubleshooting too.			
198	Record all card usage including the lane ID, entry/exit date/time, and credential number, passback status.	Y	Υ					Demo in operating log and have in ilogs too.			
199	Automatic notification to permit holder for fee due dates, past due amounts, annual renewals and bankcard on file expiration date.	Y	Υ								
200	Proposed AVI readers and antennas can read the 6C toll transponders currently for the E470 toll road.	N	Υ					Could be demonstrated with cooperation from AVI manufacturer			
201	Monthly/quarterly, annual permit rate structure with restricted day/times.	Y	Υ					Products are assigned rates. Ops PARCS was Abacus app, this is iLogs app.			
202	Flat rate/penalty for use during restricted times.	Υ	Υ					Can auto set 5 day grace before shut off. Also can sell multiple months at one time.			
203	Variable rates for use during restricted times.	Y	Υ								
204	Variable rates for pay-per-use credentials	Y	Υ								
205	Auto charge to a credit card on file for individual employees with an automated text/email reminder.	Y	Υ					Will invoice monthly with auto email on file. Can set recurring activity - invoicing, emails etc.			
206	Auto charge ACH to bank account on file for individual employees with an automated text/email reminder.	Y	Υ								
207	Auto charge to a credit card on file for public registered parkers with an automated text/email reminder.	Y	Y					Available but not demonstrated. Failed payment trans can create a report.			Priced & included in deliverable configuration.
208	Reports to reconcile daily POS unit sales to revenue collected by payment method.	Y	Y					Provides the same reports as the cashier station. The Seasonal parker module provides online sales by day and time interval and by cc type.			
209 210	Provide a method to compare active credentials to invoiced and free permits each month. Reports:	Υ	Υ								
211		Υ	Υ		-		-	Provides the same reports as the cashier station			
212	Activity report for one account with multiple employee credentials	Υ	Υ					Provides the same reports as the cashier station			
213	Activity report for one public credential showing parking fees for each exit	Y	Υ					Provides the same reports as the cashier station			
214	Activity report for one account with multiple credentials showing parking fees for each exit	Υ	Υ					Provides the same reports as the cashier station			
215	List of active credentials for one account	Υ	Y								
	Pass-back violation report History of a closed accounts are retained	Y	Y Y		-		-				
218	History or a closed accounts are retained Customer Loyalty Program	4	Y					Still needs to be integrated into the system, but demo'd components. Can do as part of ecommerce (register parker w/ payment on file) or can have a separate link to register.			
	Online enrollment process	Υ	Y					Showed in CMS demo - same module			
220	Customer account management features	Υ	Υ					•			

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221	Automated loyalty earning and redemption	Y	Υ					Redeem rewards use a code for online booking, discount to print/download to use at exit. Or can use the QR code for infout access. Good for time, 5, %. How redeem with an AVI account, so DEN can set up redeem a discount on next invoice. Currently partnered with Luthansa earn and burn program. For AVI users to prebooking coupon to redeem the points.			
222	Earn by parking purchases	Υ	Υ								
223	Earn by concession purchases	Υ	Υ					Need to coordinate how to earn and burn. Done in France with Smart Fidelities w/ stores and parking. Requires integration			As specified in integration workshops.
224	Assign different earned point values based on the parking facility, parking area, time of day, day of week, and customer loyalty status	Υ	Υ					Also earn points for other actions such as a survey, web sponsor link to website, likes of Facebook.			
225	Assign different redemption point values for products and services	Y	Υ					Intuitive worksheet to create point values and point rules.			
226	Redeem for parking benefits										
227	Automated point redemption reflected in the customers account balance when used	Υ	Υ					Provides account history of earned and burned.			
228	Cancel a request for point redemption. Show points credited to the account.	Υ	Υ					Asks customer to confirm redemption. Once used to get discount code/reservation have configurable time period to redeem then points expire.			
229	Redeem for concession benefits	Υ	Υ					Discussed doing with airlines, Available but not demonstrated			As specified in integration workshops.
230	Define which entry credentials are accepted (license plate, QR	Υ	Υ					All			workshops.
	code, AVI, etc.) Confirm adequate points are available upon exit and compute parking fees for any stay beyond the points available to the customer	Υ	Υ								
232	Customer website to view activity, print receipt	Y	Y								
233	Show how the systems identifies qualifying parking transactions as part of a loyalty program or promotion	Y	Y								
234	Interfaces with 3rd party programs - loyalty, online reservations Hotel App	Υ	Υ					API available to interface. Requires integration			As specified in integration workshops.
	Charge parking fees to the guest folio	Υ	Y					Valet system only			
	Hotel Event Validations Create validations										
239	Distribute validations	Y	Y					iLogs iLogs			
241	License Plate Recognition - Review Hardware Features							License Plate Recognition - Review Hardware Features 3 review keys - 1)Allow (accepts entry media presented in the exil 2) Swap Ticket and Allow, or 3)Decline Swapped = swindler inex Zamir software. Quercus 44 tuned specific to US LP. Colorado plates in their library so have been calibrating amount all locations. Turn on early in installation to capture all kinds of plates to calibrate before installation is complete. Cameras processes locally, not via local server or cloud. More expensive but provides quick processing. LPR cameras process locally in the cameras, allowing a cloud-based solution. LPR image is automatically included the entry ticket record. Is review time recorded? Yes, not a standard report but via special report.			
242	Discuss how multiple review requests are prioritized	N	Y		Υ			FIFO, sent to all workstations			
243	Discuss review time out period options	Υ	Υ					Configurable. Can pull data in database, not part of standard reporting. Designa will put in format that DEN wants.			
244	LPR entry sent for review due to a low confidence read	Υ	Y					Intuitive review screen with Allow or Deny buttons.			
245	LPR exit sent for review due to a low confidence read	Υ	Υ					Blizzard conditions can turn off LPR via conflict off - uses media presented at exit.		-	
246	LPR exit with plate match	Υ	Υ					iLogs			
	LPR exit with a swapped ticket, show that the original ticket used to process the transaction is closed upon completing the transaction	Υ	Υ					iLogs, LPR conflict, SWAP Ticket and Allow Button which takes entry date/time from vehicle in the land and charges a fee.			
248	LPR exit with no plate match	Y	Y					ilogs, Can hit button "copy to exit feature under entry picture (which auto populates the entry date in the exit record) or type in manually the correct plate and then it computes and sends charges to the lane.			
249	LPR exit for a lost ticket with plate match, show original ticket used to process is closed upon completing the transaction	Υ	Υ					demonstrated.	Confirmed: feature is included		Priced & included in deliverable configuration.
250	Blocked license plate	Υ	Υ					iLogs - yes, DEN can input or import. Available but not demonstrated.			Priced & included in deliverable configuration.

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251	Process to evaluate LPR accuracy	Y	Y		rioject			LPR images in" Camera and Reviews" module to show confidence reads. Also have info for each individual transaction. So LPR images are attached to each transaction and when call up a ticket/entry media record the LPR images (and pinhole if recorded) are attached to the ticket record. Don't have to go into LPR software to find the LPR info and images. Available but not demonstrated.			Priced & included in deliverable configuration.
252	Process to obtain LPR statistics reports - # of reviews, # of no matches, # of swapped tickets	Υ	Υ					No reports available. Must export to Excel.			Priced & included in deliverable configuration.
53	Places in the system where the license plate is printed - paper ticket at entry/exit, reports	Υ	Υ								
:54	Discuss LPR functionality when the lane is not communicating with the PRCS server - in the lane, closing images and tickets processed, etc.	N	N				Υ	Offline LPR functionality not supported			
255 256	Frictionless LPR for registered parkers	Y	Y					iLogs Frictionless = Fast exit	Confirmed: feature is included		Priced & included in deliverable
	Frictionless LPR for online reservations with no overstay		Y					iLogs. Available but not demonstrated. demo'd for grace and can do for vals. Available but not			configuration. It was not demo'd but it is to be
257	Frictionless LPR for a fully validated ticket	N	N					demonstrated.			provided
258	Frictionless LPR for a grace ticket	Υ	Υ								
259	Mobile License Plate Inventory - Review Hardware Features - LPI sql database is different, if fail to do LPR then find in LPI. MLPI camera different.							SKIP due to time			
260	Demonstrate how LPR and LPI databases interact	Υ	Υ					Will be developed subject to an agreed detailed Technical Specification	New development feature. Will be a separate database.		
61	Demonstrate how LPI data is used to process a transaction if LPR does not find a plate match	Υ	Υ					Will be developed subject to an agreed detailed Technical Specification	Michele: Needs to maintain data storage accuracy even if change routes and users.		
:62	Demonstrate routing logic and limitations	Y	Y					LPI system should be pre-configured with routing logic. The logic defines interconnection between travel lanes inside the parking levels.	Michele: Need to know handhelds user friendliness, battery life and recharging time.		
263	Are MLPI units route-specific or are they interchangeable with other units?	Υ	Y					The logic should be defined in advance, during the inventory trip operator should instruct the system by selecting the travel lane each time he will swap from lane to lane. So the LPI system is not route specific.	NG: LPR (BOLO be on look out) Watchlist: Yes it's part of the system. LPI does too. Get Quercus on LPR and Inex on LPI. Base interface provides 98% of functionality. Direct link with PARCS - LPI look up for RTP. NG to confirm they will provide.		
264	Login process	Y	Υ						Michele: LPI module - need a demo and ask vendor for functions. Then pose questions. Then design meetings.		
265	Inventory taking process, alarms for poor reads, and input process for poor reads	Υ	Υ								
266	Demonstrate how the system checks and balances in-place to detect and report possible data entry errors. For example, if a previous night's license plate number was "AB 112" and the current night's license plate number is "AEB 112," an error alert prompts the inventory taker to confirm that the entry "AEB 112 is correct."	Y	Y								
267	Upload/download inventory between the mobile units and the LPI server	Υ	Υ								
268	Process to make adjustments and manual entries to the LPI from a workstation	Y	Υ								
269	LPI lookup to find a vehicle Demonstrate error prevention features such as the LPR	Y	Υ					This cituation will not be so added as a con-			
270	retaining data for plate numbers that disappear then reappear in the same location the next day	Y	Y					This situation will not be considered as error, there is no special action that should be done on this LP LPI will provide API for parking system. Parking system			
271	Perform an LPI lookup when LPR does not find a license plate for a cashier station and an exit station	Y	Y					responsibility is to correctly activate API calls on LP lookup			
272	Show that once a license plate has been used to process a transaction, the plate is removed from the active inventory database and placed in an inactive inventory database	Y	Y					LPI will provide API for parking system. Parking system responsibility is to correctly activate API calls on transaction process			
273	Report of vehicles in a parking facility greater than 60 days	Y	Y								
274	Online Booking Reservation System							Online Booking Reservation System 8 airports, all German and Austrian airports in a central booking live in Nov. in ops for 7 years			
275	Customer Experience							Can choose tile or column display, font, color, images some of which are html. Have splash and urgency messaging			
	Enroll as a registered member	Y	Y					Can add a pricing widget on front DEN page or in DEN website menu with link, or look as separate website.			
277 278	Registered parker login Payment methods available	Y	Y					Includes PayPal, ACH, Cr Card, Loyalty. Dependent on			As specified.
	Book a reservation with a promo code	Y	Y					PSP used a promo code emailed			. o specifica.

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280	Access credentials available for reservation (QR code, license plate, credit card, toll tag)	Y	Y					QR, Toll/AVI, LP - can change by area too. Confirmation email incudes a qit op print/save to phone, can also save to Passport phone app mobile wallet			
282	Book a reservation with additional service (lounge pass, etc.)	Y	Y								
	Modify a reservation	Y	Y								
283	Confirmation for customer reservations and modifications Cancel a reservation	Y	Y								
	Modify account information	Y	Y								
286	Demonstrate the mobile app to make, modify, and cancel a reservation	Y	Y					responsive design, IOS and Android app or can link from website.			
288	Administrator Experience A link or storefront for reservations can be embedded on the airport's website	Y	Y					Can do but didn't demo			
289	Create a product	Y	Υ					Design will help DEN create a library of graphics to attach to products. Vield definition of bucket prices, tariffs for yield management. Set priorities how displayed (cheapest at top is default) Set exit types allowed (can be multiple) Additional products to sell System messages - splash, urgency. Product library delivered with system with easy templates.			As specified in integration workshops.
290	Delete a product	Y	Υ								
291	Modify or cancel a reservation	Y	Y					modify original, doesn't require cancel original then make new booking			
292	Set up an email campaign for offering upgrades	Y	Y								
	Issue a full refund	Y	Y					cancellation auto refund based on business rules			
295	Issue a partial refund Set up and send out promo codes	Y Y	Y								
	Set up other products to be sold with parking Analyze product performance	Y	Y								
298	Analyze sales data	Y	Y					Google analytics fully used, conversion rates. Dashboard: confirmed bookings, avg basket, avg discount, lead time, confirms by date, length of stay in days sold (not exited). Analyze by car park, year, month yield class, week type, holidays, special weeks, week number, weekday, length of stay in days, sales channel, bookings per car park. Lots of dashboards. Analytics take into account pre-booking and transient revenues.			May require addition of optional analytics software and/or third party involvement under change order or separate contract
299	Analyze competitor data	N	N					Requires additional definitions Same: booking engine. Difference: one database and			See item 298 above
	Parking Operator Experience	Y						platform. Have forecasting like Adam and yield. Just did with cologne airport. Designa also have detail transaction from the parker. Front end can be tailor made for DEN and provide widgets for own programming of customer journey using API.			
302	Show daily arrivals to manage space counts Show arrivals over a week period to manage space counts	Y	Y					Available. Not demonstrated Not Demonstrated			
303	Show count system changes	Y	Y					Available. Not demonstrated			
	Generate report used to reconcile daily web sales to the daily deposit	Υ	Υ					Export to pdf etc. Available. Not demonstrated			
305	Generate report of no-show reservations	Y	Υ					See hotlink of reports and dashboards in proposal. Available. Not demonstrated			
306	Show how the following transaction is recorded in the system: Reservation for \$20, overstay of \$5.	N	N					Not available			Not defined. Not in scope.
307	Show how to find no-show revenue for a selected period of time	Y	Υ					Available. Not demonstrated			
308	Show how to find reservation revenue paid online for a selected period of time	Y	Υ					Available. Not demonstrated			
309	Show how to find overstay revenue paid in the lanes for a selected period of time	Y	Υ					Available. Not demonstrated			
310	Show how to find unearned revenue (paid but entry time is still in the future) for a selected period of time	Y	Υ					Available. Not demonstrated			
	Reporting Management Real-time dashboards	Y	Υ					Different tables of data, exports, scheduled.			
	Data filtering and query abilities	Y	Y					Can query data and filter, many selections to display, can save filter to reuse, can export to Excel, clean formatted with columns auto filter format.			
314	Report creator tools	Υ	Υ					Create dashboxigds, don't need to be technical to do.			

Ref ID	PRCS Feature to be Demonstrated	✓ If Able to Demonstrate This Feature	✓ If Feature is included in Base Price	✓ If Feature is included in Optional Price	✓ If Feature Will be Developed for this Project	Quarter & Year of Developmen t	✓ If Feature Will Not be Provided	Demonstration Notes October 4, 2017	Notes from 1/22/18 Meeting with DEN and NextGen	Requires Follow-Up	Final Comments
315	Standard reports and available filters	Y	Υ		·			Good selection of reports. Need to define LPR and LPI but will bring into the same database. Graphs and detail supporting graphs. Strong std report pkg and features.	Michele: How do you assess LPR accuracy? NG: Have manual LPR scoring process. Michele: Do you have a report of accuracies, % sent for reviews, % no match. NG: Will see if have a report. Michele will send John a sample LPR performance report. NG: Will provide.		To be provided in Reports as specified.
316	Report scheduler	Y	Υ					by user, processing time, email.			
317	Export file types available (.csv, .xlsx)	Y	Υ								
318	Revenue Reconciliation Module to input shift cash and computes over/shorts	N	N					Online sales reports, can export, marries booking to the exited transaction in detail trans form. Not demonstrated.			Not in scope.
319	Data sorted by Day of Week (revenue, occupancy, entries, exits)	Y	Y								
320	Data sorted by Product (revenue, occupancy, entries, exits)	Y	Υ								
321	Ability to import data to allow reporting from multiple sources (lane revenue, employee revenue, registered parker revenue, online reservations, T2 Systems Peña Blvd Lot)	Y	Υ					T2 needs to create an export file. Not demonstrated.			As specified in integration workshops.
322	3rd party sales channel revenue included in PRCS reports	Y	Y					Available. Not demonstrated			To be provided in Reports as specified.
323	For rejected credit card payments, what information and messages does the system provide?	Υ	Y					The System provides a decline message (as may be agreed) to the Patron. Through the reporting portal of the PSP the reason for the decline can be established for management.			
324	When offline credit card transactions are upload, does the system mark these in anyway?	Y	Υ					Provided within the PSP reporting tools			
325	Does the system report or flag offline credit card transactions	Y	Υ					Provided within the PSP reporting tools			
	that were uploaded and then rejected? Valet System										
327	Integrated with PRCS	Y	Υ								
	Check-in Process - All Using the Handheld Handheld features - camera, battery life, ticket printer, credit							CVPS strongly discourages printing tickets from a			
329	card payment	Y	Υ					handheld	NG: Tickets are preprinted and scanned by the handheld. Michele: OK.		
	Vehicle damage tracking features Check-in with handheld and PRCS entry station ticket	Y	Y								
332	Check-in for online booking reservation	Υ	Υ								
	Add services (car wash) at check-in	Y	Y								
334	Check-in allows option to pay at valet or add to hotel bill	Y	Y								
	Vehicle retrieval from customer call/text Valet Runner Vehicle Storage Access	Y	Y								
337	Barcode valet ticket can be used as an access credential for valet runners to enter and exit the vehicle storage areas. The barcode reads are recorded in the PRCS.	Y	Y								
338	Payment Using Handheld Unit:										
339	Process a credit card payment - will it accept EMV chip too?	Y	Y					This function is dependent on the selected credit card gateway supporting mobile EMV	NG: Yes. iPhone hardware with cradle is chip compatible. Integration requirement w Payment Express P2PE and agreed to do it. Handheld cellular service is excluded from the proposal price		
	Process a payment with a QR code discount	Y	Y						NG: Confirmed they will support it. It's an enhancement but yes. Will accepts a QR code reservation for valet system. NG needs to ask CVPS for enhancement.	NG	
	Process a parking fee with added services Compute and collect payment for online reservation overstay	Y	Y								
342	fee	Y	Y								
343	Payment at Central Cashier Station - Review Hardware Features										
	Process a cash payment	Y	Y								
	Process a credit card payment Process a payment with a QR code discount	Y	Y								
	Process a parking fee with added services	Y	Y								
348	Compute and collect payment for online reservation overstay fee	Y	Υ								
349	Valet System Option Features							CVPS requires details about the database used by DEN.			
350	Provide an interface to the DEN Airport flight database for notification of flight arrivals that result in alerting the system for vehicle retrieval	Y	N	N	Y			CVPS requires details about the database used by DEN. It has developed similar integrations in the past with Flight view			
351	Validations and Discounts - Review Hardware Features										
352	Provides percentage discounts.	Y	Υ					chaser, offline coder			
	Provides time/hourly discounts Provides discounts that use a different rate to compute the	Y	Y								
354	parking fee.	Y	Υ								
355	Provide a QR code to email or download from the airports website	Y	Y					il.ogs, can demo if DEN allows to download from their web page	ilogs via ecommerce is included in price and can email or post offers/discounts/event parking to people. Need a design meeting to see all options available. Promo codes included. Can read competitors coupon QR code.		
356	Email promo codes to registered parkers	Y	Y					Via QR code.			
357	Surcharge fees allowing a fixed fee that is charged in addition to the parking fee.	Y	Υ								

tef ID #	PRCS Feature to be Demonstrated	✓ If Able to Demonstrate This Feature	✓ If Feature is included in Base Price	✓ If Feature is included in Optional Price	✓ If Feature Will be Developed for this Project	Quarter & Year of Developmen t	✓ If Feature Will Not be Provided	Demonstration Notes October 4, 2017	Notes from 1/22/18 Meeting with DEN and NextGen	Requires Follow-Up	Final Comments
358	Open API that support integration with third party programs and payment solution in the form of barcode and QR codes.	Y	Y		· · ojecc			Magstripe tix - hardcode discount, hardcode entry time and rate. No difference in unreadable ticket for mag or barcode due to center stripe and multiple places the data is encoded. Very reliable but need to keep reader clean. Barcode on same ticket stock as magstripe. Barcode only use online, not clamshell. Customers 1/3 barcode tix and 2/3 magstripe. Prints 2Dbarcode (not qi code). Online discounts have no limit to multiple discounts on a single ticket.			
359	Online e-Validations							Hard coded offline, online and applied to entry record. Online web val: open browser, go to IP, insert ticket number to apply validation, rights based on login.			
360	Apply a discount to a paper ticket	Υ	Υ					Peaks fill and want to allow overflow to be charged a cheaper for overflow than normal entry tickets. Do via rate scheduler.			
361	Apply a discount to a credit card in/out virtual ticket	N	N					Event validation - send out qi code with limits on # allowed. Not available.			Not in scope.
362	Apply a discount to an online reservation	Y	Υ					iLogs			
363	Other discount features	Y	Υ					Not demonstrated.			To be defined and specified in
	Offline Validators										workshop.
	Encode a validation onto a dispensed paper ticket.	Y	Y		-		-	Up to 3 different rates with the last validation being			
366	How many validation types does the unit accommodate?	Y	Υ					recognized for payment			
367	is anything printed on the ticket when it's encoded?	N	N					Will be developed subject to an agreed detailed Technical Specification	NG: No printer in unit. System doesn't know it's been validated.		Offline Discount Units do not have printers. ODU custodian to communicate validation amount to patrons. The discount will be encoded on the magstripe ticket and automatically processed at the exit.
368	Show how to look up validations used at exit by coder unit ID	Y	Υ								
240	Invoice to collect payment for validations (moved location of this item)	Y	Y					iLogs			
	Credit Data Security										
370 371	Proposed solution complies with PCI DSS version 3.2 Proposed solution complies with PA DSS version 3.2	Y	Y								
72	Bankcard processing solution includes Point-to-Point	Y	Y								
	Encryption (P2PE) Additional Features You Wish to Demonstrate		'					Over 100 online training modules and webinars, catalog manuals, etearning - tests to qualify techs and other staff to learn and tests, set up checklists by person of what to accomplish. Post sales service - llogs field service module is automated. Not included in the proposal but recommended to reduce staffing onsite.	NG: Field service module is included in the BAFO price		
	Additional Features You Wish to Demonstrate							Replace TransCore E5's for TransCore with compatible readers at 1/3 cost, and read the 6C toll tags, but it won't read Title 21 tag used by DEN ops vehicles. Could be overlapping protocol if replace all AVI readers to eliminate frequency requirements - eliminate DEN relocating readers.	NG: Not a lot of experience with E5 - different type of reader. Designed for tolling. How have current E5's worked? DEN: Have on GT and allow in/out of parking. Also want to read E470 tags in parking facilities. John: E470 6C tags can be read by Star Pro CN readers with Ethernet port and used significantly with EC protocol. Star has Sol readers in US. Every tag on E470 exhicles is made by Star. NG prefers the architecture of this reader. Star makes the tags too. Title 21 tags can't be read by Star readers. DEN: There are some Title 21 tags used by DEN vehicles but not many. NG: TransCore Architecture: 1 readers supports 4 antennas. Each reader needs to communicate for arming and feed so don't want a 4 reader implementation, or even 2. DEN: Would leave TransCore readers in GT. The GT readers in parking are controlled thru the GT system. This project removes parking readers from the GT system (provide access to city vehicles) and puts them in PARCS. DEN: Need a Link on E470 website a link to DEN RPP. User enters toll tag number into the website for registered parker enrolment. Also want a reverse link on DEN website to E470 toll website. NG: This is a new scope item. DEN: DEN wants to repurpose some AVI readers. NG wants to replace all AVI readers. NG wants to replace all AVI readers. NG wants to replace all AVI readers. Separate from GT system. Will import all GT tag info that are for parking and replace tags.		Star Procyon AVI readers to be provided for all lanes.
	Additional Features You Wish to Demonstrate							DEN ID shared public lanes with gatekeeper and the number of title 21 vehicles.	DEN will go with recommendations. No vehicles have both types. Will replace title 21 tags.		Noted.

Re	f ID #	PRCS Feature to be Demonstrated	✓ If Able to Demonstrate This Feature	✓ If Feature is included in Base Price	✓ If Feature is included in Optional Price	✓ If Feature Will be Developed for this Project	Quarter & Year of Developmen t	✓ If Feature Will Not be Provided	Demonstration Notes October 4, 2017	Notes from 1/22/18 Meeting with DEN and NextGen	Requires Follow-Up	Final Comments
	ı	Additional Features You Wish to Demonstrate							Strengths is ilogs - vals, training, season parker, orbs, loyalty, LPR, single system, lane troubleshooting auto bring up entry media history and data Weaknesses - MPS processing and reporting for exception trans, printing on ticket and receipt.			

DIA Parking Revenue Control System ATTACHMENT 5

Roles and Responsibilities

# Item	Install	Configure	Monitor	Manage	Document	First Call Service	2nd Call Service	3rd Call Service
1 Facility (Environmentals, Power, Rack, PDU, Access Control)	DEN	DEN	DEN	DEN	DEN	DEN	Varies	Varies
2 Firewall Hardware	DEN	DEN	DEN	DEN	DEN	DEN	Firewall Manufacturer	N/A
3 Firewall Software (ACL's, Port Configs)	DEN	DEN	DEN	DEN	DEN	DEN	Firewall Manufacturer	N/A
4 Virtual Infrastructure Hardware (hardware subject to change with time)	DEN	DEN	DEN	DEN	DEN	DEN		
5 Storage Array Hardware	DEN	DEN	DEN	DEN	DEN	DEN	Storage Manufacturer	N/A
6 Storage Array Software (RG's, Pools, Luns)	DEN	DEN	DEN	DEN	DEN	DEN	Storage Manufacturer	N/A
7 Storage Replication Engine	DEN	DEN	DEN	DEN	DEN	DEN	Storage Manufacturer	N/A
8 Extended Network	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	N/A
9 Storage Area Network Hardware (Fiber Channel Switches if applicable)	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	Storage Manufacturer
10 Storage Area Network Software (VSAN's, Zoning)	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	Storage Manufacturer
11 IP Network Hardware (switches and routers)	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	N/A
12 IP Network Software (VLAN's, Port Configs)	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	N/A
13 Other Devices (Lane controllers, EMV P2PE Reader, LPR, Gates, computers, duress, etc.)	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Varies	N/A
14 EMV P2PE Reader	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	TBD
15 VOIP Infrastructure	DEN	DEN	DEN	DEN	DEN	DEN	VOIP Manufacturer	N/A
16 Compute/Physical Server Hardware	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	N/A
17 Compute/Physical Server Software/Firmware	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	N/A
18 Compute/Physical Server Hypervisor OS+	DEN	DEN	DEN	DEN	DEN	DEN	Network Manufacturer	N/A
19 Storage Networking Multipathing Software Hypervisor (Install, Configure)	DEN	DEN	DEN	DEN	DEN	DEN	Storage Manufacturer	N/A
20 Storage Networking Multipathing Software Standard Operating Procedures	DEN	DEN	DEN	DEN	DEN	DEN	N/A	N/A
21 Virtual Environment (DRS, HA, Storage, Network)	DEN	DEN	DEN	DEN	DEN	DEN	Virtualization Manufacturer	Varies
22 Virtual Supporting Infrastructure (misc. networking, update manager, etc.)	DEN	DEN	DEN	DEN	DEN	DEN	Varies	Varies
23 Virtual Environment Management Console	DEN	DEN	DEN	DEN	DEN	DEN	Virtualization Manufacturer	Varies
24 Virtual Machines Supporting Parking OS+	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Varies	Varies
25 Parking Active Directory Infrastructure (Domain Controllers, DNS)	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Microsoft	Varies
26 Parking Anti-virus (Hypervisor McAfee Move) (Do not install A/V on vm's unless approved by DEN)	DEN	DEN	DEN	DEN	DEN	DEN	Anti-virus Manufacturer	Varies
27 Parking Microsoft License Management – OS Only (DEN supported KMS accessed via DNS)	DEN	DEN	DEN	DEN	DEN	DEN	Microsoft	Varies
28 Parking Windows Update Server	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Microsoft	Varies
29 Parking Application software	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Varies	N/A
30 Localized Backup and disaster recovery Software for Parking Application Servers	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Application Provider	DEN
31 Parking Lab Server Equipment	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Varies	Varies
32 Veeam backup of virtual machines	DEN	DEN	DEN	DEN	DEN	DEN	Veeam	Varies
33 Backup and disaster recovery for supporting hardware (Lane controllers, LPR, Gates, computers, Serial devices, duress, etc.)	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Hardware Manufacturer	Varies
34 Ping availability, Disk Space, CPU, RAM notifications	Vendor	Vendor	Vendor	Vendor	Vendor	Vendor	Software Manufacturer	Varies
35 Legacy Parking Application support (hardware and software)	Conduent	Conduent	Conduent	Conduent	Conduent	Conduent	N/A	N/A
36 PCI compliance Vendor supported infrastructure	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PCI Auditor
37 PCI compliance DEN supported infrastructure	DEN	DEN	DEN	DEN	DEN	DEN	PCI Auditor	N/A
38 Microsoft Windows clustering (Not Supported)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
39 Legacy Parking Application Hard disk data destruction	DEN	DEN	DEN	DEN	DEN	DEN	N/A	N/A
40 Hard disk data destruction	DEN	DEN	DEN	DEN	DEN	DEN	N/A	N/A
41 Network Manufacturer Support Agreement	N/A	N/A	DEN	DEN	DEN	DEN	N/A	N/A
42 Storage Manufacturer Support Agreement	N/A	N/A	DEN	DEN	DEN	DEN	N/A	N/A
43 Backup Tools Manufacturer Support Agreement	N/A	N/A	DEN	DEN	DEN	DEN	N/A	N/A
44 Virtualization Manufacturer Support Agreement	N/A	N/A	DEN	DEN	DEN	DEN	N/A	N/A
45 Microsoft Support Agreement	N/A	N/A	DEN	DEN	DEN	DEN	N/A	N/A
46 Merchant Services Provider Support Agreement	DEN	DEN	DEN	DEN	DEN	DEN		TBD
The first services i toride support in greather	DLIV		J.1.	3211		11		1.30

^{*}OS+ indicates all software from the Operating System up including all application software

^{*}Hardware includes the device and all physical connections

^{*}Support includes: Install, Configure, Manage, Maintain, Monitor, Document, Troubleshoot, Operate to documented or PCI Standards

^{*}Maintain includes keeping patches and firmware updated in accordance with documented or PCI requirements

ATTACHMENT 6

MILESTONE - PHASE COMPLETION DATES

(Unless direct by DEN, the milesdates stated below are dates established by this contract in which each phase stated to be completed, tested, certified, accepted and turned-over to DEN for operation)

Note: These dates are based on issuing NextGen's NTP on July 01, 2019. For each day this NTP is delayed, that time will be added to the established Milestone date stated below.

Phase	Description	Milestone Completion Date (Calendar days from executed NTP date)
	Employee Access Airside ACR Fact and West	
1	Employee Access - Airside AOB, East and West Employee, East Atrium, T-1 etc.	199
2	Mount Elbert And Pikes Peak	262
3	West Garage Entry & Exit Plazas & T-1	366
4	East Garage Entry & Exit, FAA, T-1	366
5	East & West Economy, Entry & Exit Plazas	403
6	East Garage Entry and Exit Plazas	473
	Employee Landside Enter and Exits, West	
7	Atrium, Reserve Parking East and West	539

DENVER INTERNATIONAL AIRPORT

PARKING ACCESS AND REVENUE CONTROL SYSTEM

ATTACHMENT 7 - PAYMENT MILESTONES

Project Total \$ 9,599,618

#	Description	% of Total Contract	Portion of Total Project
1	Contract NTP for Mobilization	5%	\$479,981
2	Equipment Order	10%	\$959,962
3	Approval of Final Design Review Submittals	2%	\$191,992
4	Approval of FAT	5%	\$479,981
5	Installation & Acceptance of Test Environment	2%	\$191,992
6a	Stage & test of Public & Employee Parking (based on % of total lanes staged & tested in any month)	7.5%	\$719,971
6b	Installation & Acceptance of Public & Employee Parking (based on % of total lanes installed & accepted in any month)	7.5%	\$719,971
7	Installation & Acceptance of Registered Parker System, Development Items for Employees (Hardware & Software)	5%	\$479,981
8	Installation & Acceptance of Registered Parker System, Development Items for Public Parking (Hardware & Software)	5%	\$479,981
9	Installation & Acceptance of Integrated & Hotel Valet System, Development Items for Public Parking (Hardware & Software)	3%	\$287,989
10	Installation & Acceptance of Integrated On-line Booking	3%	\$287,989
11	Installation & Acceptance of All Validation Systems (HW & SW)	1%	\$95,996
12	Installation & Acceptance of Control Center Monitoring/Alarm System (HW & SW)	1%	\$95,996
13	Installation & Acceptance of Control Center Remote Transaction Processing Software	5%	\$479,981
14	Installation & Acceptance of Control Center Integrated LPR Software	5%	\$479,981
15	Installation & Acceptance of Control Center Intercom (Hardware & Software)	1%	\$95,996
16	Installation & Acceptance of Lane Space Count System (Hardware & Software)	1%	\$95,996
17	Installation & Acceptance of MLPI System (Hardware & Software)	2%	\$191,992
18	Installation & Acceptance of All Other Development Items (not listed above 1 - 17)	5%	\$479,981
19a	Delivery of Access Control Spare Parts	0.5%	\$47,998
19b	Delivery of Revenue Control Spare Parts and	0.5%	\$47,998
20	Ticket/Receipt Stocks Completion & Approval of All Training	1%	\$95,996
21	Completion & Approval of All Project Documentation	2%	\$191,992
22	System Acceptance	14.873%	\$1,427,723
23	Retainage	5%	\$479,981
24	Textura Fees	0.127%	\$12,220
25	TOTAL	100.00%	\$9,599,618



CONTRACTOR:

CITY AND COUNTY OF DENVER DEPARTMENT OF AVIATION DENVER INTERNATIONAL AIRPORT

CONSTRUCTION CONTRACT APPLICATION FOR PROGRESS PAYMENT SUMMARY AUTHORIZATION

1) The title to the Work covered by this estimate of Work complete the City by incorporation into the completed work. 2) The Work covered by previous estimates of Work completed is clear of liens, claims, security interests or encumbrances, except interest created by retainage. 3) No Work covered by this estimate of Work completed is subject agreement under which an interest therein, or an encumbrance the retained by the seller or otherwise imposed by the Contractor or a person or entity. 4) All subcontractor payments have been reported within the B2G required by the Procedures for Payment.	free and for any et to an hereon, is any other
SIGNATURE / TITLE	DATE

CITY AND COUNTY OF DENVER:								
I hereby certify that, to the best on my knowledge this payment application represents a true and correct statement of the work performed and is in conformance with the terms of the Contract documents.								
, Project Manager - AIM	DATE							
, Director - AIM	DATE							
CC:, Director - AIM								

voice:	Date of Invoice:
act No.:	Contract No.:
ct Title:	Contract Title:
tractor:	Contractor:
ent No.:	Application for Progress Payment No.:
Period: to	For the Period:

			CONTRACT	PILITATE		
			TOTA	L	CURRENT APPLICATION	PREVIOUS PAYMENT
a)	ORIGINAL CONTRACT AMOUNT					
b)	PREVIOUS CHANGE ORDERS NOS.	(+ or -)				
c)	NEW CHANGE ORDERS NO. NO. NO.	(+ or -) (+ or -) (+ or -)	\$	-		
d)	ADJUSTED TOTAL CONTRACT d = [a + b + c]	, ,	\$	-		
e)	PREVIOUS EARNINGS					
f)	EARNINGS THIS APPLICATION					
g)	TOTAL CURRENT EARNINGS g = [e + f]		\$	-		
h)	TO COMPLETE h = [d - g]		\$			
i)	PREVIOUS RETENTION	5%				\$ -
j)	RETENTION THIS APPLICATION	5%			\$ -	
k)	TOTAL RETENTION $k = [i + j]$		\$	-		
I)	OTHER DEDUCTIONS					
m)	BALANCE DUE ON CONTRACT m = [h + k + I]		\$	-		
n)	TOTAL PREVIOUS PAYMENTS n = [e - i - l]					\$ -
o)	PAYMENT THIS APPLICATION o = [f - j - l]			<u> </u>	\$ -	

Note: Items a, b, c, d, g, h, k and m amounts - place only in TOTAL CONTRACT column.

CM-18 Rev. September 2015

DEN

(contractor name and address)

(contract title)
(contract no.)

Schedule of Values

Application for F	Progress
Payment No.	

Date:

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(I)
		Work Completed							
	I Description of Work	value II		This Pay Application		Total		Dalaman	
Item No.			Previous Application	Work in Place	Stored Materials [not in (d) or (e)]	Completed and Stored to Date [(d) + (e) + (f)]	Percent Complete	Balance to Finish [(c) - (g)]	Retainage (5%)
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
		_				\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
						\$0.00	#DIV/0!	\$0.00	\$0.00
	Tabela	¢0.00	¢0.00	¢0.00	¢0.00	¢0.00	#DIV/IOI	ф0.00	<u>+0.00</u>
	Totals:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	#DIV/0!	\$0.00	\$0.00

CM-89 April 2014



Denver International Airport

Parking Access and Revenue Control System Attachment 10 - PRCS Performance Standard Form

		Local Server Solution		ver Solution		
		I I mations o		Transactional Time		
ID#	Functionality	Uptime %	Accuracy %	(Excluding Human Factors)	Comments	
1	Fee Calculation Accuracy	99.90%	100.00%	N/A	Dependent on unknown factors	
2	Data transmissions for the entire PARCS and integrated system between lane equipment and PRCS servers	99.90%	100.00%	N/A	Subject to network performance	
3	Data availability from report server after event/transaction has occurred	99.90%	100.00%	< 1 sec	Subject to network performance	
4	Facility Counts	99.90%	100.00%	N/A	,	
5	Equipment monitoring and event alarms	99.90%	100.00%	N/A		
6	Data Communications Status	100.00%	100.00%	N/A	Subject to network performance	
7	Entry Processing from the time the entry media is presented until the gate opens:					
8	Paper ticket dispensed	99.90%	100.00%	less than 2 seconds		
9	AVI transponder entry - employee	99.90%	100.00%	less than 2 seconds		
10	AVI transponder entry - registered parker	99.90%	100.00%	less than 2 seconds		
11	AVI transponder entry - E470 toll tag	99.90%	100.00%	less than 2 seconds		
12	AVI transponder entry - shuttle bus	99.90%	100.00%	less than 2 seconds		
13	Credit card in/out read	99.90%	100.00%	less than 2 seconds		
14	QR code reservation read	99.90%	100.00%	less than 2 seconds		
15	QR code event/promotion read	99.90%	100.00%	less than 2 seconds		
16	Hotel parking credential	N/A	N/A	N/A	DIA has advsied interface is not required	
17	Exit Processing at Exit Station and Booth Transaction Panel from the time the entry media is presented until the gate opens:					
18	Paper ticket with credit card payment - magnetic stripe credit card	99.90%	100.00%	less than 4 seconds	Subject to network performance and connection to Pament Gateway	
19	Paper ticket with credit card payment - EMV chip credit card	99.90%	100.00%	less than 4 seconds	Subject to network performance and connection to Pament Gateway	
20	Paper ticket with NFC mobile phone credit card payment	99.90%	100.00%	less than 4 seconds	Subject to network performance and connection to Pament Gateway	
21	Paper ticket with full validation encoded on the ticket	99.90%	100.00%	less than 4 seconds		
22	Paper ticket with full validation QR code	99.90%	100.00%	less than 4 seconds		
23	Paper ticket with full e-validation	99.90%	100.00%	less than 4 seconds		
24	Credit card in/out exit	99.90%	100.00%	less than 4 seconds		
25	QR code reservation exit	99.90%	100.00%	less than 2 seconds		
26	QR code reservation with overstay	99.90%	100.00%	less than 10 seconds	Requires Patron to pay with a Credit Card	
27	Remote Transaction Processing - Lost ticket	99.90%	100.00%	less than 2 seconds		
28	Remote Transaction Processing - Damaged ticket	99.90%	100.00%	less than 2 seconds		
29	Remote Transaction Processing - Apply a validation	99.90%	100.00%	less than 10 seconds		
30	Hotel parking credential	N/A	N/A	N/A	DIA have advsied interface is not required	
31	Exit Processing at Cashier Station from the time the entry media is presented until the gate opens:					
32	Paper ticket with - cash payment	99.90%	100.00%	less than 2 seconds		
33	Paper ticket with - check payment	99.90%	100.00%	less than 2 seconds		
34	Paper ticket with credit card payment - magnetic stripe credit card	99.90%	100.00%	less than 6 seconds	Subject to network performance and connection to Pament Gateway	
35	Paper ticket with credit card payment - EMV chip credit card	99.90%	100.00%	less than 6 seconds	Subject to network performance and connection to Pament Gateway	
36	Paper ticket with NFC mobile phone credit card payment	99.90%	100.00%	less than 6 seconds	Subject to network performance and connection to Pament Gateway	
37	Paper ticket with full validation encoded on the ticket	99.90%	100.00%	less than 4 seconds		
38	Paper ticket with full validation QR code	99.90%	100.00%	less than 4 seconds		
39	Paper ticket with full e-validation	99.90%	100.00%	less than 4 seconds		
40	Credit card in/out exit	99.90%	100.00%	less than 4 seconds		
41	QR code reservation exit	99.90%	100.00%	less than 2 seconds		
42	QR code reservation with overstay	99.90%	100.00%	bet 2 & 10 seconds	Depending upon method of overstay handling	
43	Lost ticket	99.90%	100.00%	less than 2 seconds		
44	Damaged ticket	99.90%	100.00%	less than 2 seconds		
45	Insufficient funds transaction	99.90%	100.00%	less than 2 seconds		
46	Tow ticket	99.90%	100.00%	less than 2 seconds	Will be developed	
47	Remote Transaction Processing sending fee to cashier lane - Lost ticket	99.90%	100.00%	less than 2 seconds		
48	Remote Transaction Processing sending fee to cashier lane - Damaged ticket	99.90%	100.00%	less than 2 seconds		
49	Remote Transaction Processing sending fee to cashier lane - Apply a validation	99.90%	100.00%	less than 2 seconds		

				Transactional Time		
ID#	Functionality	Uptime %	Accuracy %	(Excluding Human	Comments	
				Factors)		
50	Hotel parking credential	N/A	N/A	N/A	DIA has advised interface is not required	
51	AVI Exits from the time the vehicle pulls into the lane until the gate opens:					
52	AVI transponder exit - employee	99.90%	100.00%	less than 2 seconds		
53	AVI transponder exit - registered parker	99.90%	100.00%	less than 2 seconds		
54	AVI transponder exit - E470 toll tag	99.90%	100.00%	less than 2 seconds		
55	AVI transponder exit- shuttle bus	99.90%	100.00%	less than 2 seconds		
56	LPR Performance Standards					
57	Time to perform an entry review	99.90%	100.00%	less than 10 seconds		
58	Length of time for the initial automated LPR review at exit (not including LP reviews that require human intervention.)	99.90%	100.00%	less than 6 seconds		
59	License plate capture rate (acquire a vehicle's unobstructed and unencroached LP image at each public parking entry and exit lane)	99.90%	99.00%	less than 6 seconds		
60	License plate accuracy rate - read all LP characters, exclusive of exception plates, correctly	99.90%	85.00%	less than 6 seconds		
61	License plate accuracy rate - read all but two (2) LP characters, exclusive of exception plates, correctly	99.90%	95.00%	less than 6 seconds		
64	Frictionless LPR entry/exit for registered parkers	99.90%	100.00%	less than 6 seconds	Subject to LPR accuracy	
65	Frictionless LPR entry/exit for online reservations with no overstay	99.90%	100.00%	less than 6 seconds	Subject to LPR accuracy	
66	Frictionless LPR exit for a fully validated ticket	99.90%	100.00%	less than 6 seconds	Subject to LPR accuracy	
67	Credential Management System for Registered Parkers (Employees, Public)					
68	Time frame when an access credential is activated, deactivated, or blocked at a PRCS workstation to being recognized in the lane as such	99.90%	100.00%	less than 2 seconds	Typical configuration time variable	
69	Pre-Booking Parking Reservation System		100.00%	21/2		
70	Percentage of uptime	99.90%	100.00%	N/A		
71	Average amount of time allotted at entry for reservation lookup processes when customers do not have the confirmation email, QR code, or access method credential	99.90%	100.00%	less than 2 seconds		
72	Report Generation					
73	Maximum time frame for PARCS report generation from the operational database for reports containing one (1) month of data or less.	99.90%	100.00%	less than 20 seconds		
74	Maximum time frame for PARCS report generation from archived data reports containing one (1) month of data or less.	99.90%	100.00%	less than 20 seconds		
75	Maximum time frame for PARCS report generation from the operational database for reports containing twelve (12) months of data.	99.90%	100.00%	less than 2 min		
76	Discounts & Validations - Maximum time frame to create each discount/validation					
77	Offline validation applied to the paper ticket	99.90%	100.00%	less than 2 seconds		
78	Cashier station validation keys	99.90%	100.00%	less than 2 seconds		
79	E-validations applied to an ticket	99.90%	100.00%	less than 2 seconds		
80	Creating a QR code validation	99.90%	100.00%	less than 2 seconds		
81	Valet					
82	Check in with no added services	99.90%	100.00%	less than 2 seconds		
83	Check in for online reservation customer	99.90%	100.00%	less than 2 seconds		
84	Check in time with vehicle damage recorded	99.90%	100.00%	less than 10 seconds		
85	Check in with payment added to customer's hotel folio	N/A	N/A	N/A		
86	Credit card payment using a handheld device	99.90%	100.00%	less than 4 seconds		
87	Credit card payment at the central cashier station	99.90%	100.00%	less than 6 seconds		
88	Cash payment at the central cashier station	99.90%	100.00%	less than 6 seconds		
89	Checkout for online reservation customer with no overstay	99.90%	100.00%	less than 2 seconds		

Attachment 11

Scope of Services – Point-to-Point-Encryption (P2PE)

<u>Background</u>. DEN's Parking Revenue Control System (PRCS) requires a secure data transmission facility for the processing of payment/credit card transactions such that the entire system will meet all standards and requirements prescribed by the Payment Card Industry (PCI) Security Standards Council.

<u>Deliverable</u>. To meet the above requirement, and in addition to other components of the Credit Card System, NextGen will provide access and implement connectivity to a commercial service for Point-to-Point-Encryption (P2PE) of DEN's payment/credit card transactions as specified in Exhibit A Scope of Work.

- Implementation. The P2PE solution will be fully integrated with PRCS equipment for both attended and unattended card-present payment transactions. The solution will also support card-not-present payment transactions via interfaces to ecommerce platforms such as parking reservation and loyalty systems as well as card-on-file payments from employees and other contract parking patrons.
- 2. <u>Merchant payment processor</u>. The P2PE solution will integrate with and process payments through DEN's acquirer, Chase Paymentech, or other supported merchant services provider, as mutually agreed.
- 3. <u>Responsibility for Revenue Transactions</u>. As the Merchant of Record (MoR), DEN personnel and DEN-authorized designees retain all user responsibility for activities associated with the collection & recognition of revenue including reconciliation and customer refunds.
- 4. <u>User Support</u>. As MoR users with primary revenue responsibility, DEN personnel (and authorized designees) will have direct access to support and support tools offered and provided by the P2PE solution provider. This includes telephone support, on-line access to web portals for ad-hoc inquiries as well as other reports and reporting tools. NextGen may or may not have access to DEN's P2PE user account at DEN's sole discretion and as mutually agreed.
- 5. <u>Technical Support</u>. NextGen retains primary responsibility for implementation and technical support of the P2PE solution within DEN's PRCS environment and its interoperability with other system components. While NextGen will respond to any requests for user support on a best efforts basis, the resolution of issues may require involvement of the P2PE solution provider's support organization.

- 6. <u>Reports</u>. Regular reports required from the P2PE solution (if any) will be specified by DEN during workshops conducted to define reports, interfaces and other customization requirements. NextGen will be responsible for implementing such reports with the P2PE solution provider and ensuring their proper operation.
- 7. P2PE Component of Credit Card Subsystem. The P2PE service is one component of DEN's PRCS Credit Card Subsystem. For purposes of assessing system performance and reporting on system uptime/downtime, P2PE availability will be a factor in evaluating the Credit Card Subsystem (e.g. during SAT testing) and meeting overall PRCS system service level requirements.
- 8. <u>P2PE Costs, Fees & Invoicing</u>. Costs and fees associated with P2PE services are separate from and in addition to PRCS system costs and payments as detailed in Exhibit A Attachment 7 Payment Milestones. Fees for P2PE services will be invoiced monthly in arrears and paid separately in accordance with Section 4 of the basic Contract for PRCS at DEN as follows:
 - a. No P2PE fees or charges will be assessed during implementation and testing of the Credit Card Subsystem prior to successful completion of the Bankcard Acceptance Test (BAT).
 - b. Upon completion of the BAT and commencing with the setup of users and card acceptors, the following fees will apply:

Device Fees

- A one-time \$100 device setup fee will be charged for each card acceptor (terminal) upon completion of Lane Acceptance Test (LAT) or when other payment devices are accepted for service.
- A \$5.00 monthly support fee will be charged for each card acceptor (terminal) commencing the month following its placement in service.

End User Fees

 A one-time portal setup fee of \$150 will be charged for each authorized end user's access to DEN's account on the P2PE solution provider's portal.

Transaction fees.

 A per transaction fee of \$0.09 will be charged for commercial payment/credit card transactions processed commencing with first commercial use of the P2PE service for the first year (12 months) following completion of Bankcard Acceptance Test (BAT).

- A per transaction fee of \$0.075 will be charged for commercial payment/credit card transactions processed during the second year of commercial P2PE transaction processing for the 13th through the 24th month following completion of Bankcard Acceptance Test (BAT).
- A per transaction fee of \$0.06 per transaction will be charged for commercial payment/credit card transactions thereafter and for the duration of the contract term.
- 9. <u>Standards & Compliance</u>. NextGen will provide Attestations of Compliance (AoC's) from all suppliers, including the P2PE solution provider, to verify compliance with applicable Payment Card Industry (PCI) requirements. AOCs will be provided annually to support DEN's PCI ROC for PRCS.

CITY AND COUNTY OF DENVER INSURANCE REQUIREMENTS FOR THE DEPARTMENT OF AVIATION

Certificate Holder Information:

CITY AND COUNTY OF DENVER Attn: Risk Management, Suite 8810 Manager of Aviation Denver International Airport 8500 Peña Boulevard Denver CO 80249

CONTRACT NAME & NUMBER TO WHICH THIS INSURANCE APPLIES: 201733794 – Parking Revenue Control System Replacement

I. MANDATORY COVERAGE

Colorado Workers' Compensation and Employer Liability

Minimum Limits of Liability (In Thousands)

\$500, \$500, \$500

- 1. Contractor expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement, that none of the Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement. Any such rejections previously effected, must have been revoked as of the date Contractor executes this Agreement.
- 2. If the contractor/consultant is a sole proprietor, Workers' Compensation is waived per State of Colorado law.

Commercial General Liability

Minimum Limits of Liability (In Thousands):

Each Occurrence: \$1,000
General Aggregate Limit: \$2,000
Products-Completed Operations Aggregate Limit: \$2,000
Personal & Advertising Injury: \$1,000

The policy must provide the following:

- 1. That this Agreement is an Insured Contract under the policy.
- 2. Defense costs are outside the limits of liability.
- 3. A severability of interests or separation of insureds provision (no insured vs. insured exclusion).
- 4. A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by the City.
- 5. The full limits of coverage must be dedicated to apply to each project/location.
- 6. If liquor is to be sold or distributed, then Liquor Liability, (\$1,000,000 per claim and \$1,000,000 policy aggregate limit) with the City as an additional insured is required.

Business Automobile Liability

Minimum Limits of Liability (In Thousands):

Combined Single Limit \$1,000

The policy must provide the following:

- 1. Coverage applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement.
- 2. If transporting wastes, hazardous material, or regulated substances, Contractor shall carry a pollution coverage endorsement and an MCS 90 endorsement on their policy.

ADDITIONAL COVERAGE II.

Excess/Umbrella Liability

Minimum Limits of Liability (In Thousands):

Umbrella Liability Non-Controlled Area

Each Occurrence and aggregate

\$1,000

The policy must provide the following:

- Coverage must be written on a "follow form" or broader basis. 1.
- Any combination of primary and excess coverage may be used to achieve required limits. 2.
- 3. If operations include unescorted airside access at DIA, then a \$9 million Umbrella Limit is required.

Technology Errors & Omissions

Minimum Limits of Liability (In Thousands)

Per Occurrence \$1,000 Aggregate \$1,000

The policy must provide the following:

- 1. Liability arising from theft, dissemination and / or use of confidential information (a defined term including but not limited to bank account, credit card account, personal information such as name, address, social security numbers, etc. information) stored or transmitted in electronic form.
- 2. Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon.
- 3. Policies written on a claims made basis must remain in full force and effect in accordance with CRS 13-80-104. The Insured warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under the Contract is completed.
- 4. Coverage for advertising injury, personal injury (including invasion of privacy) and intellectual property offenses related to internet.

Builders' Risk Insurance or Installation Floater

Minimum Limits of Liability (In Thousands)

Special Completed Value Basis

The policy must provide the following:

- 1. The insurance must be in the amount of the initial Contract Sum, plus value of subsequent modifications, change orders, and cost of material supplied or installed by others, comprising total value of the entire Project at the site on a replacement
- The insurance shall be written on a Special Completed Value Covered Cause of Loss form and shall include theft, vandalism, malicious mischief, collapse, false-work, temporary buildings, transit, debris removal, demolition, increased cost of construction, flood (including water damage), earthquake, and if applicable, all below and above ground structures, piping, foundations including underground water and sewer mains, pilings including the ground on which the structure rests and excavation, backfilling, filling and grading.
- 3. The Policy shall remain in force until formal acceptance of the project by the City or the placement of permanent property insurance coverage whichever is later.
- The Builders' Risk shall include a Beneficial Occupancy Clause. The policy shall specifically permit occupancy of the building during construction. Contractor shall take reasonable steps to obtain consent of the insurance company and delete any provisions with regard to restrictions within any Occupancy Clauses within the Builder's Risk Policy.

5. Equipment Breakdown Coverage (a.k.a. Boiler & Machinery) shall be included as required by the Contract Documents or by law, which shall specifically covers insured equipment during installation and testing (including cold and hot testing).

III. ADDITIONAL CONDITIONS

It is understood and agreed, for the benefit of the City, that the following additional conditions shall apply to all coverage specified herein:

- For Commercial General Liability, Auto Liability and Excess Liability/Umbrella (if required), Contractor and subcontractor's
 insurer(s) shall include the City and County of Denver, its elected and appointed officials, employees and volunteers as
 additional insured.
- 2. All coverage provided herein shall be primary and any insurance maintained by the City shall be considered excess.
- 3. For all coverages required under this Agreement, Contractor's insurer shall waive subrogation rights against the City.
- 4. The City shall have the right to verify or confirm, at any time, all coverage, information or representations contained herein, and the insured and its undersigned agent shall promptly and fully cooperate in any such audit the City may elect to undertake.
- 5. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-"VIII or better.
- 6. For claims-made coverage, the retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier
- 7. No changes, modifications or interlineations on this document shall be allowed without the review and approval of the Risk Administrator prior to contract execution.

NOTICE OF CANCELLATION

It is understood and agreed that should any Policy issued hereunder be cancelled or non-renewed before the expiration date thereof, or sustain a material change in coverage adverse to the City, the issuing company or its authorized Agent shall give notice to the Department of Aviation in accordance with policy provisions.

EXHIBITE

Bond No. K15386733

CITY AND COUNTY OF DENVER DEPARTMENT OF AVIATION

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned
ECCL 4:12 dba NextGen Parking LLC
a corporation organized and existing under and by virtue of the laws of the State of Texas
hereafter referred to as the "Contractor", and Westchester Fire Insurance Company
a corporation organized and existing under and by virtue of the laws of the State of Pennsylvania
and authorized to transact business in the State of Colorado, as Surety, are held and firmly bound unto the
CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado, hereafter referred to
as the "City", in the penal sum of FOUR MILLION FIVE-HUNDRED THOUSAND DOLLARS
AND NO CENTS (\$4,500,000.00), lawful money of the United States of America, for the payment of
which sum, well and truly to be made, we bind ourselves and our heirs, executors, administrators, successors
and assigns, jointly and severally, firmly by these presents;

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT:

WHEREAS, the above bounden Contractor has entered into a written contract with the City for furnishing all labor and tools, supplies, equipment, superintendence, materials and everything necessary for and required to do, perform and complete CONTRACT NO. 201733794, Denver, Colorado, and has bound itself to complete the project within the time or times specified or pay liquidated damages, all as designated, defined and described in the said Contract and Conditions thereof, and in accordance with the Plans and Technical Specifications therefore, a copy of said Contract being made a part hereof;

NOW, THEREFORE, if the said Contractor shall and will, in all particulars well and truly and faithfully observe, perform and abide by each and every Covenant, Condition and part of said Contract, and the Conditions, Technical Specifications, Plans, and other Contract Documents thereto attached, or by reference made a part thereof and any alterations in and additions thereto, according to the true intent and meaning in such case, then this obligation shall be and become null and void; otherwise, it shall remain in full force and effect;

PROVIDED FURTHER, that if the said Contractor shall satisfy all claims and demands incurred by the Contractor in the performance of said Contract, and shall fully indemnify and save harmless the City from all damages (liquidated or actual, including, but not limited to, damages caused by delays in the performance of the Contract), claims, demands, expense and charge of every kind (including claims of patent infringement) arising from any act, omission, or neglect of said Contractor, its agents, or employees with relation to said work; and shall fully reimburse and repay to the City all costs, damages, losses and expenses which it may incur in making good any breach or default based upon the failure of the Contractor to fulfill its obligation to furnish maintenance, repairs, services, or replacements for the full guarantee period provided in the Contract Documents, then this obligation shall be null and void; otherwise it shall remain in full force and effect;

PROVIDED FURTHER, that if said Contractor shall at all times promptly make payments of all amounts lawfully due to all persons supplying or furnishing it or its subcontractors with labor and materials, rental machinery, tools or equipment used or performed in the prosecution of work provided for in the above Contract and that if the Contractor will indemnify and save harmless the City for the extent of any and all payments in connection with the carrying out of such Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect;

PROVIDED FURTHER, that if the said Contractor fails to duly pay for any labor, materials, team hire, sustenance, provisions, provender, gasoline, lubricating oils, fuel oils, grease, coal, or any other supplies or materials used or consumed by said Contractor or its subcontractors in performance of the work contracted to be done, or fails to pay any person who supplies rental machinery, tools or equipment, all amounts due as the result of the use of such machinery, tools or equipment in the prosecution of the work, the Surety will pay the same in any amount not exceeding the amount of this obligation, together with interest as provided by law;

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to contracts with others in connection with this project, or the work to be performed thereunder, or the Technical Specifications and Plans accompanying the same, shall in any way affect its obligation on this bond and it does hereby waive notice of any change, extension of time, alteration or addition to the terms of the Contract, or contracts, or to the work, or to the Technical Specifications and Plans.

of to the Teenmeat Specifications and Tians.	
PROVIDED FURTHER, that the term of this bond is expiring on 9/2/2020, unless released bond may be renewed for an additional one-year periot the Surety. Nonrenewal by the Surety shall not constituent obtains a replacement bond with no gap in coverage. R force or the number of continuation certificates issued, amounts from period to period and shall in no event e rider.	by the City prior thereto. However, the term of this d(s) by the issuance of a Continuation Certificate by tute a default under this bond, as long as Contractor egardless of the number of years that this bond is in the liability of the Surety shall not be cumulative in
IN WITNESS WHEREOF, said Contractor and said Surday of, 2	
Attest: Nan cylaitillar Secretary	ECCL 4:12 dba NextGen Parking LLC Contractor By: President
V	Westchester Fire Insurance Company
	By: Attorney-In-Fact Christina L. Sandoval
(Accompany this bond with Attorney-in-Fact's authority the date of the bond).	from the Surety to execute bond, certified to include
APPROVED AS TO FORM:	APPROVED FOR THE CITY AND COUNTY
KRISTIN M. BRONSON, City Attorney for the City and County of Denver	OF DENVER By: MAYOR
By: Assistant City Attorney	By: CEO DEPARTMENT OF AVIATION
	PROVIDED FURTHER, that the term of this bond is expiring on 9/2/2020, unless released bond may be renewed for an additional one-year periot the Surety. Nonrenewal by the Surety shall not constituent obtains a replacement bond with no gap in coverage. R force or the number of continuation certificates issued, amounts from period to period and shall in no event erider. IN WITNESS WHEREOF, said Contractor and said Sunday of

ACKNOWLEDGEMENT BY SURETY

STATE OF ILLINC	IS
COUNTY OF COO	K

On this ____ day of _____, 2019, before me, Jean Torres, a Notary Public, for said County and State, personally within and Christina L. Sandoval to me personally known to be the Attorney-in-Fact of WESTCHESTER FIRE INSURANCE COMPANY and acknowledged that they executed the said instrument as the free act and deed of said Company.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the aforesaid County, the day and year in this certificate first above written.

Notary Public in the State of Illinois

County of Cook



Power of Attorney

Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Jessica B. Dempsey, Debra J. Doyle, Derek J. Elston, Jennifer L. Jakaitis, James B. McTaggart. Judith A. Lucky-Eftimov, Ann Mullins, Sandra M. Nowak, Diane M. O'Leary, Christina L. Sandoval, Bartlomiej Siepierski, Christopher P. Troha, Aerie Walton, Susan A. Welsh and Sandra M. Winsted of Chicago, Illinois-----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY have each executed and attested these presents and affixed their corporate seals on this 14th day of August, 2018.

Down M. Chlores

Dawn M. Chloros. Assistant Secretary

Stephen M. Haney, Vice President

Strafe





STATE OF NEW JERSEY

County of Hunterdon

On this 14th day of August, 2018, before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with Stephen M. Haney, and knows him to be Vice President of said Companies; and that the signature of Stephen M. Haney, subscribed to said Power of Attorney is in the genuine handwriting of Stephen M. Haney, and was thereto subscribed by authority of said Companies and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR NOTARY PUBLIC OF NEW JERSEY No. 2316885 Commission Expires July 16, 2019

Harfad Novary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; ACE AMERICAN INSURANCE COMPANY on March 20, 2009

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or (2)otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorneyin-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments
- Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this





Dawyn. Orlores

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT: Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

PERFORMANCE AND PAYMENT BOND SURETY AUTHORIZATION

FAX NUMBER: 303-342-2552 303-342-2540 TELEPHONE NUMBER: **Assistant City Attorney** Airport Office Building 8500 Pena Blvd. #9810 Denver, CO 80249-6340 RE: ECCL 4:12 dba NextGen Parking LLC Contract No: 201733794 Project Name: Parking Revenue Control Systems at Denver International Airport Contract Amount: \$10,642,491.00 Performance and Payment Bond No.: K15386733 Dear Assistant City Attorney, The Performance and Payment Bonds covering the above captioned project were executed by this agency, through Westchester Fire Insurance Company, on July 9, 2019. We hereby authorize the City and County of Denver, Department of Aviation, to date all bonds, Acknowledgement by Surety, and powers of attorney to coincide with the date of the contract. If you should have any additional questions or concerns, please don't hesitate to give me a call at Christina L. Sandoval and 312-381-4356.

Thank you.

6 -

Sincerely,

Christina L. Sandoval Power of Attorney



TO: All Users of the City and County of Denver Prevailing Wage Schedules

FROM: Ryland Feno, OHR Compensation and Classification

DATE: June 20, 2019

SUBJECT: Latest Update to Prevailing Wage Schedules

Please find an attachment to this memorandum of all the current Office of Human Resources Prevailing Wage Schedules issued in accordance with the City and County of Denver's Revised Municipal Code, Section 20-76(c). This schedule does not include the Davis-Bacon rates. The Davis-Bacon wage rates will continue to be published separately as they are announced.

Modification No. 145
Publication Date: June 20, 2019
(12 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to, and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor. The employer and the individual apprentice must be registered in a program, which has received prior approval by the U.S. Department of Labor. Any employer who employs an apprentice and is found to be in violation of this provision shall be required to pay said apprentice the full journeyman scale.

Attachments as listed above.

APPLIANCE MECHANIC

Effective Date: 05-16-19 Last Revision: 06-07-18

<u>Classification</u> <u>Base Wage/Hour</u> <u>Fringes/Hour</u>

Appliance Mechanic \$23.21 \$7.16

Plus 10% shift differential for regularly scheduled hours worked between 6:00 p.m. and 6:00 a.m.

The Appliance Mechanic installs, services and repairs stoves, refrigerators, dishwashing machines, exercise equipment and other electrical household or commercial appliances, using hand tools, test equipment and following wiring diagrams and manufacturer's specifications. Responsibilities include: connects appliance to power source and test meters, such as wattmeter, ammeter, or voltmeter, observes readings on meters and graphic recorders, examines appliance during operating cycle to detect excess vibration, overheating, fluid leaks and loose parts, and disassembles appliances and examines mechanical and electrical parts. Additional duties include: traces electrical circuits, following diagram and locates shorts and grounds, using ohmmeter, calibrates timers, thermostats and adjusts contact points, and cleans and washes parts, using wire brush, buffer, and solvent to remove carbon, grease and dust. Replaces worn or defective parts, such as switches, pumps, bearings, transmissions, belts, gears, blowers and defective wiring, repairs and adjusts appliance motors, reassembles appliance, adjusts pulleys and lubricates moving parts, using hand tools and lubricating equipment.

Note: This position does not perform installations done at new construction.

BUILDING ENGINEER

Effective Date: 04-05-18 Last Revision: 08-18-16

<u>Classification</u> <u>Base Wage/Hour</u> <u>Fringes/Hour</u>

Building Engineer \$28.67 \$7.72

This classification of work is responsible for operating, monitoring, maintaining/repairing the facilities mechanical systems to ensure peak performance of the systems. This includes performing P.M. and repair work of the building mechanical systems, inspecting, adjusting, and monitoring the building automation and life safety systems, contacting vendors and place order replacement parts, responding to customer service requests and performing maintenance/repairs I tenant or public spaces, performing routine P.M. i.e. light plumbing and electrical repairs, ballast lamp and tube replacement, operating mechanical systems both on site and via a remote laptop computer, maintaining inventory of spare parts and tools, painting and cleaning mechanical equipment and machine rooms, etc.

CONVEYANCE SYSTEM MAINTENANCE SERIES

Effective Date: 09-20-18 Last Revision: 10-19-17

Classification	Base Wage/Hour	Fringes/Hour
Entry-Support Mechanic	\$23.72	\$7.22
Machinery Maintenance Mechanic	\$27.19	\$7.62
Controls System Technician	\$30.26	\$7.97

Plus 10% shift differential for regularly scheduled hours worked between 6:00 p.m. and 6:00 a.m.

This classification was previously listed as Baggage Handling System Maintenance. The title of the series has been changed to be inclusive of other types of similar work.

Entry Support Mechanic

The Entry Support Mechanic (ESM) applies basic mechanical knowledge to perform maintenance and operational tasks on a conveyance system. Under supervision of a Machinery Maintenance Mechanic (MMM) or Control Systems Technician (CRO), the ESM performs cleaning, routine inspections, preventive, corrective and emergency maintenance based on an established maintenance program. The MMM clears jams and faults and may physically move items during failures.

Machinery Maintenance Mechanic

The Machinery Maintenance Mechanic (MMM) applies advanced mechanical knowledge to perform maintenance and operational tasks on a conveyance system. Performs cleaning of all parts of the system, routine inspections, preventive maintenance, corrective maintenance, and emergency maintenance within the system based on an established maintenance program. The MMM shall inspect all equipment for proper operation and performance including but not limited to conveyors, lifts, diverters and automatic tag readers. The MMM troubleshoots, repairs, replaces, and rebuilds conveyor components including but not limited to; motors, gearboxes, bearings, rollers, sheaves, hydraulic systems, conveyor belting, clutch brakes, tools, independent carrier systems, and other complex devices using basic hand tools, power tools, welders and specialized tools. The MMM may assist the Control Systems Technician (CST) with clearing electrical faults and electrical repairs. The MMM reads and interprets manufacturers' maintenance manuals, service bulletins, technical data, engineering data, and other specifications to determine feasibility and method of repairing or replacing malfunctioning or damaged components. The MMM clears jams and faults in the system and may physically move items during failures. The MMM will operate a Central Monitoring Facility/Control Room, these duties include; using multiple computer systems for monitoring the system and running reports, communicating faults in the system using a radio and telephone, and communicating with stakeholders. The MMM performs on-site training of ESM.

Controls System Technician

The Control Systems Technician (CST) applies advanced technical knowledge to perform maintenance and operational tasks on a conveyance system. Performs all duties assigned to an MMM in addition to the following routine inspections, preventive maintenance, corrective maintenance, and emergency maintenance of complex components within the system based on an established maintenance program. The CST is responsible for resolving difficult controls, electrical and mechanical problems. The CST troubleshoots, repairs, replaces, and rebuilds complex electro-mechanical systems and conveyor components including but not limited to; programmable logic controllers, input and output modules, electrical switches, variable frequency drives, 110V AC and 24V DC controls devices, automatic tag readers, electrical control panels, 110V - 480V AC components and motors, gearboxes, bearings, rollers, sheaves, hydraulic systems, conveyor belting, clutch brakes, tools, independent carrier systems, and other complex devices using basic hand tools, power tools, welders and specialized mechanical and electrical tools. The CST reads and interprets manufacturers' maintenance manuals, service bulletins, technical data, engineering data, and other specifications to determine feasibility and method of repairing or replacing malfunctioning or damaged components. The CST clears mechanical, electrical and controls faults, jams and may physically move items during failures. The CST performs on-site training and competency evaluations of MMM and ESM.

Note: Incumbents must possess an Electrician's license when work warrants.

CUSTODIANS

Effective Date: 01-17-19 Last

Revision: 01-18-18

Classification	Base Wage/Hour	Fringes/Hour
Custodian I	\$15.53	\$6.46 (Single)
		\$9.63 (Children)
		\$10.34 (2-party)
		\$13.52 (Family)
Custodian II	\$15.88	\$6.51 (Single)
		\$9.69 (Children)
		\$10.40 (2-party)
		\$13.58 (Family)

Benefits and Overtime

Parking With valid receipt from approved parking lot, employees are reimbursed the actual monthly cost

of parking.

RTD Bus Pass Employer will provide employees with the Bus Pass or pay (\$0.23) per hour for travel differential.

Shift Differential 2nd shift (2:30 p.m.-10:30 p.m.): \$.50/hour

3rd shift (10:31 p.m.-6:30 a.m.): \$1.00/hour

Overtime Time worked in excess of seven and one-half (7 ½) hours in one (1) day or in excess of thirty-

seven and one-half (37 ½) hours in one week shall constitute overtime and shall be paid for at the

rate of time and one-half (1 ½) at the employee's basic straight time hourly rate of pay.

Lunch Any employee working seven and a half (7.5) hours in a day is entitled to a thirty (30) minute paid

lunch.

Note The Career Service Board in their public hearing on March 15, 2007 approved to amend

prevailing wages paid to the Custodian as follows: "All contractors shall provide fringe benefits or cash equivalent at not less than the single rate amount. Contractors who offer health insurance shall provide an employer contribution to such insurance of not less than the 2-party or family rate for any employee who elects 2-party or family coverage. Contractors who offer such coverage will be reimbursed for their employer contributions at the above rates under any City

contract incorporating this wage specification."

Custodian I

Any employee performing general clean-up duties using equipment that does not require special training: i.e., dust mopping, damp mopping, vacuuming, emptying trash, spray cleaning, washing toilets, sinks, walls, cleaning chairs, etc.

Custodian II

Any employee performing specialized cleaning duties requiring technical training and the use of heavy and technical equipment, i.e., heavy machine operators, floor strippers and waxers, carpet shampooers, spray buffing, re-lamping, mopping behind machines, high ladder work, chemical stripping and finishing of stainless steel.

DIA OIL & GAS

Effective Date: 06-20-19 Last Revision: 03-15-18

Classification	Base Wage/Hour	Fringes/Hour
Derrick Hand/Roustabout	\$14.04	\$6.10
Electrician	\$28.41	\$7.76
Mechanic	\$24.26	\$7.28
Pipefitter	\$25.62	\$7.44
Rig/Drill Operator	\$22.29	\$7.05
Truck Driver	\$22.95	\$7.13

Heavy Equipment Mechanic

The Heavy Equipment Mechanic analyzes malfunctions and repairs, rebuilds and maintains power equipment, such as cranes, power shovels, scrapers, paving machines, motor graders, trench-digging machines, conveyors, bulldozers, dredges, pumps, compressors and pneumatic tools. This worker operates and inspects machines or equipment to diagnose defects, dismantles and reassembles equipment, using hoists and hand tools, examines parts for damage or excessive wear, using micrometers and gauges, replaces defective engines and subassemblies, such as transmissions, and tests overhauled equipment to insure operating efficiency. The mechanic welds broken parts and structural members, may direct workers engaged in cleaning parts and assisting with assembly and disassembly of equipment, and may repair, adjust and maintain mining machinery, such as stripping and loading shovels, drilling and cutting machines, and continuous mining machines.

Pipefitter

The Pipefitter, Maintenance installs or repairs water, steam, gas or other types of pipe and pipefitting. Work involves most of the following: laying out work and measuring to locate position of pipe from drawings or other written specifications, cutting various sizes of pipe to correct lengths with chisel and hammer, oxyacetylene torch or pipe-cutting machines, threading pipe with stocks and dies. This person is responsible for bending pipe by hand-driven or power-driven machines, assembling pipe with couplings and fastening pipe to hangers, making standard shop computations relating to pressures, flow and size of pipe required; and making standard tests to determine whether finished pipes meet specifications. In general, the work of the Maintenance Pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

Well Driller

This incumbent sets up and operates portable drilling rig (machine and related equipment) to drill wells, extends stabilizing jackscrews to support and level drilling rig, moves levers to control power-driven winch that raises and extends telescoping mast. This person bolts trusses and guy wires to raise mast and anchors them to machine frame and stakes, and assembles drilling tools, using hand tools or power tools. The Well Driller moves levers and pedals to raise tools into vertical drilling position and lowers well casing (pipe that shores up walls of well) into well bore, using winch, moves levers and pedals and turns hand wells to control reciprocating action of machine and to drive or extract well casing.

Laborer

The Laborer performs tasks that require mainly physical abilities and effort involving little or no specialized skill or prior work experience. The following tasks are typical of this occupation: The Laborer loads and unloads trucks, and other conveyances, moves supplies and materials to proper location by wheelbarrow or hand truck; stacks materials for storage or binning, collects refuse and salvageable materials, and digs, fills, and tamps earth excavations, The Laborer levels ground using pick, shovel, tamper and rake, shovels concrete and snow; cleans culverts and ditches, cuts tree and brush; operates power lawnmowers, moves and arranges heavy pieces of office and household furniture, equipment, and appliance, moves heavy pieces of automotive, medical engineering, and other types of machinery and equipment, spreads sand and salt on icy roads and walkways, and picks up leaves and trash.

Truckdriver

Straight truck, over 4 tons, usually 10 wheels. The Truckdriver drives a truck to transport materials, merchandise, equipment, or workers between various types of establishments such as: manufacturing plants, freight depots, warehouses, wholesale and retail establishments, or between retail establishments and customers' houses or places of business. This driver may also load or unload truck with or without helpers, make minor mechanical repairs, and keep truck in good working order.

ELEVATOR MECHANIC

Effective 1-18-2018, the Elevator Mechanic classification will utilize the base pay and fringe benefits for the Elevator Mechanic classification under the Davis Bacon Building Wage Determination.

FINISHER & JOURNEYMAN

TILE, MARBLE AND TERRAZZO

Effective Date: 06-20-19 Last Revision: 09-20-18

ClassificationBase Wage/HourFringes/HourFinisher\$25.01\$10.06Journeyman\$31.21\$10.12

Effective May 1, 2008, Local Union 7 of Colorado combined three classes of Finishers, Floor Grinders, and Base Grinders into Finisher using one pay schedule.

Tile Setter: Applies to workers who apply tile to floors, walls, ceilings, stair treads, promenade roof decks, garden walks, swimming pools and all places where tiles may be used to form a finished surface for practical use, sanitary finish or decorative purpose.

FIRE EXTINGUISHER REPAIRER

Effective Date: 09-20-18 Last Revision: 10-19-17

ClassificationBase Wage/HourFringes/HourFire Extinguisher Repairer\$19.74 \$ \$6.76

The Fire Extinguisher Repairer performs the following duties: repairs and tests fire extinguishers in repair shops and in establishments, such as factories, homes, garages, and office buildings, using hand tools and hydrostatic test equipment, this repairer dismantles extinguisher and examines tubing, horns, head gaskets, cutter disks, and other parts for defects, and replaces worn or damaged parts. Using hand tools, this repairer cleans extinguishers and recharges them with materials, (such as soda water and sulfuric acid, carbon tetrachloride, nitrogen or patented solutions); tests extinguishers for conformity with legal specifications using hydrostatic test equipment and may install cabinets and brackets to hold extinguishers.

FUEL HANDLER SERIES

Effective Date: 11-15-18 Last Revision: 01-18-18

Classification	Base Wage/Hour	Fringes/Hour
Fuel Distribution System Operator	\$23.31	\$7.17
Lead Fuel Distribution System Operator	\$24.37	\$7.29
Fuel Distribution System Mechanic	\$30.61	\$8.01
Lead Fuel Distribution System Mechanic	\$32.00	\$8.17

Plus 10% shift differential for hours worked between 6:00 p.m. and 6:00 a.m.

Fuel Distribution System Operator

Receives, stores, transfers, and issues fuel. Performs various testing procedures and documentation on fuel samples. Gauges tanks for water, temperature and fuel levels. Performs temperature and gravity testing for correct weight of fuel. Checks pumping systems for correct operating pressure or unusual noises. Inspects fuel receiving, storage, and distribution facilities to detect leakage, corrosion, faulty fittings, and malfunction of mechanical units, meters, and gauges such as distribution lines, float gauges, piping valves, pumps, and roof sumps. Operates a 24-hour control center; operates various computer equipment to determine potential equipment failure, leak and cathodic protection systems, pump failure, and emergency fuel shutoff systems. Monitors quality of fuel and drains excess condensation from fuel sumps and underground fuel pits. Inspects fuel tank farm for such items as leaks, low pressure, and unauthorized personnel. Performs general housekeeping and grounds maintenance for terminal, pipeline and dock areas, including fuel pits and valve vault cleaning and pump out activities. May connect lines, grounding wires, and loading and off-loading arms of hoses to pipelines. May assist Fuel Distribution System Mechanics by preparing work areas. Maintains record of inspections, observations and test results.

Lead Fuel Distribution System Operator

Performs lead duties such as making and approving work assignments and conducting on-the-job training as well as performing the various tasks performed by the Operator classification.

Fuel Distribution System Mechanic

Maintains and repairs fuel storage and distribution systems, equipment and filtration systems, and differential pressure valves. Corrects leakage, corrosion, faulty fittings, and malfunction of mechanical units, meters, and gauges such as distribution lines, float gauges, piping valves, pumps, and roof sumps. Inspects electrical wiring, switches, and controls for safe-operating condition, grounding, and adjustment; may make minor repairs. Lubricates and repacks valves. Lubricates pumps, replaces gaskets, and corrects pumping equipment misalignment. May clean strainers and filters, service water separators, and check meters for correct delivery and calibration. Overhauls system components such as pressure regulating valves and excess valves. Disassembles, adjusts, aligns, and calibrates gauges and meters or replaces them. Removes and installs equipment such as filters and piping to modify system or repair and replace system component. Cleans fuel tanks and distribution lines. Removes corrosion and repaints surfaces. Overhauls vacuum and pressure vents, floating roof seals, hangers, and roof sumps. Some positions maintain fuel-servicing equipment such as hydrant and tanker trucks. Maintains record of inspections and repairs and other related paperwork as required.

Lead Fuel Distribution System Mechanic

Performs lead duties such as making and approving work assignments and conducting on-the-job training as well as performing the various tasks performed by the Mechanic classification.

These classifications are recommended to be inclusive and to supersede any previously adopted classifications.

FURNITURE MOVERS

Moving, Storage and Cartage Workers

Effective Date: 11-15-18 Last Revision: 01-18-18

<u>Classification</u>	Base Wage/Hour	Fringes/Hour
Laborer/Helper	\$17.36	\$6.48
Furniture Driver/Packer	\$17.43	\$6.49
Lead Furniture Mover	\$18.22	\$6.58

GLYCOL FACILITY

Effective Date: 06-20-19 Last Revision: 06-07-18

<u>Classification</u>	Base Wage/Hour	Fringes/Hour
De-icing Facility Operator	\$27.64	\$7.67
Maintenance Mechanic	\$27.46	\$7.65
Glycol Plant Specialist	\$17.36	\$6.48

De-icing Facility Operator

The De-icing Facility Operator is responsible for the safe and efficient daily operation of all aircraft de-icing fluid equipment to include: mechanical vapor recompression (concentrators), distillation, polishing, distribution, and collection systems as well as daily routine chores to include: operating and controlling all facility machines and equipment associates with the aircraft deicing fluid system (ADS). Operate electrical motors, pumps and valves to regulate flow, add specific amounts of chemicals such as hydrochloric acid or sodium hydroxide to fluid(s) for adjustment as required, turn valves, change filters/activated carbon, and clean tanks as needed to optimize productivity. Monitor panel boards/HMI/PLC's, adjust control flow rates, repairs, and lubricate machinery and equipment using hand powered tools. Test fluids to determine quality controlling methods. Record data as necessary and maintain good housekeeping of the facility.

Maintenance Mechanic

The position of the Machinery Maintenance Mechanic will be primarily responsible for the routine maintenance and repairs of all facility equipment. Responsible for repairs to machinery and mechanical equipment, examine machines and mechanic equipment to diagnose source of trouble, dismantling or partly dismantling machines and performing repairs that mainly involve the use of hand tools in scraping and fitting parts, replacing broken or defective parts with items obtained from stock, ordering replacement parts, sending parts to a machine shop or equivalent for major repairs, preparing specific written specifications for repairs, SOP's for minor repairs, reassembly of machines and mechanical equipment, and making any necessary adjustments to all equipment for operational optimization.

Glycol Plant Specialist/Material Handling Laborer

The Material Handling Laborer is responsible for the safe and efficient daily documentation/recording of all ADF processors, distillation and polishing systems, as well as the distribution and collection system. Performing physical tasks to transport and/or store materials or fluids. Duties involve one or more of the following: manually loading or unloading trucks, tankers, tanks, totes, drums, pallets, unpacking, placing items on storage bins or proper locations. Utilizing hand carts, forklift, or wheelbarrow. Completing daily fluid inventory, to include tank measuring and completing fluid accountability records. Responsible for the overall facility housekeeping and general cleanliness. Escort vehicles and tankers in and out of the facility, change out filters as required on all systems, take samples and test for quality control and document the findings.

PARKING ELECTRONICS TECHNICIAN

Effective Date: 11-15-18
Last Revision: 12-07-17

<u>Classification</u> <u>Base Wage/Hour</u> <u>Fringes/Hour</u>

Parking Electronics Technician \$24.35 \$7.29

Plus 10% shift differential for regularly scheduled hours worked between 6:00 p.m. and 6:00 a.m.

This classification of work installs, modifies, troubleshoots, repairs and maintains revenue control equipment at manned and unmanned parking entrance and exit gates. Replaces consumable items such as tickets, printer ribbons, and light bulbs. Replaces modules and related equipment as needed to repair existing equipment, modify applications, or resolve unusual problems. Troubleshoots, tests, diagnoses, calibrates, and performs field repairs. Performs preventive maintenance such as inspection, testing, cleaning, lubricating, adjusting and replacing of serviceable parts to prevent equipment failure for electromechanical control to minimize repair problems and meet manufacturers' specifications.

PEST CONTROLLER

Effective Date: 09-20-18 Last Revision: 10-19-17

<u>Classification</u> <u>Base Wage/Hour</u> <u>Fringes/Hour</u>

Pest Controller \$20.41 \$6.84

The Pest Controller sprays chemical solutions or toxic gases and sets mechanical traps to kill pests that infest buildings and surrounding areas, fumigates rooms and buildings using toxic gases, sprays chemical solutions or dusts powders in rooms and work areas, places poisonous paste or bait and mechanical traps where pests are present; may clean areas that harbor pests, using rakes, brooms, shovels, and mops preparatory to fumigating; and may be required to hold State license

QUALITY CONTROL & ASSURANCE TECHNICIAN

Effective Date: 05-16-19 Last Revision: 03-15-18

<u>Classification</u> <u>Base Wage/Hour</u> <u>Fringes/Hour</u>

Quality Control & Assurance Technician \$23.85 \$7.23

The Quality Control & Assurance Technician provides support to Inland Technologies operations by independently performing standard analysis on samples related to the manufacture of spent de-icing fluid to a 99% recycled glycol product and waste water discharge. The Quality Control and Assurance Technician will continually look at ways to improve products and processes to exceed customer quality demands and decrease operational costs.

SIGN ERECTOR

Effective Date: 03-15-18 Last Revision: 10-15-10

ClassificationBase Wage/HourFringes/HourSign Erector\$23.82\$7.16

This classification of work erects, assembles, and/or maintains signs, sign structures and/or billboards using various tools. Erects pre-assembled illuminated signs on buildings or other structures according to sketches, drawings, or blueprints. Digs and fills holes, places poles. Bolts, screws. or nails sign panels to sign post or frame. Replaces or repairs damaged or worn signs. May use welding equipment when installing sign. This classification is not a licensed electrician and therefore cannot make connections to power sources (i.e., provide exit lighting).

TRANSIT TECHNICIANS

Effective 1-18-2018, the Transit Technician classification series and associated wages will no longer be published because these classifications are not being used at this time.

TREE TRIMMERS

Effective Date: 09-20-18 Last Revision: 10-19-17

<u>Classification</u> <u>Base Wage/Hour</u> <u>Fringes/Hour</u>

Tree Trimmer \$19.94 \$6.78

This classification of work trims, removes, and applies insecticides to trees and shrubbery including trimming dead, diseased, or broken limbs from trees utilizing rope and saddle, chain, handsaw and other related equipment common to the care of trees and shrubs. Removes limbs, branches and other litter from the work area, observes safety rules, inspects and identifies tree diseases and insects of the area distinguishing beneficial insects and environmental stress, takes samples form diseased or insect infested trees for lab analysis, operates a wide variety of heavy and power equipment in trimming and removing trees and shrubbery i.e. mobile aerial tower unit, tandem trucks, loaders, chipper, etc., maintains all equipment.

WINDOW CLEANER

Effective Date: 11-15-18 Last Revision: 12-01-16

ClassificationBase Wage/HourFringes/HourWindow Cleaner\$26.04\$8.36 (Single)\$11.76 (2-party)\$14.23 (Family)

Benefits/Overtime

Parking With valid monthly parking receipt from approved parking lot, employees are

reimbursed for the cost of parking. The employer shall reimburse employees for parking expenses from other parking lots up to the amount reimbursed for DIA Employee Parking Lot upon the submission of a monthly parking receipt.

Only (1) one receipt per month.

Shift Differential \$0.75 per hour for employees assigned to 3rd shift (11:00 p.m. to 7:00 a.m.)

Overtime One and one-half (1½) times the basic rate of pay in excess of 7.5 hours worked

per day or 37.5 hours worked per week.

Lunch Any employee working seven and a half (7.5) hours in a day is entitled to a thirty

(30) minute paid lunch.

Lead Work \$1.25 per hour above highest paid employee under supervision

High Work \$1.75 per hour (21 feet or more from ground (base) to top of surface/structure

being cleaned)

Training \$0.25 per hour

ECOPASS The Company will provide an Eco-Pass to all bargaining unit employees or pay

\$.24 per hour for travel differential.

Note: The Career Service Board in their public hearing on April 3, 2008, approved to

amend prevailing wages paid to the Window Cleaners as follows: "All

contractors shall provide fringe benefits or cash equivalent at not less than the single rate amount. Contractors who offer health insurance shall provide an employer contribution to such insurance of not less than the 2-party or family rate for any employee who elects 2-party or family coverage. Contractors who offer such coverage will be reimbursed for their employer contributions at the above rates under any City contract incorporating this wage specification."

Office of Human Resources



201 W. Colfax, Department 412

Denver, CO 80202
p: 720.913.5751
f: 720.913.5720
www.denvergov.org/csa



TO: All Users of the City of Denver Prevailing Wage Schedules

FROM: Susan Keller, Human Resources Technician

DATE: Monday, February 6, 2017

SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised, prevailing wage rates for some building, heavy, and highway construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor.

The attached Prevailing Wage Schedule is effective as of **Friday**, **February 3**, **2017** and applies to the City and County of Denver for **BUILDING CONSTRUCTION PROJECTS** (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO170030 Superseded General Decision No. CO20160030 Modification No. 3 Publication Date: 2/3/17 (4 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to, and individually registered in, a bona fide apprenticeship program registered with the U.S. Department of Labor (DOL). The employer and the individual apprentice must be registered in a program, which has received prior approval, by the DOL. Any employer, who employs an apprentice and is found to be in violation of this provision, shall be required to pay said apprentice the full journeyman scale.

For questions call (720) 913-5726.

Attachments as listed above.



General Decision Number: CO170030 02/03/2017 CO30

Superseded General Decision Number: CO20160030

State: Colorado

Construction Type: Building

County: Denver County in Colorado.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Number	Publication	Date
	01/06/2017	
	01/13/2017	
	01/27/2017	
	02/03/2017	
	Number	01/06/2017 01/13/2017 01/27/2017

ASBE0028-002 07/01/2016

11000000000000000		
	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation)	\$ 29.73	13.93
CARP0055-002 11/01/2016		
	Rates	Fringes
CARPENTER (Drywall Hanging Only)	\$ 26.25	8.64
CARP1607-001 06/01/2016		
	Rates	Fringes
MILLWRIGHT	\$ 31.38	12.70
* ELECO068-012 01/01/2017		

^{*} ELEC0068-012 01/01/2017

	Rates	Fringes
ELECTRICIAN (Includes Low Voltage Wiring)	\$ 33.85	14.09
ELEV0025-001 01/01/2017		
	Rates	Fringes
ELEVATOR MECHANIC	\$ 42.35	31.58
FOOTNOTE: a.Vacation: 6%/under 5 years all hours worked. 8%/over 5 rate for all hours worked. b. PAID HOLIDAYS: New Year's Day; Labor Day; Veterans' Day after Thanksgiving Day; and	years based o s Day; Memoria y; Thanksgivir	on regular hourly al Day; Independence ng Day; the Friday
ENGI0009-017 10/23/2013		
	Rates	Fringes
POWER EQUIPMENT OPERATOR (Crane) 141 tons and over 50 tons and under 51 to 90 tons 91 to 140 tons	\$ 24.88	9.15 9.15 9.15 9.15
IRON0024-009 06/01/2015		
	Rates	Fringes
IRONWORKER, ORNAMENTAL	\$ 25.05	11.14
IRON0024-010 06/01/2015		
	Rates	Fringes
IRONWORKER, STRUCTURAL		11.14
PAIN0079-006 08/01/2016		
	Rates	Fringes
PAINTER (Brush, Roller and Spray; Excludes Drywall Finishing/Taping)		7.91
PAIN0079-007 08/01/2016		
	Rates	Fringes
DRYWALL FINISHER/TAPER	\$ 21.05	7.91

PAIN0419-001 07/01/2016		
	Rates	Fringes
SOFT FLOOR LAYER (Vinyl and Carpet)	\$ 20.00	10.83
PAIN0930-002 07/01/2016		
	Rates	Fringes
GLAZIER	\$ 31.02	8.62
PLUM0003-009 06/01/2016		
	Rates	Fringes
PLUMBER (Excludes HVAC Duct, Pipe and Unit Installation)	\$ 38.43	15.19
PLUM0208-008 06/01/2016		
	Rates	Fringes
PIPEFITTER (Includes HVAC Pipe and Unit Installation; Excludes HVAC Duct Installation)	\$ 36.03	13.39
SFC00669-002 04/01/2016		
	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers)	\$ 35.43	19.50
SHEE0009-004 07/01/2016		
	Rates	Fringes
SHEET METAL WORKER (Includes HVAC Duct Installation; Excludes HVAC Pipe and Unit	A 20 FC	15.06
Installation)		15.96
SUCO2013-006 07/31/2015	D .	-
DDIOWIAVED	Rates	Fringes
BRICKLAYER	\$ 21.96	0.00
CARPENTER (Acoustical Ceiling Installation Only)	\$ 22.40	4.85
CARPENTER (Metal Stud Installation Only)	\$ 17.68	0.00

CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud	
Installation\$ 21.09	6.31
CEMENT MASON/CONCRETE FINISHER\$ 20.09	7.03
LABORER: Common or General\$ 14.49	5.22
LABORER: Mason Tender - Brick\$ 15.99	0.00
LABORER: Mason Tender - Cement/Concrete\$ 16.00	0.00
LABORER: Pipelayer \$ 16.96	3.68
OPERATOR: Backhoe/Excavator/Trackhoe\$ 20.78	5.78
OPERATOR: Bobcat/Skid Steer/Skid Loader\$ 19.10	3.89
OPERATOR: Grader/Blade\$ 21.50	0.00
ROOFER\$ 16.56	0.00
TRUCK DRIVER: Dump Truck\$ 17.34	0.00
WATERPROOFER\$ 12.71	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Office of Human Resources Supplemental rates (Specific to the Denver projects)

Supp #101, Date: 11-28-2016

Classification		<u>Base</u>	<u>Fringe</u>
Boilermakers		\$30.97	\$21.45
Iron Worker, Reinforcing		\$18.49	\$3.87
Journeyman Tile Setter		\$26.83	\$8.48
Laborers: Concrete Saw		\$13.89	-
Paper Hanger		\$20.15	\$6.91
Plasters		\$24.60	\$12.11
Plaster Tenders		\$10.79	-
Power Equipment Operators (Concrete Mixers):			
	Less than 1 yd	\$23.67	\$10.67
	1 yd and over	\$23.82	\$10.68
Power Equipment Operators:			
	Loader up to and incl 6 cu		
	yd	\$23.67	\$10.67
	Motor Grader	\$23.97	\$10.70
	Roller	\$23.67	\$10.67
	Drillers	\$23.97	\$10.70
	Loaders over 6 cu yd	\$23.82	\$10.68
	Oilers	\$22.97	\$10.70
	Mechanic	\$18.48	
Tile Finisher-Floor Grinder- Base Grinder		\$20.87	\$8.42
Truck Drivers	Flatbed	\$19.14	\$10.07
_	Semi	\$19.48	\$10.11

- Caulkers—Receive rate prescribed for craft performing operation to which caulking is incidental .i.e. glazier, painter, brick layer, cement mason.
- Use the "Carpenters, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud Installation" rates published by the Federal Davis-Bacon rates for batt insulation, pre-stress concrete and tilt up concrete walls.
- Use the "Laborer—Common", for General Housekeeping, Demolition, Final Cleanup and Indoor Fence Installer.
- Trade classification workers cannot be classified as common laborers for performing incidental cleanup from the installation of their craft. Common Laborers perform final cleanup of the entire jobsite.
- Go to www.denvergov.org/Auditor to view the Prevailing Wage Clarification Document.
- See Denver City Auditor's Office Prevailing Wage Clarification of Determinations 2015 Prevailing Wage Section Clarification of Determinations for list of complete classification uses at Denvergov.org/Auditor.

Office of Human Resources

Denver's Human Resource Agency

201 W. Colfax, Department 412
Denver, CO 80202
p: 720.913.5751
f: 720.913.5720
www.denvergov.org/csa



TO: All Users of the City of Denver Prevailing Wage Schedules

FROM: Susan Keller, Human Resources Technician

DATE: February 6, 2017

SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised, prevailing wage rates for some building, heavy, and highway construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor in accordance with the Davis-Bacon Act.

The effective date for this publication will be **Friday**, **February 03**, **2017** and applies to the City and County of Denver for **HEAVY CONSTRUCTION PROJECTS** in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO170012 Superseded General Decision No. CO20160012 Modification No. 2 Publication Date: 02/03/2017 (8 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to, and individually registered in, a bona fide apprenticeship program registered with the U.S. Department of Labor (DOL). The employer and the individual apprentice must be registered in a program, which has received prior approval, by the DOL. Any employer, who employs an apprentice and is found to be in violation of this provision, shall be required to pay said apprentice the full journeyman scale.

For questions please call (720) 913-5726.

Attachments as listed above.



General Decision Number: CO170012 02/03/2017 CO12

Superseded General Decision Number: CO20160012

State: Colorado

Construction Type: Heavy

Counties: Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo and Weld Counties in Colorado

Counties in Colorado.

HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/06/2017 1 01/20/2017 2 02/03/2017

ASBE0028-001 07/01/2016

Rates Fringes

Asbestos Workers/Insulator
(Includes application of all insulating materials, protective coverings, coatings and finishings to all types of mechanical

systems).....\$ 29.73

BRC00007-004 01/01/2017

ADAMS, ARAPAHOE, BOULDER, BROOMFIELD, DENVER, DOUGLAS AND JEFFERSON COUNTIES

Rates Fringes

BRICKLAYER.....\$ 26.62 7.99

BRC00007-006 05/01/2016

EL PASO AND PUEBLO COUNTIES

Rates Fringes

BRICKLAYER	.\$ 24.95	9.39
ELEC0012-004 09/01/2016		
PUEBLO COUNTY		
	Rates	Fringes
ELECTRICIAN Electrical contract over \$1,000,000 Electrical contract under		11.00+3%
\$1,000,000	.\$ 24.85 	11.00+3%
* ELEC0068-001 01/01/2017		
ADAMS, ARAPAHOE, BOULDER, BROOMF JEFFERSON, LARIMER, AND WELD COU		, DOUGLAS,
	Rates	Fringes
ELECTRICIAN	.\$ 33.85	14.09
ELEC0111-001 01/01/2016		
	Rates	Fringes
Line Construction: Groundman Line Equipment Operator Lineman and Welder	.\$ 29.40	22.25%+\$5.45
ELEC0113-002 06/01/2015		
EL PASO COUNTY		
	Rates	Fringes
ELECTRICIAN	.\$ 30.00	14.95
ELEC0969-002 06/01/2015		
MESA COUNTY		
	Rates	Fringes
ELECTRICIAN	.\$ 24.00	7.92
ENGI0009-001 10/23/2013		
	Rates	Fringes
Power equipment operators: Blade: Finish	.\$ 24.73 .\$ 24.73 .\$ 24.88 .\$ 25.04 .\$ 25.19 .\$ 25.97 .\$ 24.37	9.15 9.15 9.15 9.15 9.15 9.15 9.15 9.15

Oiler Scraper: Single bowl	\$ 24.01	9.15
under 40 cubic yards Scraper: Single bowl, including pups 40 cubic	\$ 24.88	9.15
yards and over and tandem bowls	\$ 25.04 \$ 24.88	9.15 9.15
IRON0024-003 11/01/2013		
	Rates	Fringes
Ironworkers:Structural		18.77
LABO0086-001 05/01/2009		
	Rates	Fringes
Laborers: Pipelayer	\$ 18.68	6.78
PLUM0003-005 06/01/2016		
ADAMS, ARAPAHOE, BOULDER, BROOJEFFERSON, LARIMER AND WELD CO		, DOUGLAS,
	Rates	Fringes
PLUMBER		15.19
PLUM0058-002 07/01/2016		
EL PASO COUNTY		
	Rates	Fringes
Plumbers and Pipefitters	\$ 35.60	13.65
PLUM0058-008 07/01/2016		
PUEBLO COUNTY		
	Rates	Fringes
Plumbers and Pipefitters	\$ 35.60	13.65
PLUM0145-002 07/01/2016		
MESA COUNTY		
	Rates	Fringes
Plumbers and Pipefitters		11.70
PLUM0208-004 06/01/2015		
ADAMS, ARAPAHOE, BOULDER, BROC	MFIELD, DENVER	, DOUGLAS,

ADAMS, ARAPAHOE, BOULDER, BROOMFIELD, DENVER, DOUGLAS, JEFFERSON, LARIMER AND WELD COUNTIES

	Rates	Fringes
PIPEFITTER	.\$ 35.35	13.39
SHEE0009-002 07/01/2016		
	Rates	Fringes
Sheet metal worker		15.96
TEAM0455-002 07/01/2015		
	Rates	Fringes
Truck drivers: Pickup Tandem/Semi and Water		4.02 4.02
SUCO2001-006 12/20/2001		
	Rates	Fringes
BOILERMAKER	.\$ 17.60	
Carpenters: Form Building and Setting All Other Work		2.74 3.37
Cement Mason/Concrete Finisher	.\$ 17.31	2.85
IRONWORKER, REINFORCING	.\$ 18.83	3.90
Laborers: Common	.\$ 8.91	2.92 3.80 3.21
Painters: Brush, Roller & Spray	.\$ 15.81	3.26
Power equipment operators: Backhoe Front End Loader Skid Loader	.\$ 17.24	2.48 3.23 4.41

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Office of Human Resources Supplemental rates

(Specific to the Denver Projects) (Supp #74, Date: 02-03-2012)

Classification		Base	<u>Fringe</u>
Ironworkers (Ornamental)		\$24.80	\$10.03
Laborers: Janitors/Yardmen		\$17.68	\$8.22
Laborers:			
	GROUP 1	\$18.18	\$8.27
	GROUP 2	\$21.59	\$8.61
Laborers: (Tunnel)			
, ,	GROUP 1	\$18.53	\$8.30
	GROUP 2	\$18.63	\$8.31
	GROUP 3	\$19.73	\$8.42
	GROUP 4	\$21.59	\$8.61
	GROUP 5	\$19.68	\$8.42
Laborers (Removal of Asbestos)		\$21.03	\$8.55
Line Construction:			
	Lineman, Gas Fitter/Welder	\$36.88	\$9.55
	Line Eq Operator/Line Truck		
	Crew	\$25.74	\$8.09
Millwrights		\$28.00	\$10.00
Power Equipment Operators			
(Tunnels Above and Below			
Ground, shafts and raises):	ODOLID 4	005.40	04004
	GROUP 1	\$25.12	\$10.81
	GROUP 2	\$25.47	\$10.85
	GROUP 3	\$25.57	\$10.86
	GROUP 4	\$25.82	\$10.88
	GROUP 5	\$25.97	\$10.90
	GROUP 6	\$26.12	\$10.91
	GROUP 7	\$26.37	\$10.94
Power Equipment Operators:			
	GROUP 1	\$22.97	\$10.60
	GROUP 2	\$23.32	\$10.63
	GROUP 3	\$23.67	\$10.67
	GROUP 4	\$23.82	\$10.68
	GROUP 5	\$23.97	\$10.70
	GROUP 6	\$24.12	\$10.71
	GROUP 7	\$24.88	\$10.79
Truck Drivers:			
	GROUP 1	\$18.42	\$10.00
	GROUP 2	\$19.14	\$10.07
	GROUP 3	\$19.48	\$10.11
	GROUP 4	\$20.01	\$10.16
	GROUP 5	\$20.66	\$10.23
	GROUP 6	\$21.46	\$10.31

<u>POWER EQUIPMENT OPERATOR CLASSIFICATIONS</u> (TUNNELS ABOVE AND BELOW GROUND, SHAFTS, AND RAISES):

GROUP 1 - Brakeman

GROUP 2 - Motorman

GROUP 3 - Compressor

GROUP 4 - Air Tractors; Grout Machine; Gunnite Machine; Jumbo Form

GROUP 5 - Concrete Placement Pumps; Mucking Machines and Front End Loaders, Underground,

Slusher; Mine Hoist Operator; Mechanic

GROUP 6 - Mechanic Welder

GROUP 7 - Mole

NOTE: Any equipment listed below being used in tunnel work, below or above ground shall be paid not less than \$2.00 per hour above the listed wage rates.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1 - Air compressor, brakeman, drill operator - smaller than Watson 2500 and similar, operators of 5 or more light plants, welding machines, generators, single unit conveyor, pumps, vacuum well point system, tractor, under 70 hp with or without attachments compressors, 360 C.F.M. or less.

GROUP 2 - Conveyor, handling **building** materials, ditch witch and similar trenching machine, haulage motor man, pugmill, portable screening plant with or without a spray bar, screening plants, with classifier.

GROUP 3 - Asphalt screed, asphalt plant, backfiller, bituminous spreader or laydown machine; cableway signalman, caisson drill, William MF, similar or larger; C.M.I. and similar, concrete batching plants, concrete finish machine, concrete gang saw on concrete paving, concrete mixer, less than 1 yd., concrete placement pumps, under 8 inches, distributors, bituminous surfaces dozer, drill, diamond or core, drill rigs, rotary, churn, or cable tool, elevating graders, elevator operator, equipment, lubricating and service engineer, grout machine, gunnite machine, hoist, 1 drum, horizontal directional drill operator, sandblasting machine, single unit protable crusher, with or without washer, tie tamper, wheel mounted, tractor, 70 hp and over with or without attachments, trenching machine operator, winch on truck.

GROUP 4 - Cable operated power shovels, draglines, articulated truck operator, clamshells, and backhoes, 5 cubic yards and under, concrete mixer over 1 cubic yard, concrete paver 34E or similar, concrete placement pumps, 8 inches and over, grade checker, hoist, 2 drums, hydraulic backhoe, 3/4 yds and over, loader, over 6 cubic yards, mechanic, mixer mobile, multiple unit portable crusher, with or without washer; pile driver, tractor with side boom, roto- mill and similar, welder.

GROUP 5 - Cable operated power shovels, draglines, clamshells and backhoes over 5 cubic yards, caisson drill Watson 2500 similar or larger, hoist 3 drum or more, mechanic – welder (heavy-duty).

GROUP 6 - Cableway, derrick, quad nine push unit, wheel excavator, belt or elevating loader

GROUP 7 - tower cranes all types

LABORER CLASSIFICATIONS:

GROUP 1 –Erosion Control, Dowel Bars; Fence Erectors; Gabion Basket and Reno mattresses; Signaling, Metal Mesh; Stake Caser; Traffic Control Devices; Tie Bars and Chairs in Concrete; Paving; Waterproofing Concrete; Air, Gas, Hydraulic Tools and Electrical Tool Operators; Barco Hammers; Cutting Torches; drill; diamond and core drills; Core, diamond, air track including but not limited to; Joy, Mustang, PR-143, 220 Gardner-**Denver**, Hydrosonic, and water blaster operator; Chuck Tender; Electric hammers; Jackhammers; Hydraulic Jacks; Tampers; Air Tampers; Automatic Concrete Power Curbing Machines; Concrete Processing Material; Concrete Tender; Operators of concrete saws on pavement (other than gangsaws); Power operated Concrete Buggies; Hot Asphalt Labor; Asphalt Curb Machines; Paving Breakers; Transverse Concrete Conveyor Operator; Cofferdams; Boxtenders; Caisson 8' to 12'; Caisson Over 12'; Jackhammer Operators in Caissons over 12'; Labor applicable to Pipe coating or Wrapping; Pipe Wrappers, Plant and Yard; Relining

Pipe; Hydroliner (a plastic may be used to waterproof); Pipelayer on Underground Bores; Sewer, Water, Gas, Oil Conduit; Enamalers on Pipe, inside and out, Mechanical Grouters; Monitors; Jeep Holiday Detector Men; Pump Operators; Rakers; Vibrators; Hydro- broom, Mixer Man; Gunnite Nozzelmen; Shotcrete Operator; and chain saws, gas and electric; Sand Blaster; Licensed Powdermen; Powdermen and Blaster; Siphons; Signalmen; Dumpman/spotter; Grade Checker.

GROUP 2 - Plug and galleys in dams; Scalers; any work on or off Bridges 40' above the ground performed by Laborers working from a Bos'n Chair, Swing Stage, Life Belt, or Block and Tackle as a safety requirement.

TUNNEL LABORER CLASSIFICATIONS:

GROUP 1 - Outside Laborer - Above ground

GROUP 2 - Minimum Tunnel Laborer, Dry Houseman

GROUP 3 - Cable or Hose Tenders, Chuck Tenders, Concrete Laborers, Dumpmen, Whirley Pump Operators

GROUP 4 - Tenders on Shotcrete, Gunniting and Sand Blasting; Tenders, core and Diamond Drills; Pot Tenders

GROUP 5 - Collapsible Form Movers and Setters; Miners; Machine Men and Bit Grinders; Nippers; Powdermen and Blasters; Reinforcing Steel Setters; Timbermen (steel or wood tunnel support, including the placement of sheeting when required); and all Cutting and Welding that is incidental to the Miner's work; Tunnel Liner Plate Setters; Vibrator Men, Internal and External; Unloading, stopping and starting of Moran Agitator Cars; Diamond and Core Drill Operators; Shotcrete operator; Gunnite Nozzlemen; Sand Blaster; Pump Concrete Placement Men.

<u>Laborers (Removal of Asbestos)</u> Removal or encapsulation of Asbestos Material (including removal of asbestos from mechanical systems that are going to be scraped) and work involving the removal, handling, or dealing with toxic or hazardous waste.

TRUCK DRIVER CLASSIFICATIONS:

GROUP 1 - Sweeper Truck, Flat Rack Single Axle and Manhaul, Shuttle Truck or Bus.

GROUP 2 - Dump Truck Driver to and including 6 cubic yards, Dump Truck Driver over 6 cubic yards to and including 14 cubic yards, Straddle Truck Driver, Liquid and Bulk Tankers Single Axle, Euclid Electric or Similar, Multipurpose Truck Specialty and Hoisting.

GROUP 3 - Truck Driver Snow Plow.

GROUP 4 - Cement Mixer Agitator Truck over 10 cubic yards to and including 15 cubic yards.

WELDERS: Receive rate prescribed for craft performing operation to which welding is incidental.

Career Service Authority



201 W. Colfax, Department 412 Denver, CO 80202 p: 720.913.5751 f: 720.913.5720 www.denvergov.org/csa

TO: All Users of the City of Denver Prevailing Wage Schedules

FROM: Susan Keller, Human Resources Technician

DATE: Friday, January 27, 2017

DENVER

SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised, prevailing wage rates for some building, heavy, and highway construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Authority Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor in accordance with the Davis-Bacon Act.

The effective date for this publication is **Friday**, **January 27**, **2017** and applies to the City and County of Denver for **HIGHWAY CONSTRUCTION PROJECTS** in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO170019
Superseded General Decision No. CO20160019
Modification No. 1
Publication Date: 1/27/2017
(8 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to, and individually registered in, a bona fide apprenticeship program registered with the U.S. Department. Of Labor (DOL). The employer and the individual apprentice must be registered in a program, which has received prior approval, by the DOL. Any employer, who employs an apprentice and is found to be in violation of this provision, shall be required to pay said apprentice the full journeyman scale.

For questions call (720) 913-5726.

Attachments as listed above.



General Decision Number: CO170019 01/27/2017 CO19

Superseded General Decision Number: CO20160019

State: Colorado

Construction Type: Highway

Counties: Denver and Douglas Counties in Colorado.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/06/2017 1 01/27/2017

* CARP9901-008 11/01/2016

	Rates	Fringes
CARPENTER (Form Work Only)	\$ 25.50	7.47
ELEC0068-016 03/01/2011		

Rates

Fringes

TRAFFIC SIGNALIZATION:		
Traffic Signal Installation		
Zone 1\$	26.42	4.75%+8.68
Zone 2\$	29.42	4.75%+8.68

TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:

Colorado Springs - Nevada & Bijou

Denver - Ellsworth Avenue & Broadway

Ft. Collins - Prospect & College

Grand Junction - 12th & North Avenue

Pueblo - I-25 & Highway 50

All work outside of these areas shall be paid Zone 2 rates.

ENGI0009-008 10/23/2013

POWER EQUIPMENT OPERATOR: (3)-Hydraulic Backhoe (Wheel Mounted, under 3/4 yds), Hydraulic Backhoe (Backhoe/Loader combination), Drill Rig Caisson (smaller than Watson 2500 and similar),		
Loader (up to and including 6 cu. yd.)\$ (3)-Loader (under 6 cu. yd.)	24.73	9.15
Denver County\$ (3)-Motor Grader (blade- rough)	24.73	9.15
Douglas County\$ (4)-Crane (50 tons and under), Scraper (single	24.73	9.15
bowl, under 40 cu. yd)\$ (4)-Loader (over 6 cu. yd)	24.88	9.15
Denver County\$ (5)-Drill Rig Caisson (Watson 2500 similar or larger), Crane (51-90 tons), Scraper (40 cu.yd	24.88	9.15
<pre>and over),\$ (5)-Motor Grader (blade- finish)</pre>	25.04	9.15
Douglas County\$ (6)-Crane (91-140 tons)\$		9.15 9.15
SUCO2011-004 09/15/2011		
	Rates	Fringes
		Fringes 5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$	19.27	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$ Douglas\$	19.27	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$ Douglas\$	19.27 20.18 18.75	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75	5.08 5.75 3.00
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$ Douglas\$	19.27 20.18 18.75 35.13	5.08 5.75 3.00
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13	5.08 5.75 3.00
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$ Douglas\$ ELECTRICIAN (Excludes Traffic Signal Installation)\$ FENCE ERECTOR (Excludes Link/Cyclone Fence Erection)\$ GUARDRAIL INSTALLER\$ HIGHWAY/PARKING LOT STRIPING:Painter Denver\$ Douglas\$ IRONWORKER, REINFORCING (Excludes Guardrail	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.21 3.21
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20

Installation)\$	18.22	6.01
I ADODED		
LABORER Asphalt Raker\$	16 29	4.25
Asphalt Shoveler\$		4.25
Asphalt Spreader\$		4.65
Common or General	10.30	1.05
Denver\$	16.76	6.77
Douglas\$		4.25
Concrete Saw (Hand Held)\$	16.29	6.14
Landscape and Irrigation\$	12.26	3.16
Mason Tender-		
Cement/Concrete		
Denver\$		4.04
Douglas\$	16.29	4.25
Pipelayer		
Denver\$		2.41
Douglas\$		2.18
Traffic Control (Flagger)\$	9.55	3.05
Traffic Control (Sets		
Up/Moves Barrels, Cones,		
Install Signs, Arrow Boards and Place		
Stationary Flags)(Excludes		
Flaggers)\$	12 /2	3.22
riaggeis/	12.43	3.44
PAINTER (Spray Only)\$	16 99	2.87
immillar (oping only)	10.77	2.07
POWER EQUIPMENT OPERATOR:		
Asphalt Laydown		
Denver\$	22.67	8.72
Douglas\$		8.47
Asphalt Paver		
Denver\$	24.97	6.13
Douglas\$	25.44	3.50
Asphalt Roller		
Denver\$		7.55
Douglas\$		6.43
Asphalt Spreader\$	22.67	8.72
Backhoe/Trackhoe	00.00	
Douglas\$		6.00
Bobcat/Skid Loader\$		4.28
Boom\$	22.07	8.72
Broom/Sweeper Denver\$	22 47	8.72
Douglas\$		8.22
Bulldozer\$		5.59
Concrete Pump\$		5.21
Drill	21.00	3.21
Denver\$	20.48	4.71
Douglas\$		2.66
Forklift\$		4.68
Grader/Blade		
Denver\$	22.67	8.72
Guardrail/Post Driver\$	16.07	4.41
Loader (Front End)		
Douglas\$	21.67	8.22
Mechanic		
Denver\$		8.72
Douglas\$	23.88	8.22
Oiler		

Denver\$ Douglas\$ Roller/Compactor (Dirt and Grade Compaction)		8.41 7.67
Denver\$ Douglas\$ Rotomill\$ Screed	22.78	5.51 4.86 4.41
Denver\$ Douglas\$ Tractor\$	29.99	8.38 1.40 2.95
TRAFFIC SIGNALIZATION: Groundsman		
Denver\$ Douglas\$		3.41 7.17
TRUCK DRIVER Distributor		
Denver\$ Douglas\$ Dump Truck		5.82 5.27
Denver\$ Douglas\$ Lowboy Truck\$ Mechanic\$	16.39 17.25	5.27 5.27 5.27 3.50
Multi-Purpose Specialty & Hoisting Truck		
Denver\$ Douglas\$ Pickup and Pilot Car		3.17 2.88
Denver\$ Douglas\$ Semi/Trailer Truck\$	16.43	3.77 3.68 4.13
Truck Mounted Attenuator\$ Water Truck		3.22
Denver\$ Douglas\$		5.27 2.58

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Office of Human Resources Supplemental rates

(Specific to the Denver Projects) (Supp 35, Date: 01-13-2012)

<u>Classification</u>		<u>Base</u>	<u>Fringe</u>
Millwrights		\$28.00	\$10.00
Line Construction:			
	Lineman, Gas Fitter/Welder	\$36.88	\$9.55
	Line Eq Operator/Line Truck		
	Crew	\$25.74	\$8.09
Power Equipment Operators			
(Tunnels Above and Below			
Ground, shafts and raises):			
	GROUP 1	\$25.12	\$10.81
	GROUP 2	\$25.47	\$10.85
	GROUP 3	\$25.57	\$10.86
	GROUP 4	\$25.82	\$10.88
	GROUP 5	\$25.97	\$10.90
	GROUP 6	\$26.12	\$10.91
	GROUP 7	\$26.37	\$10.94
Power Equipment Operators:			
	GROUP 1	\$22.97	\$10.60
	GROUP 2	\$23.32	\$10.63
	GROUP 3	\$23.67	\$10.67
	GROUP 4	\$23.82	\$10.68
	GROUP 5	\$23.97	\$10.70
	GROUP 6	\$24.12	\$10.71
	GROUP 7	\$24.88	\$10.79
		·	·
Ironworkers (Ornamental)		\$24.80	\$10.03
Laborers (Removal of		·	•
Asbestos)		\$21.03	\$8.55
Plumbers		\$30.19	\$13.55
Pipefitters		\$30.45	\$12.85
Truck Drivers:			
	GROUP 1	\$18.42	\$10.00
	GROUP 2	\$19.14	\$10.07
	GROUP 3	\$19.48	\$10.11
	GROUP 4	\$20.01	\$10.16
	GROUP 5	\$20.66	\$10.23
	GROUP 6	\$21.46	\$10.31
			-

<u>POWER EQUIPMENT OPERATOR CLASSIFICATIONS</u> (TUNNELS ABOVE AND BELOW GROUND, SHAFTS, AND RAISES):

GROUP 1 - Brakeman

GROUP 2 - Motorman

GROUP 3 - Compressor

GROUP 4 - Air Tractors; Grout Machine; Gunnite Machine; Jumbo Form

GROUP 5 - Concrete Placement Pumps; Mucking Machines and Front End Loaders, Underground, Slusher; Mine Hoist Operator; Mechanic

GROUP 6 - Mechanic Welder

GROUP 7 - Mole

NOTE: Any equipment listed below being used in tunnel work, below or above ground shall be paid not less than \$2.00 per hour above the listed wage rates.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1 - Air compressor, brakeman, drill operator -smaller than Watson 2500 and similar, operators of 5 or more light plants, welding machines, generators, single unit conveyor, pumps, vacuum well point system, tractor, under 70 hp with or without attachments compressors, 360 C.F.M. or less

GROUP 2 - Conveyor, handling building materials, ditch witch and similar trenching machine, forklift, haulage motor man, pugmill, portable screening plant with or without a spray bar, screening plants, with classifier, self-propelled roller, rubber-tires under 5 tons.

GROUP 3 - asphalt plant, backfiller; cableway signalman; C.M.I. and similar, concrete batching plants, concrete finish machine, concrete gang saw on concrete paving, concrete mixer, less than 1 yd., under 8 inches, distributors, bituminous surfaces dozer, drill, diamond or core, elevating graders, elevator operator, lubricating and service engineer, grout machine, gunnite machine, hoist, 1 drum, horizontal directional drill operator, hydraulic backhoes; road stabilization machine, sandblasting Machine, single unit portable crusher, with or without washer, Tie tamper, wheel mounted, trenching machine operator, winch on truck.

GROUP 4 - Cable operated power shovels, draglines, articulated truck operator, clamshells, 5 cubic yards and under, concrete mixer over 1 Cubic yard, concrete pavers 34E or similar, grade Checker, hoist, 2 drums, mechanic, mixer mobile, Portable crusher, with or without washer; tractor with sideboom, roto-M ill and similar, welder.

GROUP 5 - Cable operated power shovels, draglines, clamshells and Backhoes over 5 cubic yards, caisson drill Watson 2500 similar or larger, motor grader blade-finish, hoist 3 drum or more.

GROUP 6 - Cableway, derrick, quad nine push unit, wheel excavator, belt or elevating loader.

GROUP 7 - tower cranes all types.

TRUCK DRIVER CLASSIFICATIONS:

GROUP 1 - Greasemen, Servicemen and Ambulance Drivers, Battery Men, Shuttle Truck or Bus, Flat Rack Tandem Axle.

GROUP 2 - Fork Lift Driver, Straddle Truck Driver, Lumber Carrier, Liquid and Bulk Tankers Single Axle, Combination, Euclid Electric or Similar, Specialty and Hoisting, Truck Drivers Fuel Truck, Grease Truck, Combination Fuel and Grease.

GROUP 3 - Truck Driver Snow Plow, Truck Driver Dump or Type Jumbo and similar type equipment.

GROUP 4 - Cement Mixer Agitator Truck over 10 cubic yards to and including 15 cubic yards, Tire Man, Cab Operated Distributor Truck Driver.

GROUP 5 - Heavy Duty Diesel Mechanic, Body Man, Welders or Combination Men.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Federal Aviation Administration Required Contract Provisions

ALL CONTRACTS - NON-AIP FUNDED

Federal laws and regulations require that recipients of federal assistance (Sponsors) include specific contract provisions in certain contracts, requests for proposals, or invitations to bid.

Certain provisions must be included in all sponsor contracts, regardless of whether or not the contracts are federally-funded. This requirement was established when a sponsor accepted the Airport Improvement Program (AIP) grant assurances.

As used in these Contract/Permit Provisions, "Sponsor" means The City and County of Denver, Department of Aviation, and "Contractor" or "Consultant" or "Permittee" means the Party of the Second Part as set forth in the Permit.

GENERAL CIVIL RIGHTS PROVISIONS

The Permittee agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Permittee and subtier contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

Compliance with Nondiscrimination Requirements

During the performance of this contract, the Permittee, for itself, its assignees, and successors in interest (hereinafter referred to as the "Permittee") agrees as follows:

- Compliance with Regulations: The Permittee (hereinafter includes consultants) will comply
 with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be
 amended from time to time, which are herein incorporated by reference and made a part of this
 contract.
- 2. **Non-discrimination:** The Permittee, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Permittee will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Permittee for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Permittee of the Permittee's obligations under this contract and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The Permittee will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its

Federal Aviation Administration Required Contract Provisions

ALL CONTRACTS - NON-AIP FUNDED

books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of a Permittee is in the exclusive possession of another who fails or refuses to furnish the information, the Permittee will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

- 5. **Sanctions for Noncompliance:** In the event of a Permittee's noncompliance with the Non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Permittee under the contract until the Permittee complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The Permittee will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Permittee will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Permittee becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Permittee may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Permittee may request the United States to enter into the litigation to protect the interests of the United States.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Permittee, for itself, its assignees, and successors in interest (hereinafter referred to as the "Permittee") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;

Federal Aviation Administration Required Contract Provisions

ALL CONTRACTS - NON-AIP FUNDED

- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, subrecipients and Permittees, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority
 Populations and Low-Income Populations, which ensures non-discrimination against minority
 populations by discouraging programs, policies, and activities with disproportionately high and
 adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English
 Proficiency, and resulting agency guidance, national origin discrimination includes discrimination
 because of limited English proficiency (LEP). To ensure compliance with Title VI, you must
 take reasonable steps to ensure that LEP persons have meaningful access to your programs (70
 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

The *Permittee* has full responsibility to monitor compliance to the referenced statute or regulation. The *Permittee* must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division

OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Permittee must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to

Federal Aviation Administration Required Contract Provisions

ALL CONTRACTS - NON-AIP FUNDED

the employee. The Permittee retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Permittee must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.