Meeting Date: **11/5/2013**

Report Type: Review

Report ID: 2013-00815

City of SACRAMENTO 07

City Council Report
915 I Street, 1st Floor
www.CityofSacramento.org

Title: (Agreement/Contract for Information and Review) Contract Award: Parking Meter Procurement

Location: Citywide

Issue: Resolution No. 2013-0367 (Council Rules of Procedure) requires additional posting time for labor agreements and agreements greater than $1,000,000. The City's current parking meters are obsolete and in need of replacement to meet the City's Parking Modernization goals and objectives.

Recommendation: Review report 1) awarding purchase of 6,000 single-space parking meters, for an amount not to exceed $5,577,264, per the proposal from IPS Group, Inc.; 2) awarding contract to IPS Group, Inc. for services, maintenance, and parts for 6,000 single-space parking meters, for an amount not to exceed $4,076,625; 3) authorizing the City Treasurer or his designee to secure financing for the acquisition of the parking meters and approve, execute, and deliver related financing documents; 4) declaring the City's official intent to use proceeds of an obligation, i.e. the proceeds obtained through the Master Agreement, to reimburse itself for the original expenditures; 5) authorizing the City Manager or his designee to amend the Public Works' department budget to reflect the procurement and financing as secured by the City Treasurer or his designee; 6) authorizing the City Manager or his designee to execute the purchases specified above provided sufficient funds are available in the budget adopted for the applicable fiscal year; and 7) continue to November 12, 2013 for adoption.

Contact: Mike King, Program Specialist (916) 808-1172; Matt Eierman, Interim Parking Services Manager (916) 808-5849; Department of Public Works

Presenter: None

Department: Public Works Department

Division: Parking Meter Collections

Dept ID: 15001531

Attachments:

1-Description/Analysis

2-Background

3-Exhibit A-IPS-Meters NonProf Serv Agrmt

4-Exhibit B-Bank of America Term Sheet

5-Exhibit C-IPS Group Response to Bid Transaction #P13151171027 (redacted)

City Attorney Review

Approved as to Form
Gerald Hicks
10/29/2013 3:26:13 PM

City Treasurer Review

Reviewed for Impact on Cash and Debt
Russell Fehr
10/21/2013 10:26:56 AM

Approvals/Acknowledgements

Department Director or Designee: Jerry Way - 10/28/2013 8:53:33 AM

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Description/Analysis

Issue Detail: On May 30, 2013, in response to the City's Parking Modernization goals, staff released a Request for Proposals (RFP) for new single-space parking meters to replace the City's aging and obsolete parking meters. After a thorough selection process, IPS Group, Inc., of San Diego was selected as the most qualified and responsive vendor.

Policy Considerations: This recommended action is consistent with:

1. The Central City Parking Master Plan goal to leverage technology to use time limits, rates, and enforcement to manage parking supply more efficiently.
2. The City of Sacramento 2030 General Plan's policy, M 6.1.5, to implement parking management tools (including emerging technology) that maximize on-street parking turnover, where appropriate.
3. City Council's direction to staff to pursue parking modernization through technology/rate enhancements.

Economic Impacts: None.

Environmental Considerations:

California Environmental Quality Act (CEQA): The project is categorically exempt from CEQA pursuant to CEQA Guidelines section 15301. The project involves the replacement of existing facilities. The new facilities are located on the same site and will have substantially the same purpose and capacity as the existing facilities.

Sustainability Considerations: This action supports the City of Sacramento's sustainability goals to improve and optimize the transportation infrastructure.

Other: None.

Commission/Committee Action: None.

Rationale for Recommendation: On May 30, 2013, the Public Works Department issued RFP No. P13151171027 for Single-Space Parking Meters and Related Services. Proposals were received from IPS Group, Inc., and Duncan Solutions, Inc. (IPS Group's proposal is attached as Exhibit C).

A selection committee comprised of Parking Services staff, Information Technology (IT) staff, and representatives of three key business associations evaluated the responses to the RFP based on vendors'

compliance with technical specifications, written deliverables, sample parking meters, references, and relative experience.

IPS Group, Inc. was selected as the most qualified and responsive vendor to provide the meters and support services that are required for a successful Parking Modernization Program. Significant points considered in reaching this decision include:

- IPS has over 108,000 meters in use throughout North America. The second-highest rated qualified and responsive vendor, Duncan, has a little over 6,000 meters in use throughout North America.
- IPS was the first vendor to market with credit card-enabled single-space meters, and has always been compliant with all Payment Card Industry standards for data security.
- IPS meters are in use in San Francisco, Los Angeles, Santa Monica, Beverly Hills, West Hollywood, Berkeley, Walnut Creek, Newport Beach, Manhattan Beach, San Luis Obispo, in addition to 14 other jurisdictions. These installations account for over 66,000 installed IPS meters.
- IPS is headquartered in San Diego and employs approximately 80 employees within California. Both the manufacturing facilities and data center are located at its headquarters.
- Configuration information for meter behavior can be provided to IPS via files transferred from existing City databases.
- IPS is already capable of sending data we need for parking modernization.
- In our evaluation, installation of the sample IPS mechanisms into our existing housings was very easy and took only a few minutes per meter. The Duncan mechanisms did not fit well into some of the meter housings being used in Sacramento, requiring force and extra time to get them into service.
- The IPS system has substantially more financial and operational reports than what could be provided by the other bidder.
- People who evaluated both bidders' sample meters invariably picked the IPS meter as more user friendly for making payment and determining the amount of time on the meter and when it expires. In particular, parking enforcement staff noted that determining the paid status of the IPS meter is much easier than with the other meter.

- Staff from the parking meter shop indicated that maintenance and repair of the IPS meters is much simpler and straightforward than the other meter.
- IPS offers a parking meter collections solution that provides for significant improvements and added accountability to our collections process.

The proposed procurement will provide for a commodities purchase of up to 6,000 single-space parking meter mechanisms, installation services, extended warranty, additional meter housings, electronic locks for meter vaults and certain parking facilities, an intelligent cash collection solution that provides improved accountability for meter revenue, smart payment cards with a recharge station, and an initial stock of spare parts and supplies. The procurement allows for additional purchases in the future at the proposed pricing levels.

The proposed contract with the vendor will provide the back office service that manages the meters and delivers comprehensive accounting, reporting, analytics, and a live feed of parking transactions; communications between meters, collections, and the back office; credit card gateway fees (separate from credit card merchant account fees), and spare parts at a locked-in rate for future years.

Staff evaluated two alternatives to this procurement:

<u>Alternative 1—Keep the Current Single-Space Meters.</u>

This alternative was rejected because:

- The technology does not support the City's parking modernization efforts.
- The meters are beyond their expected life span, and costs for maintenance continue to escalate.
- The meters do not accept credit cards or mobile payments (pay-by-cell).
- Spare parts are getting more difficult to obtain, as these models have been discontinued by their manufacturers.
- The alkaline batteries must be replaced every six months and hauled away for recycling.
- The meters must be collected on a rigid schedule, as we have no way to determine the amounts deposited into the meters since the last collection.

- We have no efficient ways to reconcile between the coins inserted into meters and the amounts deposited into the bank.
- When the meters go out of service, we are not informed until the next preventative maintenance or when we are notified by a customer after a parking citation is issued.
- We have no method to track the use or abuse of the stored-value in smart parking cards effectively.

Alternative 2—Replace Single-Space Meters With Multi-Space Pay Stations.

This alternative was rejected because:

- Acquisition costs and monthly service costs are no lower than with single-space meters.
- Customers' number one complaint about on-street parking is the need to walk to the pay station and then return to the vehicle before continuing to their destinations; some customers avoid payment and take their chances on a citation.
- Additionally, customers have told us that they did not see the pay station and they claim they were unaware that they were required to pay for their parking.
- When a pay station is malfunctioning, it affects multiple parking spots; even though other pay stations may be nearby, many customers will risk getting a citation rather than walking the extra distance.
- Pay-and-Display meters were installed in 2006-2008 because they were the only solution to offer secure credit card convenience; today, we have more customer-friendly options.
- Unless the pay station is used in a "pay by space" mode, the pay station system will not provide the occupancy data needed for parking modernization; a "pay by space" mode will require painting space numbers on all on-street parking spaces (which introduces additional maintenance costs).
- Enforcement with multi-space meters is more challenging to determine the paid status for each vehicle or space; with single-space meters, there is a clear visual indicator of the status on the meter.

In summary, deployment of the new meters will provide the following benefits to parking customers in Sacramento:

- Increased customer convenience, with multiple methods to pay, future integration of text messaging capability, and payment at the parking space for the core parking areas (Downtown, Midtown, and Old Sacramento)
- Preparation for Parking Modernization
- Added accountability for meter revenue
- Live transaction feed, allowing introduction of a "parking finder" app
- Reduction in maintenance costs (labor, parts)
- Immediate notification of broken meters, so they can be repaired and placed back in service immediately
- Remote administration of all meters from one location
- Immediate reports for financials and audits
- Full tracking of stored-value in smart parking cards, from the point of initial purchase until the funds on the card have been spent, including any interim recharges

In a separate report to Council, Parking Services staff will recommend an upgrade to the AutoVu system used by Parking Enforcement. This technology upgrade will cost approximately $400,000. To obtain the best financing arrangement, staff recommends the financing for the AutoVu upgrade be included in the financing for the parking meters.

Financial Considerations:

Capital costs

Currently, about 3,825 single-space meters are deployed within the City, covering 70% of the metered spaces. The first phase will replace all of those over a period of six months. Additionally, approximately 175 extra mechanisms should be obtained as spares to swap in case of malfunctions in the field. The cost for 4,000 meter mechanisms, along with the Intelligent Cash Collection Solution, electronic locks for meter vaults and certain Parking Services facilities that process revenue, smart cards and the recharge station, and the initial stock of replacement parts will be $3,745,971, including sales tax.

4,000 Parking Meters and Deployment Services	$2,432,887
Intelligent Cash Collection Solution	557,229
Electronic Locks for Meters and Facilities	732,657
Initial Stock of Spare Parts	23,198
	$3,745,971

Staff also proposes an allowance of an additional 2,000 meter mechanisms for future deployment. The additional mechanisms will be purchased as they are needed.

The full cost of the initial 4,000 meters and the additional 2,000 meters is $5,577,265, including sales tax.

6,000 Parking Meters and Deployment Services	$3,674,523
Intelligent Cash Collection Solution	834,040
Electronic Locks for Meters and Facilities	1,036,616
Initial Stock of Spare Parts	32,086
	$5,577,265

Financing and annual costs

The Office of the City Treasurer (CTO) was requested to seek financing options for the purchase and deployment of the 6,000 parking meters, Intelligent Cash Collection Solution, electronic locks, AutoVu upgrades, and spare parts. The CTO submitted a request to Bank of America Public Capital Corp (BofA) and JP Morgan Chase (JPM Chase) to obtain interest rate quotes to finance the meters and related equipment. BofA provided the most cost effective financing option (Exhibit B) for the purchases. Funding for this procurement will be provided by a lease agreement. The source of repayment for the lease financing will be from the parking fund. The terms of the financing arranged by the City Treasurer are as follows:

Approximate Lease Financing Amount:	$6,000,000
Term of Loan:	5 years
Interest Rate:	1.28%*
Estimated Annual Debt Service:	$1,243,000

*The interest rate is set until November 26, 2013. If the transaction is not funded by that date, the interest rate may change.

After purchase of the meters, the vendor will provide maintenance, spare parts, communications, and other services. Once the initial deployment of 4,000 meters is complete, the cost for a minimum installation will be

$2,651,357 for five years' operation (inclusive of sales tax on tangible goods).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Communications & licensing	310,106	413,475	413,475	413,475	413,475	1,964,006
Credit card gateway fees	93,535	124,713	124,713	124,713	124,713	592,387
Meter parts and supplies		14,988	14,988	14,988	14,988	59,953
Other parts and supplies		8,753	8,753	8,753	8,753	35,011
	403,641	561,929	561,929	561,929	561,929	2,651,357

The following points should be noted:

1. The "Communications & licensing" amount is the allowance for a full deployment of all purchased meters; while fewer meters are deployed, the cost will be proportionally lower.
2. The "Credit card gateway fees" assume an industry average number of credit card transactions; if fewer transactions are made by card, this cost also will be proportionally lower.
3. "Meter parts and supplies" is based on the manufacturer's recommended allowance for parts stock to have on hand for field replacements due to normal wear and tear or vandalism.
4. "Other parts and supplies" is an allowance stock to have on hand for the collection solution and electronic locks.
5. The first year cost is lower because:
    a. Initial installation will be done in phases over approximately six months, so the "Communications & licensing" and "Credit card gateway fees" will be lower during the phase-in; and
    b. Initial parts and supplies are included in the capital expenditure to create stock on hand for potential meter repairs. If that stock is not depleted, the purchases in future years will be reduced or eliminated.

Operational costs will be paid as offsets from revenue. The expense budget will be adjusted to include the cost of the contract.

With staff's recommendation to approve procurement of up to 6,000 meter mechanisms, the total not-to-exceed cost for the contracted maintenance, spare parts, communications, and other services, assuming full deployment, is $4,076,623 including sales tax on tangible goods):

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Communications & licensing	478,688	638,250	638,250	638,250	638,250	3,031,688
Credit card "gateway" fees	144,383	192,510	192,510	192,510	192,510	914,423
Meter parts and supplies		21,103	21,103	21,103	21,103	84,412
Other parts and supplies		11,525	11,525	11,525	11,525	46,100
	623,071	863,388	863,388	863,388	863,388	4,076,623

Revenue

In FY2012-13, total meter revenue for nearly 5,500 metered spaces was $3.9 million, of which approximately $1.9 million was collected from the current single-space meters (controlling approximately 70% of metered spaces), and the balance were payments to the Parkeon Pay-and-Display machines (30% of the spaces).

There are several reasons why revenue at the single-space meters was less than half of total revenue, even though single-space meters control the majority of metered parking spaces:

- Single-space meters only take quarters or the City's parking card, thus customers are limited for payment options. If a customer does not have quarters or a parking card, s/he may skip payment or underpay and risk getting a citation.
- Some customers buy time at a Pay-and-Display machine (in many cases, at a 10-hour machine at a maximum rate of $6), and then use that time at one or more single-space meters, for the convenience of credit card purchasing, and/or the bargain of all-day parking for $6. This artificially lowers revenue at single-space meters and inflates it at Pay-and-Display machines. (Once the new meters are deployed, this practice will no longer be permitted.)
- Some single-space meters are located in areas where there is little or no demand for parking, receiving virtually no revenue. These locations will be re-evaluated.

Of the $2 million of revenue from the Pay-and-Display machines, $225,385 was used for communications, credit card gateway fees, and parts and supplies. Parking Services spent over $64,000 in FY13 for parts and supplies for meters.

Without changing any rates, introduction of new meters should see revenues increase for two reasons: multiple payment methods and less downtime. Jurisdictions that have upgraded to smart meters indicate that revenue increased up to 35%. Introduction of multiple payment options means that someone parking at a meter without any coins still has the option of using a credit card or a cell phone. In addition, the same jurisdictions report that after implementation of smart meters, the average payment for a parking session paid by credit card is typically twice the amount paid by coins (often, customers paying by coin will pay only for the time the coins in their possession will allow and hope it is sufficient for their stay, while customers paying with credit card will pad their time so they don't need to rush back to the meter before it expires).

During the initial pilot of the Pay-and-Display stations in Sacramento, revenue at those parking spaces increased by 38%, leading to an 11% increase in revenue in the core parking areas (including Downtown and Midtown).

If the remaining 70% of the metered spaces in the core parking areas are upgraded to modern meters, staff conservatively projects that revenue will increase by 22% in the core parking areas (Downtown and Midtown), based on the 11% increase when one-third of the meters were upgraded in the core parking areas, and by 5% in the outlying areas (mostly 10-hour parking). This would take revenue from $3.9 million to $4.7 million.

Costs and ramifications of not upgrading

Since 2010, the number of work orders for single space meters has averaged around 350 per month, with some months having as many as 480. While we know when a given work order was opened, our current data systems cannot provide any information about the length of time the issue existed prior to the work order creation—this could be weeks if no one has reported the issue. In many cases, Parking Services learns of the issue when a citation is contested.

A single meter, when out of service for just one day, can result in a loss of revenue up to $12.50. Since not all meters are utilized for the full 10-hour enforcement period each day, we assume $6 of revenue loss per day out of service. Assuming an average out-of-service time frame of four days means $100,800 of revenue loss per year.

Average # work orders/month	350
Average # days out-of-service/work order	4
Average revenue/day out-of-service	$6
Average monthly revenue loss/out-of-service	$8,400
Annualizing	12
Annual revenue loss/out-of-service	$100,800

Along with the revenue loss, the staff of the meter shop must respond to each work order and repair the meter. With the other responsibilities of the staff of the meter shop, this level of work orders cannot be sustained. Upgrading to new meters will dramatically reduce revenue loss and lower the number of repair and maintenance calls, while providing a high level of service to customers. In the rare event that a meter does go out of service (including vandalism), the meter shop will be notified immediately so the issue can be addressed and the meter returned to service, perhaps even in the same day, significantly lowering revenue loss due to meter malfunction.

Introduction of the new meters will lead to other cost savings, as well:

- Less maintenance activity and fewer parts replacements, leading to lower maintenance costs
- Considerably fewer battery replacements, as the batteries will be charged via the solar panels (thus, fewer to be transported for recycling)
- Lower costs for handling coins (fewer coins to handle, collection routes optimized for actual coin usage, reduction of in-house counting)
- Increased efficiency in employee scheduling
- With the electronic locks, better security of coins in meter vaults with added accountability for keys and their use, as well as better security of revenue handling in parking facilities

Should the City not upgrade its meter inventory, the meters will continue to age, and they will malfunction with increasing frequency. This means more parts and supplies, as well as more labor hours, will be needed to repair them and return them to service. Along with the increased expense for parts and labor, the City can expect to see revenues decline 5-10% each year as more meters fail. In addition, more staff time will be spent answering and dispatching 311 calls and performing citation adjudication.

Staff estimates that by not making this upgrade, the loss in net revenue for the current metered spaces, over seven years, will be over $10 million.

Emerging Small Business Development (ESBD): The ESBD requirements were held in abeyance since this is a procurement of commodities from vendors in a narrow field and includes specialized, proprietary non-professional services.

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Background Information

Currently, the City of Sacramento has a mix of old on-street parking meters, including over 3,000 various single-space meters that range from eight to 25 years of age and over 300 pay-and-display multi-space meters that are between six and eight years of age. These meters are nearing, or have already surpassed, the end of their useful lives. The current single-space meters only take quarters and manufacturers' proprietary debit cards. The pay-and-display meters were selected to replace one-third of the old single-space meters because, at the time of purchase, they were the only meter that could accept secure credit card payments. Maintenance costs for all these meters are starting to rise, and it is difficult to get parts for the older single-space meters, as the manufacturers are discontinuing support.

Today, all types of meters, including single-space meters, can accept credit card payments. In addition, single-space meters are now solar-powered, have pay-by-phone/texting capabilities, and can be equipped with vehicle detecting sensors.

On August 9, 2012, City Council passed a motion directing staff to pursue parking modernization through technology/rate enhancements, expansion, and legislation. Staff's report to Council at that meeting described technology enhancements, including an upgrade of the on-street parking meters. The newest generation of single-space parking meters accepts credit cards, pay-by-phone, and other non-coin payments; provides up-to-the-minute payment/usage information; supports texting to alert customers to expiring time; allows rate and configuration updates to be made remotely; uses solar power; and can be equipped with vehicle detection sensors. New single-space meters will provide real-time parking statistics, one of the first steps in parking modernization. Such parking meters are currently installed in San Francisco, Los Angeles, and Santa Monica.

On April 30, 2013, City Council suspended competitive bidding in the best interest of the City and authorized staff to use an alternative procurement method and issue a Request for Proposals for parking meters and related services. The project (Number P13151171027) was advertised on May 30, 2013, and submittals were received on July 3, 2013.

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PROJECT #:15001531
PROJECT NAME: Parking Meter Procurement
DEPARTMENT: Public Works
DIVISION: Parking Services

CITY OF SACRAMENTO

NONPROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made at Sacramento, California, as of November 12, 2013, by and between the **CITY OF SACRAMENTO,** a municipal corporation ("CITY"), and

IPS Group, Inc.
5601 Oberlin Drive, Suite 100
San Diego, CA 92121
Phone: 858.404.0607
Fax: 858.408.3352

("CONTRACTOR"), who agree as follows:

1. **Contract.** The Contract shall consist of this Agreement and each of the following documents (if applicable), which are incorporated herein by reference:

Request for Proposals
Certificate(s) of Insurance
Drug-Free Workplace Policy and Affidavit
Declaration of Compliance (Equal Benefits Ordinance)
Declaration of Compliance (Living Wage Ordinance)
Workers' Compensation Certificate
Contractor's Bid Proposal Form
Technical Specifications

2. **Services.** Subject to the terms and conditions set forth in this Agreement, CONTRACTOR shall provide to CITY the services described in Exhibit A. CONTRACTOR shall provide said services at the time, place, and in the manner specified in Exhibit A. CONTRACTOR shall not be compensated for services outside the scope of Exhibit A unless prior to the commencement of such services: (a) CONTRACTOR notifies CITY and CITY agrees that such services are outside the scope of Exhibit A; (b) CONTRACTOR estimates the additional compensation required for these additional services; and (c) CITY, after notice, approves in writing a Supplemental Agreement specifying the additional services and amount of compensation therefor. CITY shall have no obligations whatsoever under this Agreement and/or any Supplemental Agreement, unless and until this Agreement or any Supplemental Agreement is approved by the Sacramento City Manager or the City Manager's authorized designee, or by the Sacramento City Council, as required by the Sacramento City Code.

3. **Payment.** CITY shall pay CONTRACTOR for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit B. The payments specified in Exhibit B shall be the only payments to be made to CONTRACTOR for the services rendered pursuant to this Agreement unless pursuant to Section 1, above, CITY approves additional compensation for additional services. CONTRACTOR shall submit all billings for said services to CITY in the manner specified in Exhibit B, or, if not specified in Exhibit B, according to the usual and customary procedures and practices that CONTRACTOR uses for billing clients similar to CITY.

4. **Facilities and Equipment.** Except as set forth in Exhibit C, CONTRACTOR shall, at its sole cost and expense, furnish all facilities and equipment that may be required for furnishing services pursuant to this Agreement. CITY shall furnish to CONTRACTOR only the facilities and equipment listed in Exhibit C according to any terms and conditions set forth in Exhibit C.

5. **General Provisions.** The General Provisions set forth in Exhibit D, that include indemnity and insurance requirements, are part of this Agreement. In the event of any conflict between the General Provisions and any terms or conditions of any document prepared or provided by CONTRACTOR and made a part of this Agreement, including without limitation any document relating to the scope of services or payment therefor, the General Provisions shall control over said terms or conditions.

6. **Living Wage Requirements.** This Agreement is subject to the provisions of Sacramento City Code Chapter 3.58, Living Wage. The requirements of Sacramento City Code Chapter 3.58 are summarized in Exhibit E. The CONTRACTOR is required to sign the attached Declaration of Compliance (Living Wage Ordinance) to assure compliance with these requirements.

7. **Non-Discrimination in Employee Benefits.** This Agreement is subject to the provisions of Sacramento City Code Chapter 3.54, Non-Discrimination in Employee Benefits by City Contractors. The requirements of Sacramento City Code Chapter 3.54 are summarized in Exhibit F. CONTRACTOR is required to sign the attached Declaration of Compliance (Equal Benefits Ordinance), to assure compliance with these requirements.

8. **Authority.** The person signing this Agreement for CONTRACTOR hereby represents and warrants that he/she is fully authorized to sign this Agreement on behalf of CONTRACTOR and to bind CONTRACTOR to the performance of its obligations hereunder.

9. **Exhibits.** All exhibits referred to herein are attached hereto and are by this reference incorporated as if set forth fully herein.

Executed as of the day and year first above stated.

CITY OF SACRAMENTO
A Municipal Corporation

By:_____

Print name:_____

Title:_____
For: John F. Shirey, City Manager

ATTEST:

_____
City Clerk

APPROVED TO AS FORM:

_____
City Attorney

Attachments

Exhibit A - Scope of Service
Exhibit B - Fee Schedule/Manner of Payment
Exhibit C - Facilities/Equipment Provided
Exhibit D - General Provisions
Exhibit E - Living Wage Requirements
Exhibit F - Non-Discrimination in Employee Benefits

CONTRACTOR:

IPS Group Inc
NAME OF FIRM

23-3028164
Federal I.D. No.

C2642633

1015053
City of Sacramento Business Op. Tax Cert. No.

TYPE OF BUSINESS ENTITY *(check one)*:

_____ Individual/Sole Proprietor
_____ Partnership
_X_ Corporation *(may require 2 signatures)*
_____ Limited Liability Company
_____ Other (*please specify:* _____)

Signature of Authorized Person
Chad P Randall, Corp. Secretary & COO
Print Name and Title

Not required
Additional Signature *(if required)*

Print Name and Title

DECLARATION OF COMPLIANCE
Living Wage Ordinance

Name of Contractor: IPS Group, Inc.

Address: 5601 Oberlin Drive, Suite 100, San Diego, CA 92121

The above-named contractor ("Contractor") hereby declares and agrees as follows:

1. Contractor has read and understands the Living Wage Requirements (the "Requirements") attached hereto as Exhibit E.

2. As a condition of receiving this Contract, Contractor agrees to fully comply with the Requirements, as well as any additional requirements that may be specified in the City of Sacramento's Living Wage Ordinance codified at Chapter 3.58 of the Sacramento City Code (the "Ordinance"). If required by the Ordinance, Contractor will pay not less than the minimum compensation specified in the Ordinance to Contractor's employees, for all time spent performing any work under this Contract.

3. If the amount of this Contract is less than $100,000, as a condition of receiving this Contract, Contractor will notify the City of Sacramento ("City") in writing if the aggregate value of this Contract and of any other Nonprofessional Services contract(s) covered by the Ordinance that the City has awarded to Contractor within the previous 12 months, is $100,000 or more.

4. Contractor acknowledges and agrees that the Requirements, the Ordinance and this Declaration shall constitute part of this Contract, and that these provisions shall govern in the event of any conflict with any other provisions of the Contract.

5. Contractor further acknowledges and agrees that any violation of the Requirements or the Ordinance constitutes a material breach of this Contract, and that, if such a breach occurs, the City will be authorized to terminate the Contact, and pursue all available legal and equitable remedies.

6. If requested by the City, Contractor will promptly submit certified payroll records to the City, for itself and/or for Contractor's subcontractor(s), as requested by the City, and Contractor will take any other steps as may be required by the City to determine whether Contractor's subcontractor(s) or Contractor have complied with the Requirements and the Ordinance.

7. Contractor will require all of its subcontractors who are covered by these requirements to comply with the Requirements and any additional requirements that may be specified in the Ordinance, and Contractor will include these requirements in all subcontracts covered by the Ordinance.

8. Contractor agrees to defend, indemnify and hold harmless the City, its officers and employees against any claims, actions, damages, costs (including reasonable attorney fees) or other liabilities of any kind arising from any violation of the Requirements or the Ordinance by Contractor or by any subcontractor retained to perform work or provide services under this Contract.

The undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that he or she is authorized to bind the Contractor to the provisions of this Declaration.

_____ Date: 10/15/2013

Signature of Authorized Representative

Print name: Chad P Randall

Title: Chief Operating Officer

DECLARATION OF COMPLIANCE
Equal Benefits Ordinance

Name of Contractor: _ IPS Group, Inc._____

Address: _5601 Oberlin Drive, Suite 100, San Diego, CA 92121_____

The above-named Contractor ("Contractor") hereby declares and agrees as follows:

1. Contractor has read and understands the Requirements of the Non-Discrimination In Employee Benefits Code (the "Requirements") attached hereto as Exhibit F.

2. As a condition of receiving this Contract, Contractor agrees to fully comply with the Requirements, as well as any additional requirements that may be specified in the City of Sacramento's Non-Discrimination In Employee Benefits Code codified at Chapter 3.54 of the Sacramento City Code (the "Ordinance").

3. Contractor understands, to the extent that such benefits are not preempted or prohibited by federal or state law, employee benefits covered by the Ordinance are any of the following:

   a. Bereavement Leave
   b. Disability, life, and other types of insurance
   c. Family medical leave
   d. Health benefits
   e. Membership or membership discounts
   f. Moving expenses
   g. Pension and retirement benefits
   h. Vacation
   i. Travel benefits
   j. Any other benefit offered to employees

   Contractor agrees that if Contractor offers any of the above-listed employee benefits, Contractor will offer those benefits, without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouses and domestic partners of such employees.

4. Contractor understands that Contractor will not be considered to be discriminating in the provision or application of employee benefits under the following conditions or circumstances:

   a. If the actual cost of providing a benefit to a domestic partner or spouse exceeds the cost of providing the same benefit to a spouse or domestic partner of an employee, Contractor will not be required to provide the benefit, nor shall it be deemed discriminatory, if Contractor requires the employee to pay the monetary difference in order to provide the benefit to the domestic partner or to the spouse.

b. If Contractor is unable to provide a certain benefit, despite taking reasonable measures to do so, if Contractor provides the employee with a cash equivalent Contractor will not be deemed to be discriminating in the application of that benefit.

c. If Contractor provides employee benefits neither to employee's spouses nor to employee's domestic partners.

d. If Contractor provides employee benefits to employees on a basis unrelated to marital or domestic partner status.

e. If Contractor submits written evidence of making reasonable efforts to end discrimination in employee benefits by implementing policies that will be enacted before the first effective date after the first open enrollment process following the date this Contract is executed by the City of Sacramento ("City"). Contractor understands that any delay in the implementation of such policies may not exceed one (1) year from the date this Contract is executed by the City, and applies only to those employee benefits for which an open enrollment process is applicable.

f. Until administrative steps can be taken to incorporate nondiscrimination in employee benefits. The time allotted for these administrative steps will apply only to those employee benefits for which administrative steps are necessary and may not exceed three (3) months from the date this Contract is executed by the City.

g. Until the expiration of a current collective bargaining agreement(s) if employee benefits are governed by such collective bargaining agreement(s).

h. Contractor takes all reasonable measures to end discrimination in employee benefits by either requesting that the union(s) involved agree to reopen the agreement(s) in order for Contractor to take whatever steps are necessary to end discrimination in employee benefits or by ending discrimination in employee benefits without reopening the collective bargaining agreement(s).

i. In the event Contractor cannot end discrimination in employee benefits despite taking all reasonable measures to do so, Contractor provides a cash equivalent to eligible employees for whom employee benefits, are not available. Unless otherwise authorized in writing by the City Manager, Contractor understands this cash equivalent must begin at the time the union(s) refuse to allow the collective bargaining agreement(s) to be reopened or not longer than three (3) months after the date this Contract is executed by the City.

5. Contractor understands that failure to comply with the provisions of Section 4(a) through 4(i), above, will subject Contractor to possible suspension and/or termination of this Contract for cause; repayment of any or all of the Contract amount disbursed by the City; debarment for future contracts until all penalties and restitution have been paid in full and/or for up to two (2) years; and/or the imposition of a penalty, payable to the City, in the sum of $50.00 for each employee, for each calendar day during which the employee was discriminated against in violation of the provisions of the Ordinance.

6. Contractor understands and agrees to provide notice to each current employee and, within ten (10) days of hire, to each new employee, of their rights under the Ordinance. Contractor further agrees to maintain a copy of each such letter provided, in an appropriate file for inspection by authorized

representatives of the City. Contractor also agrees to prominently display a poster informing each employee of these rights.

7. Contractor understands that Contractor has the right to request a waiver of, or exemption from, the provisions of the Ordinance by submitting a written request to the City's Procurement Services Division prior to Contract award, which request shall identify the provision(s) of the Ordinance authorizing such waiver or exemption and the factual basis for such waiver or exemption. The City shall determine in its sole discretion whether to approve any such request.

8. Contractor agrees to defend, indemnify and hold harmless, the City, its officers and employees, against any claims, actions, damages, costs (including reasonable attorney fees), or other liabilities of any kind arising from any violation of the Requirements or of the Ordinance by Contractor.

The undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that he or she is authorized to bind the Contractor to the provisions of this Declaration.

Chad P. Randall

Signature of Authorized Representative

10/15/2013

Date

Chad P Randall

Print Name

Corp Sec & COO

Title

EXHIBIT A

NONPROFESSIONAL SERVICES AGREEMENT

SCOPE OF SERVICES

1. Representatives.

The CITY Representative for this Agreement is:

Mike King, Parking Technology & Infrastructure Manager
City of Sacramento
300 Richards Blvd, Parking Services, Second Floor
Sacramento, CA 95811
Phone: 916-808-1172
Fax: 916-808-5115
E-mail: mking@cityofsacramento.org

All CONTRACTOR questions pertaining to this Agreement shall be referred to the CITY Representative or the Representative's designee.

The CONTRACTOR Representative for this Agreement is:

Chad P. Randall, Chief Operating Officer
IPS Group, Inc.
5601 Oberlin Drive, Suite 100
San Diego, CA 9212
Phone: 858-404-0607
Fax: 858-408-3352
E-mail: chad.randall@ipsgroupinc.com

All CITY questions pertaining to this Agreement shall be referred to the CONTRACTOR Representative. All correspondence to CONTRACTOR shall be addressed to the address set forth on page one of this Agreement. Unless otherwise provided in this Agreement, all correspondence to the CITY shall be addressed to the CITY Representative.

2. Scope of Services.

The services provided shall be as set forth in Attachment 1 to Exhibit A, attached hereto and incorporated herein.

3. Time of Performance. The services described herein shall be provided during the period, or in accordance with the schedule, set forth in the scope of services.

Attachment 1 to Exhibit A

Statement of Work
for

Single-Space Parking Meters and Related Services

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I. SCOPE OF SERVICES

CONTRACTOR shall, for a period of five years commencing on the effective date of this agreement, with optional one-year extensions (up to five):

- Deliver, initially, approximately 6,000 single-space electronic “smart” parking meters, on a schedule mutually agreed between CONTRACTOR and CITY
- Install and perform field testing on the new parking meters, on a schedule to be negotiated between CONTRACTOR and CITY
- Maintain and support a Meter Management System (MMS) that directs the parking meters’ behavior and provides activity and financial reports
- Maintain and support a network for two-way communications between the parking meters and the MMS
- Maintain all required certifications and compliance throughout the term of the agreement
- Develop and deploy data interchange systems between CONTRACTOR’s Meter Management System and specific IT systems designated by CITY, including IT systems operated by third parties to support CITY functions
- Provide sufficient training for all CITY employees and contractors who provide the following services for meters: installation, maintenance/repair, staff and end-customer support, enforcement, accounting/reconciliation/financial reporting, administration, and collections
- Provide customer support as required by CITY personnel
- Provide warranty service for meters for a term negotiated between CONTRACTOR and CITY
- Deliver spare parts in a timely manner
- Assist the CITY in recovering any residual value in obsolete meter mechanisms
- Provide consulting for parking management, analysis, data extraction, report preparation, and decal design, as requested by CITY
- Optionally, implement a collections solution
- Optionally, deliver approximately 6,000 electronic locks, with keys and management solution, on a schedule to be negotiated between CONTRACTOR and CITY
- Optionally, implement a mobile payment solution
- Optionally, implement an on-street validation solution
- Optionally, implement an end-customer website for credit card receipts
- Optionally, provide upgrades to existing CITY pay-stations or other parking needs on an as-requested basis.
- Deliver additional meters, on a schedule to be negotiated between Contractor and CITY, at the same price as the initial 6,000 meters

Technical Specifications

Single-Space Parking Meters and Management System

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TERMS AND ABBREVIATIONS

The following definitions apply to the Specifications:

Term or Acronym	*Definition*
Active	Refers to the state when a payment is in progress.
ADA	Americans with Disabilities Act, as amended.
Backend Settings	Set of variables that affect meter Behavior and exist in CONTRACTOR's system but are not included in the Operating Schedule or the Price Schedule and are not stored in the Parking Services Management System. They control meter Behavior, such as minimum credit card charge, grace period, backlight and LED settings.
Behavior	Variables that govern meter performance; *e.g.,* start/end times, time limits, rates.
Configuration	Set of Behaviors that make up the meter Behavior for a standard week period.
Customer	Person who uses a meter on the street for the purpose of paying for parking.
Descriptive Variables	Variables that describe attributes of metered spaces and do not affect meter Behavior; *e.g.,* area, street, latitude, longitude.
Effective Date	The date of certification of the contract, as evidenced by a notice to proceed issued from CITY to CONTRACTOR.
General Metered Parking or GMP	Refers to locations where parking meters are in effect for parking for all types of vehicles.
Hotlist	A listing of credit card and/or smart card numbers that are not valid forms of payment as a result of fraud, theft or other misuse.
Idle	Refers to the state when no payment is in progress. Screen displays static information messages until a payment is started, at which time the meter switches to Active.
Meter Mechanism	The digital and mechanical components of the meter device.
Meter Operation, Operating Hours, Enforcement Hours	Days and times when payment is required for use of parking spaces.
Metered Space	A distinct parking space managed by a parking meter.
Meter Shop	Parking Services' parking meter maintenance and administration facility.
Mixed Payment Transaction	A transaction where a Customer uses more than one payment type (*e.g.,* coin and credit card) to pay for a single parking session.
MMS or Meter Management System	CONTRACTOR's package of software applications consisting of a relational database, user interface, reporting applications, and meter programming module.
Mobile Payment	Payment made through a cell phone, smart phone, smart phone app, web browser, etc., and processed by a mobile payment provider.
Near Field Communication or NFC	The ability to pay for use of the parking meter with a smartphone or certain smart cards by bringing them into close proximity with each other.
Operating Hours	Set of rules that govern the overall hours that the meter is in effect and may include towing lanes, prepayment settings, and time limits.
Parking Services Management System (PSMS)	One or more databases and reporting systems hosted and managed by Parking Services.
Parking Space ID	Unique permanent identifier assigned to a metered space when it is added to the Parking Space Inventory.
Payment Window	Window of time during which a Customer is conducting a payment at the meter before the meter considers the payment completed and transmits the transaction to the MMS.

Term or Acronym	Definition
PEO	Parking Enforcement Officer, employed by CITY to enforce parking regulations.
PDT	Personal Data Terminal (handheld device)
PMR	Parking Meter Repairer
Parking Space ID	Unique number that identifies a metered space. Currently, all spaces have IDs in the format PKGSnnnnn, where nnnnn starts at 1.
Prepay Time; Prepayment Time	Time of day before the beginning of Operating Hours when Customer is allowed to pay for time that commences at the beginning of Operating Hours.
Price Schedule	Set of rules that govern meter rates
Parking Services	A division of the Department of Public Works of the City of Sacramento
Parking Space Inventory or PSI	The complete listing of parking spaces that are or have been metered spaces in the Parking Services Management System. The Parking Space Inventory table stores all attributes of the metered spaces except for variables that govern meter Behavior; the latter are in the Operating Schedule and Price Schedule tables.
RMA	Return Merchandise Authorization. The process by which defective parts are returned and replaced.
Screen	Display on the meter that shows dynamic messages programmed remotely.
Sacramento Parking Card	Prepaid cards sold by CITY that can be used at parking meters only.
SFTP Site	Secure file transfer protocol site
Standard Variables	Meter programming and reporting variables typically included in the MMS, such as physical locators: area, street, latitude, longitude and Behavior.
Time Limit, Max Time	Maximum amount of time a Customer is allowed to park during Operating Hours.
Time Slot	A period within a day (12 AM to 11:59:59 PM) defined by a START time and an END time and assigned a set of rules that govern the meter Behavior within those hours.
Tow	Refers to a period that a vehicle may be towed for violation of parking regulations.
User	Person who uses the MMS (*e.g.,* Parking Services Meter Shop staff).
User-Defined Variables	Variables defined and supplied by PARKING SERVICES and not typically included in the MMS, primarily used to filter and sort metered spaces in ways that are useful to PARKING SERVICES only and do not affect meter Behavior.

TECHNICAL SPECIFICATIONS OVERVIEW

The Technical Specifications are organized into three sections:

SECTION I: ADMINISTRATIVE
SECTION II: METER MECHANISM
SECTION III: MMS, METER PROGRAMMING, AND DATA INTEGRATION

Where a requirement includes an accompanying example, table, or diagram, the latter is numbered to match the requirement number (e.g. Example I.A.3.b refers to requirement I.A.3.b; Table III.B.10.a refers to requirement III.B.10.a).

SECTION I: ADMINISTRATIVE

A. Administrative: General Specifications

CONTRACTOR shall deliver meter hardware, software, and services meeting these specifications.

1) Training

a. CONTRACTOR shall provide the following training:

i. Enforcement Training (2-Hour Training Session): CONTRACTOR shall provide the first enforcement training via webinar, while additional enforcement training may be conducted by webinar or PowerPoint presentation or other agreed upon, self-guided medium. CONTRACTOR shall allow Parking Services to “replay” this session multiple times to cover all shifts. CONTRACTOR shall be available to answer any questions via telephone or email and shall do so within 24 hours of receipt. CONTRACTOR shall provide City enforcement personnel with training on how to identify the following:

- A meter or machine that is registering as having been paid;
- A meter or machine that is registering as not having been paid;
- A Meter that is malfunctioning; and
- A simple determination of the nature of the malfunction.

ii. Collections Training (1-Hour Training Session): CONTRACTOR shall provide City staff with in-depth, hands-on, collections training. Training will be conducted in person, and training dates will be scheduled, by mutual agreement, at least thirty days prior to the actual day. At the conclusion of Collections Training, City staff will be able to take all steps necessary to initiate and finalize a collection from a meter.

iii. Technical Training (4 Hour Training Session): CONTRACTOR shall provide City staff with in-depth, hands-on, technical training on the functionality of the meters and machines. Training will be conducted in person, on an as needed basis, no more than twice annually. Training dates will be scheduled, by mutual agreement, at least thirty days prior to the actual day. Technical training shall be divided into two sections: physical maintenance of the meter and machine and virtual maintenance of the meter and machine.

1) At the conclusion of physical maintenance training, City staff will be able to easily complete the following tasks:

- Deconstruct a meter down to its core elements;
- Construct a meter from core elements;
- Clear all types of jams that may occur in a meter; and

- Verify if a meter is operational and meets the definition of a "functional meter" or machine.

2) Virtual Maintenance: at the conclusion of virtual maintenance training, City staff will be able to easily complete the following tasks:

- Access the Battery Voltage Report from the system;
- Access the Automated Address Event Report from the system;
- Access the Vault Collection Notification Report from the system;
- Access the Electronic Maintenance Reporting system within the system;
    - Log an event in the Electronic Maintenance Reporting system;
    - Search for an event in the Electronic Maintenance Reporting system;
    - Modify meter information in the Electronic Maintenance Reporting system;
- Access the Meter and Machine Maintenance Report from the system;
- Access the Meter and Machine Communication Report from the system;
- Access the GPS Location Report from the system.

iv. Financial and Administration Training (4 Hour Training Session): CONTRACTOR shall provide City staff with guided training on the functionality of the system. The first training shall be conducted via interactive webinar, and future training shall occur at least once quarterly, on an as needed basis, and may occur via webinar, PowerPoint, or other agreed-upon, self-guided medium. CONTRACTOR shall provide staff, via conference call, guidance through the first training session. At the conclusion of financial and administrative training, City staff will be able to easily complete the following tasks:

- Access the Area Revenue Report from the system;
- Access the Daily Bank Reconciliation Report from the system;
- Access the Coin Collection Report from the system;
- Access the Battery Voltage Report from the system;
- Access the Automated Address Event Report from the system;
- Access the Vault Collection Notification Report from the system;

- Access the Electronic Maintenance Reporting system within the system;

v. Deployment Training (2 Hour Training Session): CONTRACTOR shall provide City staff with in-depth, hands-on, technical training on the deployment of the meters, both as replacements for existing mechanisms as well as new installations. Training will be conducted in person, and training dates will be scheduled, by mutual agreement, at least thirty days prior to the actual day.

vi. At the request of Parking Services, train and certify one or more Parking Services designees (potentially, contractors) as a Level II Support Technician to support the proposed meter warranty.

b. CONTRACTOR shall provide all on-site training in Sacramento, California, at a location to be determined by Parking Services. CONTRACTOR shall cover all travel and other costs associated with training.

c. If, at Parking Services' sole discretion, more training is required, CONTRACTOR shall provide up to three additional, eight-hour days of detailed training covering deployment, maintenance, finance/accounting/audit, enforcement, and MMS usage, as scheduled by Parking Services.

d. CONTRACTOR shall ensure that initial training for system managers, Meter Shop field personnel, enforcement staff, and collection staff is completed prior to turning on the new meters according to a schedule to be approved by Parking Services.

e. CONTRACTOR shall supply and keep current hard and digital copies of all operating, training and repair manuals. These comprehensive manuals will reflect all aspects of training described above, to provide a reference to personnel.

f. CONTRACTOR shall grant CITY rights to reproduce all training and operation manuals needed for staff.

2) Customer Support

a. CONTRACTOR shall provide the following customer support:

i. A toll-free number that shall be available, at a minimum, between 8 am and 5 pm PST/PDT, Monday through Friday, except for official Parking Services holidays (as listed at http://www.cityofsacramento.org/transportation/parking/onstreetmeters.html#Holidays). CITY reserves the rights to change the business hours to reflect changes in the meter hours and days of operation.

ii. If Customer Support is not available when a call is placed, Parking Services shall receive a call back within 15 minutes during operating hours. Calls requiring a response from a senior member of CONTRACTOR's staff shall be returned within 30 minutes during the above hours.

iii. Any subcontractor(s), (*e.g.,* gateway companies, payment processors, etc.) shall be subject to the same availability standards (*i.e.,* between 8 am and 5 pm PST/PDT) and shall return calls within 15 minutes.

iv. CONTRACTOR shall send a representative to CITY within four hours of request, should meter or MMS malfunction require on-site resolution, as determined by Parking Services.

3) Warranty

a. The warranty period on each phased deployment of meters shall commence when the entire phase is accepted in writing by Parking Services. Parking Services and CONTRACTOR shall establish a deployment schedule prior to the first delivery of meters.

b. The meters shall be warranted to operate in full functionality for a period of at least three years from the date of acceptance.

c. Contractor warrants that it shall convey good title to the Meters purchased by City and that at the time of any such sale the Meters shall be free and clear from all liens and encumbrances.

d. CONTRACTOR shall pay for warranty shipments from the Meter Shop to CONTRACTOR's warranty handling facility and back to the Meter Shop.

e. CONTRACTOR shall be responsible for providing all new software and firmware releases (as they become available and approved by Parking Services) at no cost to Parking Services as long as CONTRACTOR's meters are in use by Parking Services.

f. CONTRACTOR shall supply and maintain an adequate inventory of replacement components (*e.g.,* card readers, coin validators, CPU boards) locally and/or at the Parking Services' Meter Shop. "Locally" is defined as with a 100 mile radius of the City of Sacramento City Hall.

g. Any meter mechanism that fails within the warranty period shall be replaced/repaired within five (5) business days of product receipt and with proper notification via e-mail, fax, or phone call (including voice mail message).

h. Meters shall be warranted to operate as proposed within a temperature range of 0 to 140 degrees Fahrenheit and under environmental conditions found in Sacramento, including but not limited to wind-blown grime, rain, fog, humidity, sun (including direct sunlight), and vibrations.

i. Upon written request of Parking Services, at least 60 days before the expiration of a valid warranty term, CONTRACTOR shall extend the warranty for the rate defined in Exhibit B.

j. Warranty coverage shall include repair and/or replacement, at Contractor's discretion, of any part or modular component determined to be defective in material or workmanship under normal use and service in a timely manner and at no additional cost to the City.

k. Repair or replacement under warranty of any defective product (including any Meter or subcomponent) will not extend the warranty period for that product or subcomponent.

l. Returns for credit will only apply once Contractor has received the defective product (including any Meter or subcomponent) and confirmed that the defects arose within the warranty period and are covered under the terms and conditions of the warranty provided.

m. This warranty does not cover damages, defects or Failures solely caused by or due to accident, improper handling or operation, natural disaster (including earthquake), acts of terrorism, wars, riots, vandalism, neglect of routine maintenance as instructed by Contractor, or use of parts not authorized by Contractor.

n. CITY acknowledges that any modification (not to include required maintenance and repairs) not reasonably in accordance with Contractor's directions or performed by others in such manner to affect the work materially and adversely may void this warranty. Prior to any modification to the work, Parking Services shall notify Contractor in writing. Contractor shall respond in writing within five business days describing how any such modification will affect the warranty.

4) MMS Support and Licensing

a. CONTRACTOR shall provide its hosted MMS as long as any of its meters are in service in CITY. Licensing costs are included in Exhibit B.

b. CONTRACTOR’s MMS service level shall exceed 99.5% availability during metered parking hours.

c. Access to CONTRACTOR’s MMS shall not require any software or “plug-ins” to the standard Internet browsers used by CITY. CONTRACTOR’s MMS shall operate with the most recent versions of Internet browsers, including Internet Explorer, Firefox, and Chrome.

5) Installation

a. Each mechanism shall be delivered complete, including all parts and materials needed for immediate deployment.

b. CONTRACTOR shall be responsible for handling and storage/warehousing of all materials, including incoming mechanisms and supplies, as well as all obsolete mechanisms to be resold or recycled. CITY will provide a reasonably secured space for CONTRACTOR’s use for receiving and staging of small quantities of meters.

c. Meters shall be properly configured, tested, able to connect to the network and fully operational at the time Parking Services takes possession of the meters.

d. As installation progresses, CONTRACTOR shall create electronic inventory records for the installed meters, including but not limited to delivery dates, install dates, and Parking Space ID.

e. CONTRACTOR shall, under supervision of City staff, perform installation, under one of the following scenarios:

i. An existing single-space meter will have the current dome and mechanism removed and a new mechanism and dome will be installed. This installation scenario will require coordination with collections to minimize the amount of change in the vault. CONTRACTOR will be responsible for removing the old dome and mechanism and installing the new mechanism and dome. The new mechanisms will be installed and activated immediately upon the removal of the existing equipment from service. The only exception to this provision shall be when a parking meter post or housing must be replaced or repaired due to being loose or damaged, in which case meter removal shall be scheduled in advance with Parking Services. CONTRACTOR is responsible for ensuring all meter posts and housings are in good working order at the time of meter installation.

ii. A pole without an existing housing will have a new housing attached, and a new mechanism and dome will be installed. Parking Services staff will install the new housing, and CONTRACTOR will install the new mechanism and dome.

iii. A location without a pole will have a pole installed by CONTRACTOR, subject to the specifications provided by CITY, prior to the date of installation of the housing and mechanism. After installation of the pole, Parking Services staff will install the new housing, and CONTRACTOR will install the new mechanism and dome.

f. CITY shall provide the following information to CONTRACTOR to facilitate delivery and installation of meters:

i. Meter locations and associated configuration parameters (rates, hours, display screens, etc.) as provided by meter location and configuration worksheets, in electronic form

ii. Merchant account information

iii. Logistics information (dates, quantities, and locations for delivery, etc.)

iv. Installation logistics requirements (number of people required to be provided by IPS)

v. Administrative information (purchase orders, etc.)

vi. List of individuals needing access rights to MMS and required permissions

vii. Identification of all functional groups for training

viii. Customization and integration information (data interchange, contactless requirements, SAM requirements, licensed content or source code, etc.)

g. CONTRACTOR shall identify a Project Manager for the installation period (not to exceed six (6) months). The installation period shall be from the time the first meter is delivered until the last meter is accepted. The Project Manager shall be available by phone to Parking Services personnel between 8 am and 5 pm (excluding weekends and legal holidays), and shall be on-site at any time CONTRACTOR's staff is performing installation activities. The project manager shall be authorized to make decisions and speak on behalf of CONTRACTOR.

6) Certification and Compliance

The proposed equipment shall have and maintain the following certifications. Said certifications shall be submitted to CITY before Notice to Proceed (NTP) is granted to CONTRACTOR. Any renewals of certification shall be provided to CITY no later than 30 days prior to the expiration of the current certification.

a. CONTRACTOR shall maintain PCI certification, for the term of the Agreement, as follows:

1. Proposed Meter Mechanism and/or Paystation payment software shall be Payment Application Data Security Standard (PA-DSS) validated by a Payment Application Qualified Security Assessor (PA-QSA) and be verified on PCI SSC's list of PA-DSS validated payment applications. CONTRACTOR shall provide documentation of validation and verification prior to contract execution.
2. CONTRACTOR'S payment software submitted for PA-DSS validation should incorporate:
   - "Hold and Send" protocol
   - Contactless Payment
   - Remote connections capability such as Short Messaging Service (SMS).
3. CONTRACTOR's credit card gateway shall have and maintain appropriate Payment Card Industry Data Security Standards (PCI DSS) certification as a Level 1 Service Provider (https://www.pcisecuritystandards.org/index.shtml). The credit card gateway shall meet the credit card data security requirements outlined by the Payment Card Industry Security Standards Council (PCI SSC) for service providers and/or software vendors. Compliance with PCI DSS shall have been achieved through a third party audit process. CONTRACTOR shall comply with Visa Cardholder Information Security Program (CISP) and MasterCard Site Data Protection (SDP) programs.

4. Should EMV certification become a Regulatory Requirement or Industry Standard for acceptance of credit cards, the Contractor shall, at its own expense, obtain such certification and provide proof to CITY that this certification has been established.
5. The Contractor shall, at its own expense, obtain or update certifications for Regulatory Requirements and Industry Standards that impact the Agreement as new requirements are established, and shall notify CITY in writing of these new requirements when they are in effect. Should CITY learn about new requirements, CITY will inform the Contractor and request that the Contractor verify compliance with such requirements. The Contractor shall be responsible at its own expense to establish proper certification at the first available opportunity, and shall inform CITY in writing of the timeline for compliance and any potential impact to services pending compliance.

b. The unassisted "Real Time Clock" accuracy shall have an error of not more than +/- 2 seconds or 24ppm over a 24-hour period over the operational temperature range of 0°F to 140°F, and at no time shall the meter count down timer give less than the expected time. The "Real Time Clock", and the "Count-Down Timer", shall be tested and certified for accuracy by an independent 3rd party test laboratory.

c. Proposed Mechanisms shall be FCC-approved to meet the FCC requirements appropriate for the type and frequency range of the radiating device or devices found in the mechanism. FCC testing shall be carried out on mechanisms configured with all of the proposed hardware options, components, and antennas, including, if applicable:

- **i.** Modem
- **ii.** Contactless Card Reader
- **iii.** RFID Reader
- **iv.** ISM Band Transceivers (*i.e.,* vehicle sensing technology etc.)

All required FCC certifications will be provided to CITY.

d. Environmental testing and certification of the proposed Mechanism shall be carried out by an independent third party test lab, and shall include hot, cold and humidity testing.

- **i.** Hot cycle testing shall consist of one 24-hour hot temperature cycle as follows: starting at ambient, increase temperature 1°F per minute until 140°F; carry out operational test / payment transaction after a 3-hour soak period; repeat operational test / payment transaction after 24-hour soak period; return meter to ambient temperature.
- **ii.** Cold cycle testing shall consist of one 24-hour cold temperature cycle as follows: starting at ambient, decrease temperature 1°F per minute until 0°F; carry out operational test / payment transaction after a 3-hour soak

period; repeat operational test / payment transaction after 24-hour soak period; return meter to ambient temperature.

iii. Humidity cycle testing shall consist of one 24-hour cycle as follows: starting at ambient, increase temperature 1°F per minute to approx. 80°F; set and maintain the humidity range between 75% and 98% and maintain temperature range between 75°F and 100°F; carry out operational test / payment transaction after a 3-hour soak period; repeat operational test / payment transaction after 24-hour soak period; return meter to ambient temperature.

7) Acceptance and Functionality

a. Acceptance of the meter mechanisms and domes shall occur after CONTRACTOR has successfully completed installation of the mechanisms into CITY's meter housings in designated parking spots and the mechanisms are properly integrated and communicating with the MMS. Mechanisms must meet the definition of a "functional meter."

b. A "functional meter" is a meter mechanism and related components that function together within the normal parameters of operation during the hours of enforcement. A functional meter meets the requirements established in Section II of the Technical Specifications. A functional meter will accept all specified forms of payment, properly interface with end users; actively communicate with the management system, properly indicate payment status by illuminating the correct LEDs, and properly report battery power, collection status, and coin count to the MMS. The *Meter Commissioning Checklist* details the full set of criteria that the meter must meet to be accepted.

c. Acceptance of the entire system is dependent upon Parking Services' determination the following criteria (if applicable) have been met:

i. All meters and domes have been accepted, as described above

ii. The delivered MMS meets the requirements set forth in subsection A of Sections I, II and III of the Technical Specifications, and all deployed meters are reporting properly with the MMS

iii. The audit vs. actual coin revenue is accurate to 99% (i.e. the MMS "Coin Revenue Audit Report" matches actual revenue collected from parking meters to 99% accuracy)

iv. The nightly incoming meter revenue CSV file, as described in Attachment 9, meets the formatting requirements of the Attachment, and is delivered on a nightly basis. Until the Parking Services Management System is able to receive it via electronic file exchange, it shall be stored on CONTRACTOR's SFTP site, with a notification delivered by email to an address designated by CITY.

v. The incoming XML transaction feed, as described in Attachment 5, is stored by CONTRACTOR for bulk delivery when the Parking Services Management System is able to receive it via normal delivery.

d. Acceptance shall occur upon CITY's delivery of notice to CONTRACTOR that the criteria in the section above have been met and the system complies with the specifications set forth in the agreement.

e. Acceptance of replacement parts, including "spare" meter mechanisms and parts, shall occur when received by Parking Services.

f. Absent written notification of acceptance for each meter batch, the meters shall be deemed accepted 30 days after installation or 45 days after delivery, whichever occurs first.

g. Escrow Agreement

CONTRACTOR agrees, at its expense, to place the applicable source codes for all Software that is proprietary to Contractor, including periodic updates of said source codes, and other proprietary materials, into an escrow. The source codes placed in escrow shall be on digital media and shall be accompanied by detailed software documentation, including a list of applicable software development tools. Within 60 Days of Notice to Proceed, CONTRACTOR shall effect registration of CITY as a Licensee on an escrow account that shall be maintained by a third party escrow agent on behalf of the City and CONTRACTOR.

B. Additional Administrative Requirements

1) Mobile Payment Integration

a. The proposed meter solution and MMS shall integrate with a Mobile Payment service provider, to be selected by CONTRACTOR and confirmed by Parking Services. The Mobile Payment service provider shall be a subcontractor to CONTRACTOR.

b. The Integrated solution shall include the ability to communicate mobile payments to the actual meter (*e.g.,* if a Customer purchased 30 minutes worth of time via Mobile Payment for a particular parking space, the proposed solution shall include a means to communicate the payment status so that meter display indicates 30 minutes worth of purchased parking), should Parking Services choose to use that feature.

c. Should subcontracted Mobile Payment service provider fail to meet the service requirements as established elsewhere in this Scope of Work, upon direction from Parking Services, CONTRACTOR shall enter into subcontract with an alternate Mobile Payment service provider and terminate the existing subcontract once the migration of services is complete.

2) Parking Meter Buyback

CONTRACTOR shall credit CITY for each obsolete mechanism at the rate defined in Exhibit B.

3) Revenue Processing

a. The credit card payment gateway provider shall be compatible with and certified for use by the credit card processor at the acquiring bank of Parking Services' choice (currently Bank of America Merchant Services).

b. Parking Services reserves the right, at any time during the term of the contract, to renegotiate gateway fees should another gateway provider offer a rate that is more competitive. Parking Services and CONTRACTOR shall negotiate costs and charges associated with the change.
c. Deposits must be made to a City-owned account.

4) Public Awareness Plan

a. CONTRACTOR will provide consulting services for a Public Relations campaign to notify the general public about the new meters, including a proposed timeline.

b. CONTRACTOR will develop and host a customized web site for use by parking customers in the City of Sacramento. This web site will provide functionality similar to the pages illustrated for the City of Honolulu in CONTRACTOR's proposal dated July 3, 2013.

5) Instruction Decals

CONTRACTOR shall provide a design(s) for instructional decals to inform customers how to use the meters for coin, credit card, and meter card payments. Instructional decals shall include information similar to the decals currently posted on CITY's meters, including CITY customer service contacts and meter holidays.

6) Consultant Services Rate for Additional Services

During the term of the contract, upon request of CITY, CONTRACTOR shall provide consulting services, on an ad hoc basis, that may include but are not limited to:

a. Support for parking management with emphasis on effective rate adjustments, including developing appropriate price and revenue benchmarks. This should include regular meetings with CITY's Contract Administrator, Parking Meter Repair Shop and key managers within Parking Services.

b. Analytical support for developing pricing strategies based on the best practices employed worldwide, meter planning and inventory control, and meter maintenance and repair operations. The consulting staff will conduct, or provide the technical support needed for Parking Services to conduct field surveys, and provide reports on parking space occupancy, vehicle turnover and capture rates.

c. Extracting information from parking meter databases to support parking management initiatives.

d. Assistance in preparing management reports and statistical analysis, including the development of new management reports and revisions to existing reports.

e. Providing training for Parking Services staff in parking management related topics.

Such consulting will be paid at the rate established in the Compensation Schedule, but only after CITY and CONTRACTOR agree to the specific scope of work and a *Notice to Proceed* has been issued.

7) Non-Warranty Meter Repair Services

In the case of non-warranty repairs, CONTRACTOR shall provide Parking Services a quotation for any such services on an as-needed basis after inspection of the products to be repaired. CONTRACTOR shall perform non-warranty repair services upon receipt of a purchase order in the amount of the approved price of the work. CONTRACTOR shall return non-warranty repaired Meters to Parking Services within four to six weeks of receipt of an approved purchase order.

C. Administrative Optional Specifications

1) Collection Solutions

Upon receipt of *Notice to Proceed* from CITY, CONTRACTOR shall initiate a pilot ("trial") of its Smart Collection System (SCS). The duration, scope, and location(s) of this pilot will be negotiated between Parking Services and CONTRACTOR.

2) Website

Upon receipt of *Notice to Proceed* from CITY, CONTRACTOR shall develop a specification, including a price and timeline for developing a customer-facing, CONTRACTOR-hosted website that would allow a customer who paid by credit card- to print a receipt of his or her transaction(s) at home. The proposed website shall use "open architecture" to allow for integration with additional data sources.

a. Option 1: creating a site whereby a Customer would enter only the three following pieces of information:

i. Date and approximate time of day (plus or minus 60 minutes) the transaction began;

ii. The parking space number;

iii. Last four digits of credit card number.

b. Option 2: creating a site whereby Customers would register their email addresses and credit card numbers. Whenever a registered credit card number was used at any meter, the customer would receive a receipt in a PDF format at the registered email address.

SECTION II: METER MECHANISM

A. Meter Mechanism General Specification Requirements

1) General

a. The meter mechanisms must be compatible with the following housings:

Housing

Manufacturer	Model
POM	E
MacKay	98
MacKay	MKV 97HD
Duncan	90

The mechanisms and domes shall lock in place into the housing using the current lock/key system for each type of housing.

b. All materials and components of the meter shall be new and unused.

c. Meters and associated systems shall comply with all applicable ADA regulations, including the more stringent of Federal or California. CITY shall be responsible for all parking meter poles.

d. Meters shall have a modular design such that meter components shall be able to be exchanged or replaced in the field in less than 10 minutes.

e. All electronic components, connections, CPU and wiring shall be fully weatherproofed for their useful life.

f. The proposed mechanism shall be equipped with a minimum of two Secure Access Memory (SAMs) sockets capable of accepting card schemes (*e.g.,* transit cards).

g. Meters shall have built-in diagnostics software that date- and time-stamps all events (*e.g.,* meter failures, resets, low battery, payments) for retrieval and analysis in field or remotely; all data shall be integrated with the MMS supplied under this contract.

h. Meters shall feature an out-of-order function that date- and time-stamps the out-of-order event for eventual comparison to parking citation information. This information shall be automatically sent wirelessly to the MMS (assuming that power and communications are available), and shall also be available for manual collection by maintenance personnel (via mobile MMS and/or handheld) or other manual interface at the meter).

i. If the card reader fails, the meter shall continue to allow coin payment; if the coin chute fails, the meter shall continue to allow credit/debit card payment.

j. The meter shall allow for adding time to an existing parking session, up to the maximum time limit.

k. Meters shall accept all available types of payment for adding time.

l. Meters shall periodically download and store the Hotlist from the MMS so that they prevent cards on the Hotlist from being used even when communication is not available.

m. Meters on which the coin chute and the card reader both have failed shall continue to accept mobile payments and grant time.

2) Coin Chute

a. Coins passing through the meter shall be deposited directly into a sealed container in a separate vault area of the meter.

b. Meters shall provide a count of all invalid coins.

c. If the coin slot is inoperable, meters shall have the option to accept card payments (*e.g.,* credit card and smart card).

d. The coin chute or track shall be a free-fall type.

e. The chute shall include an anti-backup provision to prevent the retrieval of deposited coins (*e.g.,* attached to strings, paddles, wires).

f. The entrance to the chute shall be replaceable stainless steel to accommodate or screen out coins of various sizes.

g. The jam alarm shall only stay active as long as the cause of the jam is present in the coin chute.

h. When the coin chute detects a jam, the jams shall be recorded in the maintenance log. At a minimum, the meter shall be able to detect the following objects:

i. bent paper clip

ii. bent soda can tab

iii. cotton

iv. toothpick

v. folded paper or cardboard (matchbook cover, business card, etc.)

vi. folded plastic straw

vii. coffee stirrer

viii. coin-wrapped in tape

3) Coin Validation

a. Meters shall provide a count of all valid coins or valid tokens passing through the coin chute to an accuracy level of 99%, so 990 coins out of 1000 shall be recorded.

b. The coin validation mechanism shall be programmable to accept a minimum of eight different coins and/or tokens including U.S. nickels, dimes, quarters and dollar coins.

c. The coin validation system shall accept all user-defined coins and tokens through software parameter changes only. Software changes shall be able to be sent to the meter wirelessly and via a mobile MMS and/or a handheld device.

d. Should the U.S. Mint change the existing currency in any way, CONTRACTOR shall, at its own expense, update the software to accept the new coins issued as well as the old coins as soon as new coins are available to the general population.

e. CONTRACTOR shall be able to alter the coin table to add new coins or to specify the screening of invalid coins upon Parking Services request. Any changes to the validation process shall be made within ten business days of written request by Parking Services. Parking Services will provide samples of objects to be screened out as invalid coins.

f. The coin validator and coin chute operations shall incorporate no contact points that could be affected by grime or moisture, or a combination of the two.

g. The coin validation system shall register both metallic and non-metallic jams.

4) Screen

a. Screens shall have a configurable backlight feature that is illuminated by any activity at the meter; *e.g.,* pressing a button, inserting a card or coin, and shall remain illuminated for a duration specified by Parking Services.

b. Date and time shall be displayed on the screen at all times when the meter is "on."

c. Meter ID shall be visible on one of the information screens.

d. Screens shall be able to electronically display:

- **i.** Rates
- **ii.** Days and hours of operation
- **iii.** Tow information
- **iv.** Instructions to the customer

e. The screen shall be legible and visible under all daytime and nighttime lighting conditions, including fog and direct sunlight and at various angles, (*e.g.,* a taller person will view the screen at a different angle than a shorter person.)

f. The screen shall be resistant to vandalism.

g. During Operating Hours, the screen shall display the current time period and corresponding rate or regulation, and whether the meter has time left or is expired.

h. The screen shall be fully programmable to display, at a minimum, messages corresponding to the following conditions:

- **i.** Condition 1: meter is “on” and Idle before operating hours. Information: Days/hours of operation, time slots, rates, regulations; configurable “Free” message (*e.g.,* “Free until XX:XX).
- **ii.** Condition 2: meter is “on,” Idle, and unpaid during operating hours. Information: Days/hours of operation, time slots, rates, regulations; configurable “Expired” message.
- **iii.** Condition 3: meter is “on,” Idle, and paid during operating hours. Information: Days/hours of operation, time slots, rates, regulations; countdown of time left before meter expires.
- **iv.** Condition 4: Customer inserts a card incorrectly during operating hours. Information: Error message specific to condition (*e.g.,* “card inserted incorrectly”).
- **v.** Condition 5: Customer inserts credit card and it is declined. Information: Error message specific to condition (e.g. “Invalid card; use another card”)
- **vi.** Condition 6: Customer inserts parking card causing the meter to become Active, adds/subtracts time and money using meter inputs (*e.g.,* +/- buttons), and confirms transaction (*e.g.,* presses “OK” button). Information: configurable “please wait” message followed by configurable “transaction completed” message.
- **vii.** Condition 7: Customer inserts parking card causing the meter to become Active, but pulls card out before transaction is completed. Information: Configurable “transaction cancelled” message.
- **viii.** Condition 8: Card slot is inoperable. Information: Days/hours of operation, time slots, rates, regulations; configurable error message specific to condition (e.g. “no cards; use coin”).
- **ix.** Condition 9: Coin slot is inoperable. Information: Days/hours of operation, time slots, rates, regulations; configurable error message specific to condition (*e.g.,* “no coins; use card”).
- **x.** Condition 10: Both coin and card slots are inoperable. Information: Configurable message specific to condition (*e.g.,* “out of order”).
- **xi.** Condition 11: Customer presses “cancel” button. Information: Configurable “transaction cancelled” message.
- **xii.** Condition 12: Meter is Active (payment is in progress). Information: current time slot and rate, time and corresponding payment stepping up or down as Customer adds coins or presses the +/- buttons to add/subtract time.
- **xiii.** Condition 13: Meter is Active, current timeslot has a rate assigned, next time period has a Tow regulation; Customer adds money/time up

to the beginning of Tow regulation. Information: Configurable “limit reached” message (*e.g.,* “Limit Reached; Tow after XX:XX”).

xiv. Condition 14: Meter is Active, current time slot has a rate assigned, Customer adds money/time up to the time limit programmed in the meter. Information: Configurable “limit reached” message (*e.g.,* “4-hr limit reached”).

xv. Condition 15: Meter is Idle, current time slot has Tow regulation. Information: Configurable “tow” message (*e.g.,* Tow until XX:XX; DO NOT PARK”).

xvi. Condition 16: Meter is “on” and Idle after operating hours. Information: Configurable “Free” message (*e.g.,* “No payment accepted”).

xvii. Condition 17: Meter has special programming in effect. Information: Days/hours of operation, time slots, rates, regulations; configurable “special” message specific to the special programming.

5) Meter Interface

a. The meter shall have a mechanism for inputting information (*e.g.,* buttons, keypad). The mechanism shall be rated for more than 200,000 cycles and shall be completely environmentally sealed to prevent interruptions in service due to moisture, dust, and other airborne contaminants. The labels shall not wear off the mechanism throughout the duty cycle.

b. The meter shall have a mechanism that provides prompting and confirmation to the Customer as he/she conducts a payment at the meter.

6) Clock

a. Meters shall automatically adjust internal clocks for Daylight Saving Time periodic changes.

b. Meter clocks shall be accurate to within plus or minus two seconds per day.

c. Meter clocks shall be synced each time they communicate with the MMS.

d. Meter clocks shall track each day of the week.

7) Power

a. Meters shall include a means to augment power through solar technology, in an environment that includes trees and multi-story buildings.

b. If the proposed battery consists of a rechargeable battery and a backup, non-rechargeable battery, then Parking Services shall be able to purchase and replace each battery component individually.

c. Batteries shall be standard “off-the-shelf” battery products available for consumers.

d. Non-rechargeable batteries shall not include any electronic boards or components besides wire connection to the mechanism.

e. The voltage check system for rechargeable and non-rechargeable batteries shall be integrated into the mechanism reset sequence.

f. Maintenance personnel shall be able to replace non-rechargeable batteries without the use of tools (*i.e.,* nothing should be screwed in or otherwise constrained from removal).

g. A low battery remote alarm indicator shall be included to facilitate timely replacement of batteries.

h. If a meter loses power (solar and/or battery), or the battery becomes depleted or disconnected, the meter shall be able to retain all stored programming, operational, and financial audit data for a minimum period of one year.

i. Based on the operational parameters identified in the Request for Proposals, new and fully charged Meter Non-Rechargeable Battery Pack (part # 795-600-H3) shall function for at least one year from installation date.

8) Visual Enforcement

Meters shall have a means for a PEO to determine payment status through visual inspection of the meter itself.

8) Card Reader Payment and Processing

a. Meters shall accept Visa and MasterCard, and allow for expansion to other commonly accepted credit card brands. Meters shall accept the City of Sacramento Parking Card, as provided by CONTRACTOR.

b. Meters shall have the ability to be programmed for additional payment systems upon request of Parking Services (*e.g.,* third party payments, metro area transit cards).

c. The maximum number of credit card transactions accepted, while in “hold and send” mode, before automatically disabling credit card payment method shall be configurable via MMS.

d. The meter’s card reader shall be non-locking and shall always permit customers to remove cards without damage to the card, especially during a fault situation or power failure.

e. If a credit card is inserted improperly (*e.g.,* upside down or with the magnetic stripe reversed), the card shall be easily removed by the Customer without the use of any tools.

f. If the card slot or reader is inoperable, the meter shall have the option to accept coin and contactless methods of payment.

g. The card connector shall be rated at more than 200,000 cycles under ideal conditions.

h. The meter shall awaken automatically upon detection of any valid card insertion into the card reader.

i. The card reader module shall have no electronic intelligence of its own. All of the driver and decision-making circuitry that establishes communication with inserted cards shall be located on the main board.

j. If a customer attempts to use a credit card when the meter cannot communicate, the meter shall determine whether the card is on the hotlist. If the card is on the hotlist, the card shall be "declined" immediately. If the card is not on the hotlist, it shall be accepted and time shall be given, and the meter will transmit the transaction information once communications are restored.

k. The meter shall be capable of storing transactions while "offline" for up to 30 days.

9) Revenue Audit Capabilities

a. Electronic information (coin count and revenue totals) shall be have the following accuracy rates:

i. Coins: greater than 99% accuracy between the MMS collection report and the physical coin count.

ii. Credit Card: 100% accuracy between the gateway report and the bank deposit.

b. Meters shall record/store the number and value of all valid coins, including a count of each individual type of valid coin (*e.g.,* quarters, dimes, nickels, dollars) and the date and time each coin was inserted, even if time cannot be purchased by the coins (*e.g.,* during periods of "no parking" or free parking, or when the customer has already purchased the maximum amount of time).

c. Meters shall record/store a count of each invalid coin.

d. Meters shall record/store the number and value of valid pre-paid and credit card transactions, and a summary of electronic cash amounts.

e. Each type of payment information (valid coins, invalid coins, electronic payments) shall be accounted for.

f. Audit information shall be available for retrieval through MMS (both standard and mobile versions and/or handheld device).

g. Financial audit data shall not be affected by the reading or retrieval of maintenance data, by resetting the meter, or by other maintenance events.

10) Collection Event Recording and Revenue Counter Reset

a. CONTRACTOR's solution shall provide an ability to reset mechanism coin counters at the time of the physical coin collection.

b. CONTRACTOR's solution shall be able to record the time and date of the physical coin collection, along with detailed coin audits since the last collection, within the proposed MMS.

c. CONTRACTOR's solution shall be able to support opening of the vault door for maintenance purposes without resetting mechanism coin counters.

d. All physical collection events shall be entered into the MMS and be available as report filters.

e. CONTRACTOR's solution shall have the ability to reset mechanisms' coin counters remotely from the MMS (both stand alone and mobile). This feature shall support both individual mechanism reset and group resets that depend on set MMS groupings (*e.g.,* collection route and sub route, maintenance route, street block(s), entire street).

11) Communications

a. Meters shall transmit payment data (*e.g.,* coins, credit cards, smart cards) and maintenance alert data to the MMS wirelessly within 90 seconds after determining the transaction to be completed, if configured to do so.

b. Meters shall support secure on-line authorizations of credit cards at the time of the transaction.

c. Meters shall support a configurable "hold and send" feature for credit card payments that can be activated when the communication network is down or not available and credit card payments cannot be authorized in on-line mode.

d. Meters shall initiate communication with the MMS periodically, on a schedule mutually agreed upon by Parking Services and CONTRACTOR, regardless of the occurrence of transactions or faults.

e. Meters shall operate in an independent network environment; *i.e.,* each meter shall communicate wirelessly without installation of any additional network equipment or additional infrastructure.

f. CONTRACTOR will provide a procedure to allow CITY to "deactivate" mechanisms that are not deployed and being used for revenue transactions; *e.g.,* mechanisms that are not assigned to parking spaces. This will not apply to meters that are temporarily powered-off because the associated parking space is reserved and the meter is "bagged."

12) Maintenance

a. Meters shall be easily maintained and serviced, and shall be designed so that metallic and non-metallic foreign objects can be cleared from the coin chute or track and/or card reader slot within a three-minute timeframe, under any weather conditions. No special tools shall be required.

b. Meters shall return to full functionality within one minute of replacing a coin chute or track and/or and card reader.

c. Meters shall feature on-board diagnostics that include a full on-screen menu or display that shows electronic error codes that enable technicians to analyze problems on-site. Diagnostics shall be available to authorized users without opening the meter housing, and shall provide, at minimum, the following information regarding the meter's current operating status:

i. View the current assigned meter configuration and software version.

ii. View the battery level of the rechargeable battery, the non-rechargeable battery, and the solar panel charge level.

iii. Test the operating condition of the card reader.

iv. Test the operating condition of the coin validator.

v. Test the integrated wireless communications.

vi. Allow for the meter to be turned off.

d. Meters shall allow for Parking Services' maintenance and meter shop staff to add time without making payment and/or having the payment register as revenue in the audit information (*e.g.,* if a Customer's payment has to be deleted during maintenance). This usage shall be logged as a distinct payment type (*e.g.,* instead of the payment being labeled "cash" or "credit", it might be labeled "maintenance"). The value of the payment shall be logged as $0.00. Staff shall be able to add up to a full day's time (up to 24 hours) to the mechanism with this feature.

e. The proposed mechanism shall have the ability to temporarily disable the recording of cash and card (credit and smart card) revenue to allow audit data test purchases by coin or card without being recorded in the payment audit data. After this feature is invoked, the recording of any coins/cards as payment for parking (or revenue) shall be immediately disabled to allow for testing. The test coins/cards shall not register as payments until there has been no activity for a set period of time provided by Parking Services (this shall be configurable via MMS), after which time the registering of payments is enabled automatically. Once the meter testing is completed, the meter shall automatically revert back to normal operation without further operator intervention or commands.

B. Meter Mechanism Additional Specification Requirements

1) Screen

The screen shall support dynamic messaging functionality to reflect changes in pricing, regulations, display messages, format, or Configurations made in the MMS and communicated wirelessly to the meter at least once per day.

2) Card Reader Payment and Processing

a. Meters shall accept a stored value "parking card."

b. A payment by parking card shall consist, generally, of the following steps:

i. Customer inserts parking card in card slot.

ii. Meter reads and displays balance in the parking card.

iii. Customer adds/subtracts time and money using meter input mechanism (*e.g.,* with +/- or ↑/↓ buttons).

iv. Customer confirms payment using meter input mechanism (*e.g.,* "OK" or √ button).

v. Meter writes new balance back to parking card while displaying configurable “please wait” message.

vi. Meter displays configurable “transaction completed” message and starts counting down time.

3) Communications

Meter Mechanisms shall support secure on-line authorizations of smart cards at the time of the transaction.

C. Meter Mechanism Optional Specifications

Meters shall be equipped with GPS technology, *i.e.,* MMS shall allow for the end user to enter the meter terminal number in the search field and generate a report with the exact location of the meter on the map.

SECTION III: MMS, Meter Programming and Data Integration

A. MMS, Meter Programming & Data Integration General Specification Requirements

1) MMS – General

a. Login to the MMS shall take less than 60 seconds.

b. MMS shall contain, at a minimum, the following general modules:

i. System Administration, including the ability to change rates and other operating parameters remotely via the Internet.

ii. Asset and Inventory Management, including

1. GPS location of meters on a map, with statistical mouse-over feature.
2. Meter uptime (over time, by zone, street, and meter number).
3. Meter paid occupancy reports.

iii. Faults and Maintenance Reports, including

1. Coin box level (% full).
2. Exception reports for units not performing as required (communications or payment faults).

iv. Revenue Reports, including

1. Credit card reconciliation (daily, weekly, monthly, annually).
2. Cash collection reports (by date, time, meter number, and collector).
3. Accumulative totals of all cash and card transactions (daily, weekly, monthly, or annually).
4. Revenue summary reports (daily, weekly, monthly, annually, by zone, route, street or meter number).
5. Individual transactions (cash or credit) by meter number.

v. Management of User Permissions and Alarms

vi. Hotlist to allow CITY to block usage of credit and smart cards suspected of fraud

vii. Meter Behavior Programming

viii. Management of maintenance work orders

c. MMS shall be server-based, hosted by CONTRACTOR, and accessed via the web. MMS shall not require any custom software to be installed on the end user's machine. Only the City of Sacramento standard web browser shall be required.

d. CONTRACTOR shall be responsible to deliver any and all updates to its MMS to ensure full compatibility with the latest versions of the internet browsers for the useful life of the meters.

e. MMS shall offer a uniform user interface, in which the same colors, fonts, nomenclature, icons and logos are used for all MMS modules.

f. Access to help materials and user manuals shall be available on-line.

g. The management system shall be capable of exporting reports to a variety of common Microsoft file formats including, but not limited to, Excel, Access, and Word.

h. The MMS and supported meters shall be compatible with Parking Services' enforcement/citation platform, the City of Inglewood's ICMS. It is understood that additional integration will be required and will depend upon the direction of Parking Services. It is further understood that this will require the cooperation with ICMS, for which the CONTRACTOR cannot be responsible.

i. It will be the responsibility of CONTRACTOR to take every precaution to ensure that all systems, files, data, equipment, communications, and facilities are reliable. CONTRACTOR shall have a detailed, City-approved recovery plan in place, tested, and ready to be implemented for all key facilities so that services are restored quickly and in accordance with City performance standards, in the event that a natural disaster or some other unanticipated event (rolling black outs do not constitute an unanticipated event) disrupts the system.

j. Each user that securely logs into the IPS MMS shall be required to provide a username and password.

k. Each user shall be assigned to a defined user profile that defines which functions and reports are visible and which ones are not accessible. Samples of these profiles include Administrator, Coin Collection, Customer Service, Manager, Financial Analyst, Utility Manager, and Technician.

l. These profiles and available reports within each user profile shall be customizable to the specific needs of Parking Services, and shall be managed by Parking Services system administrators without requiring CONTRACTOR's involvement.

m. MMS availability shall exceed 99.9% uptime.

2) MMS Documentation

a. All standard reports in the MMS shall be fully documented and explained in the MMS manual, including allowable values.

b. All standard meter Behavior programming variables shall be fully documented and explained, in the MMS manual, including allowable values.

c. All standard meter Backend Settings shall be fully documented and explained, in the MMS manual, including allowable values.

3) MMS Users and Permissions

a. MMS shall support a minimum of 10 different user groups, each with its own set of permissions for viewing reports and/or conducting changes to meter programming.

b. MMS shall allow Parking Services to manage users and permissions directly, without having to go through CONTRACTOR in order to add users or create or modify user permissions.

4) Asset and Inventory Management

MMS shall, at a minimum, have the ability to record and display the following information:

a. Date- and time-stamp of all maintenance, inventory, and audit data.

b. Mechanism serial numbers, maintenance routes and descriptions, and Parking Space IDs.

c. Audit, maintenance, inventory and programming transactions for a given space Parking Space ID.

5) Faults and Maintenance

a. The MMS shall contain reports on meter health status.

b. The MMS shall automatically record meter maintenance performed by repair staff.

c. The MMS shall record all meters' general status and performance, including fault and maintenance events, parking sessions, financial transactions, and payment status time.

d. The MMS shall contain, at a minimum, the following reports:

i. Maintenance activity by mechanism serial number, Parking Space ID, parking meter repairer, or operational status.

ii. Exception report for meters not repaired.

iii. Exception report for meters that have not communicated with the MMS within 24 hours or more, including the number of hours since last communication.

iv. Wireless signal strength.

v. Operational status by: mechanism serial number, Parking Space ID, date and time. This shall include automatic health events created by meter and manually entered by PMR's maintenance activity (*e.g.,* cleared cotton jam, cleaned meter dome, remove graffiti).

6) MMS Alarms

a. The MMS shall log all alarms and retain information, including time of alarm, time resolved, who resolved the problem, and the action taken, including the service agent/technician number and IT trail.

b. The MMS shall include, at a minimum, initial warning alarms and subsequent shutdown/failure alarms for the following events:

i. Coin collection – when physical collection occurs.

ii. Coin collection required – when the coin canister is almost full (level determined by Parking Services) and when the coin canister is completely full.

iii. Initial low battery setting has been reached.

iv. Battery is experiencing a fault.

v. Wireless communications interruption.

vi. Coin payment and/or card payment operation failure.

vii. Operating system fault.

viii. Any abnormal operational functions.

ix. Door open detection (vault and maintenance doors), if housings are fitted with appropriate sensors.

x. Status/record of all file transfer activities.

xi. Live alarm to detect communication status.

xii. Notice of various initialization and machine setting routines.

xiii. Communication failure alarm in MMS.

xiv. No transaction within defined timeframe.

xv. No coin transaction within defined timeframe.

xvi. No card or credit card transaction within defined timeframe.

xvii. MMS is “frozen” or down.

xviii. Server that accepts meter data, and supports the MMS, is down.

c. The MMS shall alert Parking Services every day that the number of meters in the non-reporting meters list reaches one percent (2%) of the number of accepted meters.

d. The MMS shall notify CITY personnel via email and text message, as determined by Parking Services.

7) Revenue Reports

a. The MMS shall contain summary revenue reports.

b. The MMS shall contain detail revenue reports, to the meter level.

c. The MMS shall report revenue broken down by payment type (*i.e.,* coin, Parking Services parking card, credit card, Mobile Payments, and other forms).

d. The MMS shall include a Transaction Detail Report that lists, for every transaction, at least the following items:

i. Transaction ID
ii. Transaction Date
iii. Transaction Start Time
iv. Transaction End Time
v. Amount Paid
vi. Payment Type
vii. Parking Time Start
viii. Amount of Parking Time Purchased.

In the case where payment is made during prepayment hours, the Time Purchased shall include only time starting at the beginning of operating hours for which payment is required. If coins are deposited during a "free" time (but not a prepayment time), this should be recorded as "no time purchased."

e. The MMS shall, at a minimum, have the ability to generate the following (or similar) reports by date/date range:

i. Revenue by Parking Space ID, collection zone, maintenance route, or other geographically defined areas, *e.g.,* Parking Management Area or Parking Management Zone.

ii. Payment for parking session by Parking Space ID, collection zone, maintenance route, or other geographically defined area.

iii. Current location of mechanism by mechanism serial number.

iv. Daily meter collection report with meter numbers, route numbers and amount collected by metered space.

v. Exception report for meters not collected.

vi. Revenue over a specified time period.

vii. Collection revenue over a specified time period.

viii. Number of meters and % of inventory out-of-order over a specified time period.

ix. Average repair time over a specified time period.

x. Rejected and Declined cards (*e.g.,* credit cards, smart cards, etc.) over a specified period of time and area (*e.g.,* collection route, maintenance route, enforcement route etc.). The report shall also be able to identify overall share of rejected/declined transactions based on card transaction counts and revenue.

f. The MMS shall have flexibility for reporting functions, including user-generated customized reporting. To the extent that reports cannot be modified by the user to produce the necessary information contained within the MMS, CONTRACTOR shall develop and publish such reports for Parking Services at no additional cost. The time required to create a report shall not

exceed 20 business days, and reports of lower complexity shall be completed in a range of 5-10 business days. However, the final time to completion will be mutually agreed by both Parties.

g. The MMS shall provide time and date range reporting capabilities of various payment statuses (*e.g.,* coin revenue, credit card revenue, smart card revenue etc.), revenue collection, alarm status, operational status, current and historic meter faults.

h. The MMS shall include a standard report showing the usage of the maintenance cards, maintenance feature that disable revenue totaling, and maintenance payments.

i. The MMS shall include a standard report showing the number of rejected smart cards and credit cards per machine broken out by reason for rejection including at least the following four reasons:

i. The card is on the Hotlist

ii. The bank declined the charge

iii. A communications failure prevented an authorization from being approved, and

iv. The card was unreadable

j. The MMS shall include a standard report showing revenue from each collection day to the following collection day.

k. Parking Services shall be able to introduce new payment types (*i.e.,* Tap and Go cards) and have them reflected in the Revenue Reports.

8) Management of Alarms

The MMS shall be configurable to send alarms to designated personnel, by email, text message, and/or voice message, if a meter has a failure. The type of notification and whether to notify shall be configurable by type of failure.

9) Meter Location Assignment in MMS

a. The MMS shall accommodate at least twelve symbol alpha numeric format of the meter identification numbering sequences, including but not limited to meter number, parking space number (*i.e.,* Parking Space ID), collection zone number, enforcement zone number etc. (The current format for Parking Space ID is nine characters: four alphabetic and up to five numeric; *e.g.,* **PKGS12345**.)

b. The MMS shall allow for assignment of meter locations in batches via CSV file.

c. Behavior of a meter mechanism installed or replaced on the street shall be programmed automatically via a system whereby the mechanism transmits a location identifier to the MMS, and the MMS responds with the behavior parameters for that location.

10) Meter Backend Settings

a. The following meter settings shall be programmable:

i. Standby mode and times

ii. Card payment settings

iii. Coin payment settings

iv. Screen parameters

v. Backlight settings

vi. LED settings

vii. Mobile Payment display settings

viii. Other meter settings as applicable

b. The meter card payment system shall be programmed with a customizable time delay for the customer to cancel a transaction.

c. The Meter shall allow programing for a configurable grace period where the specified amount of time must elapse after the time is exhausted before the meter indicates "expired." For example, if the grace period is one minute, and a customer purchases 60 minutes of parking, then at the end of the 60 minutes, the timer shall indicate zero minutes remaining for the duration of the one-minute grace period, and then the meter shall report "Expired" on the display and any other methods, such as lights, LEDs, street-facing displays, etc.

B. **MMS, Meter Programming, & Data Integration Additional Requirements**

1) MMS – General

a. Date format shall be consistent throughout the entire MMS and shall be customizable by Parking Services.

b. MMS shall include a search module that allows the user enter in a parking space identifier (*i.e.,* Parking Space ID) and date or date range to get a list of the then currently applied rates (including any special event rates) and hours of operation.

c. CONTRACTOR shall provide and maintain for the term of the contract (at no cost to Parking Services) an SFTP site for the purpose of exchanging all XML and CSV files with Parking Services, except for incoming transaction data XML.

d. ***Within 60 Days of the Notice to Implement this feature,*** CONTRACTOR shall provide a file structure in the SFTP site as specified by Parking Services.

e. MMS shall be able to transmit Mobile Payment status to the meter.

f. The MMS shall allow Parking Services to create ad-hoc reports combining user-defined and standard variables.

g. CONTRACTOR shall develop (at no additional cost) up to 25 custom reports for the term of the contract.

h. The MMS shall be able to interchange data with other vendors of parking solutions, such as parking guidance, mobile payments, enforcement, and financial reporting systems.

2) Meter Behavior Programming

a. The MMS shall accept meter programming in at least two different ways:

i. Manually, via web user interface in the MMS or mobile MMS.

ii. Automatically, via XML or CSV file deposited in CONTRACTOR's SFTP site, per the specifications in Attachments 1-4.

b. The specifications for all meter programming as listed in this document and in reference documents may be reasonably modified with the mutual agreement of both parties.

c. The MMS shall allow Parking Services to determine which variables related to a metered space may be edited via XML, CSV or web user interface.

d. The Meters shall accept programming for subsets of the rules required in section III.B.2.c and as described in Example III.B.2.c.

Example III.B.2.c

Rule Type	Overall Behavior	Rule	Specific Behavior
FREE	Meter has no rate assigned, does not accept card payment, and does not display time purchased if a coin is dropped. Time limit is 0.	FREE1, FREE2, FREE3	Meter displays one of three possible pre-defined FREE messages
PREPAY	Meter accepts payment before the beginning of operating hours, for the first hour of operating hours.	PREPAY1, PREPAY2	Meter displays one of two possible pre-defined PREPAY messages
RATE	Meter accepts payment and credits time based on programmed rate for specified hours of the day.	RATE00.00, RATE00.05,… RATE18.00	Meter charges specified rate during specified hours
TOW (no parking)	Meter has no rate assigned, does not accept card payment, and does not give time if a coin is dropped	TOW1, TOW2, TOW3	Meter displays one of three possible pre-defined TOW messages
TIME LIMIT	Meter has time limit assigned so that the amount of time a Customer can purchase is restricted for specified hours of the day.	TL0010, TL0015, … TL1440	Meter restricts purchase to specified time limit during specified hours.

e. The MMS shall accept programming for a set of general business rules that govern the specific rules listed in requirement III.B.2 as defined by Parking Services during the development and testing phase, and as listed in Example III.B.2.d.

Example III.B.2.d

Sample general business rules to be programmed into MMS:

- Time periods programmed with behaviors FREE, PREPAY, RATE, and TOW have to be mutually exclusive; i.e. no period of day may not have two of these rules assigned at the same time
- Time periods programmed with behaviors PREPAY may only precede time slots programmed with rule type RATE.
- Time periods programmed for FREE or TOW may not have time limits assigned to them
- Time limits apply only to time slots programmed with RATES.

f. Parking Services shall be able to program RULE TYPE “RATE” with a rate = $0.00 (different than RULE TYPE “FREE”). When RULE TYPE “RATE” = $0.00, meter behaves the same as RULE TYPE “FREE”, but displays the information differently, as illustrated in Example III.B.2.e.

Example III.B.2.e

In addition to:

Meter programming:	Meter screen:
… 7:00am – 12:00pm: RULE TYPE = RATE; RATE = $1.50/hr 12:00pm – 2:00pm: RULE TYPE = FREE 2:00pm – 3:00pm: RULE TYPE = RATE; RATE = $2.00/hr …	PKGS1250 EXPIRED – MAX 30 min ENFORCED MON-SUN 7:00am – 12:00pm: $1.50/hr 12:00pm – 2:00pm: FREE 2:00pm – 3:00pm: $2.00/hr MORE ↓

User shall be able to program:

Meter programming:	Meter screen:
MON-SUN 4:30am – 7:00am: RULE TYPE = PREPAY 7:00am – 12:00pm: RULE TYPE = RATE; RATE = $1.50/hr 12:00pm – 2:00pm: RULE TYPE = RATE; RATE = $0.00/hr 2:00pm – 3:00pm: RULE TYPE = RATE; RATE = $2.00/hr 3:00pm – 11:00pm: RULE TYPE = RATE; RATE = $0.25/hr MAX TIME = 30 min	PKGS1250 EXPIRED – MAX 30 min ENFORCED MON-SUN 7:00am – 12:00pm: $1.50/hr 12:00pm – 2:00pm: FREE 2:00pm – 3:00pm: $2.00/hr MORE ↓

g. As illustrated in Example III.B.2.f, meters shall accept programming of time limits independent of rates.

Example III.B.2.f

User shall be able to program meter as follows:

FROM_TIME	TO_TIME	RULE	BEHAVIOR
9:00 am	12:00 pm	RATE2.00	Meter charges $2.00/hr from 9:00 am to 12:00 pm
12:00 pm	3:00 pm	RATE3.00	Meter charges $3.00/hr from 12:00 pm to 3:00 pm
3:00 pm	7:00 pm	RATE2.50	Meter charges $2.50/hr from 3:00 pm to 7:00 pm
7:00 pm	11:00 pm	RATE0.25	Meter charges $0.25/hr from 7:00 pm to 11:00 pm
9:00 am	5:00 pm	TL0120	Meter limits parking to 120 minutes from 9:00 am to 5:00 pm
5:00 pm	11:00 pm	TL0240	Meter limits parking to 240 minutes from 5:00 pm to 11:00 pm

g. ***Within 90 Days of the Notice to Implement this feature,*** the user shall be able to program and re-program meters in batches, whether or not the original programming within the selected batch was the same, and without affecting other parameters of the original meter Behavior, as illustrated in Example III.B.2.g. Upon request by Parking Services, this capability shall be developed by CONTRACTOR within 90 days of receipt of final specification.

Example III.B.2.g

Scenario: Meters in Sacramento's Old Sacramento and Midtown neighborhoods are currently in effect Mon-Sun until 8:00 pm and Mon-Sat until 6:00 pm respectively. Parking Services plans to conduct a pilot project of extending the hours of operations of the meters in both neighborhoods until 10:00 pm. The user shall be able to select all meters in both neighborhoods and change only the end time of operating hours, so that in Old Sacramento, meters operate Mon-Sun until 10:00 pm, and in Midtown, meters operate Mon-Sat until 10:00 pm.

h. If the programming parameters of any given meter shall be grouped in the MMS into a Configuration and assigned a name, then the name of the Configuration shall automatically reflect the actual parameters that make up the Configuration as well and an identifier that describes the geographic location where the Configuration is in effect, in a format mutually agreed upon by CONTRACTOR and Parking Services during the development and testing phase. Parking Services' goal with this requirement is to prevent discrepancies between the name of a Configuration and the actual parameters contained therein. This requirement is illustrated in Example III.B.2.h.

Example III.B.2.h

If meters on the 200 block of North Point St. (Block ID = 58502, provided by Parking Services) are programmed with the parameters described below:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Fri	FREE					PREPAY					RATE_3.50			RATE_3.75			RATE_4.00			RATE_0.25				FREE	
											TL = 120 min									TL = 240 min					
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sat	FREE					PREPAY					RATE_0.25													FREE	
											TL = 120 min									TL = 240 min					
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun	FREE					PREPAY								RATE_0.25										FREE	
														TL = 240 min											

The parameters shall be grouped into a Configuration, and the name of the Configuration shall be generated automatically and shall reflect the location where it is assigned as well as the parameters contained therein. For example:

58502 MF:0430,PP,0900,TL0120,R3.50,1200,R3.75,1500,R4.00,1800,TL0240,R0.25,2200
Sa:0430,PP,0900,TL0120,R0.25,1800,TL0240,R0.25,2200
Su:0430,PP,1200,TL0240,R0.25,2200

where the first line of parameters reads:

Monday through Friday, 4:30 start prepay; 9:00 start time limit 120 minutes rate 3.50; 12:00 start rate 3.75; 15:00 start rate 4.00; 18:00 start time limit 240 minutes rate 0.25; 22:00 end

And so on.

i. The meter shall never allow a Customer to purchase time in excess of the following, whichever is smallest, as illustrated in Example III.B.2.i:

i. The total number of operating hours for the day (i.e. if meter operates from 9am to 6pm, the maximum number of hours a Customer can purchase is 9, and only if the time limit is "no limit").

ii. The total number of hours left in the operating hours at the time the Customer conducts the transaction.

iii. The maximum number of continuous operating hours from the time of payment excluding TOW periods.

iv. The time limit programmed in the meter

Example III.B.2.i

The scenarios described below illustrate the maximum number of hours a Customer can purchase in each case:

Meter Programming	Maximum No. Hours Customer Can Purchase
12:00am – 4:30am: FREE 4:30am – 9:00am: PREPAY 9:00am – 6:00pm: RATE = $2.00/hr MAX TIME = 1440 min	9 hours (from 9:00am to 6:00pm)
12:00am – 4:30am: FREE 4:30am – 9:00am: PREPAY 9:00am – 6:00pm: RATE = $2.00/hr MAX TIME = 1440 min Customer arrives at noon	6 hours (from 12:00pm to 6:00pm)
12:00am – 4:30am: FREE 4:30am – 9:00am: PREPAY 9:00am – 4:00pm: RATE = $2.00/hr 4:00pm – 6:00pm: TOW 6:00pm – 7:00pm: RATE = $2.00/hr 7:00pm – 12:00am: FREE MAX TIME = 1440 min	7 hours (from 9:00am to 4:00pm)
12:00am – 4:30am: FREE 4:30am – 9:00am: PREPAY 9:00am – 6:00pm: RATE = $2.00/hr MAX TIME = 240 min	4 hours (= programmed time limit)
12:00am – 4:30am: FREE 4:30am – 9:00am: PREPAY 9:00am – 12:00pm: RATE = $2.00/hr 12:00pm – 2:00pm: RATE = $3.00/hr 2:00pm – 6:00pm: RATE = $2.50/hr 6:00pm – 12:00am: FREE MAX TIME = 1440 min	9 hours (from 9:00am to 6:00pm)

j. Meters shall accept programming for a minimum of 12 unique time slots within a 24-hr period between 0:00:00 and 24:00:00 hours, each with its own

rule, as illustrated in Example III.B.2.j. Meters shall also be capable of displaying all time slots on the screen at any time of the day (see Section requirement III.B.5 – SCREEN PROGRAMMING).

Example III.B.2.j

Time Slot	Days	Time Start	Time end	Rule Type	Corresponding Behavior
1	Mon-Fri	00:00:00	02:00:00	TOW	Meter has no rate assigned, does not accept card payment, and does not display time purchased if a coin is dropped Meter displays TOW message
2	Mon-Fri	02:00:00	04:30:00	FREE	Meter has no rate assigned, does not accept card payment, and does not display time purchased if a coin is dropped Meter displays “FREE UNTIL X” where X is the TIME SLOT START for the first hour with a rate assigned
3	Mon-Fri	04:30:00	07:00:00	PREPAY	Meter displays “FREE UNTIL X” If payment is made, meter credits time starting at 07:00:00
4	Mon-Fri	07:00:00	10:00:00	RATE_1.50	Meter has $1.50 rate assigned Meter displays hours and rates or other rules for all non-free time slots
5	Mon-Fri	10:00:00	12:00:00	TOW	Meter has no rate assigned, does not accept card payment, and does not display time purchased if a coin is dropped Meter displays TOW message
6	Mon-Fri	12:00:00	15:00:00	RATE_2.00	Meter has $2.00 rate assigned Meter displays hours and rates or other rules for all non-free time slots
7	Mon-Fri	15:00:00	16:00:00	RATE_2.50	Meter has $2.50 rate assigned Meter displays hours and rates or other rules for all non-free time slots
8	Mon-Fri	16:00:00	18:00:00	TOW	Meter has no rate assigned, does not accept card payment, and does not display time purchased if a coin is dropped Meter displays TOW message
9	Mon-Fri	18:00:00	19:00:00	RATE_2.50	Meter has $2.50 rate assigned Meter displays hours and rates or other rules for all non-free time slots
10	Mon-Fri	19:00:00	22:00:00	RATE_6.00	Meter has $6.00 rate assigned Meter displays hours and rates or other rules for all non-free time slots
11	Mon-Fri	22:00:00	23:00:00	RATE_0.25	Meter has $0.25 rate assigned Meter displays hours and rates or other rules for all non-free time slots
12	Mon-Fri	23:00:00	24:00:00	FREE	Meter has no rate assigned, does not accept card payment, and does not give time purchased if a coin is dropped Meter displays “FREE”

k. Meters shall accept programming for time slots as small as ¼ of an hour.

l. Meters shall accept programming for up to four different types of days within a week, where each day type contains a unique set of time slot + rule combination, as illustrated in Example III.B.2.l.

Example III.B.2.l

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mo,Fr	FREE					PREPAY					RATE_3.00			RATE_3.25			RATE_3.50			RATE_0.25				FREE	
Type 1											TL = 120 min									TL = 240 min					
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Tu,We,Th	FREE					PREPAY					RATE_3.50			RATE_3.75			RATE_4.00			RATE_0.25				FREE	
Type 2											TL = 120 min									TL = 240 min					
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sa	FREE					PREPAY					RATE_0.25													FREE	
Type 3											TL = 120 min									TL = 240 min					
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Su	FREE					PREPAY								RATE_0.25										FREE	
Type 4														TL = 240 min											

m. Parking Services shall be able to program rates in $0.05 increments.

n. If a meter is programmed with two different rates in adjacent time slots and a Customer pays for time starting in one time slot and ending in the next, the meter shall prorate the amount charged within each time slot for the time purchased, as illustrated in Example III.B.2.n.

Example III.B.2.n

Scenario: Meter is programmed with different rates at different times as described below:

MON-SAT	SUN
12:00am – 4:30am: FREE 4:30am – 9:00am: PREPAY 9:00am – 12:00pm: RATE = $2.00/hr 12:00pm – 2:00pm: RATE = $3.00/hr 2:00pm – 6:00pm: RATE = $2.50/hr 6:00pm – 12:00am: FREE MAX TIME = 1440 min	12:00am – 12:00am: FREE

A Customer arrives on Tuesday at 11:30 am and wishes to stay until 2:00 pm. The meter shall charge:

Thirty minutes (11:30-12:00)@*$2.00/hr + Two hours (12:00-14:00)@*$3.00/hr = $1.00 + $6.00 = $7.00

o. When programming meters via the web user interface, Parking Services shall be able to set the effective time and date when the new meter Behavior takes effect.

p. At any given time, meters shall behave in accordance with programmed meter Behavior parameters until such time as a new set of parameters becomes effective.

3) Initial Meter Behavior Programming

a. Following the programming development and testing phase and upon implementation of the required Parking Services elements to support this functionality, the MMS shall support automatic initial programming of any new set of metered spaces at any time via XML files and CSV tables deposited in CONTRACTOR's SFTP site. The programming of any new set of metered spaces will generally consist of up to four files submitted to CONTRACTOR simultaneously or successively at short intervals as listed below:

i. Parking Space Inventory XML file, as specified in Attachment 1

ii. Operating Schedule XML file, as specified in Attachment 2

iii. Price Schedule XML file, as specified in Attachment 3

iv. Special event pricing and regulation XML file, as specified in Attachment 4

b. Parking Services will require initial programming of meters via XML file as follows:

i. After Notice to Proceed, and following the programming development and testing phase: existing metered spaces, phased in minimum batches of 100, with the specific schedule to be agreed upon between Parking Services and CONTRACTOR during contract negotiations

ii. Whenever newly-metered spaces are legislated in future, as needed.

iii. Whenever individual meters are added to already-metered blocks, as needed.

c. Any number of metered spaces submitted for programming by 11:59:59 PM any day shall be programmed into the system no later than 6:00 AM three business days later; *i.e.,* metered spaces submitted by 11:59:59 PM Monday shall be programmed into the system no later than 6:00 AM Thursday, and so on, barring holidays.

d. Following meter programming, at Parking Services' discretion, CONTRACTOR shall:

i. Provide a reconciliation XML file for verification in accordance with the specification in Attachment 7

ii. Set the programmed metered spaces to "Active" so that they are ready to go live on the street.

4) Meter Programming Reconciliation

a. Following initial programming or re-programming of any batch of meters, at Parking Services' request, CONTRACTOR shall issue an XML file in accordance with Attachment 7, "Reconciliation XML specification," and deposit it in CONTRACTOR's SFTP site for pickup by Parking Services.

b. ***Within 90 Days of the Notice to Implement this feature***,, the MMS shall allow Parking Services to select any subset of meters using any combination of standard and user-defined filters and an effective date, and generate an XML file as specified in Attachment 7, "Reconciliation XML specification," and deposit it in CONTRACTOR's SFTP site for pickup by Parking Services.

c. The MMS shall issue a reconciliation XML file containing the entire Parking Meter Space inventory and associated Descriptive Variables (both user-defined and standard) per the specification in Attachment 7 to the SFTP site for pickup by Parking Services. Parking Services will use the reconciliation XML to routinely compare the attributes of metered spaces in the Parking Services' and CONTRACTOR databases for the purpose of verifying programming and correcting any discrepancies that may arise.

5) Screen Programming

a. Screens shall be able to communicate rates and regulations for every time slot programmed in the meter, each time slot in one line, so that a Customer arriving at any time of the day when the meter is on can see all the time slots and related rates and regulations for that day.

b. If meter requires more than one screen to display all time slots and rates for one day, then City shall be able to program lines that repeat across all screens and lines that change from screen to screen.

c. MMS shall communicate the programming illustrated in example III.B.5.c, reflecting requirements 3.a and 3.b above:

Example III.B.5.c

Meter programming scenario:

Parking Space ID = PKGS12345
MON-FRI
12:00am – 7:00am: RULE TYPE = FREE
7:00am – 9:00am: RULE TYPE = TOW
9:00am – 12:00pm: RULE TYPE = RATE; RATE = $1.00/hr
12:00pm – 3:00pm: RULE TYPE = RATE; RATE = $3.00/hr
3:00pm – 4:00pm: RULE TYPE = RATE; RATE = $2.00/hr
4:00pm – 6:00pm: RULE TYPE = TOW
6:00pm – 7:00pm: RULE TYPE = RATE; RATE = $2.00/hr
7:00pm – 9:00pm: RULE TYPE = RATE; RATE = $0.50/hr
9:00pm – 11:00pm: RULE TYPE = RATE; RATE = $0.25/hr
11:00pm – 12:00am: RULE TYPE = FREE
MAX TIME = 240 min

SAT-SUN
12:00am – 6:00 am: RULE TYPE = FREE
6:00am – 7:00am: RULE TYPE = PREPAY
7:00am – 12:00pm: RULE TYPE = RATE; RATE = $2.00/hr
12:00pm – 3:00pm: RULE TYPE = RATE; RATE = $3.00/hr
3:00pm – 7:00pm: RULE TYPE = RATE; RATE = $2.00/hr
7:00pm – 11:00pm: RULE TYPE = RATE; RATE = $0.25/hr
11:00pm – 12:00am: RULE TYPE = FREE
MAX TIME = 1440 min

A customer arriving 7:30 am Tuesday might see four rotating screens:

PKGS1250 EXPIRED – MAX 4 hr ENFORCED MON-SUN 7:00am – 9:00am TOW ***DO NOT PARK*** 17 July 2012, 7:30 am MORE ↓
PKGS1250 EXPIRED – MAX 4 hr ENFORCED MON-SUN 7:00am – 9:00am: TOW 9:00am – 12:00pm: $1.00/hr 12:00pm – 3:00pm: $3.00/hr 17 July 2012, 7:30 am MORE ↓
PKGS1250 EXPIRED – MAX 4 hr ENFORCED MON-SUN 3:00pm – 4:00pm: $2.00/hr 4:00pm – 6:00pm: TOW 6:00pm – 7:00pm: $2.00/hr 17 July 2012, 7:30 am MORE ↓
PKGS1250 EXPIRED – MAX 4 hr ENFORCED MON-SUN 7:00pm – 9:00pm: $0.50/hr 9:00pm – 11:00pm: $0.25/hr 17 July 2012, 7:30 am

d. ***Within 90 Days of the Notice to Implement this feature***, all messages on meter screens, including messages related to special programming, shall be based on pre-defined variables, as illustrated in Example III.B.5.d.

e. User shall be able to program Descriptive Variables, whether standard or user-defined, into meter screens, as illustrated in Example III.B.5.e.

f. ***Within 120 Days of the Notice to Implement this feature***, the screen editor shall be independent of the rate and tariff editors, so that messages are uniform across all meter programming, as illustrated in Example III.B.5.f.

<u>Example III.B.5.d/III.B.5.e/III.B.5.f</u> [refers to all three requirements above]

User shall be able to introduce user-defined variables (such as Parking Space ID in example below) into the screens.

User shall be able to pre-define all variables used on screens, so that changing a global message on all screens of all meters requires only changing a single variable.

[Parking Space ID] [EXP1] – [TL_TXT] [TL1]
[ENF_TXT] [DAYF]-[DAYL]
[TS1_ST] – [TS1_END]: [RATE_1.50]
[TS2_ST] – [TS2_END]: [RATE_2.00]
[TS3_ST] – [TS3_END]: [RATE_3.00]
[DAY], [TIME]
[SCRL_TXT]

Results in:

PKGS12345 EXPIRED – MAX 30 min
ENFORCED MON-SUN
7:00am – 12:00pm: $1.50/hr
12:00pm – 3:00pm: $2.00/hr
3:00pm – 6:00pm: $3.00/hr
6 July 2012, 5:22 pm
MORE ↓

Where:

VAR NAME	VAR VALUE	SOURCE
PSID	Parking Space ID	User-defined variable stored in MMS
EXP_TXT	“EXPIRED”	User-defined variable with text content; tied to meter status (meter not paid)
TL_TXT	“MAX”	User-defined variable with text content
ENF_TXT	“ENFORCED”	User-defined variable with text content
DAYF	First day of week meter is enforced	Meter behavior programming
DAYL	Last day of week meter is enforced	Meter behavior programming
TSX_ST	Time slot X start time	Meter behavior programming
TSX_END	Time slot X end time	Meter behavior programming
RATE_1.50	RATE = $1.50/hr	Meter behavior programming
…		
DAY	CURRENT DAY	MMS/meter clock
TIME	CURRENT TIME	MMS/meter clock
SCRL_TXT	“MORE ↓”	User-defined variable with text content

If user wishes to change “ENFORCED” to “IN EFFECT” in all meter screens, all he/she needs to do is change the value of variable ENF_TXT from “ENFORCED” to “IN EFFECT”, and that will update every screen where variable ENF_TXT is called.

g. User shall be able to set default formats for displaying rates, times, time limits and other information on the screens, as illustrated in Example III.B.5.g.

<u>Example III.B.5.g</u>

DEFAULT SCREEN TEXT FORMATS:

Rates format:

● $XXX/hr
○ $XXX per hour
○ $XXX / hr
○ $XXX / hour
…

Time Slot Format:

○ XXam-XXam:
● XX am - XX am:
○ XX:XXam-XX:XXam:
○ XX:XX am - XX:XX am:
○ XX:XX am to XX:XX am:
…

Time Line Format:

(Whole Hour)

○ X hr max
● MAX X hr
○ X HR MAX
○ TIME LIMIT X hr
○ X hr limit
…

Time Line Format:

(Partial Hour)

○ X min max
● MAX X min
○ X MIN MAX
○ TIME LIMIT X min
○ X min limit
○ X/X hr max
…

6) MMS Customization

a. The MMS shall allow for Parking Services or its designee a mechanism to prevent any number of credit cards or smart cards from being accepted, also known as a Hotlist. Any card on the Hotlist shall be denied at the meter, and "INVALID CARD" shall be displayed on the screen.

b. ***Within 90 Days of the Notice to Implement this feature***, the MMS shall allow Parking Services to choose custom descriptors for standard variables routinely supported by the MMS in a master file or master page. Once saved, custom descriptors shall propagate throughout the MMS where the standard descriptors once appeared, as illustrated in Example III.B.6.b.

Example III.B.6.b

Master list of descriptors:

STANDARD DESCRIPTOR	DESCRIPTION	CUSTOM DESCRIPTOR (chosen by Parking Services)
Space	Parking space identifier	ParkingSpaceID
Area Name	Name of street where pole is located	Street
…	…	…

Then:

ORIGINAL PAGE NAME	NEW PAGE NAME
Find Space	Find ParkingSpaceID
Inactive Spaces	Inactive ParkingSpaceIDs
Manage Spaces	Manage ParkingSpaceIDs
Space Transaction Detail	ParkingSpaceID Transaction Detail
Manage Areas	Manage Streets

And a report with the following original column headings:

Zone	Area	Pole

Shall have custom column headings:

Zone	Street	ParkingSpaceID

c. ***Within 90 Days of the Notice to Implement this feature***, in addition to CONTRACTOR-defined variables typically supported by the MMS, the MMS shall be capable of storing variables defined by Parking Services, as described in Table III.B.6.c and in Attachment 6.

Table III.B.6.c

Variable Name	Type/Size	Sample	Description
PARKING_RECORD_ID	number	100281	This is a surrogate ID automatically generated by Parking Services when a parking space is added to the database
JURISDICTION	varchar2(5)	CITY	Entity with jurisdiction over metered space
RATE_AREA	varchar2(10)	Area 1	Corresponds to regulations that applied to specific groups of metered spaces, such as metered hours and rates
AREA_TYPE	varchar2(10)		For future expansion, to identify the type of named rate area.
STREET_BLOCK	varchar2(35)	L ST 100	Street name + street type + block number where metered space is located.
STR_NUM_PARITY	varchar2(4)	Even	Odd or even side of the street, based on street addresses.
ON_OFFSTREET_TYPE	varchar2(3)	ON	Describes whether the metered space is on street or off street.
CURB_COLOR	varchar2(10)	Grey	For future use
DOME_COLOR	varchar2(10)	Grey	For future use
SPACE_TYPE	varchar2(20)	GMP	Describes the type of metered space (GMP, GMP-ST, ML (meter loading), MTL (meter truck loading), MC (motorcycle), TOUR BUS, BOAT TRAILER); related to CAP_COLOR above
ACTIVE_METER_FLAG	char(1)	M	Describes meter status (metered, temporarily removed, legislated but not yet installed, etc).
PMR_ROUTE	varchar2(10)	J-2	Parking Meter Repairer (maintenance) route.
COLLECTION_ROUTE	varchar2(10)	411	Describes coin collection route.
COLLECTION_SUBROUTE	varchar2(10)	411.52	Describes coin collection subroute.
PEO_BEAT	varchar2(7)	109A	Describes enforcement beats for Sacramento's Parking Enforcement Officers (PEOs).
TOW_FLAG	char(1)	Y	Y/N indicates metered space has a TOW schedule.
PAX_FLAG	char(1)	Y	Y/N indicates metered space has Passenger Loading hours.
COMMERCIAL_FLAG	char(1)	Y	Y/N indicates metered space has commercial loading hours.

d. ***Within 90 Days of the Notice to Implement this feature***, the MMS shall be able to store **ten** additional user-defined variables (empty1, empty2, etc.). Parking Services shall be able to designate these variables on as needed basis.

e. The MMS shall store the equivalent of the parameters contained in Parking Services' operating schedule as defined in Attachment 2 – *OUTGOING Operating Schedule XML specification,* and as listed below:

i. Days of week

ii. Prepayment time

iii. Start time

iv. End time

v. Time limit

f. The MMS shall allow Parking Services to pre-load allowable values for Sacramento street names and types (i.e. street, avenue, boulevard, etc) so that only existing names and types can be entered in the street data field.

g. ***Within 90 Days of the Notice to Implement this feature***, the MMS shall accept content provided by Parking Services via XML file to populate user-defined variables as well as standard variables as described in Attachment 1 – *OUTGOING Parking Space Inventory XML specification.*

h. ***Within 90 Days of the Notice to Implement this feature***, alternatively, the MMS shall accept content provided by Parking Services in CSV format to be uploaded to the MMS to populate user-defined variables as well as standard variables.

i. The MMS shall be able to export content into XML files as specified in Attachment 6 – *INCOMING Parking Space Inventory XML specification* and Attachment 7 – *INCOMING Reconciliation XML specification* on demand, for any meter or set of meters selected by the user.

j. ***Within 60 Days of the Notice to Implement this feature***, the MMS shall support expansion of the number of characters in both standard and user-defined variables, up to the limit as defined by the host computer's operating system and database.

k. ***Within 90 Days of the Notice to Implement this feature***, user-defined variables shall consist of attributes of metered spaces only and shall not affect meter Behavior; however, MMS shall allow Parking Services to filter by user-defined variables for grouping meters for the purpose of batch editing meter Behavior, as illustrated in Example III.B.6.k.

Example III.B.6.k

Scenario: Parking Services currently has GMP meters that have 1-hr and 2-hr time limits, but may have different operating hours or regulations (e.g. some may have a TOW restriction in the morning whereas others do not). Parking Services wishes to change the time limit in all 1-hr GMP meters to 2 hrs. The user shall be able to select all meters where SPACE_TYPE = GMP and MAX_TIME = 1 hr and assign a 2-hr time limit to all of them at once.

l. ***Within 120 Days of the Notice to Implement this feature***, the MMS shall support the addition of any subset of the user-defined variables as columns to standard reports to create ad-hoc reports that combine user-defined and standard variables, as illustrated in Example III.B.6.l.

Example III.B.6.l

Scenario: User wishes to insert additional information into the standard Meter Faults report for the purpose of assigning PMRs to maintenance shifts in the Capitol area, and to optimize maintenance routes by having PMRs walk one side of the street first, then the other.

Sample standard Meter Faults report columns:

Area	Street	PSID	Fault	Date

Standard Meter Faults report with user-defined columns, filters, and sorts added:

Area [Filter 1: Capitol]	**PMR Route [Sort 1: ascending]**	Street	**Street and Block [Sort 3: ascending]**	**Side [Sort 2: ascending]**	PSID	Fault	Date

m. The MMS shall support filtering and sorting based on user-defined variables as well as standard variables for programming, reporting, or other purposes.

n. The MMS shall support exporting daily meter revenue CSV file as defined in Attachment 9.

o. The MMS shall support exporting daily meter maintenance CSV file as defined in Attachments 10 and 11.

7) Inventory and Asset Management Reports

Within 90 Days of the Notice to Implement this feature,

a. The MMS shall support a Parking Space Inventory Report that describes meter Behavior for every time slot of each day, as illustrated in Example III.B.7.a.

<u>Example III.B.7.a</u> – Parking Space Inventory Report

	Street and Block	Parking Space ID	Space Color	Days	From	To	Free	Prepay	Tow	Rate	Time Limit
1	05TH ST 600	PKGS6621	Green	Mo,Tu,We,Th,Fr	12:00	8:00	X				
2					8:00	9:00		X			
3					9:00	3:00				$2.25	15
4					3:00	6:00				$2.00	15
5					6:00	12:00	X				
6				Sa	12:00	8:00	X				
7					8:00	9:00		X			
8					9:00	12:00				$1.50	15
9					12:00	3:00				$2.00	15
10					3:00	6:00				$1.75	15
11					6:00	12:00	X				
12				Su	12:00	12:00	X				
13	F ST 300	PKGS3121	Gray	Mo,Tu,We,Th,Fr	12:00	6:00	X				
14					6:00	7:00		X			
15					7:00	6:00				$3.00	30
16					6:00	12:00	X				
17				Sa	12:00	6:00	X				
18					6:00	7:00		X			
19					7:00	6:00				$3.00	30
20					6:00	12:00	X				
21				Su	12:00	12:00	X				
22	03RD ST 300	PKGS3090	Gray	Mo,Tu,We,Th,Fr	12:00	7:00	X				
23					7:00	9:00			X		
24					9:00	12:00				$1.00	no
25					12:00	3:00				$2.00	no
26					3:00	4:00				$2.50	no
27					4:00	7:00			X		
28					7:00	12:00	X				
29				Sa	12:00	6:00	X				
30					6:00	7:00		X			
31					7:00	12:00				$0.50	no
32					12:00	3:00				$2.00	no
33					3:00	6:00				$2.25	no
34					6:00	12:00	X				
35				Su	12:00	12:00	X				

b. The Parking Space Inventory Report in the MMS shall allow customization by removal and addition of columns containing both standard and user-defined variables, as illustrated in Example III.B.7.b.

Example III.B.7.b – Customized Parking Space Inventory Report

The report below has the following differences as compared with the original report:

- Columns “Free” and “Prepay” have been removed, along with the associated time slots (rows).
- Column “Space Color” has been removed.
- Columns “Space Type” and “Meter Type” have been added.

	Street and Block	Meter Type	Parking Space ID	Space Type	Days	From	To	Tow	Rate	Time Limit
1	05TH ST 600	SS	PKGS 6621	GMP-ST	Mo,Tu,We,Th,Fr	9:00 AM	3:00 PM		$2.25	15 min
2						3:00 PM	6:00 PM		$2.00	15 min
3					Sa	9:00 AM	12:00		$1.50	15 min
4						12:00 PM	3:00 PM		$2.00	15 min
5						3:00 PM	6:00 PM		$1.75	15 min
6	TOWNSEND ST 300	SS	PKGS 3121	ML	Mo,Tu,We,Th,Fr	7:00 AM	6:00 PM		$3.00	30 min
7					Sa	7:00 AM	6:00 PM		$3.00	30 min
8	03RD ST 300	SS	PKGS 3090	GMP	Mo,Tu,We,Th,Fr	7:00 AM	9:00 AM	X		
9						9:00 AM	12:00		$1.00	no limit
10						12:00 PM	3:00 PM		$2.00	no limit
11						3:00 PM	4:00 PM		$2.50	no limit
12						4:00 PM	7:00 PM	X		
13					Sa	7:00 AM	12:00		$0.50	no limit
14						12:00 PM	3:00 PM		$2.00	no limit
15						3:00 PM	6:00 PM		$2.25	no limit

c. The MMS shall include reports that track meter Behavior changes, and historic parameters shall be archived in a manner that they are searchable, as illustrated in Example III.B.7.c.

Example III.B.7.c

Scenario: The user wishes to find out how the meter with ID 03100 was programmed on 6/12/12. He/she shall be able to enter these two parameters and search an archive, and see a report similar to the one below:

Date: 6/12/12

	Street and Block	Parking Space ID	Zone Color	Days	From	To	Free	Prepay	Tow	Rate	Time Limit
1	FOLSOM BL 300	PKGS3100	Gray	Mo,Tu,We, Th,Fr	12:00	8:00	X				
2					8:00	9:00		X			
3					9:00	3:00				$2.25	4 hr
4					3:00	6:00				$2.00	4 hr
5					6:00	12:00	X				
6				Sa	12:00	8:00	X				
7					8:00	9:00		X			
8					9:00	12:00				$1.50	4 hr
9					12:00	3:00				$2.00	4 hr
10					3:00	6:00				$1.75	4 hr
11					6:00	12:00	X				
12				Su	12:00	12:00	X				

8) Faults and Maintenance

a. The MMS shall include a maintenance management module that records meter and repair activity using automatically generated and manually entered faults and maintenance events.

b. The module shall support reporting of parking meter repair activity (PMR) including by not limited to employee name, date range, fault characteristic, area etc.

c. ***Within 120 Days of the Notice to Implement this feature***, the MMS shall allow for import of data in batch files. For example, when reconfiguring the hours of operation on 100 meters, the end user should be able to upload that data in batches. Including but limited the following data sources: XML, Excel, CSV etc.

9) Revenue Reports

Within 90 Days of the Notice to Implement this feature:

a. The MMS shall allow Parking Services to add user-defined variables to revenue reports, and to filter or sort reports based on user-defined variables as well as standard variables.

b. The MMS shall allow Parking Services to perform non-standard calculations in revenue reports. Parking Services will define and approve the definition of the data in terms of its format, validation and semantics. In the case of calculated fields, CITY shall define and approve the definition of the mechanism by which the data is derived, the sources of data employed in the calculation and the circumstances of data selection.

10) Mobile Payment Transaction Reports

The MMS shall include a report searchable by date range that lists the following information:

a. Parking Space ID.

b. Date/time of receipt of Mobile Payment transaction by the MMS.

c. Transaction amount.

d. Time purchased.

e. Date/time of receipt of Mobile Payment transaction by the Meter.

f. Transmission status (successful, pending, failed).

11) Data Integration

a. MMS shall be able to submit all the payment (coin, credit card, smart card Mobile Payment, etc.) and maintenance alerts data via XML format described in the Attachments 5 and 8 within 10 seconds after receiving the data from the meters. If the transfer system is "down," the data shall be queued until the system is working again.

b. The MMS shall support the ability to deliver usage and status data to Parking Services in a batched manner (at the end of the operating day or as designated by Parking Services). If the transfer system is "down," the data shall be queued until the system is working again.

c. CONTRACTOR shall enter the programming development and testing phase where CONTRACTOR shall work closely with Parking Services to develop and test its ability to accept XML and CSV files as specified in Attachments 1-11, and conduct the necessary programming specified therein within the required timelines. This will not necessarily be completed by the time the meters "go live," but will be under direction of Parking Services, at the point where Parking Services issues the *Notice To Proceed.* CONTRACTOR shall queue (store) all data from the point where the meters go live until Parking Services has accepted the transfer protocol. CONTRACTOR should also note that the file formats described in Attachments 1-11 are tentative until *Notice To Proceed.* Any changes after that point will be managed through industry "best practices" change control.

d. The frequencies of transmission for each file described in the Schedule of Attachments Table shall be mutually independent; i.e. if an Operating Schedule XML file is submitted today for re-programming of a batch of 1000 meters, this does not prevent the submission of a Price Schedule XML file for the re-programming of the same 1000 meters two weeks from today.

e. In cases where CONTRACTOR's system has a standard variable equivalent to a variable in Parking Services' system but named differently, CONTRACTOR shall be responsible for translating the variable in all its communications with Parking Services.

f. CONTRACTOR shall be required to translate system variables from default names to Parking Services-specific names. Table III.B.11.f below provides examples of needed translations.

Table III.B.11.f

Variable Name	Type/Size	Example	Description
Parking Space ID	varchar2(12)	PKGS11041	Identifies metered parking space.
STREET_NAME	varchar2(30)	L ST	Street name and street type (ST, BLVD, etc)
LATITUDE	number	37.7768342	Together with LONGITUDE, describes geographic location of metered space.
LONGITUDE	number	-122.423847	Together with LATITUDE describes geographic location of metered space.
PM_DISTRICT_NAME	varchar2(20)	Downtown	Parking Management District - a geographic unit for grouping metered spaces.

g. In the cases where CONTRACTOR's system cannot store a variable in the exact same format as submitted by Parking Services, CONTRACTOR shall develop the ability to translate Parking Services' data to fit within the equivalent in its system, as illustrated in Example III.B.11.g. Furthermore, CONTRACTOR shall translate content both when its system receives OUTGOING XML files from Parking Services and when its system issues INCOMING XML files to Parking Services.

Example III.B.11.g

For metered spaces intended to have no time limit, Parking Services will store TIME_LIMIT = 1440 minutes (= 24 hrs). In this case, the limiting factor for time purchased is one of the following, whichever occurs first:

- End of operating hours (e.g. 19:00).
- Beginning of a TOW period (e.g. 16:00 on a meter that has TOW 16:00 to 18:00 and end of operating hours = 19:00).

In the following scenario:

PKGS1240 EXPIRED – no limit Mon-Fri 8:00 – 9:00: prepay 9:00 – 16:00: $3.00/hr 16:00 – 18:00: TOW 18:00 – 19:00: $3.00/hr	PKGS1240 EXPIRED – no limit Sat 8:00 – 9:00: prepay 9:00 – 19:00: $3.00/hr	Sun FREE

Then:

- **If a Customer arrives on Tuesday at 14:00, the limiting factor for time** purchased is the start time of the TOW time slot at 16:00, so the Customer can purchase 2 hrs.
- If a Customer arrives on Saturday at 14:00, the limiting factor for time purchased is the end of operating hours at 19:00, so the customer can purchase 5 hrs.

If, in future, Parking Services chooses to remove the TOW restriction Mon-Fri 16:00 to 18:00, then the Tuesday Customer can purchase 5 hrs (instead of 2 hrs).

Alternatively, if Parking Services chooses to extend the hours of operations to 22:00, the Tuesday Customer can still only purchase 2 hrs, but the Saturday Customer can now purchase 8 hrs.

If CONTRACTOR's system cannot store the equivalent of TIME_LIMIT = 1440 minutes, then CONTRACTOR shall develop the ability to:

- Translate Parking Services' TIME_LIMIT = 1440 minutes into CONTRACTOR's equivalent of "no limit" in OUTGOING XML files.
- Match the behavior described above; in other words, the system shall have the ability to recognize the end of operating hours or the beginning of a TOW period as limiting factors in time purchases where meters have no time limit.
- Translate CONTRACTOR's equivalent of "no limit" into Parking Services' TIME_LIMIT = 1440 minutes in INCOMING XML files.

12) Meter Backend Settings

a. Parking Services shall be able to establish a default set of Backend Settings to be applied to every new meter added to the inventory.

b. ***Within 120 Days of the Notice to Implement this feature***, alternatively, Parking Services shall be able to upload a CSV file to the MMS containing Backend Settings on a per-meter basis.

c. The format of the CSV file shall be agreed upon between Parking Services and CONTRACTOR during the programming development and testing phase.

d. ***Within 90 Days of the Notice to Implement this feature***, the user shall be able to select the unit that serves as basis for each default payment setting for coins and cards (money or time, mutually exclusive for each parameter) as illustrated in Example III.B.12.d.

Example III.B.12.d

CARD PAYMENT PARAMETERS		
Min Purchase:	● Money: $0.25	○ Time:_____
Purchase Step:	○ Money:_____	● Time: 10 min
Purchase Start Value:	○ Money:_____	● Time: 120 min
Purchase Rounding:	● Money: $0.25	○ Time:_____

COIN PAYMENT PARAMETERS		
Min Purchase:	● Money: $0.05	○ Time:_____
Purchase Step:	○ Money: _____	● Time: 10 min

e. User shall be able to select what conditions will cause the meter screen backlight to turn on as illustrated in Example III.B.12.e.

Example III.B.12.e

Backlight Settings

Condition	On/Off		Time	Duration
When button pressed or keypad touched	● ON	○ OFF	○ Always ○ Never ○ Ambient light <___? ● Hrs: <19:00, >07:00	Duration: 20 sec
When meter Idle	○ ON	● OFF	● Always ○ Never ○ Ambient light <___? ● Hrs: <9:00 , > 19:00	Duration: 20 sec
When card inserted	● ON	○ OFF	○ Always ○ Never ● Ambient light <xx ○ Hrs: <____ , >_____	Duration: 60 sec
Condition 4	○ ON	○ OFF	○ Always ○ Never ○ Ambient light <___? ○ Hrs: <____ , >_____	Duration: ___sec

f. If meter uses LED lights for visual enforcement, then user shall be able to configure LED lights, as illustrated in Example III.B.12.f.

Example III.B.12.f

LED Settings

LED BEHAVIOR		
STATUS	LED	SETTING
Paid	Red:	○ ON ● OFF Duration: _____ms Interval: _____
	Green:	● ON ○ OFF Duration: 10 ms Interval: 750 ms
	Yellow:	○ ON ● OFF Duration: _____ms Interval: _____
Unpaid	Red:	● ON ○ OFF Duration: 10 ms Interval: 750 ms
	Green:	○ ON ● OFF Duration: _____ms Interval: _____
	Yellow:	○ ON ● OFF Duration: _____ms Interval: _____
Grace Period	Red:	○ ON ● OFF Duration: _____ms Interval: _____
	Green:	● ON ○ OFF Duration: 10 ms Interval: 750 ms
	Yellow:	○ ON ● OFF Duration: _____ms Interval: _____
Out of Order	Red:	○ ON ● OFF Duration: _____ms Interval: _____
	Green:	○ ON ● OFF Duration: _____ms Interval: _____
	Yellow:	● ON ○ OFF Duration: 10 ms Interval: 750 ms

13) Re-Programming of Existing Metered Spaces

a. Following the programming development and testing phase and initial programming of metered spaces, the MMS shall support automatic re-programming of any subset of metered spaces at any time via XML files and CSV tables deposited in CONTRACTOR's SFTP site. The re-programming of subsets of metered spaces shall generally consist of any combination of the following:

i. Operating Schedule XML file, as specified in Attachment 1

ii. Price Schedule XML file, as specified in Attachment 2

iii. Special event pricing and regulation XML file, as specified in Attachment 3

b. The steps and timing for re-programming of existing metered spaces shall be as described in Table III.B.13.b, where the deadline for completing each step is described based on the completion of a previous step and "(B) days" represents business days.

Table III.B.13.b

Step	Description	By	Timeline
1	Issue XML file to CONTRACTOR	Parking Services	T1
2	Conduct programming; return reconciliation XML to Parking Services	CONTRACTOR	T1 + 3 (B) days = T2
3	Conduct reconciliation of programming	Parking Services	T2 + 3 (B) days = T3
4	Correct programming as necessary	CONTRACTOR	T3 + 1 (B) day = T4
5	Give CONTRACTOR OK to download new programming to meters	Parking Services	T4 + 1 (B) day = T5
6	Set meters to download new programming	CONTRACTOR	T5 + 1 (B) day = T6
7	New programming is effective	N/A	T6 + 1 (B) day = End

c. ***Within 60 Days of the Notice to Implement this feature***, in the event that a newly-metered space is created directly in the MMS, the MMS shall automatically notify Parking Services' system by sending it an XML file containing the Parking Space ID identifier and any associated standard and user-defined data as described in Attachment 6 – *INCOMING Parking Space Inventory XML specification.*

d. ***Within 60 Days of the Notice to Implement this feature***, if a record with the Parking Space ID identifier exists in the Parking Services Management System and the XML contains the Parking Space ID identifier only (*i.e.,* it does not contain associated standard and user-defined content such as geographic locators and space attributes), then the MMS shall accept an XML file to populate both standard and user-defined variables.

14) Special Event Programming (Hours, Rates, Time Limits, and Restrictions)

a. The MMS shall allow programming of special exceptions to standard programming that can be assigned and/or removed by specific start and end dates on a calendar, consisting of time slot start/end times and one or more of the following rule types:

- **i.** Rates
- **ii.** Tow
- **iii.** Free
- **iv.** Time Limits

b. ***Within 90 Days of the Notice to Implement this feature***, the MMS shall allow programming of a minimum of 20 special exceptions that can be assigned to a minimum of 100 combinations of start and end dates, as described in Example III.B.14.b. The resulting Behavior for each day is a

combination of the standard programming for that day and the special exceptions programming. If the standard programming is different for different days of the week, then the resulting programming depends on the day of the week the override programming is scheduled for.

If the standard programmed meter behavior is as follows:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Fri	FREE					PREPAY					RATE_3.50			RATE_3.75			RATE_4.00			RATE_0.25				FREE	
											TL = 120 min									TL = 240 min					
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sat	FREE					PREPAY					RATE_0.25													FREE	
											TL = 120 min									TL = 240 min					
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun	FREE					PREPAY								RATE_0.25										FREE	
														TL = 240 min											

Then the user shall be able to program a minimum of 20 distinct special overrides as illustrated below:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SP_01																			**RATE_7.00**						
																			TL = 240 min						
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SP_02	**FREE**																								
…																									
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SP_30											**TOW**														

That can then be scheduled for a minimum of 100 combinations of start and end dates as illustrated below:

DATE_START	**DATE_END**	**OVERRIDE**
09/14/12	09/15/12	SP_30
09/21/12	09/22/12	SP_01
DATE_START	**DATE_END**	**OVERRIDE**
11/22/12	11/22/12	SP_02
12/25/12	12/25/12	SP_02

Resulting in:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/14/12	FREE										TOW					RATE_4.00			RATE_0.25				FREE		
(Fri)																TL=120 min			TL = 240 min						
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/15/12	FREE										TOW					RATE_0.25							FREE		
(Sat)																TL=120 min			TL = 240 min						
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/21/12	FREE					PREPAY					RATE_3.50		RATE_3.75			RATE_4.00			RATE_7.00				FREE		
(Fri)											TL = 120 min								TL = 240 min						
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/22/12	FREE					PREPAY					RATE_0.25								RATE_7.00				FREE		
(Sat)											TL = 120 min								TL = 240 min						
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
11/22/12	FREE																								
(Thu)																									
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
12/25/12	FREE																								
(Tue)																									

Where:

	represents the override programming scheduled for a particular day
	represents standard programming parameters affected by the override on that day

c. ***Within 60 Days of the Notice to Implement this feature***, the MMS shall accept programming for special overrides or exceptions in accordance with Attachment 4 - *Special event pricing and regulation XML specifications.*

d. In the event that Parking Services submits an operating schedule or price schedule change after submitting programming for special overrides, the MMS shall update the override programming accordingly, as illustrated in Example III.B.14.d.

Example III.B.14.d

CONTRACTOR's system shall be able to adjust special override programming as in the following scenario:

On 03/01/13, Parking Services submits the initial programming for meters in the Old Sacramento neighborhood, and it looks like this:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Fri	FREE					PREPAY			RATE_2.00					RATE_3.75		RATE_4.00			RATE_0.25				FREE		
									TL = 240 min																
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sat-Sun	FREE					PREPAY			RATE_1.50					RATE_4.00		RATE_4.50			RATE_1.50				FREE		
									TL = 240 min																

On 04/01/13, Parking Services submits override programming for the same meters, and it looks like this:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SP_01																			RATE_7.00						

DATE_START	DATE_END	OVERRIDE
09/21/13	09/22/13	SP_01

Resulting in:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/21/13			FREE			PREPAY			RATE_2.00					RATE_3.75			RATE_ 4.00		RATE_7.00					FREE	
(Fri)									TL = 240 min																
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/22/13			FREE			PREPAY			RATE_1.50					RATE_4.00			RATE_ 4.50		RATE_7.00					FREE	
(Sat)									TL = 240 min																

In June, Parking Services submits a routine demand-based rate change, and the standard programming for the same meters changes to:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Fri			FREE			PREPAY			RATE_1.75					RATE_4.00			RATE_4.25			RATE_0.25				FREE	
									TL = 240 min																
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sat-Sun			FREE			PREPAY			RATE_1.25					RATE_4.25			RATE_4.75			RATE_1.25				FREE	
									TL = 240 min																

The rate change is effective 06/15/13. The override programming SP_01 is unchanged. Then, the resulting programming for 09/21/13 and 09/22/13 should change as follows:

Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/21/13			FREE			PREPAY			RATE_1.75					RATE_4.00			RATE_4.20		RATE_7.00					FREE	
(Fri)									TL = 240 min																
Hour:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
09/22/13			FREE			PREPAY			RATE_1.25					RATE_4.25			RATE_4.75		RATE_7.00					FREE	
(Sat)									TL = 240 min																

e. The MMS shall allow up to 20 special events that can be programmed at any time.

15) Transaction Data Feed

a. CONTRACTOR shall transmit all parking meter transaction data from the MMS to the Parking Services Management System in accordance with Attachment 5 – *INCOMING Transaction Data XML specifications*.

b. CONTRACTOR's system shall differentiate between two possible transaction event types: new session and add-time session, where an add-time session is defined as one where a Customer adds time to a parking session already in progress (*i.e.,* the meter is already paid when the Customer conducts his/her transaction).

c. CONTRACTOR's system shall differentiate between payment time and parking session start time, as illustrated in the scenarios in Example III.B.15.c.

Example III.B.15.c

Scenario 1:

- Meter operation starts at 9:00 am.
- Customer arrives at a parking meter at 10:00 am.
- Meter is expired and rate is $3.00/hr until 12:00 pm.
- Customer pays $3.00 by credit card for 1 hr. Then:
    - EVENT_TYPE = NS
    - PAYMENT_TIME = START_TIME = 10:00
    - END_TIME = 11:00

Scenario 2:

- Meter operation starts at 9:00 am.
- Customer arrives at a parking meter at 8:30 am (during prepayment time).
- Meter is not displaying any purchased time (i.e. it is not counting down) and rate is $3.00/hr until 12:00 pm.
- Customer pays $3.00 by credit card for 1 hr. Then:
    - EVENT_TYPE = NS
    - PAYMENT_TIME = 8:30
    - START_TIME = 9:00
    - END_TIME = 10:00

Scenario 3:

- Meter operation starts at 9:00 am.
- Customer arrives at a parking meter at 10:00 am.
- At 10:00 am, meter is counting down from 0:30 (i.e. there is purchased time left on the meter) and rate is $3.00/hr until 12:00 pm.
- Customer pays $3.00 by credit card for 1 hr. Then:
    - EVENT_TYPE = AT
    - PAYMENT_TIME = 10:00
    - START_TIME = PAYMENT_TIME + time left on meter = 10:30
    - END_TIME = 11:30

d. Mixed payment transaction: When a Customer uses more than one payment type (i.e. coins and credit card) within a payment window to pay for a single parking session, CONTRACTOR's system shall transmit separate transactions for the different payment types, as illustrated in Example III.B.15.d.

Example III.B.15.d

Scenario 1:

- Meter operation starts at 9:00 am.
- Customer arrives at the parking meter at 10:00 am.
- Meter is expired and rate is $2.00/hr all day.
- Customer uses $1.00 in coins to purchase ½ hour, then inserts a credit card and adds $2.00 to purchase another hour. The transaction data transmitted to Parking Services should look like this:

CASH TRANSACTION	CREDIT CARD TRANSACTION
EVENT_TYPE = NS SESSION_ID = 123456 AMOUNT_PAID_BY_DRIVER = 1.00 AMOUNT_RECEIVED_BY_CITY = 1.00 PAYMENT_TYPE = CASH PAYMENT_TIME = 10:00 START_TIME = 10:00 END_TIME = 10:30	EVENT_TYPE = AT SESSION_ID = 123456 AMOUNT_PAID_BY_DRIVER = 2.00 AMOUNT_RECEIVED_BY_CITY = 2.00 PAYMENT_TYPE = CREDIT CARD PAYMENT_TIME = 10:00 START_TIME = 10:30 END_TIME = 11:30

Scenario 2:

- Meter operation starts at 9:00 am.
- Customer A arrives at the parking meter at 10:00 am.
- Meter is expired and rate is $2.00/hr all day.
- Customer A uses a credit card to pay $2.00 for 1 hr of parking, but leaves after just 15 minutes. The meter transmits the transaction with SESSION_ID = 789012
- Customer B arrives at 10:30 am, when the meter still has 30 minutes of parking left, and uses $1.00 in coins to purchase ½ hour, then inserts a credit card and adds $2.00 to purchase another hour. The transaction data transmitted to Parking Services should look like this:

CUSTOMER A CREDIT CARD TRANSACTION	CUSTOMER B CASH TRANSACTION	CUSTOMER B CREDIT CARD TRANSACTION
EVENT_TYPE = NS SESSION_ID = 789012 AMOUNT_PAID_BY_DRIVER = 2.00 AMOUNT_RECEIVED_BY_CITY = 2.00 PAYMENT_TYPE = CREDIT CARD PAYMENT_TIME = 10:00 START_TIME = 10:00 END_TIME = 11:00	EVENT_TYPE = AT SESSION_ID = 789012 AMOUNT_PAID_BY_DRIVER = 1.00 AMOUNT_RECEIVED_BY_CITY = 1.00 PAYMENT_TYPE = CASH PAYMENT_TIME = 10:30 START_TIME = 11:00 END_TIME = 11:30	EVENT_TYPE = AT SESSION_ID = 789012 AMOUNT_PAID_BY_DRIVER = 2.00 AMOUNT_RECEIVED_BY_CITY = 2.00 PAYMENT_TYPE = CREDIT CARD PAYMENT_TIME = 10:30 START_TIME = 11:30 END_TIME = 12:30

e. Assuming full connectivity, for transmission of data

CONTRACTOR shall describe the minimum, maximum, and average amount of time in seconds the MMS will take to transmit transactions of different payment types (coin, credit card, parking card, other) to the Parking Services Management System, including what parameters or conditions will affect transmission times and what percentage of each type of transaction can be expected to be transmitted within the average transmission time.

16) Monitoring Software

a. CONTRACTOR shall implement a monitoring and alerting system (aka, "watchdog software") to monitor all data transmissions to and from Parking Services, including but not limited to:

i. Receipt of OUTGOING XML files described in Schedule of Attachments Table (Attachment 12) in its SFTP site.

ii. Interruptions in the transmission of *INCOMING Transaction Data XML feed* (Attachment 5) including complete failure to transmit, partial transmission results from equipment problems and failure to transmit certain transaction types

iii. Failures in scheduled periodic transmissions of INCOMING XML and CSV files.

iv. Any other data transmissions that are discovered but not currently anticipated.

b. CONTRACTOR shall, at Parking Services' request, send alerts directly to Parking Services staff via email, text message, or other agreed-upon communication methods.

C. MMS, Meter Programming, and Data Integration Optional Specifications

1) Meter Behavior Programming

Meters shall accept programming for a minimum of 15 unique time slots within any given 24-hr period representing one day, each with its rule. Meters shall also be capable of displaying all time slots on the screen at any time of the day.

2) Mobile Maintenance Application/PDTs

a. The MMS shall have two versions: desktop (via web browser) and mobile (via web browser and/or "app").

b. Field communications shall be conducted via mobile MMS and/or via handheld device. All proposed meter systems shall recognize and verify commands from an authorized device only, ignoring all other signals or devices.

c. Both desktop and mobile versions of the MMS shall be able to record meter maintenance activity (both automatically generated by the meter itself and manually recorded by PMR via means of entering designated meter repair code).

d. The mobile version of the MMS shall be able to run on any mobile platform (Apple, Windows, Android, Blackberry, etc.).

e. Managers shall be able to perform the following activities using either mobile version of the MMS and/or a designated handheld.

i. Reprograming of Meter Behavior parameters including times, rates, time limits, etc.

ii. Reprogramming of the Backend Settings.

f. Retrieval of revenue audit information and electronic cash transactions (including mechanism serial number).

g. Retrieval of fault and maintenance information (including mechanism serial number and battery voltage).

h. Each communication session updates the mechanism's clock, calendar, and day of week information.

i. In the case that a newly-installed mechanism does not download the meter Behavior programming automatically, the Mobile MMS and/or handheld device shall have the capability to program the replacement mechanism with the rate/time program.

j. Changes made to meter programming via mobile MMS and/or PDT shall be reflected in the desktop MMS.

3) Programming without CONTRACTOR

Within 180 Days of the Notice to Implement this feature, CONTRACTOR will provide capability to allow Parking Services to conduct global rate changes, various reconciliations of attributes, special event pricing, and other global programing features within the MMS without any significant involvement of CONTRACTOR.

DOC: Attachment 1 – OUTGOING Parking Space Inventory XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which Parking Services will deliver periodic parking space inventory additions and changes for the purpose of populating or updating user-defined data fields as well as some standard fields in the Vendor's Meter Management System.

XSD along with XML namespace for this XML will be provided at a later time.

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review (Parking Services)

<PARKING_SPACE_INVENTORY>

*<CITY_ID>**ID number assigned by Vendor to Parking Services**</ CITY_ID>*

*<EFFECTIVE_DATE> **The effective date in standard Oracle format** </ EFFECTIVE_DATE>*

*<TRANSMISSION_DATETIME>**Date and time of transmission from city in standard Oracle format to the second** </TRANSMISSION_DATETIME>*

<METERED_SPACE>

*<METER_TYPE>**MS or SS**</METER_TYPE>*

*<PARKING_RECORD_ID>**Internal numeric Id for meter space assigned by Parking Services**</PARKING_RECORD_ID>*

*<SPACE_ID>**Publicly identified ID for the space**</SPACE_ID>*

*<HOUSING_ID>**Identifier for meter housing at the space**</HOUSING_ID>*

*<MECH_ID>**Manufacturer's serial number for the meter mechanism installed in this space**</MECH_ID>*

*<JURISDICTION>**CITY, OLDSAC, …**</JURISDICTION>*

*<RATE_AREA>**rate area**</RATE_AREA>*

*<PM_DISTRICT_NAME>**PM district name**</PM_DISTRICT_NAME>*

*<AREA_TYPE>**Standard**</ AREA_TYPE>*

*<STREET_NAME>**Street name in all CAPS using City street name convention**</STREET_NAME>*

*<STREET_BLOCK> **Street name + street type + block number in all CAPS using City street name convention** </STREET_BLOCK>*

*<STR_NUM_PARITY>**Odd or Even**</ STR_NUM_PARITY>*

*<LATITUDE>**Derived from geometry with standard 10 decimal**</LATITUDE>*

*<LONGITUDE>**Derived from geometry with standard 10 decimal**</LONGITUDE>*

*<ON_OFFSTREET_TYPE> **On or Off street parking** </ON_OFFSTREET_TYPE>*

*<CAP_COLOR>**one of allowed cap color values**</CAP_COLOR>*

*<SPACE_TYPE>**GMP, SHORT TERM GMP, ML, MTL, MC, TOUR BUS, BOAT TRAILER**</SPACE_TYPE >*

*<ACTIVE_METER_FLAG>**one of allowed meter flag values**</ACTIVE_METER_FLAG>*

*<PMR_ROUTE> **PMR route number from PSMS** </PMR_ROUTE>*

*<COLLECTION_ROUTE> **Collection route number from PSMS** </COLLECTION_ROUTE>*

*<COLLECTION_SUBROUTE> **Collection sub route number from PSMS**</COLLECTION_SUBROUTE>*

*<PEO_BEAT>**PEO Beat number**</PEO_BEAT>*

*<TOW_FLAG>**Y/N flag indicating metered space has a TOW Schedule**</TOW_FLAG>*

*<PAX_FLAG> **Y/N flag indicating metered space has passenger loading hours**</PAX_FLAG>*

*<COMMERCIAL_FLAG> **Y/N flag indicating metered space has commercial loading hours** </ COMMERCIAL_FLAG>*

</METERED_SPACE>

</PARKING_SPACE_INVENTORY>

XML Code:	***Shall Be:***
CITY_ID	*Assigned to City by Vendor*
EFFECTIVE_DATE	*Date and time that this addition or update to the inventory will be effective; set by Parking Services*
TRANSMISSION_DATETIME	*Provided by Parking Services*
METERED_SPACE	*One or more*
METER_TYPE	*MS: multi-space pay station* *SS: single space meter*
PARKING_RECORD_ID	*This is a surrogate ID automatically generated by Parking Services when a parking space is added to the database*
SPACE_ID	*Unique identifier assigned by Parking Services; used primarily to identify single space metered spaces on the street*
HOUSING_ID	*Unique identifier assigned by Parking Services; identifies the housing installed at the space*
MECH_ID	*Manufacturer's ID for the mechanism installed in the housing at this space*
JURISDICTION	*Entity with jurisdiction over metered space (CITY, OLDSAC; others in future)*

RATE_AREA	*Corresponds to regulations that applied to specific groups of metered spaces, such as days/hours of operations and rates.*
PM_DISTRICT_NAME	*Parking Management District - a geographic unit for grouping metered spaces.*
AREA_TYPE	*Text description of parking area.*
STREET_NAME	*Street name and street type (ST, BLVD, etc)*
STREET_BLOCK	*Street name + street type + block number where metered space is located.*
STR_NUM_PARITY	*Odd or Even (side of the street)*
LATITUDE	*Together with LATITUDE, describes geographic location of metered space.*
LONGITUDE	*Together with LONGITUDE, describes geographic location of metered space.*
ON_OFFSTREET_TYPE	*Describes whether the metered space is on street or off street.*
CAP_COLOR	*For future use.*
SPACE_TYPE	*Indicates the "operations mode" of the space, as follows:* *Grey = GMP* *Green = SHORT TERM GMP* *Yellow = ML* *Red = MTL* *Black = MC* *Brown = TOUR BUS* *Purple = BOAT TRAILER*
ACTIVE_METER_FLAG	*Describes meter status (metered, temporarily removed, legislated but not yet installed, etc.).*
PMR_ROUTE	*Parking Meter Repairer (maintenance) route.*
COLLECTION_ROUTE	*Describes coin collection route.*
COLLECTION_SUBROUTE	*Describes coin collection subroute.*
PEO_BEAT	*Describes enforcement beats for Parking Enforcement Officers (PEOs).*
TOW_FLAG	*Y/N indicates metered space has a TOW schedule.*
PAX_FLAG	*Y/N indicates metered space has a passenger loading hours.*
COMMERCIAL_FLAG	*Y/N indicates metered space has commercial loading hours.*

Examples:

<PARKING_SPACE_INVENTORY>

```
<CITY_ID>1001</CITY_ID>
<EFFECTIVE_DATE>2012-07-10 00:00:00</EFFECTIVE_DATE>
<TRANSMISSION_DATETIME>2012-07-01 17:30:45</TRANSMISSION_DATETIME>
<METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <PARKING_RECORD_ID>123456</PARKING_RECORD_ID>
        <SPACE_ID>PKGS12345</SPACE_ID>
        <HOUSING_ID>PKGH55441 </HOUSING_ID>
        <MECH_ID>09615462</MECH_ID>
        <JURISDICTION>CITY</JURISDICTION>
        < RATE_AREA>Area 1</RATE_AREA>
        <PM_DISTRICT_NAME>Downtown</PM_DISTRICT_NAME>
        <AREA_TYPE>General</AREA_TYPE>
        <STREET_NAME>K ST</STREET_NAME>
        <STREET_BLOCK>K ST 1100</STREET_BLOCK>
        <STR_NUM_PARITY>Even</STR_NUM_PARITY>
        <LATITUDE>37.7768342</LATITUDE>
        <LONGITUDE>-122.423847</LONGITUDE>
        <ON_OFFSTREET_TYPE>ON</ON_OFFSTREET_TYPE>
        <CAP_COLOR>Null</CAP_COLOR>
        <SPACE_TYPE>GMP</SPACE_TYPE>
        <ACTIVE_METER_FLAG>M</ACTIVE_METER_FLAG>
        <PMR_ROUTE>J-2</PMR_ROUTE>
        <COLLECTION_ROUTE>11</COLLECTION_ROUTE>
        <COLLECTION_SUBROUTE>11.5</COLLECTION_SUBROUTE>
        <PEO_BEAT>15</PEO_BEAT>
        <TOW_FLAG>Y</TOW_FLAG>
        <PAX_FLAG>Y</PAX_FLAG>
        <COMMERCIAL_FLAG>Y</COMMERCIAL_FLAG>
</METERED_SPACE>

<METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <PARKING_RECORD_ID>56789</PARKING_RECORD_ID>
        <SPACE_ID>PKGS41</SPACE_ID>
        <HOUSING_ID>PKGH5941</HOUSING_ID>
        <MECH_ID>SG1245784</MECH_ID>
```

*<JURISDICTION>**CITY**</JURISDICTION>*
*< RATE_AREA>**Area 2**</ RATE_AREA>*
*<PM_DISTRICT_NAME>**Capitol**</PM_DISTRICT_NAME>*
*<AREA_TYPE>**Standard**</AREA_TYPE>*
*<STREET_NAME>**13TH ST**</STREET_NAME>*
*<STREET_BLOCK>**13TH ST 1100**</STREET_BLOCK>*
*<STR_NUM_PARITY>**Odd**</STR_NUM_PARITY>*
*<LATITUDE>**37.1234567**</LATITUDE>*
*<LONGITUDE>**-122.123456**</LONGITUDE>*
*<ON_OFFSTREET_TYPE>**ON**</ON_OFFSTREET_TYPE>*
*<CAP_COLOR>**Null**</CAP_COLOR>*
*<SPACE_TYPE>**SHORT TERM GMP**</SPACE_TYPE>*
*<ACTIVE_METER_FLAG>**M**</ACTIVE_METER_FLAG>*
*<PMR_ROUTE>**J-3**</PMR_ROUTE>*
*<COLLECTION_ROUTE>**12**</COLLECTION_ROUTE>*
*<COLLECTION_SUBROUTE>**12.1**</COLLECTION_SUBROUTE>*
*<PEO_BEAT>**12**</PEO_BEAT>*
*<TOW_FLAG>**Y**</TOW_FLAG>*
*<PAX_FLAG>**N**</PAX_FLAG>*
*<COMMERCIAL_FLAG>**N**</COMMERCIAL_FLAG>*
</METERED_SPACE>

…… Followed by additional parking spaces, as this sample only lists a couple of metered spaces to highlight the various elements and formats. Typically MS and SS will be in distinct vendor xml files.

</PARKING_SPACE_INVENTORY>

DOC: Attachment 2: OUTGOING Operating Schedule XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which Parking Services will deliver periodic operating schedule changes for the purpose of re-programming meters or pay stations with new schedules (e.g. new time limits; longer operating hours).

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review

<OPERATING_SCHEDULE>

*<CITY_ID>**ID number assigned by Vendor to City**</ CITY_ID >*

*<EFFECTIVE_DATE> **Date and time the effective date in standard Oracle format to the second** </ EFFECTIVE_DATE >*

*<TRANSMISSION_DATETIME>**Date and time of transmission from City in standard Oracle format to the second** </TRANSMISSION_DATETIME>*

<METERED_SPACE>

*<METER_TYPE>**MS or SS**</METER_TYPE>*

<SPACE_ID>Internal numeric ID assigned to meter space by Parking Services</ SPACE_ID>

< OP_SCHEDULE>

*<COLOR_RULE >**Type of Parking Allowed – see allowed values below**</COLOR_RULE>*

*<DAYS_OF_WEEK>**Day of Week mask** </DAYS_OF_WEEK>*

*< START_TIME>**Start time for price in standard Oracle format to the second** </ START_TIME>*

*< END_TIME>**End time for price in standard Oracle format to the second** </ END_TIME>*

*<TIME_LIMIT>**Meter time limit in minutes**</TIME_LIMIT>*

*<PREPAYMENT_TIME>**Actual time of day before operating hours (in standard Oracle format to the minute) when prepayments may be accepted**</PREPAYMENT_TIME>*

</ OP_SCHEDULE>

< TOW_SCHEDULE>

*<DAYS_OF_WEEK>**Day of Week mask** </DAYS_OF_WEEK>*

*< START_TIME>**Start time for price in standard Oracle format to the second** </ START_TIME>*

*< END_TIME>**End time for price in standard Oracle format to the second** </ END_TIME>*

</ TOW_SCHEDULE>

< ALT_SCHEDULE>

*<COLOR_RULE >**Type of Parking Allowed – see allowed values below**</COLOR_RULE>*

*<DAYS_OF_WEEK>**Day of Week mask** </DAYS_OF_WEEK>*

*< START_TIME>**Start time for price in standard Oracle format to the second** </ START_TIME>*

*< END_TIME>**End time for price in standard Oracle format to the second** </ END_TIME>*

</ ALT_SCHEDULE>

</METERED_SPACE>

</OPERATING_SCHEDULE>

General Notes

OP_SCHEDULE defines the overall hours of meter operation. There may be multiple schedules, although typically only one weekday and one Saturday (or Saturday and Sunday, where different). OP_SCHEDULE always has the PARKING_ALLOWED_FLAG tag = Yes.

TOW_SCHEDULE defines periods when parking is not allowed due to lane usage during rush hour traffic. These should always fall within overall OP_SCHEDULES and override accordingly. There may be multiple schedules although typically only one (AM or PM) or two (where AM and PM closures both apply). TOW_SCHEDULE always has the PARKING_ALLOWED_FLAG tag = No.

ALT_SCHEDULE defines other exceptions to base operating schedules. There may be multiple exception schedules, most of which indicate no parking periods. However some indicate allowed parking periods where the time limit has changed or the allowed type of parking has changed (e.g. from commercial to general parking). COLOR_RULE sets this as follows: Grey/Green/Yellow/Red = parking allowed, White/Orange/Blue = no parking allowed.

ALT_SCHEDULEs & TOW_SCHEDULEs that are based on calendar schedules ("School Days," "Performance," or "Game Day/Night") or variable "As posted" events are not included in the feed, as they are defined separately. Non-metered space operating schedules are also not included in the feed.

Technically to avoid overlap, START_TIMEs are >= values and END_TIMEs are < values.

When a change is transmitted for a particular meter, the entire schedule is delivered and should replace all existing schedule elements.

XML Code:	*Shall Be:*
CITY_ID	*Assigned by Vendor to City*
EFFECTIVE_DATE	*PRELIMINARY date and time that this price schedule will be effective; set by Parking Services; and subject to change during operating schedule change process*
TRANSMISSION_DATETIME	*Provided by Parking Services*
METERED_SPACE	

SPACE_ID	*Unique identifier for the metered parking space assigned by Parking Services; applies to either SS or MS metered space*
OP_SCHEDULE	
COLOR_RULE	*Indicates type of allowed parking. Allowed values under OP_SCHEDULE are:* *Grey – general parking* *Green – short term general parking (30 min or less* *Yellow – commercial parking* *Red – multi-axle commercial parking* *Brown – tour bus* *Purple – Boat trailer parking* *Black - motorcycle*
DAYS_OF_WEEK	*Provided by Parking Services, mask in format 'Su,Mo,Tu,We,Th,Fr,Sa' or similar, it represents all the days of the week this schedule applies to*
START_TIME	*Provided by Parking Services, it represents the beginning of the time period for this schedule*
END_TIME	*Provided by Parking Services, it represents the end of the time period for this schedule*
TIME_LIMIT	*Maximum allowed time in minutes*
PREPAYMENT_TIME	*Actual time of day before operating hours when prepayments may be accepted. Format is hh:mm AM/PM.*
TOW_SCHEDULE	
DAYS_OF_WEEK	*Provided by Parking Services, mask in format 'Su,Mo,Tu,We,Th,Fr,Sa' or similar, it represents all the days of the week this schedule applies to*
START_TIME	*Provided by Parking Services, it represents the beginning of the time period for this schedule*
END_TIME	*Provided by Parking Services, it represents the end of the time period for this schedule*
ALT_SCHEDULE	

COLOR_RULE	*Indicates type of allowed parking. Allowed values under ALT_SCHEDULE are:* *Grey – general parking* *Green – short term general parking (30 min or less)* *Yellow – commercial parking* *White – no parking passenger loading zone* *Orange – no parking shuttle bus, vanpool, or carpool loading zone*
DAYS_OF_WEEK	*Provided by Parking Services, mask in format 'Su,Mo,Tu,We,Th,Fr,Sa' or similar, it represents all the days of the week this schedule applies to*
START_TIME	*Provided by Parking Services, it represents the beginning of the time period for this schedule*
END_TIME	*Provided by Parking Services, it represents the end of the time period for this schedule*
TIME_LIMIT	*Maximum allowed time in minutes*

Example shows both MS and SS as examples. If MS vendor is distinct from SS vendor, then these would be in distinct XML extracts:

```
<OPERATING_SCHEDULE>
    <CITY_ID>1001</CITY_ID>
    <EFFECTIVE_DATE>2010-05-04 00:00:00</EFFECTIVE_DATE>
    <TRANSMISSION_DATETIME>2010-04-15 17:30:45</TRANSMISSION_DATETIME>
    <METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS12345</ SPACE_ID>
        <OP_SCHEDULE>
            <COLOR_RULE>Grey</COLOR_RULE>
            <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr</DAYS_OF_WEEK>
            < START_TIME>07:00 AM</ START_TIME>
            < END_TIME>06:00 PM</ END_TIME>
            <TIME_LIMIT>60</TIME_LIMIT>
            <PREPAYMENT_TIME>6:00 AM</PREPAYMENT_TIME>
        </OP_SCHEDULE>
```

```
        <OP_SCHEDULE>
                <COLOR_RULE>Grey</COLOR_RULE>
                <DAYS_OF_WEEK>Sa</DAYS_OF_WEEK>
                < START_TIME>09:00 AM</ START_TIME>
                < END_TIME>05:00 PM</ END_TIME>
                <TIME_LIMIT>60</TIME_LIMIT>
                <PREPAYMENT_TIME>8:00 AM</PREPAYMENT_TIME>
        </OP_SCHEDULE>
</METERED_SPACE>

<METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS23456</SPACE_ID>
        <OP_SCHEDULE>
                <COLOR_RULE>Grey</COLOR_RULE>
                <PARKING_ALLOWED_FLAG>Yes</ PARKING_ALLOWED_FLAG >
                <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr,Sa</DAYS_OF_WEEK>
                < START_TIME>07:00 AM</START_TIME>
                < END_TIME>07:00 PM</END_TIME>
                <TIME_LIMIT>120</TIME_LIMIT>
                <PREPAYMENT_TIME>9:00 AM</PREPAYMENT_TIME>
        </OP_SCHEDULE>
        <TOW_SCHEDULE>
                <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr</DAYS_OF_WEEK>
                < START_TIME>07:00 AM</START_TIME>
                < END_TIME>09:00 AM</END_TIME>
        </TOW_SCHEDULE>
        <TOW_SCHEDULE>
                <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr</DAYS_OF_WEEK>
                < START_TIME>04:00 PM</START_TIME>
                < END_TIME>06:00 PM</END_TIME>
        </TOW_SCHEDULE>
</METERED_SPACE>

<METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS135</ SPACE_ID>
```

```
        <OP_SCHEDULE>
            <COLOR_RULE>Yellow</COLOR_RULE>
            <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr,Sa</DAYS_OF_WEEK>
            < START_TIME>07:00 AM</START_TIME>
            < END_TIME>07:00 PM</END_TIME>
            <TIME_LIMIT>60</TIME_LIMIT>
            <PREPAYMENT_TIME>6:00 AM</PREPAYMENT_TIME>
        </OP_SCHEDULE>
        <ALT_SCHEDULE>
            <COLOR_RULE>Orange</COLOR_RULE>
            <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr</DAYS_OF_WEEK>
            < START_TIME>02:00 PM</START_TIME>
            < END_TIME>03:30 PM</END_TIME>
            <TIME_LIMIT>0</TIME_LIMIT>
        </ALT_SCHEDULE>
        <ALT_SCHEDULE>
            <COLOR_RULE>Grey</COLOR_RULE>
            <DAYS_OF_WEEK>Sa</DAYS_OF_WEEK>
            < START_TIME>07:00 AM</START_TIME>
            < END_TIME>07:00 PM</END_TIME>
            <TIME_LIMIT>120</TIME_LIMIT>
        </ALT_SCHEDULE>
    </METERED_SPACE>
</OPERATING_SCHEDULE>
```

DOC: Attachment 3: OUTGOING Price Schedule XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which Parking Services will deliver periodic price schedule changes for the purpose of re-programming meters or pay stations with new prices.

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review

<PRICE_SCHEDULE>

*<CITY_ID>**ID number assigned by Vendor to City**</ CITY_ID >*

*<EFFECTIVE_DATE>**The effective date in standard Oracle format**</EFFECTIVE_DATE>*

*<TRANSMISSION_DATETIME>**Date and time of transmission from City in standard Oracle format to the second**</TRANSMISSION_DATETIME>*

<METERED_SPACE>

*<METER_TYPE>**MS or SS**</METER_TYPE>*

*< SPACE_ID>**Unique identifier for the metered parking space assigned by Parking Services**</ SPACE_ID>*

*<EVENT_TYPE>**MPS (meter_price_schedule) or SE (special_event)**</EVENT_TYPE>*

*<BASE_PRICE> **Decimal value of the price in dollars and cents** </BASE_PRICE>*

<METER_PRICE_SCHEDULE>

*<DAYS_OF_WEEK>**Day of Week mask** </DAYS_OF_WEEK>**

*<PRICE_START_TIME>**Start time for price in standard Oracle format to the second** </PRICE_START_TIME>*

*<PRICE_END_TIME>**End time for price in standard Oracle format to the second** </PRICE_END_TIME>*

<LENGTH_OF_STAY_SCHEDULE>

<LEVEL>

*<HOUR>**Hour in whole numbers**</HOUR>*

*<PRICE_PREMIUM_PCT>**Price premium percentage**</PRICE_PREMIUM_PCT>*

</LEVEL>

….

</LENGTH_OF_STAY_SCHEDULE>

*<PRICE>**Decimal value of the price in dollars and cents**</PRICE>*

```
            </METER_PRICE_SCHEDULE>
        </METERED_SPACE>
</PRICE_SCHEDULE>
```

XML Code:	Shall Be:
CITY_ID	Assigned by Vendor to City
EFFECTIVE_DATE	INITIAL date and time that this price schedule will be effective; set by Parking Services; and subject to change during price schedule change process
TRANSMISSION_DATETIME	Provided by Parking Services
METERED_SPACE	One or more
METER_TYPE	MS: multi-space pay station SS: single space meter
SPACE_ID	Unique identifier for the metered parking space assigned by Parking Services; applies to either SS or MS metered space
EVENT_TYPE	MPS (Meter Price Schedule) or SE (Special Event)
BASE_PRICE	This is the regular price per hour in dollars and cents, applicable to all operating hours not covered by an alternate METER_PRICE_SCHEDULE. Required & applicable only when EVENT_TYPE = MPS
METER_PRICE_SCHEDULE	Optional (0, 1 or more) only when EVENT_TYPE = MPS
DAYS_OF_WEEK	Provided by Parking Services, mask in format 'Su,Mo,Tu,We,Th,Fr,Sa' or similar, it represents the all days of the week this price schedule is valid
PRICE_START_TIME	Provided by Parking Services, it represents the beginning of the time period for this price
PRICE_END_TIME	Provided by Parking Services, it represents the end of the time period for this price
LENGTH_OF_STAY_SCHEDULE	
LEVEL	

HOUR	*1 is the hour after the first full hour a driver is parked. 2 is the second hour after the first full hour a driver is parked.*
PRICE_PREMIUM_PERCENTAGE	*Percentage premium over the regular price*
PRICE	*Hourly rate in dollars and cents e.g. 3.50.*

Examples:

```
<PRICE_SCHEDULE>
    <CITY_ID>1001</CITY_ID>
    <EFFECTIVE_DATE>2010-05-04 00:00:00</EFFECTIVE_DATE>
    <TRANSMISSION_DATETIME>2010-04-15 17:30:45</TRANSMISSION_DATETIME>
    <METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS12345</SPACE_ID>
        <BASE_PRICE>3.00</BASE_PRICE>
        <METER_PRICE_SCHEDULE>
            <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr</DAYS_OF_WEEK>
            <PRICE_START_TIME>09:00 AM</PRICE_START_TIME>
            <PRICE_END_TIME>05:00 PM</PRICE_END_TIME>
            <LENGTH_OF_STAY_SCHEDULE>
                <LEVEL>
                    <HOUR>2</HOUR>
                    <PRICE_PREMIUM_PCT>50</PRICE_PREMIUM_PCT>
                </LEVEL>
                <LEVEL>
                <HOUR>4</HOUR>
                <PRICE_PREMIUM_PCT>100</PRICE_PREMIUM_PCT>
                </LEVEL>
                <LEVEL>
                <HOUR>6</HOUR>
                <PRICE_PREMIUM_PCT>150</PRICE_PREMIUM_PCT>
                </LEVEL>
            </LENGTH_OF_STAY_SCHEDULE>
            <PRICE>4.00</PRICE>
        </METER_PRICE_SCHEDULE>
```

```
        <METER_PRICE_SCHEDULE>
            <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr</DAYS_OF_WEEK>
            <PRICE_START_TIME>05:00 AM</PRICE_START_TIME>
            <PRICE_END_TIME>09:00 AM</PRICE_END_TIME>
            <PRICE>2.00</PRICE>
        </METER_PRICE_SCHEDULE>
    </METERED_SPACE>
    <METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS23458</SPACE_ID>
        <EVENT_TYPE>MPS</EVENT_TYPE>
        <BASE_PRICE>2.00</BASE_PRICE>
    </METERED_SPACE>
    <METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS13579</SPACE_ID>
        <EVENT_TYPE>MPS</EVENT_TYPE>
        <BASE_PRICE>2.00</BASE_PRICE>
        <METER_PRICE_SCHEDULE>
            <DAYS_OF_WEEK>Mo,Tu,We,Th,Fr</DAYS_OF_WEEK>
            <PRICE_START_TIME>06:00 PM</PRICE_START_TIME>
            <PRICE_END_TIME>10:00 PM</PRICE_END_TIME>
            <PRICE>1.50</PRICE>
        </METER_PRICE_SCHEDULE>
    </METERED_SPACE>
</PRICE_SCHEDULE>
```

DOC: Attachment 4: OUTGOING Special Event Schedule XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which Parking Services will deliver periodic price, closure, or time limit changes for the purpose of overriding the standard meter programming on specific days for special event conditions.

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review
6/1/13	1.1	Removed erroneous references

<SPECIAL_EVENT_SCHEDULE>

*<CITY_ID>**ID number assigned by Vendor to City of Sacramento**</ CITY_ID >*

*<TRANSMISSION_DATETIME>**Date and time of transmission from City in standard Oracle format to the second** </TRANSMISSION_DATETIME>*

*<EVENT_DESCRIPTION>**Text description of event**</EVENT_DESCRIPTION>*

<METERED_SPACE>

*<METER_TYPE>**MS or SS**</METER_TYPE>*

*<SPACE_ID>**Unique identifier for the metered parking space assigned by Parking Services**</SPACE_ID>*

<PRICE_OVERRIDE_SCHEDULE>

*<START_TIME>**Start time for price in standard Oracle format to the minute** </START_TIME>*

*<END_TIME>**End time for price in standard Oracle format to the minute**</END_TIME>*

*<PRICE>**Decimal value of the price in dollars and cents** </PRICE>*

*<FREE>**Set to 1 to indicate free parking during specified start and end time</**FREE>*

<EVENT_CALENDAR>

*<EVENT_DATE> **each date as separate tag that this schedule applies to in YYYY-MM-DD format**</EVENT_DATE>*

</EVENT_CALENDAR>

</PRICE_OVERRIDE_SCHEDULE>

<TOW_OVERRIDE_SCHEDULE>

*<TOW_OVERRIDE>**Set to 1 to indicate all pre-established tow schedules for the scheduled days should be ignored**</TOW_OVERRIDE>*

<EVENT_CALENDAR>

*<EVENT_DATE> **each date as separate tag that this schedule applies to in YYYY-MM-DD format**</EVENT_DATE>*

</EVENT_CALENDAR>

<CLOSURE_SCHEDULE>

*<START_TIME>**Start time for closure in standard Oracle format to the minute** </START_TIME>*

*<END_TIME>**End time for closure in standard Oracle format to the minute**</END_TIME>*

<EVENT_CALENDAR>

*<EVENT_DATE> **each date as separate tag that this schedule applies to in YYYY-MM-DD format**</EVENT_DATE>*

</EVENT_CALENDAR>

</CLOSURE_SCHEDULE>

<TL_OVERRIDE_SCHEDULE>

*<START_TIME>**Start time for time limit in standard Oracle format to the minute** </START_TIME>*

*< END_TIME>**End time for time limit in standard Oracle format to the minute**</END_TIME>*

*<TIME_LIMIT>**Override time limit in minutes**</TIME_LIMIT>*

<EVENT_CALENDAR>

*<EVENT_DATE> **each date as separate tag that this schedule applies to in YYYY-MM-DD format**</EVENT_DATE>*

</EVENT_CALENDAR>

</TL_OVERRIDE_SCHEDULE>

</METERED_SPACE>

</SPECIAL_EVENT_SCHEDULE>

XML Code:	*Shall Be:*
CITY_ID	*Assigned by Vendor to City*
TRANSMISSION_DATETIME	*Provided by Parking Services*
EVENT_DESCRIPTION	*Provided by Parking Services to identify the event*
METERED_SPACE	*One or more*
METER_TYPE	*MS: multi-space pay station* *SS: single space meter*
SPACE_ID	*Unique identifier for the metered parking space assigned by Parking Services; applies to either SS or MS metered space*

PRICE_OVERRIDE_SCHEDULE or TOW_OVERRIDE_SCHEDULE or CLOSURE_SCHEDULE or TL_OVERRIDE_SCHEDULE	*Parent tag indicating the type of special event override schedule. Repeat in any combination together with applicable child tags*
START_TIME	*Provided by Parking Services, it represents the beginning of the time period for this price, closure or time limit. Not applicable to TOW_OVERRIDE_SCHEDULE.*
END_TIME	*Provided by Parking Services, it represents the end of the time period for this price, closure or time limit. Not applicable to TOW_OVERRIDE_SCHEDULE.*
PRICE	*Override hourly rate in dollars and cents e.g. 3.50. Applies only to PRICE_OVERRIDE_SCHEDULE when <FREE> is not used.*
FREE	*Optional: Set to 1 to indicate free parking during specified start and end time (i.e. no price assigned). Applies only to PRICE_OVERRIDE_SCHEDULE.in lieu of <PRICE> tag.*
TOW_OVERRIDE	*Applies only to TOW_OVERRIDE_SCHEDULE and is mandatory set to 1 for that tag.*
TIME_LIMIT	*Override time limit in minutes, e.g. 60. Applies only to TL_OVERRIDE_SCHEDULE.*
EVENT_CALENDAR	*Parent tag to individual EVENT_DATE tags*
EVENT_DATE	*One tag for each date this schedule applies to*

Examples:

<SPECIAL_EVENT_SCHEDULE>

*<CITY_ID>**101**</ CITY_ID >*

*<TRANSMISSION_DATETIME>**2012-06-20 15:00:00**</TRANSMISSION_DATETIME>*

*<EVENT_DESCRIPTION>**Kings November 2013 night games** </EVENT_DESCRIPTION>*

<METERED_SPACE>

*<METER_TYPE> **SS**</METER_TYPE>*

```
        <SPACE_ID>PKGS12345</SPACE_ID>
        <PRICE_OVERRIDE_SCHEDULE>
                <START_TIME>6:00 PM</START_TIME>
                <END_TIME>11:00PM</END_TIME>
                <PRICE>5.00 </PRICE>
                <EVENT_CALENDAR>
                        <EVENT_DATE> 2013-11-06</EVENT_DATE>
                        <EVENT_DATE> 2013-11-11</EVENT_DATE>
                        <EVENT_DATE> 2013-11-12</EVENT_DATE>
                </EVENT_CALENDAR>
        </PRICE_OVERRIDE_SCHEDULE>
</METERED_SPACE>
<METERED_SPACE>
        <METER_TYPE> SS</METER_TYPE>
        <SPACE_ID>PKGS23456</SPACE_ID>
        <CLOSURE_SCHEDULE>
                <START_TIME>6:00 PM </START_TIME>
                <END_TIME>11:00PM</END_TIME>
                <EVENT_CALENDAR>
                        <EVENT_DATE> 2013-11-06</EVENT_DATE>
                        <EVENT_DATE> 2013-11-11</EVENT_DATE>
                        <EVENT_DATE> 2013-11-12</EVENT_DATE>
                </EVENT_CALENDAR>
        </CLOSURE_SCHEDULE>
</METERED_SPACE>
<METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS13579</SPACE_ID>
        <TL_OVERRIDE_SCHEDULE>
                <START_TIME>6:00 PM </START_TIME>
                <END_TIME>11:00PM</END_TIME>
                <TIME_LIMIT>300</TIME_LIMIT>
                <EVENT_CALENDAR>
                        <EVENT_DATE> 2013-11-06</EVENT_DATE>
                        <EVENT_DATE> 2013-11-11</EVENT_DATE>
                        <EVENT_DATE> 2013-11-12</EVENT_DATE>
                </EVENT_CALENDAR>
```

```
            </TL_OVERRIDE_SCHEDULE>
        </METERED_SPACE>
</SPECIAL_EVENT_SCHEDULE>
```

DOC: Attachment 5: INCOMING Transaction Data XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which the Vendor will deliver real-time parking transaction data.

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review

<PAYMENT>

*<VENDOR_ID>**ID number assigned to each Vendor by Parking Services**</VENDOR_ID>*

*<TRANSMISSION_ID>**Transaction number generated by Vendor for this message**</TRANSMISSION_ID>*

*<TRANSMISSION_DATETIME>**Date and time of transmission from Vendor in UTC**</TRANSMISSION_DATETIME>*

*<METER_TYPE>**MS,SS**</METER_TYPE>*

*<SPACE_ID> **ID assigned to meter space by Parking Services**</SPACE_ID>*

*<EVENT_TYPE>**NS,AT** </EVENT_TYPE>*

<NEW_SESSION>

*<SESSION_ID>**unique_ID_number**</SESSION_ID>*

*<AMOUNT_PAID_BY_DRIVER>**price in dollars and cents**</AMOUNT_PAID_BY_DRIVER>*

*<AMOUNT_RECEIVED_BY_CITY>**price in dollars and cents**</AMOUNT_RECEIVED_BY_CITY>*

*<PAYMENT_TYPE>**CREDIT CARD, CASH, SMART CARD, TOKEN, PAY BY CELL, TECH CREDIT**</PAYMENT_TYPE>*

</NEW_SESSION>

<ADD_TIME>

*<SESSION_ID>**unique_ID_number**</SESSION_ID>*

*<AMOUNT_PAID_BY_DRIVER>**price in dollars and cents**</AMOUNT_PAID_BY_DRIVER>*

*<AMOUNT_RECEIVED_BY_CITY>**price in dollars and cents**</AMOUNT_RECEIVED_BY_CITY>*

*<PAYMENT_TYPE>**CREDIT CARD, CASH, SMART CARD, TOKEN, PAY BY CELL, TECH CREDIT**</PAYMENT_TYPE>*

</ADD_TIME>

<PAYMENT_TIME> ***time in standard Oracle format to the second in UTC****</PAYMENT_TIME>*

*<START_TIME>****time in standard Oracle format to the second in UTC****</START_TIME>*

*<END_TIME>****time in standard Oracle format to the second in UTC****</END_TIME>*

</PAYMENT>

Descriptions:

XML Code:	***Shall Be:***
VENDOR_ID	*Assigned by Parking Services to each entity collecting parking funds (pay by cell company, parking meter company, etc.)*
TRANSMISSION_ID	*Unique and generated by Vendor*
TRANSMISSION_DATETIME	*Provided by Vendor, in standard Oracle format to the second in UTC time zone*
METER_TYPE	*MS: multi-space meter* *SS: single space meter*
SPACE_ID	*Unique identifier for the metered parking space assigned by Parking Services; applies to either SS or MS metered space*
EVENT_TYPE	*Provided by Vendor* *NS: New Session - A customer initiates a new session* *AT: Add Time - A customer adds time to an existing session*
NEW_SESSION	
SESSION_ID	*Generated by Vendor. A new session_ID shall be generated for each new NEW_SESSION event.*
AMOUNT_PAID_BY_DRIVER	*The total amount paid by the customer including any fees.*
AMOUNT_RECEIVED_BY_CITY	*The total amount owed the City.*

PAYMENT_TYPE	*CREDIT CARD* *CASH* *SMART CARD* *TOKEN* *PAY BY CELL (used only by pay-by-cell service provider)* *TECH CREDIT*
ADD_TIME	
SESSION_ID	*Generated by Vendor. If a customer adds time to a session the existing session_ID will be sent along with any ADD_TIME event(s).*
AMOUNT_PAID_BY_DRIVER	*The total amount paid by the customer including any fees.*
AMOUNT_RECEIVED_BY_CITY	*The total amount owed the City.*
PAYMENT_TYPE	*CREDIT CARD* *CASH* *SMART CARD* *TOKEN* *PAY BY CELL (used only by pay-by-cell service provider)* *TECH CREDIT*
PAYMENT_TIME	*Provided by Vendor in UTC time zone. Actual time payment is made to meter or pay by phone.*
START_TIME	*Provided by Vendor in UTC time zone. For the NEW_SESSION event, the initial start time for the parking session. In the case of prepayment this is not the same as payment time. For the ADD_TIME event, the extension start time for the parking session. This is rarely the same as the payment time.*
END_TIME	*Provided by Vendor in UTC time zone. For a NEW_SESSION event, the initial end time for the parking session. For the ADD_TIME event, the new end time for the parking session.*

Sample XML:

<PAYMENT>
*<VENDOR_ID>**999**</VENDOR_ID>*
*<TRANSMISSION_ID>**12345678**</TRANSMISSION_ID>*

```
        <TRANSMISSION_DATETIME>2010-07-10
          15:30:02</TRANSMISSION_DATETIME>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS12345</SPACE_ID>
        <EVENT_TYPE>NS</EVENT_TYPE>
            <NEW_SESSION>
                <SESSION_ID>123456</SESSION_ID>
                <AMOUNT_PAID_BY_DRIVER>7.00</AMOUNT_PAID_BY_DRI
                  VER>
                <AMOUNT_RECEIVED_BY_CITY>7.00</AMOUNT_RECEIVED
                  _BY_CITY>
                <PAYMENT_TYPE>CASH</PAYMENT_TYPE>
            </NEW_SESSION>
        <PAYMENT_TIME>2010-07-10 15:29:30</PAYMENT_TIME>
        <START_TIME>2010-07-10 15:29:30</START_TIME>
        <END_TIME>2010-07-10 17:29:30</END_TIME>
    </PAYMENT>

    <PAYMENT>
        <VENDOR_ID>999</VENDOR_ID>
        <TRANSMISSION_ID>12345679</TRANSMISSION_ID>
        <TRANSMISSION_DATETIME>2010-07-10
          17:20:45</TRANSMISSION_DATETIME>
        <METER_TYPE>SS</METER_TYPE>
        <SPACE_ID>PKGS23456</SPACE_ID>
        <EVENT_TYPE>AT</EVENT_TYPE>
            <ADD_TIME>
                <SESSION_ID>101234</SESSION_ID>
                <AMOUNT_PAID_BY_DRIVER>3.50</AMOUNT_PAID_BY_DRI
                  VER>
                <AMOUNT_RECEIVED_BY_CITY>3.50</AMOUNT_RECEIVED
                  _BY_CITY>
                <PAYMENT_TYPE>CREDIT CARD</PAYMENT_TYPE>
            </ADD_TIME>
        <PAYMENT_TIME>2010-07-10 15:29:30</PAYMENT_TIME>
        <START_TIME>2010-07-10 17:20:45</START_TIME>
        <END_TIME>2010-07-10 18:20:45</END_TIME>
```

</PAYMENT>

DOC: Attachment 6: – INCOMING Parking Space Inventory XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which Vendor's Meter Management System will deliver periodic parking space inventory attribute changes originated in MMS for the purpose of comparing the data entered directly in the Vendor's system with the data contained in the Parking Services Management System, so that corrections and updates can be conducted as appropriate.

The XSD along with XML namespace for this XML will be provided during the development and testing phase.

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review
6/1/2013	1.1	Removed erroneous references

<PARKING_SPACE_INVENTORY>

*<CITY_ID>**ID number assigned by Parking Services**</ CITY_ID>*

*<EFFECTIVE_DATE> **The effective date in standard Oracle format** </ EFFECTIVE_DATE>*

*<TRANSMISSION_DATETIME>**Date and time of transmission from vendor in standard Oracle format to the second** </TRANSMISSION_DATETIME>*

<METERED_SPACE>

*<METER_TYPE>**MS or SS**</METER_TYPE>*

*<PARKING_RECORD_ID>**Internal numeric Id for meter space assigned by Parking Services**</PARKING_RECORD_ID>*

*<SPACE_ID>**Publicly identified ID for the space**</SPACE_ID>*

*<HOUSING_ID>**Identifier for meter housing at the space**</HOUSING_ID>*

*<MECH_ID>**Manufacturer's serial number for the meter mechanism installed in this space**</MECH_ID>*

*<JURISDICTION>**CITY, OLDSAC, …**</JURISDICTION>*

*<RATE_AREA>**rate area**</RATE_AREA>*

*<PM_DISTRICT_NAME>**PM district name**</PM_DISTRICT_NAME>*

*<AREA_TYPE>**Standard**</ AREA_TYPE>*

*<STREET_NAME>**Street name in all CAPS using Sacramento street name convention**</STREET_NAME>*

*<STREET_BLOCK> **Street name + street type + block number in all CAPS using Sacramento street name convention** </STREET_BLOCK>*

*<STR_NUM_PARITY>**Odd or Even**</ STR_NUM_PARITY>*

*<LATITUDE>**Derived from geometry with standard 10 decimal**</LATITUDE>*

*<LONGITUDE>**Derived from geometry with standard 10 decimal**</LONGITUDE>*

*<ON_OFFSTREET_TYPE> **On or Off street parking** </ON_OFFSTREET_TYPE>*

*<CAP_COLOR>**(unused)**</CAP_COLOR>*

*<SPACE_TYPE>**GMP, SHORT TERM GMP, ML, MTL, MC, TOUR BUS, BOAT TRAILER**</SPACE_TYPE >*

*<ACTIVE_METER_FLAG>**one of allowed meter flag values**</ACTIVE_METER_FLAG>*

*<PMR_ROUTE> **PMR route number from PSMS** </PMR_ROUTE>*

*<COLLECTION_ROUTE> **Collection route number from PSMS** </COLLECTION_ROUTE>*

*<COLLECTION_SUBROUTE> **Collection sub route number from PSMS**</COLLECTION_SUBROUTE>*

*<PEO_BEAT>**PEO Beat number**</PEO_BEAT>*

*<TOW_FLAG>**Y/N flag indicating metered space has a TOW Schedule**</TOW_FLAG>*

*<PAX_FLAG> **Y/N flag indicating metered space has passenger loading hours**</PAX_FLAG>*

*<COMMERCIAL_FLAG> **Y/N flag indicating metered space has commercial loading hours** </ COMMERCIAL_FLAG>*

</METERED_SPACE>

</PARKING_SPACE_INVENTORY>

XML Code:	*Shall Be:*
CITY_ID	*Assigned to City by Vendor*
EFFECTIVE_DATE	*Date and time that this addition or update to the inventory was effective in Vendor's MMS*
TRANSMISSION_DATETIME	*Provided by Vendor*
METERED_SPACE	*One or more*
METER_TYPE	*MS: multi-space pay station* *SS: single space meter*
PARKING_SPACE_ID	*This is a surrogate ID automatically generated by Parking Services when a parking space is added to the database*
SPACE_ID	*Unique identifier assigned by Parking Services; used primarily to identify single space metered spaces on the street*
HOUSING_ID	*Unique identifier assigned by Parking Services; identifies the housing installed at the space*
MECH_ID	*Manufacturer's ID for the mechanism installed in the housing at this space*

JURISDICTION	*Entity with jurisdiction over metered space (CITY, OLDSAC; others in future)*
RATE_AREA	*Corresponds to regulations that applied to specific groups of metered spaces, such as days/hours of operations and rates.*
PM_DISTRICT_NAME	*Parking Management District - a geographic unit for grouping metered spaces.*
AREA_TYPE	*Text description of parking area.*
STREET_NAME	*Street name and street type (ST, BLVD, etc)*
STREET_BLOCK	*Street name + street type + block number where metered space is located.*
STR_NUM_PARITY	*Odd or Even (side of the street)*
LATITUDE	*Together with LATITUDE, describes geographic location of metered space.*
LONGITUDE	*Together with LONGITUDE, describes geographic location of metered space.*
ON_OFFSTREET_TYPE	*Describes whether the metered space is on street or off street.*
CAP_COLOR	*Unused*
SPACE_TYPE	*Reflects "operations type," as follows:* *Grey = GMP* *Green = SHORT TERM GMP* *Yellow = ML* *Red = MTL* *Black = MC* *Brown = TOUR BUS* *Purple = BOAT TRAILER*
ACTIVE_METER_FLAG	*Describes meter status (metered, temporarily removed, legislated but not yet installed, etc).*
PMR_ROUTE	*Parking Meter Repairer (maintenance) route.*
COLLECTION_ROUTE	*Describes coin collection route.*
COLLECTION_SUBROUTE	*Describes coin collection subroute.*
PEO_BEAT	*Describes enforcement beats for Parking Enforcement Officers (PEOs).*
TOW_FLAG	*Y/N indicates metered space has a TOW schedule.*
PAX_FLAG	*Y/N indicates metered space has a passenger loading hours.*
COMMERCIAL_FLAG	*Y/N indicates metered space has commercial loading hours.*

Examples:

```
<PARKING_SPACE_INVENTORY>
    <CITY_ID>1001</CITY_ID>
    <EFFECTIVE_DATE>2012-07-10 00:00:00</EFFECTIVE_DATE>
    <TRANSMISSION_DATETIME>2012-07-01 17:30:45</TRANSMISSION_DATETIME>
    <METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <PARKING_RECORD_ID>123456</PARKING_RECORD_ID>
        <SPACE_ID>PKGS12345</SPACE_ID>
        <HOUSING_ID>PKGH55441 </HOUSING_ID>
        <MECH_ID>09615462</MECH_ID>
        <JURISDICTION>CITY</JURISDICTION>
        < RATE_AREA>Area 1</RATE_AREA>
        <PM_DISTRICT_NAME>Downtown</PM_DISTRICT_NAME>
        <AREA_TYPE>General</AREA_TYPE>
        <STREET_NAME>K ST</STREET_NAME>
        <STREET_BLOCK>K ST 1100</STREET_BLOCK>
        <STR_NUM_PARITY>Even</STR_NUM_PARITY>
        <LATITUDE>37.7768342</LATITUDE>
        <LONGITUDE>-122.423847</LONGITUDE>
        <ON_OFFSTREET_TYPE>ON</ON_OFFSTREET_TYPE>
        <CAP_COLOR>Null</CAP_COLOR>
        <SPACE_TYPE>GMP</SPACE_TYPE>
        <ACTIVE_METER_FLAG>M</ACTIVE_METER_FLAG>
        <PMR_ROUTE>J-2</PMR_ROUTE>
        <COLLECTION_ROUTE>11</COLLECTION_ROUTE>
        <COLLECTION_SUBROUTE>11.5</COLLECTION_SUBROUTE>
        <PEO_BEAT>15</PEO_BEAT>
        <TOW_FLAG>Y</TOW_FLAG>
        <PAX_FLAG>Y</PAX_FLAG>
        <COMMERCIAL_FLAG>Y</COMMERCIAL_FLAG>
    </METERED_SPACE>

    <METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <PARKING_RECORD_ID>56789</PARKING_RECORD_ID>
        <SPACE_ID>PKGS41</SPACE_ID>
        <HOUSING_ID>PKGH5941</HOUSING_ID>
```

*<MECH_ID>**SG1245784**</MECH_ID>*
*<JURISDICTION>**CITY**</JURISDICTION>*
*< RATE_AREA>**Area 2**</ RATE_AREA>*
*<PM_DISTRICT_NAME>**Capitol**</PM_DISTRICT_NAME>*
*<AREA_TYPE>**Standard**</AREA_TYPE>*
*<STREET_NAME>**13TH ST**</STREET_NAME>*
*<STREET_BLOCK>**13TH ST 1100**</STREET_BLOCK>*
*<STR_NUM_PARITY>**Odd**</STR_NUM_PARITY>*
*<LATITUDE>**37.1234567**</LATITUDE>*
*<LONGITUDE>**-122.123456**</LONGITUDE>*
*<ON_OFFSTREET_TYPE>**ON**</ON_OFFSTREET_TYPE>*
*<CAP_COLOR>**Null**</CAP_COLOR>*
*<SPACE_TYPE>**SHORT TERM GMP**</SPACE_TYPE>*
*<ACTIVE_METER_FLAG>**M**</ACTIVE_METER_FLAG>*
*<PMR_ROUTE>**J-3**</PMR_ROUTE>*
*<COLLECTION_ROUTE>**12**</COLLECTION_ROUTE>*
*<COLLECTION_SUBROUTE>**12.1**</COLLECTION_SUBROUTE>*
*<PEO_BEAT>**12**</PEO_BEAT>*
*<TOW_FLAG>**Y**</TOW_FLAG>*
*<PAX_FLAG>**N**</PAX_FLAG>*
*<COMMERCIAL_FLAG>**N**</COMMERCIAL_FLAG>*
</METERED_SPACE>

…… Followed by additional parking spaces, as this sample only lists few metered spaces to highlight the various elements and formats. Typically MS and SS will be in distinct vendor xml files. ……..

</PARKING_SPACE_INVENTORY>

DOC: Attachment 7: INCOMING Reconciliation XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which the Vendor will deliver price schedule information on their system to Parking Services for the purpose of comparison to the price schedule stored in Parking Services' database.

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review
6/1/2013	1.1	Removed erroneous references

<PRICE_SCHEDULE>

*<TRANSMISSION_DATETIME>**Date and time of transmission from City in standard Oracle format to the second** </TRANSMISSION_DATETIME>*

<METERED_SPACE>

*< SPACE_ID>**Unique identifier for the metered parking space assigned by Parking Services**</ SPACE_ID>*

*<DAYS_OF_WEEK>**Abbreviated Day of week, e.g. Mo. Note each day schedule needs to be listed separately even if same**</DAYS_OF_WEEK>*

*<EVENT_DATE> **Date in standard Oracle format**</EVENT_DATE>*

<METER_PRICE_SCHEDULE>--repeat for more schedules on that day

*<PRICE_START_TIME>24**HH:MM, e.g. 07:00**</PRICE_START_TIME>*

*<PRICE_END_TIME>24**HH:MM, e.g. 12:00**</PRICE_END_TIME>*

*<PRICE>**Hourly rate; e.g., 3.50**</PRICE>*

*<MAX_TIME>**Max park time in minutes; e.g., 240**</MAX_TIME>*

*<FREE_PREPAY>**Set to 1 to indicate free prepay allowed during specified start and end time**</FREE_PREPAY>*

*<TOW_AWAY>**Set to 1 to indicate free tow away zone during specified start and end time**</TOW_AWAY>*

*<FREE>**Set to 1 to indicate free parking during specified start and end time**</FREE>*

</METER_PRICE_SCHEDULE>

</METERED_SPACE>

</PRICE_SCHEDULE>

Descriptions:

XML Code:	*Shall Be:*
TRANSMISSION_DATETIME	*Provided by Parking Services*
SPACE_ID	*Unique identifier for the metered parking space assigned by Parking Services; applies to either SS or MS metered space*
DAYS_OF_WEEK	*2 letter Abbreviated Day of week,* *Su, Mo, Tu, We, Th, Fr, or Sa.* *Note: List each day schedule separately even if same. Multiple days not allowed. This tag should always be one day value only. If this tag is used the EVENT_DATE is not.*
EVENT_DATE	*Actual date of this schedule. This is for special event reconciliations and is in lieu of using the DAYS_OF_WEEK tag.*
PRICE_START_TIME	*The start time for this meter parking schedule in 24HH:MM form, e.g, 07:00.* *Note: 00:00 signifies midnight and the first start time of the day*
PRICE_END_TIME	*The end time for this meter parking schedule in 24HH:MM form, e.g, 15:00.* *Note: 24:00 or 00:00 can be used to signify the last end time of the day.* *End times should be equal to subsequent start times and not ended as :29 or :59. It is evaluated as" less than", not as" less than or equal to".*
PRICE	*Hourly rate in dollars and cents e.g. 3.50. Tag in not used when one of the optional flags is used.*
MAX_TIME	*Optional: Max park time in minutes, e.g. 240. Should only be used when <PRICE> is provided.*
FREE_PREPAY	*Optional: Set to 1 to indicate free prepay allowed during specified start and end time*
TOW_AWAY	*Optional: Set to 1 to indicate tow away zone during specified start and end time (no payment allowed)*

FREE	*Optional: Set to 1 to indicate free parking during specified start and end time (i.e. no price assigned)*
NO_PARK	*Optional: Set to 1 to indicate no parking during specified start and end time (i.e. no price assigned)*

Sample XML:

Note: The XML file will include the metered spaces in the vendor system and setup for each day along with the various price schedules listed for the metered space/day combination.


```
<PRICE_SCHEDULE
xmlns="http://www.cityofsacramento.org/xsd/mpsrec">
  <METERED_SPACE>
    <SPACE_ID>PKGS2010</SPACE_ID>
    <DAYS_OF_WEEK>Tu</DAYS_OF_WEEK>
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>00:00</PRICE_START_TIME>
      <PRICE_END_TIME>07:00</PRICE_END_TIME>
      <FREE>1</FREE>
    </METER_PRICE_SCHEDULE>
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>07:00</PRICE_START_TIME>
      <PRICE_END_TIME>12:00</PRICE_END_TIME>
      <PRICE>2.75</PRICE>
      <MAX_TIME>60</MAX_TIME>
    </METER_PRICE_SCHEDULE>
     <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>12:00</PRICE_START_TIME>
      <PRICE_END_TIME>15:00</PRICE_END_TIME>
      <PRICE>3</PRICE>
      <MAX_TIME>60</MAX_TIME>
    </METER_PRICE_SCHEDULE>
     <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>15:00</PRICE_START_TIME>
      <PRICE_END_TIME>18:00</PRICE_END_TIME>
      <PRICE>3</PRICE>
      <MAX_TIME>60</MAX_TIME>
    </METER_PRICE_SCHEDULE>
    <METER_PRICE_SCHEDULE>
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>18:00</PRICE_START_TIME>
      <PRICE_END_TIME>00:00</PRICE_END_TIME>
          <FREE>1</FREE>
```

```
    </METER_PRICE_SCHEDULE>  </METERED_SPACE>
…*
  <METERED_SPACE>
    <SPACE_ID>PKGS2070</SPACE_ID>
    <DAYS_OF_WEEK>Fr</DAYS_OF_WEEK>
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>06:00</PRICE_START_TIME>
      <PRICE_END_TIME>07:00</PRICE_END_TIME>
      <MAX_TIME>240</MAX_TIME>
      <FREE_PREPAY>1</FREE_PREPAY>
    </METER_PRICE_SCHEDULE>
  </METERED_SPACE>
  <METERED_SPACE>
    <SPACE_ID>PKGS2070</SPACE_ID>
    <DAYS_OF_WEEK>Sa</DAYS_OF_WEEK>
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>06:00</PRICE_START_TIME>
      <PRICE_END_TIME>07:00</PRICE_END_TIME>
      <MAX_TIME>240</MAX_TIME>
      <FREE_PREPAY>1</FREE_PREPAY>
    </METER_PRICE_SCHEDULE>
  </METERED_SPACE>
  <METERED_SPACE>
    <SPACE_ID>PKGS2100</SPACE_ID>
    <DAYS_OF_WEEK>We</DAYS_OF_WEEK>
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>15:00</PRICE_START_TIME>
      <PRICE_END_TIME>19:00</PRICE_END_TIME>
      <MAX_TIME>240</MAX_TIME>
      <TOW_AWAY>1</TOW_AWAY>
    </METER_PRICE_SCHEDULE>
  </METERED_SPACE>
</PRICE_SCHEDULE>
```

**Followed by all other metered spaces and/or schedules for each meter/day of week. Below this point his sample only lists few metered space/price schedules to highlight the various elements and formats……..*

. Sample for Special Event reconciliation xml files:.

```
<PRICE_SCHEDULE
xmlns="http://www.cityofsacramento.org/xsd/mpsrec">
  <METERED_SPACE>
    <SPACE_ID>PKGS2010</SPACE_ID>
    <EVENT_DATE>2011-06-28</EVENT_DATE>
```

```
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>07:00</PRICE_START_TIME>
      <PRICE_END_TIME>12:00</PRICE_END_TIME>
      <PRICE>2.75</PRICE>
      <MAX_TIME>60</MAX_TIME>
    </METER_PRICE_SCHEDULE>
     <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>12:00</PRICE_START_TIME>
      <PRICE_END_TIME>15:00</PRICE_END_TIME>
      <PRICE>5</PRICE>
      <MAX_TIME>60</MAX_TIME>
    </METER_PRICE_SCHEDULE>
     <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>15:00</PRICE_START_TIME>
      <PRICE_END_TIME>18:00</PRICE_END_TIME>
      <PRICE>3</PRICE>
      <MAX_TIME>60</MAX_TIME>
    </METER_PRICE_SCHEDULE>
    <METER_PRICE_SCHEDULE>
      <PRICE_START_TIME>18:00</PRICE_START_TIME>
      <PRICE_END_TIME>00:00</PRICE_END_TIME>
          <FREE>1</FREE>
    </METER_PRICE_SCHEDULE>
  </METERED_SPACE>
…see above*
</PRICE_SCHEDULE>
```

DOC: Attachment 8: INCOMING Meter Faults and Maintenance Codes XML specification
Date : 04/01/2013
Author : Parking Services, City of Sacramento
Ref:
Description: The following XML is the format in which the Vendor will deliver meter fault and maintenance codes information on an agreed upon interval; e.g., nightly.

Revision History		
Date	Version	Description
4/1/2013	1.0	First DRAFT for review

<METER_FAULTS>

*<VENDOR_ID>**ID number assigned to Vendor by Parking Services**</VENDOR_ID>*

*<TRANSMISSION_DATETIME>**Date and time of transmission from Vendor in UTC**</TRANSMISSION_DATETIME>*

<METERED_SPACE>--one set per space

*<METER_TYPE>**MS,SS**</METER_TYPE>*

*<PARKING_RECORD_ID>**Internal numeric Id for meter space assigned by Parking Services**</PARKING_RECORD_ID>*

*<SPACE_ID>**Publicly identified ID for the space**</SPACE_ID>*

*<HOUSING_ID>**Identifier for meter housing at the space**</HOUSING_ID>*

*<MECH_ID>**Manufacturer's serial number for the meter mechanism installed in this space**</MECH_ID>*

*<SERIAL_NUM>**12345**</SERIAL_NUM>*

*<FIRMWARE_VER>**123</**FIRMWARE_VER>*

*<FIRMWARE_REV>**4.05**</FIRMWARE_REV>*

*<EVENT_TIME>**time in standard Oracle format to the second in UTC**</EVENT _TIME>*

*<EVENT_TYPE>**F,M,S**</EVENT_TYPE>*

*<FAULT>**LB**</FAULT>**

*<METER_STATUS>**0 or 1**</METER_STATUS>**

*<MAINT_CODE>**CJ**</MAINT_CODE>**

</METERED_SPACE>

</METER_FAULTS>

***Only one of these respective element required based on event type**

Oracle Date format: should be (Hrs as 24hr) YYYY-MM-DD 24HR:MM:SS and represented in UTC unless otherwise noted

Descriptions:

XML Code:	***Shall Be:***
VENDOR_ID	*Assigned by Parking Services to each parking meter company, etc.*
TRANSMISSION_ID	*Unique and generated by Vendor*
TRANSMISSION_DATETIME	*Provided by Vendor, in standard Oracle date format to the second in UTC time zone*
METER_TYPE	*MS: multi-space meter* *SS: single space meter*
PARKING_RECORD_ID	*This is a surrogate ID automatically generated by Parking Services when a parking space is added to the database*
SPACE_ID	*Unique identifier assigned by Parking Services; used primarily to identify single space metered spaces on the street*
HOUSING_ID	*Unique identifier assigned by Parking Services; identifies the housing installed at the space*
MECH_ID	*Manufacturer's ID for the mechanism installed in the housing at this space*
SERIAL_NUM	*Unique meter serial number assigned by Parking Services*
FIRMWARE_VER	*The firmware version of the meter.*
FIRMWARE_REV	*The firmware revision of the meter.*
MODEM_FIRMWARE_VER	*The firmware version of the modem in the meter or pay station.*
EVENT_TIME	*The time the event took place (i.e. time fault occurred or cleared, time maintenance code was entered, time meter went into service or out of service). In standard Oracle date format to the second in UTC time zone*

EVENT_TYPE	*Type of event* *F: Fault* *M: Maintenance* *S: Meter Status*
*FAULT**	*If Event Type is 'F'* *Character string up to 12 characters describing the fault; e.g. "OBL" (Low Battery) or "OCRB" (Card Reader Blocked). Up to 100 possible strings – table to be provided by Parking Services (to standardize across all vendors).*
*METER_STATUS**	*If Event Type is 'S'* *"0" each time the meter goes out of service; "1" each time the meter goes back into service. Correspondence between faults/maintenance events and "out of service" status to be provided by Parking Services.*
*MAINT_CODE**	*If Event Type is 'M'* *Character string up to 12 characters describing the maintenance event; e.g. "RTS" (Remove Meter From Service) or "RCJ" (Cotton Jam). Up to 100 possible strings – table to be provided by Parking Services.*

Sample table of values for fault/maintenance codes. The final list will be provided separately by Parking Services:

ALPHA CODE	DESCRIPTION	TYPE (M/F)	SS	MS
RRI	ROUTINE INSPECTION OK	M	X	X
RCC	CLEAN CASE	M	X	X
RCOM	COMMUNICATION ERROR	M	X	X
RRB	REPLACE BATTERY	M	X	X
RSR	SERVICE REQUEST	M	X	X
RSDL	SERVICE DOOR/LOCKS	M	X	X
RVAN	VANDALISM	M	X	X
RRV	REPLACE VALIDATOR	M	X	X
RJ	JAM	M	X	X
RJC	COTTON JAM	M	X	X
OTDO	Top Door Closed	F		X
OTDC	Top Door Opened	F		X
OXF	Cashbox Full	F		X
OXFU	Cashbox Full	F		X
OCOM	Communications problem	F	X	X
ONRM	Non-reporting meter	F	X	X
ONVF	Coin Validator Fault	F	X	
ONVO	Coin Validator Oscillator	F	X	
OCRE	Card Read Error	F	X	

Sample XML:

```
<METER_FAULTS>
    <VENDOR_ID>999</VENDOR_ID>
    <TRANSMISSION_DATETIME>2012-06-27
      15:30:02</TRANSMISSION_DATETIME>
    <METERED_SPACE>
        <METER_TYPE>SS</METER_TYPE>
        <PARKING_RECORD_ID>123456</PARKING_RECORD_ID>
        <SPACE_ID>PKGS12345</SPACE_ID>
        <HOUSING_ID>PKGH55441 </HOUSING_ID>
        <MECH_ID>09615462</MECH_ID>
        <SERIAL_NUM>61290</SERIAL_NUM>
        <FIRMWARE_VER>32</FIRMWARE_VER>
        <FIRMWARE_REV>51.2</FIRMWARE_REV>
        <EVENT_TIME>2012-06-27 13:30:02</EVENT_TIME>
        <EVENT_TYPE>F</EVENT_TYPE>
        <FAULT>OBL</FAULT>
```

```
</METERED_SPACE>
<METERED_SPACE>
    <METER_TYPE>SS</METER_TYPE>
    <PARKING_RECORD_ID>56789</PARKING_RECORD_ID>
    <SPACE_ID>PKGS41</SPACE_ID>
    <HOUSING_ID>PKGH5941</HOUSING_ID>
    <MECH_ID>SG1245784</MECH_ID>
    <SERIAL_NUM>61880</SERIAL_NUM>
    <FIRMWARE_VER>32</FIRMWARE_VER>
    <FIRMWARE_REV>51.2</FIRMWARE_REV>
    <EVENT_TIME>2012-06-27 13:34:02</EVENT_TIME>
    <EVENT_TYPE>F</EVENT_TYPE>
    <FAULT>OCRB</FAULT>
</METERED_SPACE>
<METERED_SPACE>
    <METER_TYPE>SS</METER_TYPE>
    <PARKING_RECORD_ID>13579</PARKING_RECORD_ID>
    <SPACE_ID>PKGS4175</SPACE_ID>
    <HOUSING_ID>PKGH23</HOUSING_ID>
    <MECH_ID>X919293</MECH_ID>
    <SERIAL_NUM>62406</SERIAL_NUM>
    <FIRMWARE_VER>32</FIRMWARE_VER>
    <FIRMWARE_REV>51.2</FIRMWARE_REV>
    <EVENT_TIME>2012-06-27 17:18:07</EVENT_TIME>
    <EVENT_TYPE>M</EVENT_TYPE>
    <MAINT_CODE>RRB</MAINT_CODE>
</METERED_SPACE>
<METERED_SPACE>
    <METER_TYPE>SS</METER_TYPE>
    <PARKING_RECORD_ID>88124</PARKING_RECORD_ID>
    <SPACE_ID>PKGS9852</SPACE_ID>
    <HOUSING_ID>PKGH5254</HOUSING_ID>
    <MECH_ID>BR549</MECH_ID>
    <SERIAL_NUM>50213</SERIAL_NUM>
    <FIRMWARE_VER>32</FIRMWARE_VER>
```

*<FIRMWARE_REV>**51.2**</FIRMWARE_REV>*

*<EVENT_TIME>**2012-06-27 23:28:07**</EVENT_TIME>*

*<EVENT_TYPE>**S**</EVENT_TYPE>*

*<METER_STATUS>**1**</METER_STATUS>*

</METERED_SPACE>

…… Followed by all other spaces as this sample only lists few metered space/price schedules to highlight the various elements and formats ……..

</METER_FAULTS>

Attachment 9: INCOMING Meter Revenue CSV

Column	Optional	Data type & format	description
Vendor	No	Char	The vendor identifier supplying the file
Meter Type	No	Char	The type of meter at the location. This can be used to identify various meter properties , such as whether it is single or multi bay, how to interpret the meter status etc.
Collection Route	No	Char	Collection Route identifier that the meter is on
Collection subroute	No	Char	Collection sub Route identifier that the meter is on
Location Id	No	Char	Space identifier
Street Name	No	Char	Street where the post exists
Bay Number	No	Number	The bay number controlled by the meter. Starts at 1. Single bay meters are always set to 1
Payment Type	No	Char	Either “CASH”, “CREDIT CARD”, “SMART CARD”, “PAY BY PHONE”
Collection Time	No	DATE TIME (YYYY-MM-DD HH24:MI:SS’)	The time the meter data was collected
Transaction Time	Yes	DATE TIME (YYYY-MM-DD HH24:MI:SS’)	The time the transaction meter transaction took place. If this field is empty then the data is cumulative value since the last collection. If valid then the data is an individual transaction
Tokens	Yes	Integer	Number of Tokens collected per transaction or collection
Dollar2 Coins	Yes	Integer	Number of 2 dollar coins collected per transaction or collection
Dollar1 Coins	Yes	Integer	Number of 1 dollar coins collected per transaction or collection
Cents50 Coins	Yes	Integer	Number of 50 cent coins collected per transaction or collection
Cents25 Coins	Yes	Integer	Number of 25 cent coins collected per transaction or collection
Cents10 Coins	Yes	Integer	Number of 10 cent coins collected per transaction or collection
Cents5 Coins	Yes	Integer	Number of 5 cent coins collected per transaction or collection
Cents1 Coins	Yes	Integer	Number of 1 cent coins collected per transaction or collection
Total Value	No	Number(7,2)	Value of collection in dollars and cents collected per transaction or collection.
Card No	Yes	Char	Any card id. This column will only be filled in for transaction level “SMART CARD”, “CREDIT CARD”, or “PAY BY PHONE” and may be an encrypted value where the data is deemed sensitive. This column can be used for any future payment type which relies on an identifier.
Meter Status	Yes	integer	This may be a bit mask or numeric value representing the status. Its interpretation is dependent on the meter type
Serial No	Yes	Char	The meter’s serial number.
Firmware Ver	Yes	Char	The firmware version of the meter.
Firmware Rev	Yes	Char	The firmware revision of the meter.

Notes:

- Identification of the meter type allows properties of meters to be defined in other lookup tables and processing performed according to these properties, for example interpretation of meter status.
- Payment types can be added in future if required.
- Use of transaction time allows differentiation between cumulated totals per collection or individual transactions.
- Token allows for if meters can be paid for by token. No total Value will exist for tokens
- Card No is an identifier of the device used to make a transactional payment. It doesn't have to be from a card. It could be from a finger print recognition, electronic key fob etc. Data may be encrypted to prevent fraud.
- Each column may optionally be placed in double quotes i.e. "1.34"
- Each row must be terminated by <CR><LF> , hex 0D0A

DOC: Attachment 10: INCOMING Meter Maintenance CSV

Date : 04/01/2013

Author : Parking Services, City of Sacramento

Ref:

Revision History

Date	Version	Description
4/1/2013	1.0	First DRAFT for discussion
6/1/2013	1.1	Removed erroneous references

Column	Optional	Data type & format	Description
Vendor	No	char	The vendor identifier supplying the file
Meter Type	No	char	The type of meter at the location. This can be used to identify various meter properties , such as whether it is single or multi bay, how to interpret the meter status etc.
Location Id	No	char	Post identifier.
Serial No	No	char	The meter's serial number.
Firmware Ver	No	char	The firmware version of the meter.
Firmware Rev	No	char	The firmware revision of the meter.
Event Time	No	DATE TIME (YYYY-MM-DD HH24:MI:SS')	The time the event took place (i.e. time fault occurred or cleared, time maintenance code was entered, time meter went into service or out of service).
Event Type	No	char	Type of event: F for fault, M for Maintenance, S for Status.
Fault	Yes	char	If Event Type is 'F' Character string up to 12 characters describing the fault; e.g. "LB" (Low Battery) or "CRB" (Card Reader Blocked). Up to 100 possible strings – table to be provided by Parking Services. Otherwise blank
Meter Status	Yes	integer	If Event Type is 'S' "0" each time the meter goes out of service; "1" each time the meter goes back into service. Correspondence between faults/maintenance events and "out of service" status to be provided by Parking Services. Otherwise blank
Maintenance Code	Yes	char	If Event Type is 'M' Character string up to 12 characters describing the maintenance event; e.g. "RMFS" (Remove Meter From Service) or "CJ" (Cotton Jam). Up to 100 possible strings – table to be provided by Parking Services. Otherwise blank

Notes:

- Identification of the meter type allows properties of meters to be defined in other lookup tables and processing performed according to these properties, for example interpretation of meter status.
- Each column may optionally be placed in double quotes i.e. “1.34”
- Each row must be terminated by <CR><LF> , hex 0D0A

Attachment 11: List of Faults and Maintenance Codes

ALPHA CODE	DESCRIPTION	TYPE (M/F)	SS	MS
RRI	ROUTINE INSPECTION OK	M	X	X
RCC	CLEAN CASE	M	X	X
RCOM	COMMUNICATION ERROR	M	X	X
RRB	REPLACE BATTERY	M	X	X
RSR	SERVICE REQUEST	M	X	X
RSDL	SERVICE DOOR/LOCKS	M	X	X
RVAN	VANDALISM	M	X	X
RRV	REPLACE VALIDATOR	M	X	X
RJ	JAM	M	X	X
RJC	COTTON JAM	M	X	X
RSC	STUCK COINS	M	X	X
RRPM	REPLACE PARTS TO METER	M	X	X
RCFG	CONFIG ERROR	M	X	X
RRT	RESET TIME	M	X	X
ROOO	OUT OF ORDER	M	X	X
RRS	REPLACE SIGN	M		X
RRMS	REPLACE METER INTO SERVICE	M	X	X
RTS	REMOVE METER FROM SERVICE	M	X	X
REM	EXCHANGE MECHANISM	M	X	
REH	EXCHANGE HEAD	M	X	
RBP	BROKEN POST	M	X	
RVF	Validator Fault	M	X	
RCR	Card Reader Blockage	M	X	
RDI	Display	M	X	
RK	Keypad	M	X	
RLED	Expiry LED's	M	X	
OAC	Alarms cleared	F		X
OBLD	Low Battery Alert - Dry Cell	F		X
OBLR	Low Battery Alert - Rechargeable	F		X
OXR	Cashbox Removed Alert	F		X
ONJM	Max Jam - Validator Alarm	F		X
ONJI	Input Chute Coin Jam Alert	F		X
ONJO	Reject Chute Coin Jam Alert	F		X
ONJU	Vault Chute Coin Jam Alert	F		X
OXI	New Cashbox Inserted	F		X
OMR	Meter Restarted	F		X
OTK	Technician Key Used	F		X
OEL	Maintenance Event Logged	F		X
OXAR	Cashbox Audit Retrieval	F		X
OXSI	Same Cashbox Inserted	F		X
OUDO	Vault Door Opened	F		X

ALPHA CODE	DESCRIPTION	TYPE (M/F)	SS	MS
OUDC	Vault Door Closed	F		X
OTDO	Top Door Closed	F		X
OTDC	Top Door Opened	F		X
OXF	Cashbox Full	F		X
OXFU	Cashbox Full	F		X
OCOM	Communications problem	F	X	X
ONRM	Non-reporting meter	F	X	X
ONVF	Coin Validator Fault	F	X	
ONVO	Coin Validator Oscillator	F	X	
OCRE	Card Read Error	F	X	
OCD	Card Detection Switch Fault	F	X	
OCFG	Configuration Fault	F	X	
OCRB	Card Reader Blocked	F	X	
OME	Memory Error	F	X	
OBL	Battery Low	F	X	
OBC	Battery Critical	F	X	
OX75	Cashbox 75%	F	X	
OOK	OK	F	X	
ONVB	Coin Validator Blocked	F	X	

ATTACHMENT 12: ANTICIPATED FREQUENCY OF TRANSMISSION--CSV AND XML

The table below is a summary of the Attachments describing XML and CSV specifications used for automatic programming referenced throughout the RFP, their purpose, and the anticipated frequency of transmission. While Parking Services does not anticipate major deviations to the listed specifications, Parking Services reserves the right to make changes and corrections in consultation with the Contractor during the programming development and testing phase. Likewise, Parking Services will review and consider any changes to the specifications requested by the Contractor. OUTGOING means files are going from Parking Services to the Contractor; INCOMING means files are going from the CONTRACTOR to Parking Services.

Schedule of Attachments

Attachment	Description	Purpose	Anticipated Frequency
Attachment 1 – OUTGOING PSI XML	Contains both standard and user-defined variables describing attributes of the metered spaces not related to meter behavior.	Populate attributes of newly-metered spaces in MMS.	as-needed
		Routine changes/edits to individual metered spaces in MMS.	nightly
Attachment 2 – OUTGOING Operating schedule XML	Contains variables that govern the overall hours meters are in effect; may include TOW, prepayment settings, time limits, and other restrictions.	Program meter behavior and screens of newly-metered spaces with hours, prepayment, TOW, and time limits.	as-needed
		Routine changes/edits to individual metered spaces.	nightly
		Re-program meter behavior and screens of existing metered spaces with new hours, prepayment, TOW, or time limits.	1x/month avg.
Attachment 3 – OUTGOING Price schedule XML	Contains variables that govern meter hourly rates for specific time slots.	Program meter behavior and screens of newly-metered spaces with time slots and hourly rates.	as-needed
		Routine changes/edits to individual metered spaces.	nightly
		Re-program meter behavior and screens of existing metered spaces with new time slots and rates.	1x/month avg.
Attachment 4 – OUTGOING Special event pricing and regulation XML	Contains variables that govern the overall hours meters are in effect; may include TOW, prepayment settings, time limits, other restrictions, or rates for specific time slots that override standard operating and price schedules only on specific dates listed in the XML file.	Program meter behavior and screens of newly-metered spaces with special hours, prepayment, TOW, time limits, time slots, hourly rates, or other regulations to override standard operating and price schedules on specific dates.	as-needed
		Re-program meter behavior and screens of existing metered spaces with special hours, prepayment, TOW, time limits, rates, or other regulations to override standard operating and price schedules on specific dates.	Periodic, TBD

Attachment	Description	Purpose	Anticipated Frequency
Attachment 5 – INCOMING Transaction Data XML	Contains data related to every transaction conducted at the meter including start/end times of parking sessions, payment times, amounts, and payment type.	Deliver parking transaction data to Parking Services.	real-time
Attachment 6 – INCOMING PSI changes XML specification	Contains standard and user-defined variables stored in the MMS.	Deliver standard and user-defined variables describing attributes of the metered spaces not related to meter behavior to Parking Services for comparison to Parking Services' records.	weekly
Attachment 7 – INCOMING Reconciliation XML	Contains variables that govern meter behavior stored in the MMS.	Deliver metered space programming information including hours, prepayment, TOW, time limits, rates, or special event programming to Parking Services for comparison to Parking Services' records	on-demand
Attachment 8 – INCOMING Faults & maintenance codes XML	Contains faults and maintenance codes transmitted by the meters to the MMS.	Deliver meter faults reported by meters and maintenance codes entered by Parking Services staff at the meters to Parking Services.	nightly
Attachment 9 – INCOMING Meter Revenue CSV	Contains meter revenue by Post ID.	To populate PSMS with meter revenue data.	nightly
Attachment 10 – INCOMING Meter Maintenance CSV	Contains meter maintenance data by Post ID.	To populate PSMS with meter maintenance events.	nightly
Attachment 11 – List of Faults and Maintenance Codes	Contains list of faults and maintenance codes.	Used in conjunction with Attachment 10.	nightly

LIQUIDATED DAMAGES AND CREDIT ASSESSMENTS
SINGLE-SPACE METERS ("Meters")

I. DEFINITIONS:

In addition to the definitions in the Agreement and the Technical Specifications, the following definitions shall pertain to the terms used within this document:

A. Average Daily Revenue (ADR) for Failed Meters is equal to the actual revenue collected for the Failed Meters for the 90-Day period prior to the date of Failure (excluding Meters in Special Event areas during a Special Event) divided by 90, divided by the number of Failed Meters. Actual Meter revenue will be based on data in the MMS.

B. Average Special Event Daily Revenue (ASEDR) for Failed Meters is equal to the actual revenue collected for the Failed Meters for the last 10 Special Events in the 12-month period prior to the date of Failure divided by 10 divided by the number of Failed Meters. Actual Meter revenue will be based on data in the MMS.

C. “Consumables” shall mean items that are not subject to credit assessments and/or loss compensation, such as ticket roll paper and attached graphic panels and signs.

D. "Failure" shall mean functionality that is below the threshold in the Technical Specifications for a particular hardware or software requirement.

E. "Performance Standards" shall mean the minimum standards acceptable for functioning of the Meters.

F. “Vandalism” shall mean any willful damage caused to the Meter which affects the appearance or operation of the Meter or interferes with the normal use of the Meter.

II. GENERAL EXCLUSIONS:

Liquidated damages and credit assessments shall not be imposed for the following Failures or to the extent the following are solely responsible for noncompliance with the Performance Standards:

1. Unavoidable Delays.
2. Failures that are self-corrected by the Meters within agreed performance specifications (e.g., clock re-syncs).
3. Infant mortality, i.e., parts Failure during the first 60 Days after installation of the Meters, provided that such parts are replaced within seven Days of the Failure.
4. Failures in Meters that are being field tested on new software or hardware during the mutually agreed upon field test period.
5. Failure of Consumables.
6. Failure as a result of use of replacement parts for the Meters other than those authorized by CONTRACTOR.

7. Failures that are solely caused by the negligent actions or inactions of SFMTA or its contractors or subcontractors.
8. Failure of third-party providers of electrical power, internet access or cellular communications.

III. LIQUIDATED DAMAGES:

CONTRACTOR acknowledges that its failure to perform certain obligations under this Agreement during the respective time limits imposed will cause the CITY to incur cost and inconvenience not contemplated under this Agreement, which cost and inconvenience will constitute damage to the CITY and the public, and that the exact amount of such damage will be extremely difficult or impractical to fix. The CITY and CONTRACTOR agree that the amounts described as liquidated damages in this Agreement are not penalties, but represent a fair and reasonable estimate of the damages that the CITY will incur by reason of CONTRACTOR's failure to perform, and are fair compensation to City for its losses. Failure by the CITY to impose liquidated damages for specified violations will not be a waiver of the right to enforce this Section, nor will it constitute a waiver of any other right of the CITY under this Agreement.

The CITY may deduct a sum representing the liquidated damages assessed from any money due to CONTRACTOR under this Agreement. Should an assessment take place, the CITY will send written notification to the CONTRACTOR for its information. Assessments within a given month shall not exceed 35 percent of the Monthly Operational Expenses paid to CONTRACTOR. Excess liquidated damages (over a monthly cap) will be carried over to the following month.

If two or more Failures are determined for a particular event, CONTRACTOR will be charged for the Failure with the highest assessment.

Where, under the provisions below, the CITY is required to issue a written warning to CONTRACTOR prior to assessment of liquidated damages, CONTRACTOR's obligation to repair, replace, correct, adjust, or modify a Failure shall not commence until the date the CITY issues such written warning, which written warning shall include a reasonable description of the nature of the Failure as known to PARKING SERVICES at the time. Any extensions to the cure period must be authorized by the CITY in writing.

Where, under the provisions below, the CITY is not required to issue a written warning to CONTRACTOR prior to assessment of liquidated damages, PARKING SERVICES, as soon as practicable after the failure, will send a written notice of assessment to CONTRACTOR, setting forth a reasonable description of the nature of the failure, as known to PARKING SERVICES at the time, and the amount of the assessment.

Liquidated Damages will not be assessed in situations where actual damages are known and for which Credit Assessments may be imposed. With respect to any breaches or items for which the City has a right to obtain liquidated damages, the City will not seek actual damages or any damages in excess of the liquidated damages to which it may be entitled.

	Description of Failure:	**Threshold for LD Assessment:**	**Potential Assessment:**
1a	A Failure of the Meters that results in either no payment being accepted by the meters (e.g., Meters allow free parking during enforcement hours) or application of the wrong rates.	During Operating Hours, a single Failure that exceeds 20% of the total Meters installed and accepted, or multiple Failures in one Day that together exceed 20%. Multiple Failures that cumulatively exceed 30% over a one-week period. A single Failure of the same Meters that continues for more than one Day shall be considered to be a Multiple Failure for each Day.	No warning will be issued prior to assessment of liquidated damages for this Failure. CONTRACTOR may be assessed liquidated damages based on ADR* Loss multiplied by the total number of affected Meters. *Average Daily Revenue (ADR) Loss calculation example is contained in this document.
1b	A Failure (during a Special Event) of the Meters in Special Event areas that results in either no payment transaction being Accepted by the Meters (e.g., Meters allow free parking during enforcement hours) or application of the wrong rates (e.g., although properly configured, Meter does not charge Special Event rates).	During Operating Hours, a single Failure that exceeds 20% of the total Meters installed and accepted in Special Event areas, or multiple Failures in one Day in Special Event areas that together exceed 20%. Multiple Failures in Special Event areas that cumulatively exceed 30% over a one-week period. A single Failure of the same Meters that continues for more than one Day shall be considered to be a Multiple Failure for each Day.	No warning will be issued prior to assessment of liquidated damages for this Failure. CONTRACTOR may be assessed liquidated damages based on ASEDR** Loss multiplied by the total number of affected Meters. **Average Special Event Daily Revenue (ASEDR) Loss calculation example is contained in this document.

	Description of Failure:	**Threshold for LD Assessment:**	**Potential Assessment:**
2	CONTRACTOR Fails to maintain Payment Card Industry Data Security Standard Certification.	Any lapse in requirements as described in Section I.A.7.a of the Technical Specifications.	No warning will be issued prior to assessment of liquidated damages for this Failure. CONTRACTOR may be assessed liquidated damages of $30,000 the first month (or portion thereof) of non-compliance and $40,000 for each additional month (or portion thereof) until the Failure is cured. For all future such Failures, CONTRACTOR will be assessed liquidated damages in the amount of $45,000 per month (or portion thereof) until the Failure is cured.
3	CONTRACTOR Fails to comply with the Batch Delivery Schedule [TBD].	See Delivery Schedule	No warning will be issued prior to assessment of liquidated damages for this Failure. CONTRACTOR may be assessed liquidated damages of $3,000 per day per deliverable until the Failure is cured.

	Description of Failure:	Threshold for LD Assessment:	Potential Assessment:
4	Meter Fails to provide a customer the proper time purchased.	**(Applies to items 4-11)** More than 5% of accepted Meters Fail.	**(Applies to items 4-11)** Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall **cure the** Failure within seven days thereafter, unless an extension is authorized by Parking Services in writing. If the Failure is not cured within allotted time frame, CONTRACTOR may be assessed liquidated damages of $10 per Failing metered space per day, from the date of the initial Failure until the Failure is cured. For all future such Failures CONTRACTOR may be assessed liquidated damages of $15 per metered space per day until the Failure is cured.
5	Meter Fails to wirelessly communicate all payment statuses to its respective MMS (coins, smart cards, credit card etc.) even though the wireless network is available.		
6	CONTRACTOR Fails to transmit evidence of a transaction paid via pay-by-phone vendor to the Meter within 60 seconds after pay-by-phone transactions are received from PBP vendor.		
7	Meter gives a customer time when the space is programmed as “No Parking.”		
8	Meter Fails to provide accurate visual enforcement indication on the front and the back of the Meter.		
9	Meter Fails to display, retain, or deliver a time-stamped “out of order” message to MMS.		
10	Meter Fails to transmit a requested alarm when malfunctioning (e.g., coin jam, card reader jam, low battery, out of order etc.)		
11	Failure of a new coin discrimination parameter change to be sent to a Meter wirelessly.		

	Description of Failure:	Threshold LD Assessment:	Potential Assessment:
12	CONTRACTOR Fails to deliver accurate rate changes in accordance with the schedule agreed to by the Parties.].	**(Applies to items 12-16)** More than 2% of accepted Meters Fail.	**(Applies to items 12-16)** Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure the Failure within 72 hours thereafter unless an extension is authorized by Parking Services in writing. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $10 per Failing metered space per day, from the date of the initial Failure until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $15 per Failing metered space per day until the Failure is cured.
13	CONTRACTOR Fails to deliver time limit changes to its Meters accurately in accordance with the schedule agreed to by the Parties.		
14	CONTRACTOR Fails to deliver operational hours changes to its Meters accurately in accordance with the schedule agreed to by the Parties.		
15	CONTRACTOR Fails to deliver display configuration changes to its Meters, and Fails to do so accurately in accordance with the schedule agreed to by the Parties.		
16	CONTRACTOR Fails to modify its modem settings (e.g. time the modem is required to listen for PBP transaction data) accurately in accordance with the schedule agreed to by the Parties.		

17	MMS Fails to automatically detect and program a replacement mechanism over a period of five consecutive days.	More than 0.2% of the accepted Meters.	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within seven days thereafter, unless an extension is authorized by Parking Services in writing. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $10 per Failing metered space per day, from the date of the initial Failure until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $15 per Failing metered space per day until the Failure is cured.
18	Meters' internal clocks drift more than two seconds per Day, or Meters do not automatically adjust internal clocks for Daylight Saving Time periodic changes.	More than 2% of the accepted Meters, over a period of three consecutive days.	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within seven days thereafter, unless an extension is authorized by Parking Services in writing. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $10 per Failing metered space per day, from the date of the initial Failure until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $15 per Failing metered space per day until the Failure is cured.
19	Meter Fails to synch its internal clock with the MMS on all call-in events.		

20	Failure of a Meter to properly recognize and credit time for new coins issued by the U.S. Mint.	None	Parking Services will issue a written warning. CONTRACTOR shall cure within three days thereafter, unless an extension is authorized by Parking Services in writing. If the Failure is not cured within the allotted time frame CONTRACTOR may be assessed liquidated damages of $10 per Failing metered space per day, from the date of the initial Failure until the Failure is cured. For all future Failures CONTRACTOR may be assessed liquidated damages in the amount of $15 per Failing metered space per calendar day until the Failure is cured.
21	Failure to deliver any custom report by the agreed-upon date.	Not applicable	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within 14 days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $50 per missed report per day until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $75 per day for each missed report until the Failure is cured.
22	Failure to make a custom report available to run in the MMS during the contract period.		
23	Failure of the Meters to download the Hotlist within 24 hours.	None	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within three Days thereafter, unless an extension is authorized by Parking Services in writing. If the Failure is not cured within allotted time frame,
24	Failure of the MMS to update Hotlist within 24 hours.		

25	Failure of the Meter to reject a card that is on the Hotlist.		CONTRACTOR may be assessed liquidated damages of $100 per Day until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $150 per day until the Failure is cured.
26	Failure of CONTRACTOR to return a call from Parking Services within 15 minutes. (Tech. Spec. Sec. I.A.2.a.ii.)		Parking Services will issue a written warning prior to assessment of liquidated damages. If the Failure occurs a second time, CONTRACTOR may be assessed liquidated damages of $100 per incident. For all future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $150 per incident.

	Description of Failure:	**Threshold LD Assessment:**	**Potential Assessment:**
27a	Failure of the Meter to maintain 99% accuracy in its daily audit that passes through the Meter payment systems. **Coins:** Comparison will be made between MMS collection report and physical coin count. **Credit Card:** Comparison will be made between the Gateway report and the bank deposit.	Discrepancy of more than 1% in audit of daily revenue	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within seven days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $100 per day until the Failure is cured.
27b	Failure of the Meter to maintain 99% accuracy in its audit of total monthly revenue that passes through the Meter Payment systems. (**Coin, credit card and smart card revenue**: Comparison will be made between MMS, financial reports and the SFMTA databases.)	Discrepancy of more than 1% in audit of monthly revenue	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within seven days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $100 per day until the Failure is cured.
28	CONTRACTOR Fails to deliver historical data (e.g. revenue, revenue collections, maintenance events, alarms, payment) in the format or within the time frame requested by Parking Services.	none	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within seven days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $100 per day until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $150 per day until the Failure is cured.

	Description of Failure:	**Threshold LD Assessment:**	**Potential Assessment:**
29	Failure to deliver 99 percent of all data (e.g., CSV files) to Parking Services daily.	none	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within three days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $250 per day until the Failure is cured. For any future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $500 per day until the Failure is cured.
30	Failure to deliver 99 percent of all XML data feed to Parking Services within 60 seconds of transmission.		
31	Failure of CONTRACTOR's MMS to process any XML file (e.g., price schedule, special event spreadsheet) as described in the attached specification documents.		
32	A User with operable computers and broadband internet connection is unable to log in to the MMS (mobile and stand-alone), within 60 seconds. (Sec. III.A.1.a.)	none	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within seven days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $250 per day until the Failure is cured. For any future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $500 per day until the Failure is cured.
33	A User with operable computers and broadband internet connection receives an error code from the MMS.		
34	With the exception of mutually agreed-upon downtime, the MMS or any component of the MMS fails to be available for use (e.g., the server is down, the internet connection at the data center is not functioning, a hard drive Failure on one of the storage servers) more frequently than once per calendar month.		

	Description of Failure:	**Threshold LD Assessment:**	**Potential Assessment:**
35	Failure of CONTRACTOR to make available custom fields within its MMS by a mutually agreed-upon timeframe.	not applicable	Parking Services will issue a written warning prior to assessment of liquidated damages. CONTRACTOR shall cure within 14 days thereafter. If the Failure is not cured within the allotted time frame CONTRACTOR may be assessed liquidated damages of $250 per day until the Failure is cured. For any future such Failures, CONTRACTOR may be assessed liquidated damages in the amount of $500 per day until the Failure is cured.
36	Meter Fails to transmit data to the MMS within 120 seconds of transaction.	Five percent of average daily transactions. Percentage shall be calculated once a month on the anniversary Day of the Notice to Proceed.	Parking Services will issue a written warning to CONTRACTOR prior to assessment of liquidated damages. CONTRACTOR shall cure within 14 days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $250 per day until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages without benefit of warning in the amount of $500 per day until the Failure is cured.
37	MMS Fails to transmit transactional data to Parking Services within 10 seconds of MMS receipt.		
38a	Contractor Fails to provide an SFTP site with a file structure within 60 Days of the Notice to Proceed, as described in Sections III.B.1.c and III.B.1.d of the Statement of Work.	No compliance by Day 61.	No warning will be issued prior to assessment of liquidated damages for this Failure. The Contractor may be assessed liquidated damages at the rate of $500 per month until the Failure is cured.

	Description of Failure:	**Threshold LD Assessment:**	**Potential Assessment:**
38b	Contractor Fails to maintain a functional SFTP site for the term of the Agreement, as described in Section III.B.1.c of the Statement of Work.	No functionality of the FTP site for a continuous two-week period.	Parking Services will issue a written warning to CONTRACTOR prior to assessment of liquidated damages. CONTRACTOR shall cure within seven days thereafter. If the Failure is not cured within the allotted time frame, CONTRACTOR may be assessed liquidated damages of $500 per week until the Failure is cured. For all future such Failures, CONTRACTOR may be assessed liquidated damages without benefit of warning in the amount of $750 per week until the Failure is cured.
39	Any MMS programming or customization functional requirement, defined in Section III of the Statement of Work, is not completed within the timeline agreed by CONTRACTOR and Parking Services.	Functional requirement not met on next business day after the agreed timeline.	No warning will be issued prior to assessment of liquidated damages for this Failure. Beginning on the 91st Day after the Notice to Proceed, the Contractor may be assessed liquidated damages at the rate of $500 per functional requirement per month until the Failure is cured.

CREDIT ASSESSMENTS:

In addition to the Failures for which liquidated damages may be imposed, CONTRACTOR agrees that in certain instances of Failure of performance of the Meters, the City will suffer loss of revenue and other damages in an amount that can reasonably be calculated. CONTRACTOR agrees that such loss of revenue ("credit assessments") as set forth below may be deducted by the City from payments to CONTRACTOR under the Agreement as they accrue. Should an assessment take place, the SFMTA will send written notification to CONTRACTOR for its information. Assessments within a given month shall not exceed 35 percent of the Monthly Operational Expenses paid to CONTRACTOR. Excess credit assessments (over a monthly cap) will be carried over to the following month.

1. Parking Services will monitor the Performance Standards listed for compliance with the requirements of the Agreement and share information monthly with CONTRACTOR to provide early indication of potential issues. These standards are meant to be systematic performance issues.
2. If there is a Failure in the performance of the Meters as provided below, Parking Services will notify CONTRACTOR in writing, with supporting performance data.
3. CONTRACTOR shall review the potential performance deviation data and respond within 24 hours with acknowledgement of a potential Performance Standard Failure (or lack thereof) and potential causes. Failure to respond to the notice in a timely manner may result in liquidated damages to Parking Services of $1,000 per day.
4. CONTRACTOR shall cure the Failure within seven days of the Failure unless Parking Services agrees to extend the time to cure. If the Failure is not repaired within seven days of acknowledgement (unless additional cure time has been granted), CONTRACTOR agrees that Parking Services shall be entitled to Credit Assessments as set forth below:
    a. All labor costs incurred by the City associated with repairing or replacing parts required to cure the Failure (e.g., labor costs, including overhead, for the following positions: Position 13206 (Parking Meter Coin Collector), Position 13334 (Parking Meter Repair Worker), and/or Position 23010 (Parking Meter Collection Supervisor)). Administrative costs shall also be included.
    b. The cost of any materials or parts required to cure the Failure.
    c. Any costs of disposal of Meters associated with the Failure if Parking Services is required to repair the Failure.
    d. Revenue losses directly associated with this Failure, retroactive to seven days after the date of the Failure, per Meter, until the Failure is cured. Revenue loss shall be calculated based on ADR for the meters in question.
    e. A list of Failures of Performances Standards in this category follows below:

	Description of Failure:	**Threshold**
1	CPU/Motherboard Failure.	More than 0.5% of accepted Meters.
2	Battery Fails to last for the term 12 months.	More than 2% of accepted Meter mechanisms
3	The jam detection mechanism Fails to detect metallic or non-metallic jams.	
4	Meter Modem Failure	
5	Meter Antenna Failure	
6	Keypad or button Failure.	
7	Failure of the single-space Meter Mechanism and Meter dome (if required) to securely fit within the designated housing.	
8	Any keypad or button proves to be non-weather-proof or becomes corroded.	

Examples:

ADR (Average Daily Revenue):

- *Inventory of Accepted Meters: 6,000*
- *Systemwide Failure affected 30% of the inventory, or 1,800 Meters for 10 Days.*
- *Calculations:*
    - *Revenue collected in prior 90 days for 1,800 Meters = $810,000*
    - *ADR will be $810,000* ***divided by*** *90 Days and* ***divided by*** *1,800 Meters* ***equals*** *$5 per Meter/ per Day.*
    - *For 10 Days of Failure MMS reported total revenue for 1,800 affected Meters as $50,000.*
    - *LD for such Failure would be calculated as 1,800 multiplied by $5 ADR* ***multiplied by*** *10 Days (=$90,000)* ***minus*** *$50,000 of actual revenue* ***equals*** *$40,000.*

ASEDR (Average Special Event Daily Revenue):

- *Inventory of Accepted Meters: 6,000*
- *System-wide Failure affected 22% of the inventory, or 1,320 Meters for 2 Days.*
- *Calculations.*

- *For the last 10 special events from the date of failure MMS reported total revenue for 1,320 affected Meters as $99,000*
- *ASEDR will be $99,000 divided by 10 events and divided by 1,320 Meters equals $7.50 per Meter per Day.*
- *For 2 Days of Failure MMS reported total revenue for 1,320 affected Meters as $2,640.*
- *LD for such Failure would be calculated as 1,320 multiplied by $7 ASEDR multiplied by 2 Days minus $2,640 equals $15,840.*

Meter Commissioning Checklist

1) Meter Mechanism shall not be damaged during shipment.
2) Battery voltage and condition shall meet the minimum voltage requirements for a new battery pack.
3) Coins (5¢, 10¢, 25¢, $1) shall be accepted and record the proper amount of time when deposited.
4) Non-authorized coins shall not register any amount of time.
5) The card reader shall recognize the insertion of a valid credit or smart card.
6) The automated mechanism configuration download shall work as described in the Technical Specifications.
7) The Meter Mechanism location id and serial # shall be part of the MMS inventory.
8) The Meter Mechanism programming profile is accurate for its assigned location id.
9) The Keypad shall work properly.
10) The Meter Mechanism shall register jams.
11) The Meter Mechanism LEDs shall work properly.
12) The Meter Mechanism stickers shall be properly applied.
13) The Meter Mechanism communications channels shall work properly.
14) The Meter Mechanism shall display proper the date and time.
15) The Meter Mechanism backlight shall operate properly.
16) The Meter Mechanism shall have the ability to add time without using the coin and/or register in the audit records.

Parking Meter Electro-mechanical Vault Locks and Management System

Scope of Work

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Section I: Introduction

CONTRACTOR will purchase electronic lock cylinders, full vault door assemblies (i.e. vault door, hinges, electronic lock cylinders), and electronic keys to improve security for parking meters throughout the City. The system shall be supported by an Electronic Lock Management System (ELMS).

All products (lock cylinders and keys) shall be warranted for three years (price shall be included in the unit cost) and have two one year warranty extension options. Shipping for warranty repairs shall be paid both ways by CONTRACTOR.

The initial procurement shall be distributed across multiple deliveries that may span six months or longer. The City shall be able to buy additional locks, keys, and ELMS licenses at the price levels established in this procurement for the life of the contract.

Section II: Electro-mechanical Vault/Lock and Key Specifications

1. Electronic Locks

A. Locks shall be made from new material and be weatherproof.
B. All parking meter vault door locks shall be of electro-mechanical design. Access shall be controlled electronically, while the actual rotating of the lock cylinder is performed by turning a collection key device.
C. The electronic locks shall require no power from the parking meter itself. All power for operating the lock must come from key.
D. The electronic lock memory shall store no less than 1,000 access related events (e.g. collections, unauthorized attempted access, collection key not in the system, collection key is out of schedule, collection key not on route, etc.). After the threshold is reached, the oldest record must be deleted.
E. The electronic lock shall only allow the key to be removed when the lock is in the locked position.
F. Electronic locks shall incorporate a stainless steel, drill-resistant face plate.
G. The face plate must be constructed to break away and spin freely for resistance to attack by torque.
H. Electronic locks shall have break-away plug face to fail leaving the vault secure in the event of over-torqueing.
I. Electronic locks shall have a stainless steel plug face and shall resist adverse environmental conditions, including but not limited to, wind-blown grime, rain, fog, humidity, sun (including direct sunlight), and vibrations.
J. Electronic locks shall have drill-resistant inserts.
K. The cylinder configuration of electronic locks shall fit all types of existing vault doors and housings in use in the City of Sacramento. If not, new vault doors shall be provided.
L. Electronic locks shall support a secure communications session between the lock and an electronic key, using a combination of schemes including DES, AES and designated proprietary encryption developed by the electronic lock manufacturer.
M. The electronic lock cylinders shall tolerate the following environmental conditions:
    a. Extreme high temperature: 160º F
    b. Extreme low temperature: -10º F
    c. Extreme temperature cycling: -10º F to 160º F
    d. ASTM-B-117 Salt Fog Testing: Greater than 48 hours.
N. The electronic lock cylinders shall surpass or meet the following electronic testing specifications:
    a. ESD Protection: +/- 15kV
    b. Over-voltage Protection: Cylinder Security Protected
O. The electronic lock cylinders shall surpass or meet the following mechanical specifications:
    a. Plug Front Breakaway Torque: 90 In-Lb
    b. Plug front successfully spins and cylinder remains secure

c. Shock and Vibration: Test samples withstanding the vibration conditions specified without physical damage, and continue to exhibit normal performance

P. The electronic lock cylinders shall tolerate the following vibration specifications, or if requested, shall be further tested and results provided by the manufacturer:

a. 5 to 2000 Hz, at an input level of 1G.
b. Front to Back Axis
c. Side to Side Axis
d. Top to Bottom Axis
e. Slow Sweep – Resonant Frequency
f. Slow Sweep – Low Frequency
g. 10% to +10% of sample resonant frequency, at an input level of 1G
h. 69Hz to 84Hz, at an input level of 1G
i. High resistance to high speed steel and carbide drills
j. Cylinder resistant to over 6-foot drop

Q. The electronic lock assembly as mounted in the MacKay MKV 97HD housing shall be tested for its resistance to physical attack methods and shall have the following performance characteristics:

Test	Description	Measured Value
Plug Drill	Drill plug and gain access	9/64 drill; 4 minutes; no entry to cash vault
Plug Punch	Punch the plug to gain access	3 lb hammer; 5/8 punch; five blows; no entry to cash vault.
Plug Pull	Pull the plug to gain access	Greater than 3,000 lbs; no entry to cash vault.
Plug Torque	Attempt to open by rotating plug with a tool inserted in key way.	Shall allow for fail secure at torque of 65 inch pounds; no entry to cash vault.
External Heat	Heat with a propane torch.	Direct heat 3 minutes; no entry to cash vault.
Hammer Bounce	Use a 2-lb hammer and a tool inserted in the key way to gain access to the vault.	Two sets of 25 blows while attempting to turn a tool in the lock; no entry to cash vault

2. Electronic Keys

A. The electronic keys shall be made from new material, with an all-metal housing, and shall be durable, weatherproof, and water-resistant.

B. The electronic key shall have a durable, replaceable, hardened steel key tip.
C. The electronic key tip shall last without replacement for a minimum of 150,000 lock openings
D. The electronic key circuitry components shall be securely potted inside the body of the key.
E. The electronic key memory shall be non-volatile and protected by a separate internal battery.
F. The electronic key shall be programmable to operate specific locks during specified schedules, and not to operate past expiration.
G. The electronic key shall provide all power to the lock.
H. The electronic key shall include a rechargeable battery with a life cycle of no less than 2,000 openings per charge.
I. The electronic key shall incorporate replaceable data contacts for electronic communications with electronic locks.
J. The electronic key shall withstand all adverse weather conditions (e.g. fog, moisture, grime, dirt, heat, cold etc.).
K. The electronic key shall be able to store a minimum of 10,000 electronic lock cylinders to be opened.
L. The electronic key shall be able to store audit events and prevent the loss of audit trail data.
M. The electronic key shall be able to collect and transfer audit data events (e.g. collections, access, unauthorized collection attempts etc.) from electronic locks to lock management system.
N. The electronic key shall be able to have an activation period from one day to 30 days.
O. The electronic key shall use commonly available “off-the-shelf” rechargeable batteries.
P. The electronic key battery indication should be visible during key programming.
Q. The electronic key internal battery shall be able to protect audit and collection route/subroute data; “non-volatile” memory shall be protected for a minimum of one year and shall be programmable via management system.
R. The electronic key shall support a secure communications session between the key and host PC using a combination of schemes including DES, AES and designated proprietary encryption developed by the electronic lock manufacturer.
S. The electronic key shall be damage resistant to a drop of up to six feet.

Section III: Electronic Lock Management System (ELMS)

A. ELMS shall allow combining parking meter location IDs into a minimum of ten various groups (e.g. blocks, areas, streets, collection subroutes, collection routes, parking meter districts, etc.).
B. ELMS shall allow customization of support group names, report columns and headings.
C. ELMS database shall store all the electronic lock codes in encrypted format.
D. ELMS shall have multiple security levels including but not limited to administrative keys, customer unique pins (e.g. system password), and manufacturer's generated lock codes specific to the Agency.
E. ELMS shall allow for secure software logins and user definable modular permissions to grant and control various levels of software access.
F. ELMS shall allow assignments and managing of multiple location ID's as a group; e.g. assigning multiple location ID's to the appropriate collection subroute or parking meter repair route.
G. ELMS shall allow assignments and managing multiple software users/groups permissions at the same time.
H. ELMS shall allow assignment of the key to a particular user or group of users.
I. ELMS shall track software user activity (e.g. who and when created a route, subroute, collection schedule, assigned or edited location id, added or removed locks from the inventory, etc.).
J. ELMS shall have the ability to use a calendar feature, to program, display, and color code scheduling of lock openings based on various grouping of location ids collection subroutes, routes, areas, assignments etc.
K. ELMS shall allow editing and deleting of routes, locations, meters and employees together with summaries of routes, locations, meters, keys and locks.
L. ELMS shall allow for automated programming of collection keys. In particular, the following features shall be supported:
    a. Detection and automated collection key programing
    b. Scheduling time to automatically program all or some of the collection keys at once
    c. Scheduling and automated collection key programing for various physical locations, assuming all locations are part of one network. A minimum of four locations must be available; e.g., an operator must be able to schedule and program collection keys at Parking Services' headquarters, the Meter Shop, and the "corporation yards."
M. ELMS shall have a function to "import" meter location IDs, along with the various groupings, for initial setup and mass updates
N. ELMS shall have a reporting module that provides data mining capabilities.
O. ELMS shall be able to export all reports into various formats (including, but not limited to, CSV, XML, PDF, EXCEL, WORD, TXT, HTML).
P. ELMS database shall store all the collection and access data in history tables, which can be queried for historical reports.
Q. ELMS shall be able to provide the following predefined reports:

a. Daily Collection Route Report – after completion of the collection activities, ELMS shall allow reporting on daily collection assignments by individual collection key, group of keys or all daily activity. This report shall support variable data range parameter.

b. Collection Route Activity Report - after completion of the collection assignment, ELMS shall allow retrieval of the collection route data from the schedule grid.

c. Software Activity Report – this report shall be able to display any and all software activity (e.g. creation of new location id, collection route/subroute, lock assignments, user software logins and durations of active session, schedule creation and modification etc.). The Software Activity Report shall be able to provide historical usage data for a given date or for a range of dates.

d. Schedule Summary Report – this report shall be able to display all the scheduling activity within specified time period. Report shall include assigned work summary (e.g. location ids, collection routes, repair routes, etc.), collection key number, collector name, scheduler login information, date and time of the scheduled events.

e. Collection Activity Report – this report shall provide accurate records of collections activities performed by a specific collection key or set of keys.

f. Collection Route Content Report – this report shall provide the list of assets, locks, and other attributes associated with a particular collection route or collection subroute. This report shall generate an inventory of these elements giving the selected parameters.

g. Lock Installation Report – this report shall provide accurate records of lock assignments that occur within specified date range.

h. Lock History Assignment Report – this report shall display lock assignment history within specified data range. The report shall include lock #, location ids, any route information, date of each assignment and person performing the changes.

Mobile Payment Service
Scope of Work
Requirements and Performance Standards

1. Introduction

CONTRACTOR shall provide a citywide Mobile Payment Service to enable Customers to pay for parking at all on-street single-space metered parking spaces in CITY (approximately 6,000, but with future expansions), as well the spaces in select off-street lots, for which mobile payments will be made by space number.

Deployment to the off-street lots will begin implementation immediately upon contract execution. Deployment to on-street metered spaces will be completed in phases after a sufficient number of meters have been upgraded to CONTRACTOR's technology, based on mutual agreement between CONTRACTOR and Parking Services.

CITY recognizes that CONTRACTOR may subcontract this service to another vendor, with the approval of Parking Services. CONTRACTOR is responsible for ensuring that any subcontracted vendor(s) meet all specifications and performance standards described in this Scope of Work.

2. Description of Services

Through the Mobile Payment Service, Customers shall be able to pay for parking with the following methods, at minimum:

- Phone call to CONTRACTOR's IVR and/or DTMF system (through any phone)
- Use of a web browser on a mobile device, allowing the Customer to enter a space number
- Use of an app on a smartphone (at minimum, iOS and Android devices) where the user enters a space number
- Recognizing an NFC tag (affixed to a meter or pole) that launches an app on a smartphone (at minimum, Android devices)
- Scanning a QR code that launches an app on a smartphone (at minimum, iOS and Android devices)

CONTRACTOR shall be responsible for collecting revenue from Customers, consistent with the posted meter rates, which shall be transmitted to Parking Services in its entirety. The fee that CONTRACTOR is authorized to charge per the Agreement shall not be taken out of this revenue. Parking Services shall be responsible for the accurate transmission of meter rates to CONTRACTOR at least 72 hours prior to said rates taking effect and for enforcement of parking regulations.

CONTRACTOR will perform the following services:

A. DEFINITIONS

The following is a summary of terms to be used within this document:

"Business Days" shall mean Monday through Friday, excluding CITY-observed holidays. See http://www.cityofsacramento.org/CityHolidaySchedule.html for a listing of official CITY holidays.

"Calculated Liquidated Damages" shall mean the sum of each liquidated damages assessment for each Incident.

"Calendar Quarter" shall mean any one of the following three-month periods: January to March; April to June; July to September; and October to December.

"Contractor's Management System" shall mean CONTRACTOR's database system used to store Customer account information and all information relating to System transactions.

"Customer" shall mean a person using the Mobile Payment Service to pay for parking.

"Days" shall mean calendar days.

"DTMF" shall mean "Dual-Tone Multi-Frequency," the tones emitted from many push-button phones that can be used to control interactive systems; e.g., "Press 1 to inquire on account, press 2 to make a payment, …."

"Electronic Commerce" shall mean the ability to safely and securely charge and process credit cards over the phone or internet in exchange for goods or services.

"Handheld Device" shall mean the handheld device used by CITY Parking Enforcement Officers (PEOs) to verify the payment status of parking spaces and issue parking citations.

"Incident" shall mean an event where CONTRACTOR fails to meet the specified performance standards. An Incident may trigger the assessment of a liquidated damage or an Event of Default.

"Independent Third Party" shall mean any firm or entity whom CONTRACTOR has hired and/or pays to provide services under this Agreement but over whom CONTRACTOR does not and is unable to exercise any direct control over concerning the service provided, including but not limited to wireless carriers, messaging and internet service providers, financial institutions and payment processors, hardware manufacturers supplying Handheld Devices for Parking Enforcement Officers, firms providing citation issuance software for Handheld Devices, and firms with a contractual relationship with CITY that provide software and/or hardware to support Parking Services' functions.

"IVR" shall mean the Interactive Voice Response software that recognizes spoken words over the telephone and translates into computer code to assist the caller with their service needs.

"Meter Management System" shall mean the database system operated by CONTRACTOR that tracks meter transactions and transmits data to meters.

"Parking Services Management System" (PSMS) shall mean the database server used by Parking Services to store information about parking space occupancy, payment, turnover rates and other data.

"Parking Services" shall mean the division of the Public Works Department of the City of Sacramento responsible for management of CITY's parking inventory, including parking meters.

"PEO" shall mean a CITY employee in the Parking Enforcement Officer classification, or manager/supervisor over that classification, who is authorized to issue citations for parking violations.

"PDT or PST" shall mean Pacific Daylight Time or Pacific Standard Time, which is the time base for any scheduling for Services under the Agreement.

"Performance Standards" shall mean the minimum standards acceptable for functioning of the Service.

"Real Time" shall mean a time period of five (5) seconds or less in order to process a transaction as set forth herein.

"Service" shall mean the Mobile Payment service including the IVR, wireless network, servers, operating software, etc.

B. CUSTOMER AND SERVICE INTERFACE REQUIREMENTS

CONTRACTOR shall provide seamless integration between its Service, Customers, PEOs' Handheld Devices, Parking Services' meters, and Parking Services-managed databases (e.g., Parking Services Management System, Meter Management Systems, and other) as provided under CITY's third-party agreement(s).

1. Parking Space Coverage – During any given 30 day period, CONTRACTOR shall ensure that the Service is available at a minimum of 98 percent of the agreed-upon CITY-managed on-and off-street parking spaces. No more than 2 percent of said spaces may be excluded from the Service due to inadequate wireless coverage to support the system. CONTRACTOR shall not be responsible for the cell phone performance of individual Customers. To measure performance under this standard, CONTRACTOR shall provide a report outlining active locations available for use through the Service and shall make this report available upon request from Parking Services. CITY reserves the right to seek independent third party verification of the report. Prior to commencing service, CONTRACTOR shall verify that a comprehensive survey of CITY-managed on-street parking spaces was completed at CONTRACTOR's expense to determine which spaces are included and excluded from the Service. Thereafter, spaces may be added or subtracted from the Service due to changes in wireless coverage as directed by Parking Services or recommended by CONTRACTOR.

2. Service Availability – CONTRACTOR shall ensure that the Service is available to Customers during any and all hours that CITY has paid parking in force, seven days per week, including holidays. Unless a system outage is agreed to in advance by CONTRACTOR and Parking Services, Service must be available for 99.5 percent of operating hours during any given seven day period, and must not have any continuous outage in excess of 15 minutes. Where the Service is unavailable, CONTRACTOR must inform Customers that they are still required to pay for parking through another means. To measure performance under this standard, CONTRACTOR shall maintain application tracking logs and shall make such logs available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance. The following features must be active for the Service to be considered "available":

   (a) Customer must be able to initiate a payment through one of the following methods:
      i. By a phone call to a Sacramento area telephone number, provided by CITY, and managed by CONTRACTOR, to initiate a parking payment. The number shall be relinquished to CITY or transferred to any third party as designated by CITY upon termination of the Agreement, for any reason, at no additional cost to CITY.

ii. By use of an "app" (either iOS or Android) on a smartphone or other device, either launched by the customer or by the phone's recognition of any event designed to launch the app, to initiate a parking payment.

iii. By use of a web page accessible from a browser on a mobile phone or other wireless device to initiate a parking payment.

(b) CONTRACTOR's Interactive Voice Response ("IVR") or DTMF system must be available to receive the call, or CONTRACTOR's app server or web server must be available to receive the request from the mobile device, and process the transaction at the requested location.

(c) CONTRACTOR's system must record the payment and parking session correctly.

(d) CONTRACTOR's Management System must be available to respond to queries from Handheld Units used by CITY's Parking Enforcement Officers.

3. Customer Service Inquiries – CONTRACTOR's IVR system will be capable of customization according to specifications agreed to by Parking Services and CONTRACTOR. CONTRACTOR shall work with Parking Services to streamline IVR menus to improve customer experience, including options to provide translations in other languages mutually agreed to by CITY and CONTRACTOR, or required by CITY law, at no cost to CITY, and voice recognition capability in English if required by CITY. The IVR system shall permit Customers (a) to create an account and (b) to speak with a live Customer Service agent to modify an account in a manner consistent with Level One Payment Card Industry (PCI) Data Security Standard (https://www.pcisecuritystandards.org/index.shtml) and CONTRACTOR's internal security standards, to ask questions about the Service, and track and resolve payment processing issues (including acceptance, reversal, duplicate and fraudulent charges, etc.). The IVR system shall also incorporate any other functions as mutually agreed to by Parking Services and CONTRACTOR. During any given three-month period, CONTRACTOR shall provide a live Customer Service agent for 98 percent of the time from 6 a.m. to 6 p.m. on business days. To measure performance under this standard, CONTRACTOR shall engage an Independent Third Party to make random calls from a landline phone to CONTRACTOR's IVR system upon request from CITY. A minimum sample size shall consist of 300 calls over 30 days, with at least 10 calls per day spaced out a minimum of five minutes apart.

4. Responses to CITY Staff Inquiries – CONTRACTOR shall provide a separate phone number for CITY staff to communicate Service-related issues from 8 a.m. to 5 p.m. on business days (the "Customer Service Number") and a second phone number for emergency issues ("the "Emergency Phone Number"). During any given 180 day period, CONTRACTOR shall respond to 90 percent of priority calls directed to the Emergency Phone Number related to enforcement, payments or data transmission within 15 minutes, and 100 percent of said calls within 2 hours. During any given 180 day period, CONTRACTOR shall respond to 90 percent of all other calls directed to the Customer Service Phone Number within 1 business day and 100 percent of calls within 2 business days. To measure performance under this standard, CONTRACTOR shall track phone calls, and a minimum sample size of 30 calls shall be required to determine compliance. CONTRACTOR shall make such log available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance.

5. Online Account – Customers shall be able to create and view an account, and change account details online. Customers shall also be able to review previous parking transactions and parking payments, adjustments, and modify credit card details online.

6. Parking Confirmation – Customers shall receive confirmation upon successful payment via the means through which they initiated the transaction. Customers who fail to complete the payment process will be sent an SMS indicating that they are not successfully parked.

Customers shall have the option to receive an email receipt provided they add their email address to their account profile. The email receipt will indicate, for each transaction, the location of parking, duration and amount charged. Customers shall also have the option to receive a reminder via SMS before the parking meter expires, and shall have the ability to remotely extend a parking session within the applicable time limit for the parking meter. The process to extend the time shall be the same as the initial purchase. CONTRACTOR must send "failure to complete transaction" messages within 10 seconds of transaction attempt for at least 98 percent of applicable transactions. CONTRACTOR must send reminder messages within thirty seconds of parking session expiration for at least 98 percent of applicable transactions where Customers have opted in for reminders. To measure performance under this standard, CONTRACTOR shall maintain a message log and shall make such log available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance.

7. Minimum purchase – CITY may institute a minimum parking time and associated purchase requirement for Customers using the Mobile Payment program. In the event that CITY institutes this requirement, CONTRACTOR shall ensure that a minimum of 98 percent of all parking transactions adhere to the requirement. To measure performance under this standard, CONTRACTOR shall maintain payment records and shall make such records available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance.

8. Decals and Signage – CONTRACTOR shall pay for the design and production of all meter decals for all CITY-managed meters (approximately 5,500), signage, and initial associated installation costs. In the event that CITY retains an Independent Third Party to design the decals and signage for the Service, CONTRACTOR shall work with the Third Party to implement changes necessary for deploying these graphics. CONTRACTOR must obtain CITY's written approval of all decal and signage graphics prior to production. CITY shall have the right to limit signage as appropriate.

   All meter decals must be resistant to the environmental conditions found in CITY, including but not limited to wind blown grime, rain, sun, fog, salt air, and vibrations, in a temperature range of -20 deg. F to +185 deg. F, and be clearly visible in low light situations, bright sunlight, snow, rain, fog, and day/night lighting transitions. As Parking Services installs additional meters in CITY, CONTRACTOR shall pay for the design and production of any additional signage and decals.

9. Public Awareness and Advertisements – CONTRACTOR must submit a Public Awareness and Advertisement Plan to notify the general public of the Service, at CONTRACTOR's expense. CONTRACTOR shall pay for all public relations and social media activities as well as any online advertisements, radio and television advertisements, local print advertisements, banners, posters and leaflets/pamphlets that may be used to promote usage of the Service. As part of the Service implementation process CONTRACTOR shall also include a proposed set of activities and timeline for the plan.

   CONTRACTOR must obtain CITY's written approval on all advertising, including graphics, prior to public dissemination. CONTRACTOR shall not enter into advertising campaigns or merchant participation programs to increase usage without written approval from CITY.

10. Web Content – CONTRACTOR shall provide web content for CITY's websites. The content shall include detailed instructions on how to set up a new account, how to use the system, pictorial examples of the decals and signage identifying those meters included in the program, and provide CONTRACTOR's contact information for help in using the Service.

11. Announcement – At the request of Parking Services, CONTRACTOR shall record and provide to Customers an announcement not to exceed 30 seconds at the beginning of the call to the Service. The content of the announcement shall be determined by Parking Services at any time. During any given 30 day period, the announcement shall be included in a minimum of 98 percent of transactions for which Parking Services has specified the announcement. This announcement may include advertising by Parking Services or third parties unrelated to the Service. Any revenues associated with the announcement shall belong to Parking Services. To measure performance under this standard, CONTRACTOR shall engage an Independent Third Party to make random calls from a landline phone to CONTRACTOR's IVR system upon request from Parking Services. A minimum sample size shall consist of 300 calls over 30 days, with at least 10 calls per day spaced out a minimum of five minutes apart.

    Implementation of an announcement shall be subject to the following conditions:
    (a) Prior to Mobile Payment transactions reaching 50,000 per month for three consecutive months, Parking Services shall only require an announcement upon mutual agreement with CONTRACTOR.
    (b) Once usage reaches 50,000 transactions per month for three consecutive months, Parking Services shall have the sole discretion to determine whether to implement an announcement.
    (c) If, after implementing an announcement, the call abandonment rate (Customers terminating a phone call before a transaction has been completed) increases by 5 percentage points or more over the previous month, all announcements shall be automatically suspended for 90 days unless Parking Services and CONTRACTOR mutually determine whether to recommence playing an announcement during this period.

12. Meter feeding/Time Limits – The Service shall block Customers from adding any additional time once the maximum time limit for the meter has been reached. Moreover, Customers shall be prevented from purchasing any additional time at any metered space on the same block in accordance with CITY parking regulations. At a minimum, CONTRACTOR shall meet this requirement for 98 percent of all transactions during any given 30 day period. In addition, instances in which the Service enables Customers to exceed the maximum time limit by more than 30 minutes shall not exceed 0.5 percent of transactions during any 30 day period. To measure performance under this standard, CONTRACTOR shall maintain reporting logs and shall make such logs available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance.

13. Erroneous Citation Issuance – Occasionally, problems with CONTRACTOR's Service may result in an incorrectly-issued citation to a Customer. Where CONTRACTOR becomes aware of such a problem, CONTRACTOR shall notify Parking Services of the nature, time and duration of the problem and maintain a list of all parking transactions using the Service that occurred during that period.

14. Error handling – The Service shall be able to address errors including, but not limited to, the following:

    a. A Customer enters in an invalid parking space number; or
    b. A Customer enters a valid parking space number, but it is not valid for parking at the time, whether the error is detected during or after the phone call; or
    c. A Customer enters an invalid amount of meter time for the Customer-occupied parking space.

C. PRICING REQUIREMENTS

1. Pricing – CONTRACTOR shall be permitted to charge Customers using the Service a single flat convenience fee per-transaction for each use of the Service as set forth in Section 4 ("Compensation") of the Agreement. CONTRACTOR may charge this fee at the time a Customer initiates a transaction to pay for parking at a space, and each time thereafter that a Customer extends the time for that space, until the maximum time limit for the metered space has been reached. CONTRACTOR may not charge a fee if, for any reason, the Mobile Payment transaction does not result in the successful purchase of time for parking at the selected metered space.

   CONTRACTOR shall also be permitted to create an optional plan for Customers, with an alternative fee schedule, such as a program guaranteeing a flat rate per month for an unlimited number of transactions. Such plans will require approval of CITY, which will not be unreasonably withheld.

2. Convenience Fee Modifications – No increase to the convenience fee shall be allowed except by modification of the Agreement in accordance with Section 41 of the Agreement and subject to following conditions:
   a) Every 180 days, CONTRACTOR is permitted to adjust the convenience fee if the average parking transaction value (excluding the convenience fee itself) exceeds $4.00 and has increased by 10 percent or more over the previous 180 day period, or if payment card processing costs increase and cause a net increase in costs of 1 cent or more on average. CONTRACTOR may increase the fee upward by multiplying the variable credit card processing fee rate (excluding any fixed credit card processing fees) by the incremental average parking transaction value (excluding the convenience fee). For example, if the average parking transaction value increased from $4.00 to $4.67 and the variable credit card processing fee is 3%, CONTRACTOR would be permitted to increase the transaction fee by $0.02.
   b) In the event that CONTRACTOR is unable to meet the data communications requirements set forth in this Section, CONTRACTOR may choose to use an alternative data communications provider with the concurrence of CITY. In the event that CONTRACTOR's alternative data communications provider results in a substantial cost increase to CONTRACTOR, or if costs associated with the existing provider increase substantially, CONTRACTOR may request that CITY permit a transaction fee increase. Such a request shall include CONTRACTOR's financial analysis to support its claim. In addition, CITY shall have the right to audit and inspect CONTRACTOR's records in accordance with the terms of the Agreement. This transaction fee increase may be granted at the sole discretion of CITY through a modification to the Agreement as set forth in Section 41.

D. SYSTEM REQUIREMENTS

1. Data communications – Data communications from CONTRACTOR's Management System including payment authorizations and transaction data details shall be in Real Time following the initial transmission of data. Parking Services will work to accommodate CONTRACTOR's preferred data communications provider, but this provider is subject to the written approval of Parking Services. In the event that CONTRACTOR is unable to meet the data communications requirements of this Agreement as set forth herein, CONTRACTOR may identify an alternative data communications provider. Parking Services cannot guarantee that it will approve CONTRACTOR's preferred data communications provider.

2. Meter Location Number – The Service shall accommodate a unique alphanumeric ID assigned to each metered parking space, allowing up to twelve characters in each identifier.

3. Processing of Parking Rate Data - CONTRACTOR shall process rate data for metered spaces via an XML "Price Schedule" feed. Prices for metered spaces may vary according to location, time of day, day of week, and/or length of stay. Parking Services will not vary the amount by time of month (e.g. Monday the 2nd will be the same as Monday the 9th, Monday the 16th, Monday the 23rd, and every Monday thereafter until the next price schedule change). Parking Services will transmit the new Price Schedule to CONTRACTOR at least 72 hours prior to the effective date of the Price Schedule. During any 180 day period, CONTRACTOR shall implement 98 percent of the price schedule changes prior to the effective date of the Price Schedule and 100 percent of the price schedule no later than two business days after the effective date of the Price Schedule. The final required format for the Price Schedule XML feed shall be provided at contract execution, which format Parking Services may modify at its sole discretion. [See Attachment 3 to *Technical Specifications – Single-Space Parking Meters and Management System*]

4. Accuracy of Parking Rates –CONTRACTOR shall process the correct parking rates and calculate the correct tariff for a minimum of 99 percent of parking transactions measured over a 30 day period. CONTRACTOR is not responsible for errors in XML rate feed files but shall work in good faith to detect potential errors and notify Parking Services accordingly. To measure performance under this standard, CONTRACTOR shall maintain transaction logs and shall make such logs available upon request from Parking Services for comparison with Parking Services' XML rate feeds. Parking Services reserves the right to seek independent third party verification of this performance.

5. Real Time Transaction Feed – CONTRACTOR shall provide for transmission of parking payment event data for each Mobile Payment transaction, be it an initial transaction or an add time transaction, to Parking Services Management System, and any third-party Meter Management System(s) and third-party Citation Processing System(s) as designated by Parking Services. This data shall be a "pushed" continuous Real Time XML data transmission, i.e., CONTRACTOR's server shall send the XML transmission to the various designated systems. CONTRACTOR must transmit at least 98 percent of all recorded events in Real Time, and at least 99 percent of all recorded events within 10 seconds after occurrence, to Parking Services and associated parking databases.

   Data formats and transmission protocols shall be provided at contract execution. The format for the Real-Time XML feed to Parking Services will be similar to Attachment 5 to *Technical Specifications – Single-Space Parking Meters and Management System*, recognizing that Parking Services may modify the format at its sole discretion.

6. Parking Services Management System Transmission Failures – In the event that the Parking Services Management System is unable to accept transmissions, Service messages shall be stored and sent as soon as the PSMS comes online. This data shall be part of Parking Services' unified platform and combined with data from other sources to provide a single management system for Parking Services.

7. Meter Vendor Transmission Failures – In the event that a meter vendor is unable to accept transmissions, Service messages shall be stored and sent as soon as the meter vendor's system comes online.

8. Enforcement/Citation Management Transmission Failures – In the event that the third-party citations issuance system is unable to accept transmissions, Service messages shall be stored and sent as soon as the third-party citations issuance system comes online. This data shall be

part of the enforcement platform and combined with data from citations to provide a single source for enforcement data.

9. Hosting – CONTRACTOR shall provide secure hosting and support for all payment processing functions at its own hosting facilities ensuring availability through phone or other wireless devices. CONTRACTOR or its authorized subcontractor shall own its servers. CONTRACTOR shall provide redundant connectivity and a fully redundant hosting environment with automatic fail-over to the redundant system in the event of failure. CONTRACTOR shall develop full business continuity and recovery plans, and shall obtain Parking Services' approval on such plans prior to their adoption.

10. Service Levels – Except for scheduled maintenance, CONTRACTOR shall ensure that the Service is operational, available and reliable during all hours that CITY has paid parking in force.

11. Security – CONTRACTOR shall implement highly secure systems to manage its data for the Service. CONTRACTOR's security for the Service and all connections thereto shall conform to the most current National Institute of Standards and Technology's (NIST) Security Content Automation Protocol (SCAP) (internet: http://scap.nist.gov/revision/index.html). CONTRACTOR's conformance to SCAP shall include, but not be limited to: restricting and securing administrative access to its data with login IDs and passwords; restricting physical access to CONTRACTOR's computer and data storage facilities to authorized persons; use of secure "firewalls" to protect the Service and its databases from unauthorized access; and restricting of access to, and exchange of, sensitive data to Virtual Private Networks (VPNs).

12. Time Synchronization – CONTRACTOR shall synchronize its server clock no less than one time per day to the NTP.org time protocol (internet: www.ntp.org). During any given 30 day period, the server time shall deviate no more than two seconds from the NTP source for 98 percent of the time and shall not deviate more than 30 seconds from the NTP source at any time. To measure performance under this standard, CONTRACTOR shall engage an Independent Third Party to make random checks upon request from CITY. A minimum sample size shall consist of 300 calls over 30 days, with at least 10 calls per day spaced out a minimum of five minutes apart.

E. DATA REQUIREMENTS

1. Data Privacy – CONTRACTOR shall encrypt all Customer data to the most current NIST SCAP (internet: http://scap.nist.gov/revision/index.html), and shall work with CITY to minimize the collection of personal information. CONTRACTOR shall safeguard and protect the confidentiality of all data, and in no event share data collected with any third party except as required by law, except to the extent that a Customer chooses to "opt-in" on their online account to authorize sharing of specific data with third parties. Customers shall have the opportunity to "opt-out" at any time. CONTRACTOR is expressly forbidden from selling, leasing, distributing, publishing, or otherwise sharing any personal information collected from Customers, including, but not limited to, transaction history, address, email address, phone number, and credit card information, Notwithstanding the preceding restrictions, CONTRACTOR shall be permitted to use such information to enable Customers with Service accounts for CITY-managed parking spaces to use their accounts to pay for services provided by CONTRACTOR to other entities, and vice versa.

2. Data Ownership – CITY shall be the exclusive owner of all data and rights to the data generated from the Service, regardless of whether the data is direct or derived, calculated or

modeled. CITY shall not hold, nor be held responsible for safeguarding any personal data, including, but not limited to, names, addresses, email addresses, phone numbers, or credit card information. CONTRACTOR shall be expressly prohibited from transmitting any credit card data (other than the last 4 digits of the account number) to CITY.

3. Archived Data - CONTRACTOR shall archive all transaction data during the term of the Agreement and for a minimum of five years after the termination of the Agreement. CONTRACTOR shall deliver copies of all system data upon request of CITY and the termination of the Agreement. CITY shall have the option to receive copies of all archived data stored in a mutually-acceptable medium such as DVD+R or Blu-ray Disc (BD-R). During any 180 day period, CONTRACTOR shall deliver a minimum of 80 percent of CITY data requests for archived data within 3 business days of the request and deliver all CITY data requests within 10 business days of the request. CONTRACTOR shall be responsible for providing transaction data during the term of this Agreement and during the five year archive period in a format that is readable by CITY using commonly available commercial off-the-shelf software.

F. PAYMENT PROCESSING REQUIREMENTS

1. Registration – CONTRACTOR shall collect such pieces of information from each Customer required to complete a transaction successfully, which include, but are not limited to:
    a. Credit Card Number
    b. Telephone Number
    c. Credit card expiration date

    The Service must reject any attempts by a Customer to use the Service if these required pieces of information are not collected and verified.

2. Fee Notification – During a payment transaction, any associated fees to the cardholder must be clearly stated prior to confirming the transaction and allow the cardholder to discontinue and cancel the transaction. This statement must be made for a minimum of 99percent of all transactions,

3. Customer Payment – Over a 30- day measurement period, a minimum of 98 percent of all payments shall process in 5 seconds or less and a minimum of 99% of payments shall process within 20 seconds once confirmed by a Customer. The payment processing time is defined as the time during which the system determines if sufficient funds are available to allow the Customer to park, excluding communication time by any Independent Third Party. No more than 1 percent of valid credit cards may be incorrectly rejected. No Customer shall be allowed to park without assurance that sufficient funds have been authorized for the time requested. To measure performance under this standard, CONTRACTOR shall maintain payment records and shall make such records available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance.

4. Payment Processing Standards – CONTRACTOR shall be capable of processing transactions for Visa, MasterCard, Discover and American Express. Credit card data transmission shall meet the Level One Payment Card Industry (PCI) Data Security Standard (https://www.pcisecuritystandards.org/index.shtml) and comply with Visa Cardholder Information Security Program (CISP) and MasterCard Site Data Protection (SDP) programs. As the PCI Data Security Standard evolves, CONTRACTOR shall be responsible for maintaining compliance with that standard at CONTRACTOR's sole expense.

5. Credit Card Security – CONTRACTOR shall be solely responsible and shall indemnify CITY against any claim arising from lost or stolen personal information including but not limited to credit card information.

6. Rejected Credit Cards – CONTRACTOR's payment processing system shall detect and reject invalid credit cards. Measured over a 30 day period, the payment system shall authorize at least 98 percent of valid credit card transactions in Real Time and at least 99 percent of valid credit card transactions within 20 seconds. Customers shall be provided a second opportunity to initiate a payment, using a different credit card. No parking transaction shall be allowed for rejected credit cards. CONTRACTOR shall not be responsible for mistakes in the status of credit card transaction validity provided by CONTRACTOR's gateway company or acquiring bank. To measure performance under this standard, CONTRACTOR shall engage an Independent Third Party to make random checks upon request from CITY. A minimum sample size shall consist of 300 transactions over 30 days, with at least 10 calls per day spaced out a minimum of five minutes apart.

7. Processing Fees – CONTRACTOR shall pay for all associated payment processing fees including, but not limited to, gateway company fees, card issuing bank fees, card association dues and assessments, and CONTRACTOR's merchant account bank fees. All such fees shall be in addition to the payment of the meter rate. For example, if a Customer purchases $3.00 worth of parking, CONTRACTOR will owe CITY $3.00, regardless of additional fees.

8. Settlement of Funds – CONTRACTOR shall transmit by electronic means all transactions to designated processing centers as the transactions occur and deposit the parking revenues collected to CITY's designated bank accounts. In any trailing 30 day period, CONTRACTOR shall settle 95 percent of the collected funds in CITY's bank no later than two business days after receipt of said funds from CONTRACTOR's acquiring bank. Notwithstanding any delays by CONTRACTOR or Independent Third Parties, including but not limited to banks or payment card companies, CONTRACTOR shall settle 100 percent of the collected funds within ten business days of the occurrence of the transactions. To measure performance, CONTRACTOR shall make available third party wire transfer logs upon request from CITY. CITY reserves the right to seek independent third party verification of this performance. Settlement shall be via Automated Check Handling or Automated Clearing House ("ACH") transfer to bank accounts designated by CITY. Revenues from some metered spaces may be deposited into different accounts as determined by CITY. For example, revenue from another jurisdiction may be deposited directly into that jurisdiction's account.

G. PROJECT MANAGEMENT REQUIREMENTS

1. Methodologies – CONTRACTOR shall adopt disciplined project management, development, and change management methodologies to ensure the successful operation of the Service. CONTRACTOR shall provide Parking Services with documentation explaining the adopted methodologies.

2. Issue Resolution – CONTRACTOR shall provide and implement a process for tracking and reporting on issues and/or change requests reported by Customers or CITY employees.

3. Testing – Parking Services will test and accept the Service before it is made available to the public.

H. REPORTING REQUIREMENTS

1. Daily Reporting – CONTRACTOR shall transmit electronically, in Comma Separated Value (CSV) file format files the following daily transaction detail and summary reports to CITY, either via e-mail or file transfer to the PSMS (as directed by Parking Services). Parking Services will specify the data and format required in the report. During any given calendar month, 80 percent of said daily reports shall be transmitted no later than 5 A.M. PST or PDT the next business day after a credit card transaction and 99.5 percent of said daily reports shall be transmitted no later than 96 hours (excluding non-business days) after a credit card transaction. To measure performance under this standard, CONTRACTOR shall maintain reporting logs and make such logs available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance. In the event reports are not available, CONTRACTOR must send an error message to CITY via e-mail at or before the deadline.

    a. Daily Detailed Credit Card Transactions Report - Daily transaction log certifying all credit card transactions per meter number including the start date and time, the end date and time, the parking space identifier, credit card type, receipt number, rate charged per hour, transaction amount, convenience fee, total charged, and date of deposit.
    b. Daily Summary Credit Card Transactions Report – Daily credit card summary totaling the number of transactions, transaction amount, and convenience fees for all transactions per day.
    c. Daily Customer Service Report – Customer service log detailing number and types of Customer calls.
    d. Daily Revenue Report – Daily deposit report showing the total amount deposited into CITY bank account per day. This report shall include Service revenues collected by hour (e.g., $300 collected from 7 A.M. to 7:59 A.M., $400 collected from 8:00 A.M. to 8:59 A.M., etc.).

2. Monthly Reporting – CONTRACTOR shall transmit electronically, in Comma Separated Value (CSV) file format files the following summary reports to CITY, either via e-mail or file transfer to the PSMS (as directed by Parking Services). Parking Services will specify the data and format required in the report. During any rolling 180 day period, CONTRACTOR shall submit 80 percent of said monthly reports no later than twenty-one (21) days following the end of each month and all reports no later than thirty (30) days following the end of each month. To measure performance under this standard, CONTRACTOR shall maintain reporting logs and make such logs available upon request from CITY. CITY reserves the right to seek independent third party verification of this performance.
    a. Mobile Payment Status Response Time Report – This report shall include, but not be limited to: (a) the total number of Mobile Payment status requests from all Parking Enforcement Officers' Handheld Devices (excluding payment status requests for spaces in Dead Zones that are excluded from the Mobile Payment program); (b) the average response time for said requests, excluding data transmission times by a third-party cellular provider; (c) the average response time for said requests, including data transmission times through the cellular provider; (d) the percentage and volume of said requests that exceed five seconds, excluding data transmission times through the cellular provider; and (e) the percentage and volume of said requests that exceed ten seconds, including data transmission times through the cellular provider.
    b. Monthly Cellular Dead Zone Report – Although CONTRACTOR is not required to conduct a carrier coverage survey each month, CONTRACTOR shall, at its discretion or at the direction of CITY, identify spaces where changes in cellular coverage may preclude or enable Service availability. Based on this information, CONTRACTOR shall produce a monthly report that shall include, but not be limited to: (a) the total number and percentage of metered parking spaces where the Mobile Payment program

is not available due to poor cellular communication; and (b) the general locations on a map of said parking spaces.

c. Monthly Meter Service Report – This report shall show the exact minutes per day each meter is unable to service a Mobile Payment request with explanation, such as IVR down or network down.

d. Monthly Revenue Report – Report showing the total amount deposited into CITY bank account during the calendar month. This report shall include average Service revenues collected by hour and day type (weekday, Saturday, Sunday or holiday) (e.g., $300 collected from 7 A.M. to 7:59 A.M. weekdays, $400 collected from 8:00 A.M. to 8:59 A.M. weekdays, $250 collected from 10 A.M. to 10:59 A.M. Saturdays, etc.) as well as the average Service revenue collected per transaction.

CITY reserves the right to use its own and third-party auditing systems and reporting to verify CONTRACTOR's performance.

3. Reports Website – CONTRACTOR shall make all reports available on a secure and password-protected website that can be accessed by designated CITY staff.

4. Citation Adjudication – CONTRACTOR shall provide a simple web-based query system which delivers transaction searches by day and meter number for citation adjudication purposes. All transaction data will be maintained and made available to an unlimited number of CITY employees for not less than five years after the date of the transaction. Prior to the expiration or termination of this Agreement, CONTRACTOR shall provide CITY with a data file containing all parking transactions subject to this five-year requirement.

5. Records – CONTRACTOR shall maintain and make available to CITY during regular business hours, accurate paper and electronic books and accounting records relating to the Service.

6. Jurisdiction-level reporting – All metered spaces will be assigned a jurisdiction code and all reports shall be able to be run for each jurisdiction code separately or summed across all. There shall be no limit to the number of jurisdiction codes. However, CITY expects that less than 100 codes will be created.

I. INTEGRATION REQUIREMENTS

Enforcement System – CONTRACTOR shall assist CITY and its third-party vendor with the integration to the third-party vendor's enforcement system, including Enforcement Handheld Devices.

1. Website Access Restrictions – CONTRACTOR shall cooperate fully with the third-party vendor to ensure that Enforcement Handheld Devices allow access to CONTRACTOR's web site for payment verification purposes only.

2. Citations Issuance System – CONTRACTOR shall reimburse CITY for all costs of, and be responsible for, the integration of CONTRACTOR's Mobile Payment system with CITY's third-party citations issuance system. The citations issuance system software is licensed to CITY by CITY's Citation Processing Contractor and CONTRACTOR will be responsible for contracting directly with CITY's Citation Processing Contractor for the creation of the necessary interface and securing additional licenses as required to facilitate service integration. The main purpose of the interface is to provide for seamless enforcement of parking violations on a wireless Handheld Device through one software program. CONTRACTOR shall be solely responsible for specifying and contracting for this interface directly with CITY's Citation Processing Contractor to ensure that no additional license or

maintenance fees shall be payable by CITY to CITY's Citation Processing Contractor in connection with CONTRACTOR's use or CITY's indirect use of the interface.

3. New Parking Technologies – CONTRACTOR shall reimburse CITY for all reasonable costs of, and be responsible for, the seamless integration of the Mobile Payment program with CITY's PSMS, provided that (a) Parking Services provides CONTRACTOR with 30 days prior written notice of the need to commence planning for such integration; and (b) such integration shall be managed by Parking Services in consultation with CONTRACTOR.

4. Dead zones – CONTRACTOR shall provide a detailed plan for conducting a survey of each metered space in CITY to verify adequate cellular coverage for drivers. This survey plan must be executed prior to the Service being accepted by CITY. Those metered spaces found to be in areas of little or no cellular coverage shall be excluded from the Service. CONTRACTOR shall identify excluded spaces with a sticker explaining that particular space is excluded from the Service due to poor cellular coverage.

5. Mobile Payment Status Requests – CONTRACTOR's Management System shall be able to receive Mobile Payment status requests from any Parking Enforcement Officer's Handheld Device. The status requests will include both a query identification number and the time the request was issued from the Handheld Device. CONTRACTOR's Management System shall store both the query identification number and the time of the request.

6. Mobile Payment Status Responses (Excluding Third-Party Data Transmission Times) – CONTRACTOR's Management System shall be able to send correct Mobile Payment status confirmation (affirmative or negative) to any Parking Enforcement Officer's Handheld Device within Real Time of the receipt of the request for 98 percent of requests during any given 30 day period. Response times shall be within 15 seconds for 99 percent of requests during any given 30 day period.

7. Mobile Payment Status Responses (Including Third-Party Data Transmission Times) – The total response time, including data transmission times through a third-party cellular provider, between the issuance of a Mobile Payment status request from a PEO's Handheld Device and the receipt of the payment status information from the Service back to the Handheld Device shall not exceed 10 seconds for 98 percent of requests within any 30 day period. Response times shall be within 30 seconds for 99 percent of requests during any given calendar month.

8. Confirmation of Status Request Response – Upon receipt of the payment status confirmation from CONTRACTOR's Management System, the Handheld Device will return a confirmation message to CONTRACTOR's Management System with a query identification number and the time the payment status confirmation response was received by the Handheld Device. CONTRACTOR's Management System shall record both the request issuance and receipt time for each query identification number. This information shall be used to calculate the total response time for payment status query requests and used for reporting purposes to CITY as detailed above in Section H (Reporting Requirements).

9. Confirmation of Status Request Format – The data format of the Mobile Payment status confirmation shall be compatible with the parking citation issuance software used by CITY's vendor (currently the City of Inglewood [ICMS]).

10. Integration with Third-Party software and hardware – CONTRACTOR shall work in good faith with third-party vendors to integrate Mobile Payment software, hardware and

transaction data. The database systems of these vendors include, but are not limited to, Parking Services Management System, Meter Management System, parking meter manufacturers and operators, and the parking citation issuance software vendor (currently City of Inglewood). CONTRACTOR shall be responsible for reimbursing CITY within 90 days from the date of notification from Parking Services for all costs of any integration software and hardware requirements relating to implementation of the Mobile Payment System. Parking Services shall make all reasonable efforts to involve CONTRACTOR in the development of the integration work scope to ensure that reimbursement rates accurately reflect the cost of work required for third-party vendors to incorporate the Mobile Payment system into their respective database systems.

J. SYSTEM START-UP

CONTRACTOR shall ensure that the Mobile Payment Program is ready to be activated within 180 calendar days of the commencement of this Contract, unless a delay results from the actions of CITY or a third party not under subcontract to CONTRACTOR.

K. ADDITIONAL TECHNOLOGIES

During the term of this contract, additional technologies may become available that will enhance the Mobile Payment program and/or facilitate the use of the program by Customers. An example would be the ability to refund part or all of a transaction to a Customer based on provision of a "validation code" that the Customer obtained from a merchant after parking.

Upon mutual agreement between CONTRACTOR and CITY, CONTRACTOR may elect to implement such technologies. Any Customer convenience fees associated with the new technologies shall be determined by mutual agreement between CONTRACTOR and CITY.

L. STAFF TRAINING REQUIREMENTS

Staff Training – CONTRACTOR shall provide all necessary enforcement training on applications and usage of Handheld Devices, and management training on using and administering the management system. CONTRACTOR will provide a local or toll-free number for CITY employees to obtain technical assistance during the hours of 9 a.m. and 5 p.m. PST or PDT. This provision shall extend to any subcontractors or service providers, (e.g., credit card gateway companies), on which CONTRACTOR relies to deliver the Service.

Mobile Payment Service
Liquidated Damages

A. Liquidated Damages

CONTRACTOR acknowledges that its failure to perform certain obligations under this Agreement during the respective time limits imposed will cause Parking Services to incur cost and inconvenience not contemplated under this Agreement, which cost and inconvenience will constitute damage to Parking Services, CITY, and the public, and that the exact amount of such damage will be extremely difficult or impractical to fix. CITY and CONTRACTOR agree that the amounts described as liquidated damages in this Agreement are not penalties, but represent a fair and reasonable estimate of the damages that Parking Services will incur by reason of CONTRACTOR's failure to perform, and are fair compensation to CITY for its losses. Failure by Parking Services to impose liquidated damages for specified violations will not be a waiver of the right to enforce this Section, nor will it constitute a waiver of any other right of CITY under this Agreement.

CONTRACTOR shall not be subject to liquidated damages where the failure to meet the Performance Standard is due to the conduct of an Independent Third Party. However, CONTRACTOR shall be subject to liquidated damages where the failure to meet the Performance Standard is due to the conduct of other third parties who are under CONTRACTOR's control. An example of such a third party would be a subcontracted software developer reporting to CONTRACTOR.

CITY may assess liquidated damages each time CONTRACTOR fails to meet the performance standards enumerated in this section (an Incident). Following notification from CITY, CONTRACTOR shall have a limited cure period to remedy the noncompliance before a subsequent Incident is triggered. CITY may assess further liquidated damages for a second or subsequent Incidents if non-performance continues after the specified cure period. Additionally, in the event that it is no longer possible for CONTRACTOR to meet the performance standards during any measurement period, even before the end of the measurement period has been reached, an Incident shall be immediately triggered.

Notwithstanding anything else in this Agreement, if CITY provides notification to CONTRACTOR of noncompliance with a Performance Standard which has triggered an Incident resulting in potential liability for liquidated damages, and CONTRACTOR cures such noncompliance within the applicable time period after receipt of such notification from CITY, then a second or subsequent Incident related to such Performance Standard will not be triggered (and CITY may not assess further liquidated damages related to such Performance Standard) until (a) the applicable time period for measuring compliance with such Performance Standard has expired after having been restarted on the day such cure became effective, or (b) it is no longer possible for CONTRACTOR to meet the Performance Standard prior to the end of a measurement period having been restarted on the day such cure became effective, whichever is earlier.

The following provisions shall apply to each of the liquidated damages provisions in this section:

(a) During any calendar month, CONTRACTOR's liability for payment of liquidated damages shall not exceed the average of $20,000 and one-month trailing net revenue, where net revenue equals total revenue less direct costs, even if the Calculated Liquidated Damages for the month exceed that amount.

(b) If an Incident triggers multiple liquidated damages, only the provision imposing the largest amount of liquidated damages will apply.

(c) Calculated Liquidated Damages shall include the sum of liquidated damages assessed in accordance with provision (b) for all incidents. As described in Section 14 of the Agreement, excessive Calculated Liquidated Damages shall be an Event of Default.

B. Incidents Triggering Liquidated Damages

1. Service Availability – In the event that the Service is not available in accordance with the performance standards specified in as specified in Appendix M. Section 2.B.2, (a) for 0.5 percent or more of operating hours during the hours that CITY has paid parking in force during any given seven day period, or (b) is not available for any continuous period of 15 minutes or more during operating hours, CITY may impose liquidated damages of $1,000 unless the outages are agreed to in advance by CITY and CONTRACTOR. An additional $1,000 in liquidated damages may be assessed to compensate for potential uncaptured citation revenue as a result of the system outage; however, this assessment will be waived if CONTRACTOR maintains a back-up database that tracks potential citations during the outage and verifies transaction payment status when the Service resumes operations. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have two hours to cure the cause of the noncompliance before another Incident is triggered.

2. Customer Service Inquiries - In the event that CONTRACTOR fails to respond to Customer Service inquiries in accordance with the performance standards specified in Appendix M, Section 2.B.3, CITY may impose liquidated damages of $100. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

3. Responses to CITY Staff Inquiries – In the event that CONTRACTOR is unable to respond to CITY Staff Inquiries in accordance with the performance standards specified in Appendix M, Section 2.B.4, CITY may impose liquidated damages of $100. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

4. Parking Confirmation – In the event that CONTRACTOR fails to provide confirmation of a parking transaction in accordance with the performance standards specified in Appendix M, Section 2.B.6 during any given 30 day period, CITY may impose liquidated damages of $100. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

5. Minimum purchase – In the event that CITY establishes a minimum purchase requirement and CONTRACTOR fails to enforce this policy in accordance with the performance standards specified in Appendix M, Section 2.B.7 during any given 30 day period, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

6. Announcement – In the event that CONTRACTOR fails to provide an announcement to Customers in accordance with the performance standards specified in Appendix M, Section 2.B.11 during any given 30 day period, CITY may impose liquidated damages of $100. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

7. Meter feeding/Time Limits – In the event that CONTRACTOR fails to prevent Customers from purchasing more than the maximum parking time permitted in accordance with the performance standards specified in Appendix M, Section 2.B.12 during any given 30 day period, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

8. Processing of Parking Rate Data – In the event that CONTRACTOR's Management System is unable to process rate data for metered parking spaces prior to the effective date of a new Price Schedule in accordance with the performance standards specified in Appendix M, Section 2.D.3, during any rolling 180 day period, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

9. Accuracy of Parking Rates - In the event that CONTRACTOR fails to process the correct parking rates in accordance with the performance standards specified in Appendix M, Section 2.D.4, during any given 30 day period, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

10. Real Time Transaction Feed – In the event that CONTRACTOR's Management System is unable to provide for transmission of parking payment events in Real Time in accordance with the performance standards related to transmission of parking payment event data to CITY and associated parking databases during any 30 day period as specified in Appendix M, Section 2.D.5, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one hour to cure the cause of the noncompliance before another Incident is triggered.

11. Time Synchronization – In the event that CONTRACTOR fails to synchronize its server clock to the NIST's Network Time Protocol or NTP (RFC-1305) in accordance with the performance standards specified in Appendix M, Section 2.D.12 during any given 30 day period, CITY may impose liquidated damages of $250. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

12. Archived Data Requests - In the event that CONTRACTOR fails to deliver archived data requested by CITY in accordance with the performance standards specified in Appendix M, Section 2.E.3 during any rolling 180 day period, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have three business days to cure the cause of the noncompliance before another Incident is triggered.

13. Fee Notification - In the event that CONTRACTOR fails to notify Customers of fees prior to transaction completion in accordance with the performance standards specified in Appendix M, Section 2.F.2 during any given 30 day period, CITY may impose liquidated damages of $100. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

14. Customer Payment – In the event that CONTRACTOR fails to process valid credit card transactions in accordance with the performance standards specified in Appendix M, Section 2.F.3 during any given 30 day period, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

15. Rejected Credit Cards – In the event that CONTRACTOR fails to detect and reject invalid credit cards in accordance with the performance standards specified in Appendix M, Section 2.F.6, during any given 30 day period, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

16. Settlement of Funds – In the event that CONTRACTOR fails to settle funds expeditiously in accordance with the performance standards specified in Appendix M, Section 2.F.8 during any given 30 day period, CITY may impose liquidated damages of $500 plus 18 percent annualized interest compounded daily on the value of the unsettled transactions. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

17. Daily Reports - In the event that CONTRACTOR fails to deliver daily reports in accordance with the performance standards specified in Appendix M, Section 2.H.1 during any given 30 day period, CITY may impose liquidated damages of $100. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have two business days to cure the cause of the noncompliance before another Incident is triggered.

18. Monthly Reports - In the event that CONTRACTOR fails to deliver monthly reports in accordance with the performance standards in Appendix M, Section 2.H.2 during any rolling 180 day period, CITY may impose liquidated damages of $100. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

19. Mobile Payment Status Responses – In the event that CONTRACTOR's Management System is unable to meet the performance standards for Mobile Payment status confirmation during any 30 day period as specified in Appendix M, Section 2.I.6 or 2.I.7, CITY may impose liquidated damages of $500. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

20. System Start-Up – In the event that the Mobile Payment Program is not ready to be activated within 180 calendar days of the commencement date of this Agreement, CITY may impose liquidated damages of $500. This assessment will be waived if a delay results from the actions of CITY or an Independent Third Party. Following notice from CITY that an Incident as described in this paragraph has occurred, CONTRACTOR shall have one business day to cure the cause of the noncompliance before another Incident is triggered.

EXHIBIT B

NONPROFESSIONAL SERVICES AGREEMENT

FEE SCHEDULE/MANNER OF PAYMENT

1. **CONTRACTOR's Compensation.** The total of all fees paid to the CONTRACTOR for the performance of all services set forth in Exhibit A, including normal revisions (hereafter the "Services"), and for all authorized Reimbursable Expenses, shall not exceed the total sum of $4,076,625**.**

2. **Billable Rates.** CONTRACTOR shall be paid for the performance of Services on an hourly rate, daily rate, flat fee, lump sum or other basis, as set forth in Attachment 1 to Exhibit B, attached hereto and incorporated herein.

3. **CONTRACTOR's Reimbursable Expenses.** Reimbursable Expenses shall be limited to actual expenditures of CONTRACTOR for expenses that are necessary for the proper completion of the Services and shall only be payable if specifically authorized in advance by CITY.

4. **Payments to CONTRACTOR.**

   A. Payments to CONTRACTOR shall be made within a reasonable time after receipt of CONTRACTOR's invoice, said payments to be made in proportion to services performed or as otherwise specified in Attachment 1 to Exhibit B. CONTRACTOR may request payment on a monthly basis. CONTRACTOR shall be responsible for the cost of supplying all documentation necessary to verify the monthly billings to the satisfaction of CITY.

   B. All invoices submitted by CONTRACTOR shall contain the following information:

      (1) Job Name
      (2) Description of services billed under this invoice, and overall status of project
      (3) Date of Invoice Issuance
      (4) Sequential Invoice Number
      (5) CITY's Purchase Order Number
      (6) Total Contract Amount
      (7) Amount of this Invoice (Itemize all Reimbursable Expenses)
      (8) Total Billed to Date
      (9) Total Remaining on Contract
      (10) Updated project schedule. This shall identify those steps that shall be taken to bring the project back on schedule if it is behind schedule.

   C. Items shall be separated into Services and Reimbursable Expenses. Billings that do not conform to the format outlined above shall be returned to CONTRACTOR for correction. CITY shall not be responsible for delays in payment to CONTRACTOR resulting from CONTRACTOR's failure to comply with the invoice format described below.

D. Requests for payment shall be sent to:

City of Sacramento
Parking Services Division, Second Floor
300 Richards Blvd
Sacramento, CA 95811
Phone: 916-808-1172
Fax: 916-808-5115

5. **Additional Services.** Additional Services are those services related to the scope of services of CONTRACTOR set forth in Exhibit A but not anticipated at the time of execution of this Agreement. Additional Services shall be provided only when a Supplemental Agreement authorizing such Additional Services is approved by CITY in accordance with CITY's Supplemental Agreement procedures. CITY reserves the right to perform any Additional Services with its own staff or to retain other contractors to perform said Additional Services.

6. **Accounting Records of CONTRACTOR.** During performance of this Agreement and for a period of three (3) years after completing all Services and Additional Services hereunder, CONTRACTOR shall maintain all accounting and financial records related to this Agreement, including, but not limited to, records of CONTRACTOR's costs for all Services and Additional Services performed under this Agreement and records of CONTRACTOR's Reimbursable Expenses, in accordance with generally accepted accounting practices, and shall keep and make such records available for inspection and audit by representatives of the CITY upon reasonable written notice.

7. **Taxes.** CONTRACTOR shall pay, when and as due, any and all taxes incurred as a result of CONTRACTOR's compensation hereunder, including estimated taxes, and shall provide CITY with proof of such payment upon request. CONTRACTOR hereby agrees to indemnify CITY for any claims, losses, costs, fees, liabilities, damages or injuries suffered by CITY arising out of CONTRACTOR's breach of this Section 7.

Procurement Summary

Capital Expenditure

Parking Meters and Deployment Services	3,674,523
Intelligent Cash Collection Solution	834,040
Electronic Locks	1,036,616
Initial Stock of Spare Parts	32,086
	5,577,264

Annual/recurring services & parts-full

	Year 1*	Year 2	Year 3	Year 4	Year 5	Total
Communications & licensing	478,688	638,250	638,250	638,250	638,250	3,031,688
Credit card "gateway" fees	144,383	192,510	192,510	192,510	192,510	914,423
Meter parts and supplies		21,103	21,103	21,103	21,103	84,413
Other parts and supplies		11,525	11,525	11,525	11,525	46,102
	623,070	**863,389**	**863,389**	**863,389**	**863,389**	**4,076,625**

**Year 1 costs are reduced because a) the new meters will be phased in over a period of at least six months, and the charges for any given meter do not commence until the meter has been placed into service, and b) the cost for the first year's parts and supplies are incorporated into the capital expenditure.*

Capital Expense

Item	Unit	Qty	Ext Cost	Sales Tax	Total	Subtotals
Parking Meters and Deployment Services						
M5 Single-Space parking meters with domes and shipping	425.00	6,000	2,550,000.00	216,750.00	2,766,750.00	
Extended Warranty, years 2-3	70.00	6,000	420,000.00		420,000.00	
Meter installation services	10.00	5,750	57,500.00		57,500.00	
Installation Project Management (initial)	3,500.00	6	20,034.00		20,034.00	
Decal - Insert Card	0.50	6,000	3,000.00	255.00	3,255.00	
Decal - Insert Coin	0.50	6,000	3,000.00	255.00	3,255.00	
Decal - Credit Card Brands	0.50	6,000	3,000.00	255.00	3,255.00	
Smart Card Recharge Station	2,000.00	1	2,000.00	170.00	2,170.00	
Initial Stock of Smart Cards	2.25	2,500	5,625.00	478.13	6,103.13	
Additional housings, Duncan 90, w/o vault doors or cans	140.00	2,500	350,000.00	29,750.00	379,750.00	
Spare Coin Cans (normal)	22.95	500	11,475.00	975.38	12,450.38	
					Parking Meters and Deployment Services	**3,674,522.50**
Intelligent Cash Collection Solution						
Intelligent Cash Collection Cart and Canister	495.00	5	2,475.00	210.38	2,685.38	
Intelligent Cash Collection Canister Heads	495.00	5	2,475.00	210.38	2,685.38	
Intelligent Coin Can	65.00	5,750	373,750.00	31,768.75	405,518.75	
Intelligent Collection Meter Communications Upgrade	65.00	6,000	390,000.00	33,150.00	423,150.00	
					Intelligent Cash Collection Solution	**834,039.50**
Electronic Locks						
Elec locks + vault doors for various SS meter housings	135.00	5,750	776,250.00	65,981.25	842,231.25	
Electronic locks for Parkeon meter vaults	112.50	340	38,250.00	3,251.25	41,501.25	
Electronic locks for facility access	135.00	300	40,500.00	3,442.50	43,942.50	
Additional warranty for locks (to five years)	15.00	6,390	95,850.00		95,850.00	
Rechargeable collector keys	330.00	8	2,640.00	224.40	2,864.40	
Rechargeable keys for employee access	50.00	50	2,500.00	212.50	2,712.50	
Nexgen Software Host Kit	2,095.00	1	2,095.00		2,095.00	
Moxa Serial Server (via IPS)	1,100.00	2	2,200.00	187.00	2,387.00	
Docking Station Kit	285.00	1	285.00	24.23	309.23	
Docking Station Rack Kit w/Hardware	57.00	1	57.00	4.85	61.85	
Maint. Kit, With Key Tip Kit	117.50	1	117.50	9.99	127.49	
Nexgen Key Programming Station	125.00	5	625.00	53.13	678.13	
Charger with cable	75.00	10	750.00	63.75	813.75	
XT Software	450.00	1	450.00		450.00	
Barcode Scanner (for installation)	545.00	1	545.00	46.33	591.33	
					Electronic Locks	**1,036,615.66**
Initial Stock of Spare Parts						
Meter Parts: Card Entry Slot	19.00	25	475.00	40.38	515.38	
Meter Parts: Hybrid Card Reader	49.00	25	1,225.00	104.13	1,329.13	
Meter Parts: Coin Chute or Track (Validator)	69.00	50	3,450.00	293.25	3,743.25	
Meter Parts: Meter dome (Top Cover)	69.00	25	1,725.00	146.63	1,871.63	
Meter Parts: Dome Lenses (Lexan for top cover)	15.00	25	375.00	31.88	406.88	
Meter Parts: Coin Entry Slot	2.00	25	50.00	4.25	54.25	
Meter Parts: Keypad	25.00	50	1,250.00	106.25	1,356.25	
Meter Parts: Validator Connector Board	15.00	25	375.00	31.88	406.88	
Meter Parts: Battery pack	30.00	50	1,500.00	127.50	1,627.50	
Meter Parts: Validator Connection Cable	5.00	25	125.00	10.63	135.63	
Meter Parts: Solar Panel/Modem (Comms Board)	165.00	20	3,300.00	280.50	3,580.50	
Meter Parts: Main Board	165.00	25	4,125.00	350.63	4,475.63	
Meter Parts: Screen/Display	49.00	25	1,225.00	104.13	1,329.13	
Meter Parts: RFID Tags	10.00	25	250.00	21.25	271.25	
Coll Syst Parts: Intelligent Cash Collection Canister Heads	495.00	5	2,475.00	210.38	2,685.38	
Coll Syst Parts: Intelligent Coin Can	65.00	100	6,500.00	552.50	7,052.50	
Elec Locks Parts: Replacement rechargeable batteries	32.50	5	162.50	13.81	176.31	
Elec Locks Parts: Key Tip Kits	21.00	5	105.00	8.93	113.93	
Elec Locks Parts: Contact Cleaner Spray	37.00	16	592.00	50.32	642.32	
Elec Locks Parts: Cleaning Brush	9.00	4	36.00	3.06	39.06	
Elec Locks Parts: Pogo-Pin Kit Collector Key	14.00	12	168.00	14.28	182.28	
Elec Locks Parts: Pogo-Pin Kit Programming Cradle	14.00	6	84.00	7.14	91.14	
					Initial Stock of Spare Parts	**32,086.16**
Grand totals			5,187,021.00	390,242.82	5,577,263.82	**5,577,263.82**

Sales tax rate 8.50%

Item	Unit	Qty	Months	Ext Cost	Sales Tax	Total	Months	Ext Cost/yr	Sales Tax	Total
Monthly Communications Fees	3.45	5,750	60	1,190,250.00		1,190,250.00	12	238,050.00		238,050.00
Monthly Meter Management/Licensing Fees	4.55	5,750	60	1,569,750.00		1,569,750.00	12	313,950.00		313,950.00
Monthly Collection System Comms Fees	1.25	5,750	60	431,250.00		431,250.00	12	86,250.00		86,250.00
Credit Card Gateway Fees (est 46.5 trans/meter/mo)	0.06	267,375	60	962,550.00		962,550.00	12	192,510.00		192,510.00
						4,153,800.00		830,760.00		**830,760.00**

Item	Unit	Qty	Years	Ext Cost	Sales Tax	Total	Months	Ext Cost/yr	Sales Tax	Total
Annual Nexgen XT key/lock management system fee	595.00	1	5	2,975.00		2,975.00	12	595.00		595.00
						2,975.00		595.00		**595.00**

Item	Unit	Qty	Years	Ext Cost	Sales Tax	Total	Years	Ext Cost	Sales Tax	Total	Mtr/Othr
Meter Parts: Card Entry Slot	19.00	25	4	1,900.00	161.50	2,061.50	1	475.00	40.38	515.38	M
Meter Parts: Hybrid Card Reader	49.00	25	4	4,900.00	416.50	5,316.50	1	1,225.00	104.13	1,329.13	M
Meter Parts: Coin Chute or Track (Validator)	69.00	50	4	13,800.00	1,173.00	14,973.00	1	3,450.00	293.25	3,743.25	M
Meter Parts: Meter dome (Top Cover)	69.00	25	4	6,900.00	586.50	7,486.50	1	1,725.00	146.63	1,871.63	M
Meter Parts: Dome Lenses (Lexan for top cover)	15.00	25	4	1,500.00	127.50	1,627.50	1	375.00	31.88	406.88	M
Meter Parts: Coin Entry Slot	2.00	25	4	200.00	17.00	217.00	1	50.00	4.25	54.25	M
Meter Parts: Keypad	25.00	50	4	5,000.00	425.00	5,425.00	1	1,250.00	106.25	1,356.25	M
Meter Parts: Validator Connector Board	15.00	25	4	1,500.00	127.50	1,627.50	1	375.00	31.88	406.88	M
Meter Parts: Battery pack	30.00	50	4	6,000.00	510.00	6,510.00	1	1,500.00	127.50	1,627.50	M
Meter Parts: Validator Connection Cable	5.00	25	4	500.00	42.50	542.50	1	125.00	10.63	135.63	M
Meter Parts: Solar Panel/Modem (Comms Board)	165.00	20	4	13,200.00	1,122.00	14,322.00	1	3,300.00	280.50	3,580.50	M
Meter Parts: Main Board	165.00	25	4	16,500.00	1,402.50	17,902.50	1	4,125.00	350.63	4,475.63	M
Meter Parts: Screen/Display	49.00	25	4	4,900.00	416.50	5,316.50	1	1,225.00	104.13	1,329.13	M
Meter Parts: RFID Tags	10.00	25	4	1,000.00	85.00	1,085.00	1	250.00	21.25	271.25	M
Coll Syst Parts: Intelligent Cash Collection Canister Heads	495.00	5	4	9,900.00	841.50	10,741.50	1	2,475.00	210.38	2,685.38	O
Coll Syst Parts: Intelligent Coin Can	65.00	100	4	26,000.00	2,210.00	28,210.00	1	6,500.00	552.50	7,052.50	O
Elec Locks Parts: Replacement rechargeable batteries	32.50	5	4	650.00	55.25	705.25	1	162.50	13.81	176.31	O
Elec Locks Parts: Nexgen XT Keys	50.00	10	4	2,000.00	170.00	2,170.00	1	500.00	42.50	542.50	O
Elec Locks Parts: Key Tip Kits	21.00	5	4	420.00	35.70	455.70	1	105.00	8.93	113.93	O
Elec Locks Parts: Contact Cleaner Spray	37.00	16	4	2,368.00	201.28	2,569.28	1	592.00	50.32	642.32	O
Elec Locks Parts: Cleaning Brush	9.00	4	4	144.00	12.24	156.24	1	36.00	3.06	39.06	O
Elec Locks Parts: Pogo-Pin Kit Collector Key	14.00	12	4	672.00	57.12	729.12	1	168.00	14.28	182.28	O
Elec Locks Parts: Pogo-Pin Kit Programming Cradle	14.00	6	4	336.00	28.56	364.56	1	84.00	7.14	91.14	O
				120,290.00	10,224.65	**130,514.65**		**30,072.50**	2,556.16	**32,628.66**	
Grand Totals				4,277,065.00	10,224.65	**4,287,289.65**		861,427.50	2,556.16	**863,983.66**	
							5 years	**4,287,289.65**		21,103.25	M
										11,525.41	O

The following costs are defined, but no scope currently is established:

Hourly consulting services rate for additional services, as defined in the Statement of Work, Section I.B.6	175.00
Sales tax rate	8.50%

IPS AMENDED PRICING (10/11/2013)

IPS is providing the City of Sacramento an amended capital price list based on the discussed scope of services. This revision is primarily intended to convey updates. Any other items not contained herein shall remain unchanged per any prior submissions, including warranty terms and conditions.

Item	Unit Cost	Description
Meter Mechanism	$425	Delivered cost with a 12 month warranty (non-NFC version)
Extended Warranty	$70	For Years 2 & 3
Installation Services	$10	Optional service to have IPS install all meter mechanisms
Ongoing Support	$0.00	Included. IPS is committed to provide exceptional ongoing support and local support, and this cost is included in other items already priced.
Mobile Meter Management System	$0.00	Included
Project Management	$3,500.00	Monthly fee includes on-site project management and field based technical support
Longer Term Extended Warranty	Varies	$50 per meter per each additional 12 month period for years 4 & 5, and $60 for years 6 & 7.
Extended Life Battery Pack Replacement	$30	Battery Pack 795-600-H3
Decals (Insert Card, Insert Coin, Credit Card Brands)	$0.50	Standard meter decals. Additional customization is possible, but would need to quote separately.
Smart Card	$2.25	Standard Prepaid Parking Card (based on minimum quantity of 2500 cards)
Smart Card Recharge Station	$2000	Includes desktop station, software and 12 month warranty (designed to plug into desktop computer, computer not included)
Duncan 90 housings (without vault doors or cans)	$140	Refurbished option to replace old meter housings as needed
Spare sealed coin cans (not smart cans)	$22.95	Spare parts item for meter vault
Replacement Meter Dome Lens	$15	Meter replacement dome lens with Anti-fog coating, UV stabilized Lexan®, with decals installed

NOTE: Please note that all pricing does not include any applicable federal, state or local taxes.

IPS SPARE PARTS PRICING		
Item	**Unit Price**	**Recommended Quantity**
Card Entry Die Casting	$19.00	25
Hybrid Card Reader	$49.00	25
Coin Validator	$69.00	50
Complete Top Cover	$69.00	25
Lexan for Top Cover	$15.00	25
Coin Entry Slot	$2.00	25
Keypad	$25.00	50
Validator Connector Board	$15.00	25
Battery Pack 795-600-H3 (non-rechargeable)	$30.00	50
Validator Connection Cable	$5.00	25
Solar Panel / Comms Board	$165.00	20
Main Board	$165.00	25
Display Board (non-NFC)	$49.00	25
RFID Tag	$10.00	25

MEDECO PRICING OPTIONS		
Item	**Description**	**Unit Price**
Nexgen Locks		
EN-400006-xx	Electronic locks for POM Model “E” vaults	$112.50
EP-2100 - -XX	Nexgen Lock and Door Assembly For 480 POM Model E, Rectangular Door	$135.00
EN-400002-xx	Electronic locks for MacKay Model 98 vaults	$112.50
EN-400002-xx	Electronic locks for MacKay Model MKV 97HD vaults	$112.50
EN-400002-xx	Electronic locks for Duncan Model 90 vaults	$112.50
EP-121X - -XX	Nexgen Lock And Door Assembly for Duncan Model 90	$135.00
EN-400002-xx	Electronic locks for 315 Parkeon Stelio vaults	$112.50
EN-400002-xx	Electronic locks for15 Parkeon Strada vaults	$112.50
CUSTOM	Other Nexgen Lock and Door Assembly for other doors	QUOTE TO BE PROVIDE UPON REQUEST
EN-100003-219	Nexgen 1 1/8" Cam Lock	$105.00
	All combinations of doors and locks required door styles to be verified and Finish To Be Specified	
	Note: Three year warranty included with lock purchase.	

MEDECO PRICING OPTIONS (continued)		
Extended Warranty Options		
	Additional 1 year warranty (per lock)	$7.00
	Additional 2 year warranty (per lock)	$15.00
	Prices are valid for purchases of additional quantities through the warranty period, including any purchased extended warranty periods. All discounts are included in the pricing provided.	
Keys		
EV-5502R or EV-5505R	Nexgen Collector Key, Rechargeable	$330.00
EV-5502T	Nexgen Test/Install Key	$330.00
EV-250057	Admin Dongle	$30.00
Accessories		
EV-4508	Nexgen Host Kit (Software)	$2,095.00
9 EN-600006	Nexgen Serial Server (16 port Moxa NP5610 series)	$1,100.00
EN-500003	Docking Station Kit	$285.00
EN-500010	Docking Station Rack Kit w/Hardware	$57.00
EN-600007	Maint. Kit, With Key Tip Kit	$117.50
EA-350068	Replacement Key Batteries Rechargeable	$32.50
EA-250047	Barcode Scanner	$545.00
EA-250058	Key Tip Kit	$21.00
CP-301350	Contact Cleaner Spray	$37.00
CP-286180	Cleaning Brush	$9.00
94-0171	Pogo-Pin Kit Collector Key	$14.00
94-0172	Pogo-Pin Kit Programming Cradle	$14.00
CP-284490	T-Handle for 7/64" Screw Removable	$6.50
CP-286080	T-Handle for 3/32"" Screw Removable	$6.50
Terms		
Payment	Net 30 Days	
Lead Time	16 weeks if vault doors are also required to be purchased	
Shipping	F.O.B. Salem, Virginia	
Term	Quote Valid For 60 Days	

MEDECO PRICING OPTIONS (continued)		
Item	**Description**	**Unit Price**
10G540	Nexgen Mortise Cylinder	$135.00
EA100108	Nexgen Small Format Interchangeable Core	$135.00
20G20049	Nexgen KIK Cylinders	$125.00
10G510	Nexgen Mortise Cylinder	$125.00
20G20049/EA100108	Nexgen KIL/Small Format Interchangeable Core	$135.00/$135.00
20G20049/EA100109	Nexgen KIL/Small Format Interchangeable Core	$135.00/$135.00
20G20049/EA100110	Nexgen KIK/Small Format Interchangeable Core	$135.00/$135.00
20G20049/EA100111	Nexgen KIK/Small Format Interchangeable Core	$135.00/$135.00
10G0400VX	Nexgen Rim Cylinder	$125.00
20G20049/EA100111	Nexgen KIK/Small Format Interchangeable Core	$135.00/$135.00
10G540	Nexgen Mortise Cylinder	$135.00
EA-100107	Nexgen XT Key	$50.00
EA-100109	Nexgen Key Programming Station	$125.00
94-0239	Charger with cable	$75.00
EV4515	XT Software	$450.00
	For Medeco to host your system annual charge	$595.00
Terms		
Payment	Net 30 Days	
Lead Time	16 weeks if vault doors are also required to be purchased	
Shipping	F.O.B. Salem, Virginia	
Term	Quote Valid For 60 Days	

IPS AMENDED PRICING (10/11/2013)

IPS is providing the City of Sacramento an amended services price list based on the discussed scope of services. This revision is primarily intended to convey updates. Any other items not contained herein shall remain unchanged per any prior submissions, including warranty terms and conditions.

Item	Unit Cost	Description
Credit Card (gateway) Fee	$0.06	As provided by IPS Group gateway
Meter Mechanism Communication Fees	$3.45	Monthly fee includes standard meter data, not including sensors or other potential wireless services. Add $0.50 for real time meter communications (optional for future use)
Meter Management Fee	$4.55	Complete cost of MMS as per the defined scope of work, including all ongoing support costs
Pay-By-Phone	$0.10	Per transaction fee to push payment to the meter. Additional convenience charges will be charged to the customer by Parkmobile. This $0.10 cost can also be rolled into the cost charged to the user if desired by the City.

NOTE: Please note that all pricing does not include any applicable federal, state or local taxes. Pricing also requires the City to provide the associated merchant account. IPS can provide this service and pricing upon request.

EXPLANATION OF IPS APPROACH TO PRICING

IPS is very pleased to provide the City of Sacramento with what we believe to be a long term partnership approach to pricing. Based on our experience with projects of similar scale and scope, meter data needs, the technical specifications, and long term commitment to partnership, the pricing provided reflects both consistency with other municipal projects of this scale but also a commitment to evolving with the needs of the City. Additionally, we hope that this pricing approach truly reflects the long term partnership approach that we hope to continue to build, which includes all of the additional development items listed on Section B of the pricing worksheet at no additional cost to the City.

The pricing below represents the costs associated with the fully featured meter and real time data management system capabilities. Please note significant cost reductions are possible and are outlined in the pages that follow should the City wish to explore those options.

Key points of the Pricing Provided in SECTION A:

Item	Unit Cost	Description
Meter Mechanism	$675.00	Delivered cost (shipping and installation) with a 60 month warranty, bonding and all required features. Does not include additional data fees associated with vehicle sensors or cash collection system.
Credit Card (gateway) Fee	$0.06	As provided by IPS Group gateway
Meter Mechanism Communication Fees	$3.95	Monthly fee includes standard meter data for project, not including sensors or other potential wireless services.
Additional Communication Fee	$0.00	already included in the pricing above. An additional fee per meter per month will apply when the real time data feed and data warehouse is established.
Meter Management Fee	$4.55	Complete cost of MMS as specified in technical specification/deliverables sections of RFP, including all ongoing support costs
Pay-By-Phone	$0.10	Per transaction fee to push payment to the meter. Additional convenience charges will be charged to the customer by Parkmobile. This $0.10 cost can also be rolled into the cost charged to the user if desired by the City.
Ongoing Support	$0.00	Included. IPS is committed to provide exceptional ongoing support and local support, and this cost is included in other items already priced.
Mobile Meter Management System	$0.00	Included
Project Management	$5,000.00	Monthly fee includes on-site project management and field based technical support
Optional Extended Warranty	$60.00	$60.00 per meter per each additional 12 month period after the initial 60 month period (years 6 & 7, for example)

NOTE: Please note that all pricing does not include any applicable federal, state or local taxes.

NOTE: Performance Bond

IPS is providing the $3M performance bond for the initial term of 1 year as required by the RFP. If we are able to negotiate a reduction in either total bond amount or term of the bond, **IPS could significantly reduce the total cost of the pricing offered in SECTION A.** Given the fact that we are offering an extended warranty of 5 years in our meter pricing, the presence of liquidated damages, and the proven nature of IPS products as provided in many other municipalities, we hope to be able to discuss this in greater detail with the City during the contract negotiation process.

NOTE: Real Time Data

The IPS meters and data management systems (DMS) are fully compliant and apable of delivering all of the real time data needs that the City has outlined in the RFP technical specifications and deliverables sections, and is evidenced by our performance in Cities like San Francisco, Los Angeles, and Santa Monica. However, until such a time that the Sacramento Parking Services has fully implemented their own City data warehouse and other real time features to support this service, then IPS will be able to provide additional data and management system cost reductions for a more traditional on-street meter system (provided below). When the City is ready to implement the additional Real Time reporting elements, for the purposes of paid/unpaid status, coin payments, real time XMP data feeds, etc., IPS will implement the pricing contained in Pricing Section A.

NOTE: Ability to reduce meter and data fees

Subject to final negotiation, the reduction of the meter warranty term and associated performance bonds could provide the City a significant cost savings without sacrificing performance of the desired system For example, upon further negotiation between the City and IPS, IPS may be able to reduce the meter price to $450 per meter (as compared to $665 on pricing sheet tab A line 1). Additionally, reduction in the monthly data fee and meter management system fees can be provided to the City until such time as the City Parking Services Management System is established. Standard data and management system fees are listed below.

Standard Meter Data & Management System Fees		
Fee Type	Option 1	Option 2
Secure Wireless Gateway/Data Fee and Meter Management System Software License Fee (per meter per month)	$5.50	$8.00
Secure Credit Card Payment Gateway Fee (per transaction)	$0.13	$0.06

IPS ALTERNATIVE APPROACHES TO PURCHASE

For your consideration IPS is pleased to provide various options for purchase, lease and/or lease-purchase. IPS is capable and experienced in providing all financing arrangements, including direct financing as well as using 3rd parties, such as local banks and private municipal lenders.

Pricing Model Flexibility: The total cost of ownership of the IPS model is a combination of up-front costs, recurring flat fees (on a per meter per month basis) and variable fees (on a per transaction basis). IPS is prepared to re-arrange the structure of these fees if the City of Sacramento would have a preference. We remain committed to providing the very best performance, support and overall value for the City and the public.

Lease-Purchase: Can be financed with IPS or with 3rd party lenders. Local banks and municipal lending specialists will provide the best possible rates and IPS has partners ready to work closely with the City of Sacramento. This represents a creative option for the City to consider.

Performance Based: IPS is also prepared to provide a solution whereby all costs associated with the contract will be paid out of the increase in revenues generated. This form of agreement would not require the City of Sacramento provide any up front capital. With more flexibility and lender risk comes increased costs in the form of interest financing charges. However, IPS can provide such options, and if it is the City's intention to pay off any lease obligation early, most interest can be avoided and IPS can provide such financing solutions with no pre-payment penalties.

Key points of the Pricing Provided in SECTION B:

IPS is providing the entire set of development activities list in Tab B at no additional costs to the City of Sacramento. We look to the City of Sacramento as a true long term partner, and our intention is to work very close with the City on all items requested, prioritized, and provided according to a defined schedule based on City direction and definition.

In addition to those items listed on Pricing Section B, IPS is offering the City a number of value added services for your consideration.

IPS VALUE ADDED SERVICES

In addition to the items contained in the pricing section, IPS is prepared to provide additional options and services to the City of Sacramento upon request. A list of these options and services is provided below.

Recycling Services

IPS will assist the City with the sale of any used meters if possible by utilizing secondary market brokers, operators, etc. Any revenue will be remitted to City.

For those meters that cannot be sold and should be disposed of or recycled, IPS Group has contacted a couple of local firms to assist in this process.

Ming's Recycling Corporation
Sacramento, CA
http://mingsrecycling.com/aboutus.html

Zanker Road Resource Management Ltd., Florin Perkins Public Disposal Site, Sacramento, CA
http://www.zankerrecycling.com/content/florin-perkins-location

Additionally, IPS has offered a buy-back price of $5.00 per used meter mechanism that can be used as a credit against the overall meter purchase.

Consulting Services

While IPS is likely to be able to provide much of this service at no cost to the City of Sacramento, depending on the type of request, IPS can also provide additional consulting services to meet any need, and will confirm that we will provide such services at $175/hour. We have identified two (2) consultants that we will recommend for such services and have included their resumes in the appendix.

Julie Dixon – Dixon Resources Unlimited
Bill Timmer – BlueWater Project Management

Public Outreach

CAPITOL PUBLIC AFFAIRS

Working with IPS and the City of Sacramento, Capitol Public Affairs will customize a public relations and education program that includes outreach efforts that best inform the public on the benefits of the new parking meters, direction on its use, and will help ensure the rollout of a successful meter upgrade program.

Scope of services and associated timeline is contained in DELIVERABLE #17.
Costs of the Service as defined: $27,500. Further customization of the optional/ongoing activities and associated quotes are available upon further input from the City.

Optional Upgrade for existing pay-stations

- Additionally, IPS is prepared to upgrade any existing pay-stations with an IPS pay-station upgrade kit for off street use. Cost to upgrade each pay-station is $2,500 and seamlessly integrates into the IPS data management system. Ongoing costs are $75 per pay-station per month or can also be based on a lower flat fee + a per transaction fee if desired, such as $35.00 per month and $0.13 per credit card transaction. Subject to final negotiation with the City. These costs are based on the similar real time reporting and data management system requirements.

IPS Vehicle Detection Sensors & Coin Collection Vault Sensor Systems

While not incorporated fully into the technical specifications, IPS has the ability to upgrade our meter to incorporate additional wireless communications capabilities to interact with both vehicle detection systems and coin collection systems. IPS would appreciate the input of the City and be prepared to trial the systems upon request. Please refer to the Appendix for additional product information.

Vehicle Detection System		
Item	Sensors (Spaces)	Cost per Space
Vehicle Detection Sensors (12 month warranty, FOB Sacramento, CA, installation and training included)	6000	$250.00
***OPTIONAL:* Extended Sensor Warranty** (each additional 12 months)		$35.00

NOTE: Price per sensor (per unit) is the total fixed price for the equipment. Additional ongoing costs associated with wireless services, management system access are ongoing and outlined below. All pricing does not include any applicable state or local taxes that are required to be paid by the city now or in the future. All costs of permits will be added to customer invoice.

Ongoing Sensor Costs	
Item	Cost per Month per Space
Management System/Base Data Fee	$4.50

Smart Collection System Pricing			
Item	Cost per Unit	Option 1	Option 2
Cash Collection Cart and Canister	$495.00	X	X
Intelligent Cash Collection Canister Heads	$495.00	X	X
Intelligent Coin Can (replaces existing coin can inside each meter)	$65.00		X
Meter Communications Upgrade (includes upgraded link to IPS coin can)	$65.00		X
IPS Management System Reporting/License Fee and Meter Collection Event Data Fee (includes additional data for logging of collection events reported via IPS meter to IPS management system – per meter per month)	$1.25	X	X

Pole Installation Services

If required, IPS is prepared to provide meter pole and housing installation services in support of this contract. Pricing for this service is $125.00 per pole + any application permitting fees. Pricing includes the pole and associated installation services.

Meter Housings

If required, IPS will procure additional meter housings in support of this project. Pricing for these options are listed below.

IPS Parking Meter Solution	
Meter Hardware	Meters Cost Per Meter Extended Cost
New Duncan Model 90 Style Single –Space Meter Housing (or equivalent) (FOB San Diego, CA, Standard locks, sealed coin canister with 12 month warranty, and keys)	$300.00
Refurbished Duncan Model 90 Style Single –Space Meter Housing (or equivalent) (FOB San Diego, CA, Standard locks, sealed coin canister with 12 month warranty, and keys)	$185.00
Meter Yoke (attaches 2 meter housings to a single meter pole, FOB San Diego, CA)	$45.00

MEDECO PRICING OPTIONS		
Item	**Description**	**Unit Price**
Nexgen Locks		
EN-400006-xx	Electronic locks for 480 POM Model “E” vaults	$125.00
EP-2100 - -XX	Nexgen Lock and Door Assembly For 480 POM Model E, Rectangular Door	$185.00
EN-400002-xx	Electronic locks for 2,275 MacKay Model 98 vaults	$125.00
EN-400002-xx	Electronic locks for 34 MacKay Model MKV 97HD vaults	$125.00
EN-400002-xx	Electronic locks for 880 Duncan Model 90 vaults	$125.00
EP-121X - -XX	Nexgen Lock And Door Assembly for Duncan Model 90	$185.00
EN-400002-xx	Electronic locks for 315 Parkeon Stelio vaults	$125.00
EN-400002-xx	Electronic locks for15 Parkeon Strada vaults	$125.00
CUSTOM	Other Nexgen Lock and Door Assembly for other doors	QUOTE TO BE PROVIDE UPON REQUEST
EN-100003-219	Nexgen 1 1/8" Cam Lock	$109.00
	All combinations of doors and locks required door styles to be verified and Finish To Be Specified	
	Note: Three year warranty included with lock purchase.	
Extended Warranty Options		
	Additional 1 year warranty (per lock)	$7.00
	Additional 2 year warranty (per lock)	$15.00
	Prices are valid for purchases of additional quantities through the warranty period, including any purchased extended warranty periods. All discounts are included in the pricing provided.	
Keys		
EV-5502R or EV-5505R	Nexgen Collector Key, Rechargeable	$350.00
EV-5502T	Nexgen Test/Install Key	$350.00
EV-250057	Admin Dongle	$30.00
Accessories		
EV-4508	Nexgen Host Kit (Software)	$2,195.00
9 EN-600006	Nexgen Serial Server	$1,595.00
EN-500003	Docking Station Kit	$295.00
EN-500010	Docking Station Rack Kit w/Hardware	$60.00
EN-600007	Maint. Kit, With Key Tip Kit	$205.00
EA-350068	Replacement Key Batteries Rechargeable	$33.00
EA-250047	Barcode Scanner	$575.00
EA-250058	Key Tip Kit	$54.00

MEDECO PRICING OPTIONS (continued)		
Item	**Description**	**Unit Price**
CP-301350	Contact Cleaner Spray	$39.00
CP-286180	Cleaning Brush	$9.00
94-0171	Pogo-Pin Kit Collector Key	$14.00
94-0172	Pogo-Pin Kit Programming Cradle	$14.00
CP-284490	T-Handle for 7/64" Screw Removable	$7.00
CP-286080	T-Handle for 3/32"" Screw Removable	$7.00
Terms		
Payment	Net 30 Days	
Lead Time	16 weeks if vault doors are also required to be purchased	
Shipping	F.O.B. Salem, Virginia	
Term	Quote Valid For 60 Days	

IPS LIMITED WARRANTY

IPS will provide a limited warranty for any new meter or sensor product manufactured and supplied by IPS for 12 months (or as contractually extended) against defects in materials and workmanship from the point of installation or months from the date of delivery, whichever is sooner, and 90 days from the date of delivery received in the case of spare or repaired products.

Additional Provisions:

- IPS must have the opportunity to assist in the initial deployment and system installation
- Repair or replacement under warranty of any defective product (including any meter or subcomponent) does not extend the warranty period for that product or subcomponent
- IPS will either repair or replace products or subcomponents, at our discretion, that are found to be defective within the defined warranty period
- Returns for credit will only apply once IPS has received defective product (including any meter or subcomponent) and confirmed that defects were within the warranty period and are covered under the terms and conditions of the warranty provided.

Exclusions:

- Warranty voided with use of imitation or non-genuine IPS replacement parts, un-authorized alterations, abuse, vandalism, improper handling or general misuse to the equipment (hardware or software), including attempted repairs that result in damage.
- In the case of extended warranties, any consumable, such as batteries, are specifically excluded unless otherwise contractually agreed.
- IPS does not cover defects caused by improper care or use, lack of preventative maintenance, and does not warranty any defects due to vandalism or other factors contained as a part of the Force Majeure clause below.
- Force Majeure: IPS shall not be liable for any warranty provisions where such product failure is as a result of Acts of Nature (including fire, flood, earthquake, storm, hurricane or other natural disaster), war, invasion, act of foreign enemies, hostilities (whether war is declared or not), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike, lockout or interruption or failure of electricity [or cellular telecommunication failures caused by any of the events or causes described above).

Preventative Maintenance (Meters):

- Preventative maintenance will be similar to current single-space parking meters. However, the primary elements will be a working battery, card reader and coin validator.
- Meters surfaces should be kept clean with mild soap and water
- The card reader heads should be cleaned with a cleaning card every 1-2 months to ensure optimum performance. Cleaning cards may be purchased from IPS.
- At 9-12 month increments, the coin validator shall be visually inspected for any damage or debris. Compressed air may be used to keep the card reader and coin acceptor clear of debris, every 9-12 months.
- Additional preventative maintenance shall be administered by SFMTA Staff at such time as it is apparent to be necessary, even if it should occur on a more frequent basis than described herein.
- The City, at its own cost and expense, shall keep the equipment in good repair, condition and working order after warranty expiration.

Medeco® Engineered Security Solutions
Warranty for Mechanical
& Electromechanical Products

Medeco Security Locks Inc. ("Medeco") warrants to the original purchaser of a Medeco branded lock, cylinder, or electromechanical product (referred to collectively as "Product") to be free of defects in material and/or workmanship for a period of three (3) years from the date of original purchase for use. This Warranty may also apply to other specific products. For additional Warranty information or Warranty claim service contact Medeco Customer Service at (800) 839-3157.

In the event of a defect in material or workmanship during the Warranty period, Medeco will repair or replace (at its option) the Product under the conditions of this Warranty, this action being the sole remedy available to the purchaser under this express limited Warranty.

Limitations, Exclusions and other Rights:

a. Medeco disclaims liability for implied warranties including but not limited to those of merchantability or fitness for any particular purpose.

b. Medeco disclaims liability for indirect, incidental or consequential damage at any time.

c. This Warranty gives specific legal rights and a buyer may also have other rights that may vary from state to state. Some states do not allow limitations on indirect, incidental, and consequential damages or implied warranties so that the above limitations may not fully apply.

d. Medeco shall not be held responsible for damage arising from, in its sole judgment, improper installation, failure to provide normal maintenance, extreme environmental conditions, use rates in excess of the industry standards defined for the type of product, use of incompatible parts or products not made or authorized by Medeco, or application of force not resulting from normal use.

e. Unless otherwise specified by separate warranty, finishes are warranted for a period of two years following purchase for use. This finish Warranty shall be considered void after installation if, in the sole judgment of Medeco, the damage to the finish is the direct result of extreme climatic conditions, chemical or abrasive actions.

EXHIBIT C

NONPROFESSIONAL SERVICES AGREEMENT

FACILITIES AND EQUIPMENT TO BE PROVIDED BY CITY

CITY shall [*check one*] _X__ Not furnish any facilities or equipment for this Agreement; or

____ furnish the following facilities or equipment for the Agreement [*list, if applicable*]:

EXHIBIT D
NONPROFESSIONAL SERVICES AGREEMENT

GENERAL PROVISIONS

1. **Independent Contractor**.

A. It is understood and agreed that CONTRACTOR (including CONTRACTOR's employees) is an independent contractor and that no relationship of employer-employee exists between the parties hereto for any purpose whatsoever. Neither CONTRACTOR nor CONTRACTOR's assigned personnel shall be entitled to any benefits payable to employees of CITY. CITY is not required to make any deductions or withholdings from the compensation payable to CONTRACTOR under the provisions of this Agreement, and CONTRACTOR shall be issued a Form 1099 for its services hereunder. As an independent contractor, CONTRACTOR hereby agrees to indemnify and hold CITY harmless from any and all claims that may be made against CITY based upon any contention by any of CONTRACTOR's employees or by any third party, including but not limited to any state or federal agency, that an employer-employee relationship or a substitute therefor exists for any purpose whatsoever by reason of this Agreement or by reason of the nature and/or performance of any Services under this Agreement. (As used in this Exhibit D, the term "Services" shall include both Services and Additional Services as such terms are defined elsewhere in this Agreement.)

B. It is further understood and agreed by the parties hereto that CONTRACTOR, in the performance of its obligations hereunder, is subject to the control and direction of CITY as to the designation of tasks to be performed and the results to be accomplished under this Agreement, but not as to the means, methods, or sequence used by CONTRACTOR for accomplishing such results. To the extent that CONTRACTOR obtains permission to, and does, use CITY facilities, space, equipment or support services in the performance of this Agreement, this use shall be at the CONTRACTOR's sole discretion based on the CONTRACTOR's determination that such use will promote CONTRACTOR's efficiency and effectiveness. Except as may be specifically provided elsewhere in this Agreement, the CITY does not require that CONTRACTOR use CITY facilities, equipment or support services or work in CITY locations in the performance of this Agreement.

C. If, in the performance of this Agreement, any third persons are employed by CONTRACTOR, such persons shall be entirely and exclusively under the direction, supervision, and control of CONTRACTOR. Except as may be specifically provided elsewhere in this Agreement, all terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other terms of employment or requirements of law, shall be determined by CONTRACTOR. It is further understood and agreed that CONTRACTOR shall issue W-2 or 1099 Forms for income and employment tax purposes, for all of CONTRACTOR's assigned personnel and subcontractors.

D. The provisions of this Section 1 shall survive any expiration or termination of this Agreement. Nothing in this Agreement shall be construed to create an exclusive relationship between CITY and CONTRACTOR. CONTRACTOR may represent, perform services for, or be employed by such additional persons or companies as CONTRACTOR sees fit provided that CONTRACTOR does not violate the provisions of Section 5, below.

2. **Licenses; Permits, Etc.** CONTRACTOR represents and warrants that CONTRACTOR has all licenses, permits, City Business Operations Tax Certificate, qualifications, and approvals of whatsoever nature that are legally required for CONTRACTOR to practice its profession or provide any services under the Agreement. CONTRACTOR represents and warrants that CONTRACTOR shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals that are legally required for CONTRACTOR to practice its profession or provide such Services. Without limiting the generality of the foregoing, if CONTRACTOR is an out-of-state corporation, CONTRACTOR warrants and represents that it possesses a valid certificate of qualification to transact business in the State of California issued by the California Secretary of State pursuant to Section 2105 of the California Corporations Code.

3. **Time.** CONTRACTOR shall devote such time and effort to the performance of Services pursuant to this Agreement as is necessary for the satisfactory and timely performance of CONTRACTOR's obligations under this Agreement. Neither party shall be considered in default of this Agreement, to the extent that party's performance is prevented or delayed by any cause, present or future, that is beyond the reasonable control of that party.

4. **CONTRACTOR Not Agent.** Except as CITY may specify in writing, CONTRACTOR and CONTRACTOR's personnel shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. CONTRACTOR and CONTRACTOR's personnel shall have no authority, express or implied, to bind CITY to any obligations whatsoever.

5. **Conflicts of Interest.** CONTRACTOR covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, that would conflict in any manner with the interests of CITY or that would in any way hinder CONTRACTOR's performance of Services under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor, without the written consent of CITY. CONTRACTOR agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the interests of CITY at all times during the performance of this Agreement. If CONTRACTOR is or employs a former officer or employee of the CITY, CONTRACTOR and any such employee(s) shall comply with the provisions of Sacramento City Code Section 2.16.090 pertaining to appearances before the City Council or any CITY department, board, commission or committee.

6. **Confidentiality of CITY Information.** During performance of this Agreement, CONTRACTOR may gain access to and use CITY information regarding inventions, machinery, products, prices, apparatus, costs, discounts, future plans, business affairs, governmental affairs, processes, trade secrets, technical matters, systems, facilities, customer lists, product design, copyright, data, and other vital information (hereafter collectively referred to as "City Information") that are valuable, special and unique assets of the CITY. CONTRACTOR agrees to protect all City Information and treat it as strictly confidential, and further agrees that CONTRACTOR shall not at any time, either directly or indirectly, divulge, disclose or communicate in any manner any City Information to any third party without the prior written consent of CITY. In addition, CONTRACTOR shall comply with all CITY policies governing the use of the CITY network and technology systems, as set forth in applicable provisions of the City of Sacramento Administrative Policy Instructions # 30. A violation by CONTRACTOR of this Section 6 shall be a material violation of this Agreement and shall justify legal and/or equitable relief.

7. CONTRACTOR Information.

A. CITY shall have full ownership and control, including ownership of any copyrights, of all information prepared, produced, or provided by CONTRACTOR, solely and exclusively for the CITY, pursuant to this Agreement. In this Agreement, the term "information" shall be construed to mean and include: any and all work product, submittals, reports, plans, specifications, and other deliverables consisting of documents, writings, handwritings, typewriting, printing, photostatting, photographing, computer models, and any other computerized data and every other means of recording any form of information, communications, or representation, including letters, works, pictures, drawings, sounds, or symbols, or any combination thereof. CONTRACTOR shall not be responsible for any unauthorized modification or use of such information for other than its intended purpose by CITY. The City may not sell, rent or lease the CONTRACTOR Software. The City may not reverse engineer, decompile, disassemble, alter, modify, assign, translate, adapt or make derivative works of the CONTRACTOR Software. City agrees not to remove or destroy any proprietary markings or proprietary legends placed upon or contained within the CONTRACTOR Software or any related materials or documentation. CONTRACTOR warrants that it has title to and/or the authority to grant a license of such CONTRACTOR Software to the City. This license and the City's right to use the CONTRACTOR Software will terminate if there is a finding by a court of law that the City has failed to comply with any provision of this license.

B. CONTRACTOR shall fully defend, indemnify and hold harmless CITY, its officers and employees, and each and every one of them, from and against any and all claims, actions, lawsuits or other proceedings alleging that all or any part of the information prepared, produced, or provided by CONTRACTOR pursuant to this Agreement infringes upon any third party's trademark, trade name, copyright, patent or other intellectual property rights. CITY shall make reasonable efforts to notify CONTRACTOR not later than ten (10) days after CITY is served with any such claim, action, lawsuit or other proceeding, provided that CITY's failure to provide such notice within such time period shall not relieve CONTRACTOR of its obligations hereunder, which shall survive any termination or expiration of this Agreement.

C. All proprietary and other information received from CONTRACTOR by CITY, whether received in connection with CONTRACTOR's proposal to CITY or in connection with any Services performed by CONTRACTOR, will be disclosed upon receipt of a request for disclosure, pursuant to the California Public Records Act; provided, however, that, if any information is set apart and clearly marked "trade secret" when it is provided to CITY, CITY shall give notice to CONTRACTOR of any request for the disclosure of such information. The CONTRACTOR shall then have five (5) days from the date it receives such notice to enter into an agreement with the CITY, satisfactory to the City Attorney, providing for the defense of, and complete indemnification and reimbursement for all costs (including plaintiff's attorney fees) incurred by CITY in any legal action to compel the disclosure of such information under the California Public Records Act. The CONTRACTOR shall have sole responsibility for defense of the actual "trade secret" designation of such information.

D. The parties understand and agree that any failure by CONTRACTOR to respond to the notice

provided by CITY and/or to enter into an agreement with CITY, in accordance with the provisions of subsection C, above, shall constitute a complete waiver by CONTRACTOR of any rights regarding the information designated "trade secret" by CONTRACTOR, and such information shall be disclosed by CITY pursuant to applicable procedures required by the Public Records Act.

E. Intellectual Property.

(1) The City exclusively and solely owns all City Data and the intellectual property therein. CONTRACTOR further agrees to execute any documents necessary for the City to perfect, memorialize, or record the City's ownership rights in City Data. For purposes of this Agreement, "City Data" means all intellectual property of the City, including but not limited to occupancy data, financial records, programming configurations of the parking meters, GIS location and rates, and other operational data and tailored operational programming.

(2) CONTRACTOR may not provide or disclose any City Data to any third party without the City's prior written consent.

(3) All pre-existing and independently developed intellectual property, and any derivation thereof, including but not limited to designs, models, inventions, processes, methodologies, software, associated documentation, software upgrades, modifications and customizations, copyrightable material and other tangible and intangible materials authored, and combinations thereof, prepared, created, made, delivered, conceived or reduced to practice, in whole or in part, by the CONTRACTOR and provided to the City ("Pre-Existing and Independently Developed IP") will at all times remain the sole and exclusive property of the CONTRACTOR and/or its vendors. In the event the CONTRACTOR provides the City with Pre-Existing and Independently Developed IP, the City will receive a limited license to use such Pre-Existing and Independently Developed IP, and shall be non-assignable, non-transferable, and non-exclusive license to use in the performance of this Agreement only for the fees contained in Exhibit B. Nothing in this Section or elsewhere in this Agreement shall be construed as assigning, selling, conveying, or otherwise transferring any ownership rights or title in CONTRACTOR Pre-Existing and Independently Developed IP.

(4) The provisions of this Section will survive expiration or termination of this Agreement.

8. Standard of Performance. CONTRACTOR shall perform all Services required pursuant to this Agreement in the manner and according to the standards currently observed by a competent practitioner of CONTRACTOR's profession in California. All products of whatsoever nature that CONTRACTOR delivers to CITY pursuant to this Agreement shall be prepared in a professional manner and conform to the standards of quality normally observed by a person currently practicing in CONTRACTOR's profession, and shall be provided in accordance with any schedule of performance specified in Exhibit A. CONTRACTOR shall assign only competent personnel to perform Services pursuant to this Agreement. CONTRACTOR shall notify CITY in writing of any changes in CONTRACTOR's staff assigned to perform the Services required under this Agreement, prior to any such performance. In the event that CITY, at any time during the term of this Agreement, desires the removal of any person assigned by CONTRACTOR to

perform Services pursuant to this Agreement, because CITY, in its sole discretion, determines that such person is not performing in accordance with the standards required herein, CONTRACTOR shall remove such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person.

A. Use of Parking Meter Equipment.

(1) City shall use the parking meter equipment in the proper manner and shall comply with and conform to all national, state, and local laws and regulations in any way relating to the possession, use or maintenance of the equipment, including meter mechanisms, poles, and meter housings.

(2) City, at its own cost and expense, shall keep the equipment in good repair, condition and working order as described in the Limited Warranty sub-section entitled "Preventative Maintenance" and inclusive of first line maintenance (battery replacements, coin validator replacements, remove of graffiti, and replacement of meters and sub-components as necessary). The City will also notify the CONTRACTOR of any need for warranty repair work and will coordinate the return process with the CONTRACTOR.

9. Term; Suspension; Termination.

A. This Agreement shall become effective on the date that it is approved by both parties, set forth on the first page of the Agreement, and shall continue in effect until both parties have fully performed their respective obligations under this Agreement, unless sooner terminated as provided herein.

B. CITY shall have the right at any time to temporarily suspend CONTRACTOR's performance hereunder, in whole or in part, by giving a written notice of suspension to CONTRACTOR. If CITY gives such notice of suspension, CONTRACTOR shall immediately suspend its activities under this Agreement, as specified in such notice.

C. CITY shall have the right to terminate this Agreement at any time by giving a written notice of termination to CONTRACTOR. If CITY gives such notice of termination, CONTRACTOR shall immediately cease rendering Services pursuant to this Agreement. If CITY terminates this Agreement:

(1) CONTRACTOR shall, not later than five days after such notice of termination, deliver to CITY copies of all information prepared pursuant to this Agreement.

(2) CITY shall pay CONTRACTOR the reasonable value of Services rendered by CONTRACTOR prior to termination; provided, however, CITY shall not in any manner be liable for lost profits that might have been made by CONTRACTOR had the Agreement not been terminated or had CONTRACTOR completed the Services required by this Agreement. In this regard, CONTRACTOR shall furnish to CITY such financial information as in the judgment of the CITY is necessary for CITY to determine the reasonable value of the

Services render by CONTRACTOR. The foregoing is cumulative and does not affect any right or remedy that CITY may have in law or equity.

10. Indemnity.

A. Indemnity: CONTRACTOR shall defend, hold harmless and indemnify CITY, its officers and employees, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by CITY's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death, damage to personal, real or intellectual property or the environment, contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with performance of or failure to perform this Agreement by CONTRACTOR, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not (i) such Liabilities are caused in part by a party indemnified hereunder or (ii) such Liabilities are litigated, settled or reduced to judgment; provided that the foregoing indemnity does not apply to liability for any damage or expense for death or bodily injury to persons or damage to property to the extent arising from the sole negligence or willful misconduct of CITY, its agents, servants, or independent contractors who are directly responsible to CITY, except when such agents, servants, or independent contractors are under the direct supervision and control of CONTRACTOR.

B. Insurance Policies; Intellectual Property Claims: The existence or acceptance by CITY of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of CITY's rights under this Section 10, nor shall the limits of such insurance limit the liability of CONTRACTOR hereunder. This Section 10 shall not apply to any intellectual property claims, actions, lawsuits or other proceedings subject to the provisions of Section 7.B., above. The provisions of this Section 10 shall survive any expiration or termination of this Agreement.

11. Insurance Requirements. During the entire term of this Agreement, CONTRACTOR shall maintain the insurance coverage described in this Section 11.

Full compensation for all premiums that CONTRACTOR is required to pay for the insurance coverage described herein shall be included in the compensation specified for the Services provided by CONTRACTOR under this Agreement. No additional compensation will be provided for CONTRACTOR's insurance premiums.

It is understood and agreed by the CONTRACTOR that its liability to the CITY shall not in any way be limited to or affected by the amount of insurance coverage required or carried by the CONTRACTOR in connection with this Agreement.

A. Minimum Scope & Limits of Insurance Coverage

(1) Commercial General Liability Insurance, providing coverage at least as broad as ISO CGL Form 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than one million dollars ($1,000,000) per occurrence. The policy shall provide contractual liability and products and completed operations coverage for the term of the policy.

(2) Automobile Liability Insurance providing coverage at least as broad as ISO Form CA 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than one million dollars ($1,000,000) per occurrence. The policy shall provide coverage for owned, non-owned and/or hired autos as appropriate to the operations of the CONTRACTOR.

No automobile liability insurance shall be required if CONTRACTOR completes the following certification:

"I certify that a motor vehicle will not be used in the performance of any work or services under this agreement." _____ (CONTRACTOR initials)

(3) Workers' Compensation Insurance with statutory limits, and Employers' Liability Insurance with limits of not less than one million dollars ($1,000,000). The Worker's Compensation policy shall include a waiver of subrogation for contracts involving construction or maintenance, or if required by the CITY by selecting the option below:

__X__ Workers' Compensation waiver of subrogation in favor of the City is required for all work performed by the CONTRACTOR.

No Workers' Compensation insurance shall be required if CONTRACTOR completes the following certification:

"I certify that my business has no employees, and that I do not employ anyone. I am exempt from the legal requirements to provide Workers' Compensation insurance." _____ (CONTRACTOR initials)

B. Additional Insured Coverage

(1) Commercial General Liability Insurance: The CITY, its officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects general liability arising out of activities performed by or on behalf of CONTRACTOR, products and completed operations of CONTRACTOR, and premises owned, leased or used by CONTRACTOR. The general liability additional insured endorsement must be signed by an authorized representative of the insurance carrier for contracts involving construction or maintenance, or if required by the CITY by selecting the option below:

__X__ Additional insured endorsement must be signed by an authorized representative of the insurance carrier.

If the policy includes a blanket additional insured endorsement or contractual additional insured coverage, the above signature requirement may be fulfilled by submitting that document with a signed declaration page referencing the blanket endorsement or policy form.

(2) Automobile Liability Insurance: The CITY, its officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects auto liability.

C. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

(1) CONTRACTOR's insurance coverage shall be primary insurance as respects CITY, its officials, employees and volunteers. Any insurance or self-insurance maintained by CITY, its officials, employees or volunteers shall be in excess of CONTRACTOR's insurance and shall not contribute with it.

(2) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to CITY, its officials, employees or volunteers.

(3) Coverage shall state that CONTRACTOR's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(4) CITY will be provided with thirty (30) days written notice of cancellation or material change in the policy language or terms.

D. Acceptability of Insurance

Insurance shall be placed with insurers with a Bests' rating of not less than A:V. Self-insured retentions, policy terms or other variations that do not comply with the requirements of this Section 11 must be declared to and approved by the CITY Risk Management Division in writing prior to execution of this Agreement.

E. Verification of Coverage

(1) CONTRACTOR shall furnish CITY with certificates and required endorsements evidencing the insurance required. The certificates and endorsements shall be forwarded to the CITY representative named in Exhibit A. Copies of policies shall be delivered to the CITY on demand. Certificates of insurance shall be signed by an authorized representative of the insurance carrier.

(2) The CITY may withdraw its offer of contract or cancel this Agreement if the certificates of insurance and endorsements required have not been provided prior to execution of this Agreement. The CITY may withhold payments to CONTRACTOR and/or cancel the Agreement if the insurance is canceled or CONTRACTOR otherwise ceases to be insured as required herein.

F. Subcontractors

CONTRACTOR shall require and verify that all subcontractors maintain insurance coverage that meets the minimum scope and limits of insurance coverage specified in subsection A, above.

12. Equal Employment Opportunity. During the performance of this Agreement, CONTRACTOR, for itself, its assignees and successors in interest, agrees as follows:

A. Compliance With Regulations: CONTRACTOR shall comply with the Executive Order 11246 entitled "Equal Opportunity in Federal Employment", as amended by Executive Order 11375 and 12086, and as supplemented in Department of Labor regulations (41 CFR Chapter 60), hereinafter collectively referred to as the "Regulations".

B. Nondiscrimination: CONTRACTOR, with regards to the work performed by it after award and prior to completion of the work pursuant to this Agreement, shall not discriminate on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual orientation in selection and retention of subcontractors, including procurement of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in discrimination prohibited by the Regulations.

C. Solicitations for Subcontractors, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by CONTRACTOR for work to be performed under any subcontract, including all procurement of materials or equipment, each potential subcontractor or supplier shall be notified by CONTRACTOR of CONTRACTOR's obligation under this Agreement and the Regulations relative to nondiscrimination on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual orientation.

D. Information and Reports: CONTRACTOR shall provide all information and reports required by the Regulations, or by any orders or instructions issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the CITY to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the CITY, and shall set forth what efforts it has made to obtain the information.

E. Sanctions for Noncompliance: In the event of noncompliance by CONTRACTOR with the nondiscrimination provisions of this Agreement, the CITY shall impose such sanctions as it may determine to be appropriate including, but not limited to:

(1) Withholding of payments to CONTRACTOR under this Agreement until CONTRACTOR complies;

(2) Cancellation, termination, or suspension of the Agreement, in whole or in part.

F. Incorporation of Provisions: CONTRACTOR shall include the provisions of subsections A through E, above, in every subcontract, including procurement of materials and leases of equipment, unless exempted by the Regulations, or by any order or instructions issued pursuant thereto. CONTRACTOR shall take such action with respect to any subcontract or procurement as the CITY may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, CONTRACTOR may request CITY to enter such litigation to protect the interests of CITY.

13. Entire Agreement. This document, including all Exhibits, contains the entire agreement between the parties and supersedes whatever oral or written understanding they may have had prior to the execution of this Agreement. No alteration to the terms of this Agreement shall be valid unless approved in writing by CONTRACTOR, and by CITY, in accordance with applicable provisions of the Sacramento City Code.

14. Severability. If any portion of this Agreement or the application thereof to any person or circumstance shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and shall be enforced to the greatest extent permitted by law.

15. Waiver. Neither CITY acceptance of, or payment for, any Service or Additional Service performed by CONTRACTOR, nor any waiver by either party of any default, breach or condition precedent, shall be construed as a waiver of any provision of this Agreement, nor as a waiver of any other default, breach or condition precedent or any other right hereunder.

16. Enforcement of Agreement. This Agreement shall be governed, construed and enforced in accordance with the laws of the State of California. Venue of any litigation arising out of or connected with this Agreement shall lie exclusively in the state trial court or Federal District Court located in Sacramento County in the State of California, and the parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

17. Assignment Prohibited. The expertise and experience of CONTRACTOR are material considerations for this Agreement. CITY has a strong interest in the qualifications and capability of the persons and entities that will fulfill the obligations imposed on CONTRACTOR under this Agreement. In recognition of this interest, CONTRACTOR shall not assign any right or obligation pursuant to this Agreement without the written consent of the CITY. Any attempted or purported assignment without CITY's written consent shall be void and of no effect.

18. Binding Effect. This Agreement shall be binding on the heirs, executors, administrators, successors and assigns of the parties, subject to the provisions of Section 17, above.

19. Use Tax Requirements. During the performance of this Agreement, CONTRACTOR, for itself, its assignees and successors in interest, agrees as follows:

A. Use Tax Direct Payment Permit: For all leases and purchases of materials, equipment, supplies, or other tangible personal property used to perform the Contract or Agreement and shipped from outside California, the Contractor and any subcontractors leasing or purchasing such materials, equipment, supplies or other tangible personal property shall obtain a Use Tax Direct Payment Permit from the California State Board of Equalization ("SBE") in accordance with the applicable SBE criteria and requirements.

B. Sellers Permit: For any construction contract and any construction subcontract in the amount of $5,000,000 or more, Contractor and the subcontractor(s) shall obtain sellers permits from the SBE and shall register the jobsite as the place of business for the purpose of allocating local sales and use tax to the City. Contractor and its subcontractors shall remit the self-accrued use tax to the SBE, and shall provide a copy of each remittance to the City.

C. The above provisions shall apply in all instances unless prohibited by the funding source for the Contract or Agreement.

EXHIBIT E

LIVING WAGE REQUIREMENTS
(Nonprofessional Service Agreement)

The Living Wage Ordinance

The City of Sacramento's Living Wage Ordinance (the "LWO") is codified as Chapter 3.58 of the Sacramento City Code. The LWO requires certain firms that enter into agreements or contracts (all subsequent references to a "contract" or "contracts" will refer to both contracts and agreements) to provide certain services to or for the CITY, to pay a specified minimum level of compensation to their employees for time spent performing any work on the CITY contract. The LWO also applies to certain subcontractors.

The LWO applies to contracts entered into, amended, or renewed or extended at the CITY's discretion, on or after March 1, 2004 (the "LWO Effective Date").

Contracts and Contractors Covered by the LWO

Determining whether the LWO applies to a specific CITY contract, contractor or subcontractor, depends on whether the contract, contractor and/or subcontractor meet the criteria specified in the LWO for contract type, contract amount, contractor size (# of employees), subcontract amount and subcontractor size (# of employees). These criteria are summarized below.

Contract Type

The LWO applies only to contracts for Nonprofessional Services. Under the LWO, this includes contracts for any services of a nonprofessional character, including but not limited to tree trimming services, repair services for motor vehicles and office equipment, vehicle towing, and security services.

The LWO does not apply to: (1) Incidental services, such as delivery, installation or maintenance, that are provided under contracts for the purchase or lease of equipment, supplies, or other personal property; (2) contracts that are subject to CITY, state, or federal prevailing-wage requirements; (3) contracts for professional services (including but not limited to services rendered by engineers, architects, auditors, banks, consultants, actuaries and attorneys); and (4) contracts with nonprofit corporations that are organized under section 501 of the Internal Revenue Code and have fewer than 100 employees, whether full or part time.

Contract Amount

The LWO applies to contracts entered into or amended after the LWO Effective Date that provide compensation from the CITY of $100,000 or more. In addition, the LWO applies to a contract entered into or amended after the LWO Effective Date that, by itself, does not reach this amount, if the aggregate value of that contract and of any other Nonprofessional Services contracts covered by the LWO that the CITY has awarded to the same person or firm within the previous 12 months, is $100,000 or more. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHETHER THIS AGGREGATE VALUE IS $100,000 OR MORE, AND TO NOTIFY THE CITY IN WRITING WHENEVER THIS IS THE CASE.

Contractor Size

The LWO only applies to a contractor that has at least 25 employees, working either full or part time. The number of employees that a contractor has is determined by adding the contractor's employees and the employees of any other person or entity deemed to be a "Related Person" under the LWO.[a]

Subcontract Amount

The LWO applies to a subcontractor providing services under a covered contract if the amount of the subcontract is at least 25 % of the contract amount, without regard to the number of employees the subcontractor has.

Subcontractor Size

The LWO also applies to a subcontractor providing services under a covered contract if the subcontractor has at least 25 employees, working either full or part time, whether or not the amount of the subcontract is at least 25 % of the contract amount.

Payment of Living Wage to Covered Employees

If a contractor or subcontractor meets the criteria specified in the LWO for contract type, contract amount, contractor size, subcontract amount and/or subcontractor size, the contractor or subcontractor is deemed to be a "Covered Employer" under the LWO. The LWO requires a Covered Employer to provide specified minimum compensation to its employees who perform work directly related to the CITY contract (these employees are called "Covered Employees" under the LWO), for all hours the Covered Employees perform under the CITY contract.[b]

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[a] The LWO provides that a person or entity is a Related Person when any of the following circumstances exists:

(1) The person or entity and the contractor are both corporations, and (i) share a majority of members of their governing boards, or (ii) have two or more officers in common, or (iii) are controlled by the same majority shareholder or shareholders (control means more than 50% of the corporation's voting power), or (iv) are in a parent-subsidiary relationship (such a relationship exists when one corporation directly or indirectly owns shares possessing more than 50% of another corporation's voting power); or

(2) The person or entity otherwise controls and directs, or is controlled and directed by, the contractor, as determined by the City Manager.

[b] A Covered Employee includes full-time, part-time, contingent, contract and temporary employees, but does not include: (1) individuals who participate in job-training-and-education programs that have, as their express purpose, the provision of basic job skills and education to participants, with the goal of earning a high-school-equivalency diploma and permanent employment; (2) student interns; (3) individuals participating in specialized-training programs; and (4) an employee whose term and conditions of employment are governed by a bona fide collective-bargaining agreement containing an express waiver of the LWO.

The minimum compensation required is as follows:

(1) If health benefits are provided to Covered Employees and the Covered Employer's contribution for the benefits is at least $1.50 for each hour, then the rates are as follows:

(a) During 2007, the greater of $10.00 an hour or $9.00 adjusted by the increase in the Consumer Price Index for All Urban Consumers, San Francisco/Oakland/San Jose area (1982--1984=100) from January 1, 2004, through December 31, 2006.

(b) For each year after 2007, the rate shall be based on the rate from the immediately preceding year adjusted by the increase in the Consumer Price Index for All Urban Consumers, San Francisco/Oakland/San Jose area (1982--1984=100) from January 1 through December 31 of the immediately preceding year.

(2) If health benefits are not provided to Covered Employees or if health benefits are provided but the Covered Employer's contribution for the benefits is less than $1.50 for each hour, then the rates are as follows:

(a) During 2007, the greater of $11.50 an hour or $10.50 adjusted by the increase in the Consumer Price Index for All Urban Consumers, San Francisco/Oakland/San Jose area (1982--1984=100) from January 1, 2004, through December 31, 2006.

(b) For each year after 2007, the rate shall be based on the rate from the immediately preceding year adjusted by the increase in the Consumer Price Index for All Urban Consumers, San Francisco/Oakland/San Jose area (1982--1984=100) from January 1 through December 31 of the immediately preceding year.

Notification to Covered Employees

The LWO requires a Covered Employer to give each existing employee and (at the time of hire) each new employee a copy of the following written notification:

> **This company may enter into a contract to perform services for the City of Sacramento. If you work on such a contract, then you are entitled to be paid a living wage for each hour so worked. For more information, see Chapter 3.58 of the Sacramento City Code, which can be viewed at www.cityofsacramento.org.**

The LWO requires the above notification to be provided in each language spoken by 10% or more of the Covered Employer's workforce.

The LWO also requires a Covered Employer to inform all employees of their possible right to the federal Earned Income Credit (EIC), and to make available to those employees any forms required to secure advance EIC payments from the Covered Employer.

Subcontractor Compliance

A contractor is responsible for requiring all of its subcontractors who are covered by these requirements to comply with the provisions of the LWO, by including these requirements in all subcontracts covered by the LWO.

Other Provisions of the LWO

Use of Funds Paid Under CITY Contracts

Under the LWO, Covered Employers may not directly use CITY funds to persuade Covered Employees to support or oppose unionization, and Covered Employers may not directly use CITY funds to schedule or hold meetings related to union representation during the Covered Employees' working hours. These restrictions do not apply to expenditures made during good-faith collective bargaining or to expenditures required under bona fide collective-bargaining agreements.

No Reduction in Non-Wage Benefits

Under the LWO, Covered Employers may not fund any wage increases required by the LWO, nor shall Covered Employers otherwise respond to the enactment of the LWO, by reducing the health, insurance, pension, vacation, or other non-wage benefits of any of their employees.

No Retaliation

The LWO prohibits a Covered Employer from taking any adverse action against a Covered Employee because the Covered Employee does any of the following: (1) exercises or asserts his or her rights under the LWO; (2) informs or assists other Covered Employees concerning their rights and the Covered Employer's obligations under the LWO; (3) complains about the Covered Employer's failure to comply with the LWO; or (4) seeks to enforce the LWO.

No Reduction in Collective-Bargaining Wage Rates

The LWO does not require or authorize any Covered Employer to reduce wages set by a collective-bargaining agreement or required under any prevailing-wage law.

Violations and Monitoring

The LWO provides that any violation of the LWO by a CITY contractor constitutes a material breach of the contract, and authorizes the CITY to terminate the contract and pursue all available legal and equitable remedies. In order to monitor compliance, the LWO authorizes the CITY to require Covered Employers to verify their compliance with the LWO by submitting certified payroll records to the CITY, and to take such other steps as may be necessary for the CITY to determine whether the requirements of the LWO have been satisfied.

The LWO also includes provisions authorizing an employee or interested person to file a judicial action against a contractor or subcontractor for violation of the LWO.

Declaration of Compliance

To assure compliance with the LWO, any person or entity entering into a contract to provide Nonprofessional Services to or for the CITY, on or after March 1, 2004, is required to provide the CITY with a signed Declaration of Compliance in the form required by the CITY, prior to the CITY's execution of the contract. The Declaration of

Compliance shall be signed by a duly authorized representative of the person or entity entering into the contract, and, when accepted by the CITY, shall constitute part of the contract.

Additional Information

- For a complete description of the LWO's provisions, refer to the LWO codified at Sacramento City Code Chapter 3.58. The Sacramento City Code is available on the internet at **www.cityofsacramento.org**.
- For more information on the LWO requirements and the CITY's LWO program, contact Procurement Services at 916-808-6240.

EXHIBIT F

REQUIREMENTS OF THE NON-DISCRIMINATION IN EMPLOYEE BENEFITS CODE

INTRODUCTION

The Sacramento Non-Discrimination In Employee Benefits Code (the "Ordinance"), codified as Sacramento City Code Chapter 3.54, prohibits City contractors from discriminating in the provision of employee benefits between employees with spouses and employees with domestic partners, and between the spouses and domestic partners of employees.

APPLICATION

The provisions of the Ordinance apply to any contract or agreement (as defined below), between a Contractor and the City of Sacramento, in an amount exceeding $100,000.00. The Ordinance applies to that portion of a contractor's operations that occur: (i) within the City of Sacramento; (ii) on real property outside the City of Sacramento if the property is owned by the City or if the City has a right to occupy the property; or (iii) at any location where a significant amount of work related to a City contract is being performed.

The Ordinance does not apply: to subcontractors or subcontracts of any Contractor or contractors; to transactions entered into pursuant to cooperative purchasing agreements approved by the Sacramento City Council; to legal contracts of other governmental jurisdictions or public agencies without separate competitive bidding by the City; where the requirements of the ordinance will violate or are inconsistent with the terms or conditions of a grant, subvention or agreement with a public agency or the instructions of an authorized representative of any such agency with respect to any such grant, subvention or agreement; to permits for excavation or street construction; or to agreements for the use of City right-of-way where a contracting utility has the power of eminent domain.

DEFINITIONS

As set forth in the Ordinance, the following definitions apply:

"Contract" means an agreement for public works or improvements to be performed, or for goods or services to be purchased or grants to be provided, at the expense of the City or to be paid out of moneys deposited in the treasury or out of the trust money under the control or collected by the City. "Contract" also means a written agreement for the exclusive use ("exclusive use" means the right to use or occupy real property to the exclusion of others, other than the right reserved by the fee owner) or occupancy of real property for a term exceeding 29 days in any calendar year, whether by singular or cumulative instrument, (i) for the operation or use by others of real property owned or controlled by the City for the operation of a business, social, or other establishment or organization, including leases, concessions, franchises and easements, or (ii) for the City's use or occupancy of real property owned by others, including leases, concessions, franchises and easements.

"Contract" shall not include: a revocable at-will use or encroachment permit for the use of or encroachment on City property regardless of the ultimate duration of such permit; excavation, street construction or street use permits; agreements for the use of City right-of-way where a contracting utility has the power of eminent domain; or agreements governing the use of City property that constitute a public forum for activities that are primarily for the purpose of espousing or advocating causes or ideas and that are generally protected by the First Amendment to the United States Constitution or that are primarily recreational in nature.

“Contractor” means any person or persons, firm, partnership, corporation, company, or combination thereof, that enters into a Contract with the City. “Contractor” does not include a public entity.

“Domestic Partner” means any person who has a currently registered domestic partnership with a governmental entity pursuant to state or local law authorizing the registration.

“Employee Benefits” means bereavement leave; disability, life, and other types of insurance; family medical leave; health benefits; membership or membership discounts; moving expenses; pension and retirement benefits; vacation; travel benefits; and any other benefit given to employees. “Employee benefits” shall not include benefits to the extent that the application of the requirements of this chapter to such benefits may be preempted by federal or state.

CONTRACTOR’S OBLIGATION TO PROVIDE THE CITY WITH DOCUMENTATION AND INFORMATION

Contractor shall provide the City with documentation and information verifying its compliance with the requirements of the Ordinance within ten (10) days of receipt of a request from the City. Contractors shall keep accurate payroll records, showing, for each City Contract, the employee’s name, address, Social Security number, work classification, straight time pay rate, overtime pay rate, overtime hours worked, status and exemptions, and benefits for each day and pay period that the employee works on the City Contract. Each request for payroll records shall be accompanied by an affidavit to be completed and returned by the Contractor, as stated, attesting that the information contained in the payroll records is true and correct, and that the Contractor has complied with the requirements of the Ordinance. A violation of the Ordinance or noncompliance with the requirements of the Ordinance shall constitute a breach of contract.

EMPLOYER COMPLIANCE CERTIFICATE AND NOTICE REQUIREMENTS

(a) All contractors seeking a Contract subject to the Ordinance shall submit a completed Declaration of Compliance Form, signed by an authorized representative, with each proposal, bid or application. The Declaration of Compliance shall be made a part of the executed contract, and will be made available for public inspection and copying during regular business hours.

(b) The Contractor shall give each existing employee working directing on a City contract, and (at the time of hire), each new employee, a copy of the notification provided as Attachment “A.”

(c) Contractor shall post, in a place visible to all employees, a copy of the notice provided as Attachment “B.”

Attachment A

YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S NON-DISCRIMINATION IN EMPLOYEE BENEFITS CODE

On November 12, 2013, your employer (the "Employer") entered into a contract with the City of Sacramento (the "City") for Parking Meters and Related Services, and as a condition of that contract, agreed to abide by the requirements of the City's Non-Discrimination In Employee Benefits Code (Sacramento City Code Section 3.54).

The Ordinance does not require the Employer to provide employee benefits. The Ordinance does require that if certain employee benefits are provided by the Employer, that those benefits be provided without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouse or domestic partner of employees.

The Ordinance covers any employee working on the specific contract referenced above, but only for the period of time while those employees are actually working on this specific contract.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Any other benefits given to employees
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits

(Employee Benefits does not include benefits that may be preempted by federal or state law.)

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, or in the application of these employee benefits, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of the Ordinance, and after having exhausted all remedies with your employer,

You May . . .

○ Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:

City of Sacramento
Procurement Services Division
5730 24th Street, Bldg. 1
Sacramento, CA 95822

- Bring an action in the appropriate division of the Superior Court of the State of California against the Employer and obtain the following remedies:

  - Reinstatement, injunctive relief, compensatory damages and punitive damages

  - Reasonable attorney's fees and costs

Attachment B

YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S NON-DISCRIMINATION IN EMPLOYEE BENEFITS CODE

If your employer provides employee benefits, they must be provided to those employees working on a City of Sacramento contract without discriminating between employees with spouses and employees with domestic partners.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits
- Any other benefits given to employees

If you feel you have been discriminated against by your employer . . .

You May . . .

○ Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:

City of Sacramento
Procurement Services Division
5730 24th Street, Bldg. 1
Sacramento, CA 95822

○ Bring an action in the appropriate division of the Superior Court of the State of California against the employer and obtain reinstatement, injunctive relief, compensatory damages, punitive damages and reasonable attorney's fees and costs.

Discrimination and Retaliation Prohibited.

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of this Ordinance . . .

You May Also . . .

Submit a written complaint to the City of Sacramento, Contract Services Unit, at the same address, containing the details of the alleged violation.

YEAR **2012**

Withholding Exemption Certificate

CALIFORNIA FORM **590**

(This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.)

File this form with your withholding agent. (Please type or print)

Withholding agent's name: IPS Group Inc.

Payee's name: 5601 Oberlin Dr., Suite 100

Payee's ☐ SOS file no. ☑ CA corp. no. ☐ SSN or ITIN ☐ FEIN: C 2 6 4 2 6 3 3

Address (number and street, PO Box, or PMB no.):

Apt. no./ Ste. no.:

City: San Diego

State: C A

ZIP Code: 9 2 1 2 1

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

☐ **Individuals — Certification of Residency:**
I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

☑ **Corporations:**
The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

☐ **Partnerships or limited liability companies (LLC):**
The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

☐ **Tax-Exempt Entities:**
The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 _____ (insert letter) or Internal Revenue Code Section 501(c) _____ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

☐ **Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**
The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

☐ **California Trusts:**
At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

☐ **Estates — Certification of Residency of Deceased Person:**
I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

☐ **Nonmilitary Spouse of a Military Servicemember:**
I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

CERTIFICATE: Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) Chad P Randall, Corp Sec & COO Daytime telephone no. 858-404-0607

Payee's signature ▶ Chad P Randall Date 10/15/2013

For Privacy Notice, get form FTB 1131.

7061123

Form 590 C2 2011

Form **W-9**
(Rev. December 2011)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
IPS Group Inc.

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:
☐ Individual/sole proprietor ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶

☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)
5601 Oberlin Dr, Suite 100

Requester's name and address (optional)
City of Sacramento, CA

City, state, and ZIP code
San Diego, CA 92121

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number
☐☐☐ - ☐☐ - ☐☐☐☐

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Employer identification number
2 3 - 3 0 2 8 1 6 4

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here **Signature of U.S. person ▶** [signature] **Date ▶** 10/15/2013

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

City of SACRAMENTO
Department of Public Works

DRUG-FREE WORKPLACE POLICY AND AFFIDAVIT

BID PROPOSAL MAY BE DECLARED NONRESPONSIVE IF THIS FORM (COMPLETED) IS NOT ATTACHED.
Pursuant to City Council Resolution CC90-498 dated 6/26/90 the following is required.

The undersigned contractor certifies that it and all subcontractors performing under this Agreement will provide a drug-free workplace by:

1. Publishing a "Drug-Free Workplace" statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Establishing a Drug-Free Awareness Program to inform employees about:

   a. The dangers of drug abuse in the workplace.
   b. The contractor's policy of maintaining a drug-free workplace.
   c. Any available drug counseling, rehabilitation, and employee assistance program.
   d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.

3. Notify employees that as a condition of employment under this Agreement, employees will be expected to:

   a. Abide by the terms of the statement.
   b. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace.

4. Making it a requirement that each employee to be engaged in the performance of the Agreement be given a copy on the "Drug-Free Workplace" statement.

5. Taking one of the following appropriate actions, within thirty (30) days of receiving notice from an employee or otherwise receiving such notice, that said employee has received a drug conviction for a violation occurring in the workplace:

   a. Taking appropriate disciplinary action against such an employee, up to and including termination; or
   b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement or other appropriate agency.

* I certify that no person employed by this company, corporation, or business has been convicted of any criminal drug statute violation on any job site or project where this company, corporation or business was performing was within three years of the date of my signature below.

EXCEPTION: _____ _____ _____
Date **Violation Type** **Place of Occurrence**

If additional space is required use back of this form.

*** The above statement will also be incorporated as a part of each subcontract agreement for any and all subcontractors selected for performance on this project.**

IN THE EVENT THIS COMPANY, CORPORATION, OR BUSINESS IS AWARDED THIS CONSTRUCTION AGREEMENT, AS A RESULT OF THIS BID; THE CONTRACTOR WITH HIS/HER SIGNATURE REPRESENTS TO THE CITY THAT THE INFORMATION DISCLOSED IN THIS DOCUMENT IS COMPLETE AND ACCURATE. IT IS UNDERSTOOD AND AGREED THAT FALSE CERTIFICATION IS SUBJECT TO IMMEDIATE TERMINATION BY THE CITY.

The Representations Made Herein On This Document Are Made Under Penalty Of Perjury.

CONTRACTOR'S NAME: IPS Group Inc.

BY: Chad P Randall (signature) Corp Sec & COO **Date:** 10/15/2013
Signature **Title**

Effects of violations: a. Suspension of payments under the Agreement. **b.** Suspension or termination of the Agreement. **c.** Suspension or debarment of the contractor from receiving any Agreement from the City of Sacramento for a period not to exceed five years.

FM 681
(Rev. 10/5/01)

OP ID: J5

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/08/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Leavitt Ins Agency San Diego
CA License #0B72756
3636 Nobel Drive, Suite 100
San Diego, CA 92122
Andrew James
Phone: 858-259-5800
Fax: 858-259-6069

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS:
PRODUCER CUSTOMER ID #: IPSGR-1

INSURED
IPS Group, Inc.
5601 Oberlin Drive, Suite 100
San Diego, CA 92121

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : National Fire Ins of Hartford	20478
INSURER B : American Casualty Company	20427
INSURER C : Continental Casualty Co	20443
INSURER D : Valley Forge Insurance Co	20508
INSURER E :	
INSURER F :	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC	X		4034371571	10/19/2013	10/19/2014	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ $ $ $ $ $	1,000,000 500,000 15,000 1,000,000 2,000,000 2,000,000
B	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS	X		4034371554 NO OWNED AUTOS	10/19/2013	10/19/2014	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $	1,000,000
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE X RETENTION $ 10,000			4034371568	10/19/2013	10/19/2014	EACH OCCURRENCE AGGREGATE	$ $	5,000,000 5,000,000
D D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	X	5084046939 CALIFORNIA 5084046987 OTHER STATES	03/19/2013 03/19/2013	03/19/2014 03/19/2014	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000
A	Tech E&O/Network/ Privacy/Media			4034371571 DEDUCTIBLE: $50,000	10/19/2013	10/19/2014	Ea Occ Aggregate		5,000,000 5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: Parking Meter Procurement

See page 2 for additional information.

CERTIFICATE HOLDER

The City of Sacramento
Dept of Public Works-Attn:Paul
Sheridan, Parking Services Div
300 Richards Blvd., 2nd Floor
Sacramento, CA 95811

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Janet Acbate

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NOTEPAD:

HOLDER CODE IPSGR-1
INSURED'S NAME IPS Group, Inc.
OP ID: J5

DATE 10/08/13

The City of Sacramento,its officials, employees and volunteers are named as additional insureds as respects General Liability and Auto Liability per attached.
Primary/Non-Contributory wording applies as respects General Liability per attached and Auto Liability per policy form.
Waiver of Subrogation applies as respects Workers Compensation per attached.

Leavitt Insurance Agency will provide Certificate Holder with 30 Day written Notice of Cancellation.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

TECHNOLOGY GENERAL LIABILITY EXTENSION ENDORSEMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Coverage afforded under this extension of coverage endorsement does not apply to any person or organization covered as an additional insured on any other endorsement now or hereafter attached to this Coverage Part.

1. ADDITIONAL INSURED – BLANKET VENDORS

WHO IS AN INSURED (Section **II**) is amended to include as an additional insured any person or organization (referred to below as vendor) with whom you agreed, because of a written contract or agreement to provide insurance, but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business, subject to the following additional exclusions:

1. The insurance afforded the vendor does not apply to:

a. "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;

b. Any express warranty unauthorized by you;

c. Any physical or chemical change in the product made intentionally by the vendor;

d. Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;

e. Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;

f. Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;

g. Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or

h. "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:

(1) The exceptions contained in Subparagraphs **d.** or **f.**; or

(2) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.

2. This insurance does not apply to any insured person or organization, from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

3. This provision **1.** does not apply to any vendor included as an insured by an endorsement issued by us and made a part of this Coverage Part.

4. This provision **1.** does not apply if "bodily injury" or "property damage" included within the "products-completed operations hazard" is excluded either by the provisions of the Coverage Part or by endorsement.

2. MISCELLANEOUS ADDITIONAL INSUREDS

WHO IS AN INSURED (Section **II**) is amended to include as an insured any person or organization (called additional insured) described in paragraphs **2.a.** through **2.h.** below whom you are required to add as an additional insured on this policy under a written contract or agreement but the written contract or agreement must be:

1. Currently in effect or becoming effective during the term of this policy; and

2. Executed prior to the "bodily injury," "property damage" or "personal injury and advertising injury," but only the following persons or organizations are additional insureds under this endorsement and coverage provided to

4002000714034371571549 1

such additional insureds is limited as provided herein:

a. Additional Insured – "Your Work"

That person or organization for whom you do work is an additional insured solely for liability due to your negligence specifically resulting from "your work" for the additional insured which is the subject of the written contract or written agreement. No coverage applies to liability resulting from the sole negligence of the additional insured.

The insurance provided to the additional insured is limited as follows:

(1) The Limits of Insurance applicable to the additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less. These Limits of Insurance are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations.

(2) The coverage provided to the additional insured by this paragraph. **2.a.**, does not apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" unless:

(a) It is required by the written contract or written agreement; and

(b) "Bodily injury" or "property damage" included within the "products-completed operations hazard" is not excluded either by the provisions of the Coverage Part or by endorsement.

(3) The insurance provided to the additional insured does not apply to "bodily injury," "property damage," or "personal and advertising injury" arising out of the rendering or failure to render any professional services.

b. State or Political Subdivisions

A state or political subdivision subject to the following provisions:

(1) This insurance applies only with respect to the following hazards for which the state or political subdivision has issued a permit in connection with premises you own, rent, or control and to which this insurance applies:

(a) The existence, maintenance, repair, construction, erection, or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoistaway openings, sidewalk vaults, street banners, or decorations and similar exposures; or

(b) The construction, erection, or removal of elevators; or

(2) This insurance applies only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit.

This insurance does not apply to "bodily injury," "property damage" or "personal and advertising injury" arising out of operations performed for the state or municipality.

c. Controlling Interest

Any persons or organizations with a controlling interest in you but only with respect to their liability arising out of:

(1) Their financial control of you; or

(2) Premises they own, maintain or control while you lease or occupy these premises.

This insurance does not apply to structural alterations, new construction and demolition operations performed by or for such additional insured.

d. Managers or Lessors of Premises

A manager or lessor of premises but only with respect to liability arising out of the ownership, maintenance or use of that specific part of the premises leased to you and subject to the following additional exclusions:

This insurance does not apply to:

(1) Any "occurrence" which takes place after you cease to be a tenant in that premises; or

(2) Structural alterations, new construction or demolition operations performed by or on behalf of such additional insured.

e. Mortgagee, Assignee or Receiver

A mortgagee, assignee or receiver but only with respect to their liability as

mortgagee, assignee, or receiver and arising out of the ownership, maintenance, or use of a premises by you.

This insurance does not apply to structural alterations, new construction or demolition operations performed by or for such additional insured.

f. Owners/Other Interests – Land is Leased

An owner or other interest from whom land has been leased by you but only with respect to liability arising out of the ownership, maintenance or use of that specific part of the land leased to you and subject to the following additional exclusions:

This insurance does not apply to:

(1) Any "occurrence" which takes place after you cease to lease that land; or

(2) Structural alterations, new construction or demolition operations performed by or on behalf of such additional insured.

g. Co-owner of Insured Premises

A co-owner of a premises co-owned by you and covered under this insurance but only with respect to the co-owners liability as co-owner of such premises.

h. Lessor of Equipment

Any person or organization from whom you lease equipment. Such person or organization are insureds only with respect to their liability arising out of the maintenance, operation or use by you of equipment leased to you by such person or organization. A person's or organization's status as an insured under this endorsement ends when their written contract or agreement with you for such leased equipment ends.

With respect to the insurance afforded these additional insureds, the following additional exclusions apply:

This insurance does not apply:

(1) To any "occurrence" which takes place after the equipment lease expires; or

(2) To "bodily injury," "property damage," or "personal and advertising injury" arising out of the sole negligence of such additional insured.

Any insurance provided to an additional insured designated under paragraphs **b.** through **h.** above does not apply to "bodily injury" or "property damage" included within the "products-completed operations hazard."

As respects the coverage provided under this endorsement, Paragraph **4.b. SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS** is deleted and replaced with the following:

4. Other Insurance

b. Excess Insurance

This insurance is excess over:

Any other insurance naming the additional insured as an insured whether primary, excess, contingent or on any other basis unless a written contract or agreement specifically requires that this insurance be either primary or primary and noncontributing. Where required by written contract or agreement, we will consider any other insurance maintained by the additional insured for injury or damage covered by this endorsement to be excess and noncontributing with this insurance.

3. NEWLY FORMED OR ACQUIRED ORGANIZATIONS

Paragraph **3.a.** of **Section II – Who Is An Insured** is deleted and replaced by the following:

Coverage under this provision is afforded only until the end of the policy period or the next anniversary of this policy's effective date after you acquire or form the organization, whichever is earlier.

4. JOINT VENTURES / PARTNERSHIP / LIMITED LIABILITY COMPANY COVERAGE

A. The following is added to **Section II – Who Is An Insured:**

4. You are an insured when you had an interest in a joint venture, partnership or limited liability company which terminated or ended prior to or during this policy period but only to the extent of your interest in such joint venture, partnership or limited liability company. This coverage does not apply:

a. Prior to the termination date of any joint venture, partnership or limited liability company; or

b. If there is other valid and collectible insurance purchased specifically to insure the partnership, joint venture or limited liability company.

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B. The last paragraph of **Section II – Who Is An Insured** is deleted and replaced by the following:

Except as provided in **4.** above, no person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

5. PARTNERSHIP OR JOINT VENTURES

Paragraph **1.b.** of **Section II – Who Is An Insured** is deleted and replaced by the following:

b. A partnership (including a limited liability partnership) or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.

6. EMPLOYEES AS INSUREDS – HEALTH CARE SERVICES

For other than a physician, paragraph **2.a.(1)(d)** of **Section II – Who Is An Insured** does not apply with respect to professional health care services provided in the course of employment by you.

7. PROPERTY DAMAGE – PATTERNS, MOLDS AND DIES

Paragraphs **(3)** and **(4)** of Exclusion **j. Damage to Property** of **SECTION I – EXCLUSIONS** do not apply to patterns, molds or dies in the care, custody or control of the insured if the patterns, molds or dies are not being used to perform operations at the time of loss. A limit of insurance of $25,000 per policy period applies to **PROPERTY DAMAGE – PATTERNS, MOLDS AND DIES** and is included within the General Aggregate Limit as described in **SECTION III – LIMITS OF INSURANCE.**

The insurance afforded by this provision **7.** is excess over any valid and collectible property insurance (including any deductible) available to the insured, and the Other Insurance Condition is changed accordingly.

8. BODILY INJURY

Section V – Definitions, the definition of "bodily injury" is changed to read:

"Bodily injury" means bodily injury, sickness or disease sustained by a person, including death, humiliation, shock, mental anguish or mental injury by that person at any time which results as a consequence of the bodily injury, sickness or disease.

9. EXPANDED PERSONAL AND ADVERTISING INJURY

A. The following is added to **Section V – Definitions,** the definition of "personal and advertising injury":

h. Discrimination or humiliation that results in injury to the feelings or reputation of a natural person, but only if such discrimination or humiliation is:

(1) Not done intentionally by or at the direction of:

(a) The insured; or

(b) Any "executive officer," director, stockholder, partner, member or manager (if you are a limited liability company) of the insured; and

(2) Not directly or indirectly related to the employment, prospective employment, past employment or termination of employment of any person or persons by any insured.

B. Exclusions of **Section I – Coverage B – Personal and Advertising Injury Liability** is amended to include the following:

p. Discrimination Relating To Room, Dwelling or Premises

Caused by discrimination directly or indirectly related to the sale, rental, lease or sub-lease or prospective sale, rental, lease or sub-lease of any room, dwelling or premises by or at the direction of any insured.

q. Fines Or Penalties

Fines or penalties levied or imposed by a governmental entity because of discrimination.

C. This provision **9. (EXPANDED PERSONAL AND ADVERTISING INJURY COVERAGE)** does not apply to discrimination or humiliation committed in the states of New York or Ohio. Also, **EXPANDED PERSONAL AND ADVERTISING INJURY COVERAGE** does not apply to policies issued in the states of New York or Ohio.

D. This provision **9. (EXPANDED PERSONAL AND ADVERTISING INJURY COVERAGE)** does not apply if **Section I – Coverage B – Personal And Advertising Injury Liability** is excluded either by the provisions of the Coverage Part or by endorsement.

10. MEDICAL PAYMENTS

A. Paragraph **7. Medical Expense Limit,** of **Section III – Limits of Insurance** is deleted and replaced by the following:

7. Subject to **5.** above (the Each Occurrence Limit), the Medical Expense Limit is the most we will pay under **Section – I – Coverage C**

for all medical expenses because of "bodily injury" sustained by any one person. The Medical Expense Limit is the greater of:

(1) $15,000; or

(2) The amount shown in the Declarations for Medical Expense Limit.

B. This provision **10. (Medical Payments)** does not apply if **Section I – Coverage C Medical Payments** is excluded either by the provisions of the Coverage Part or by endorsement.

C. Paragraph **1.a.(3)(2)** of **Section I – Coverage C – Medical Payments,** is replaced by the following:

The expenses are incurred and reported to us within three years of the date of the accident; and

11. SUPPLEMENTARY PAYMENTS

A. Under **Section I – Supplementary Payments – Coverages A** and **B**, Paragraph **1.b.**, the limit of $250 shown for the cost of bail bonds is replaced by $2,500:

B. In Paragraph **1.d.**, the limit of $250 shown for daily loss of earnings is replaced by $1,000.

12. PROPERTY DAMAGE – ELEVATORS

With respect to Exclusions of **Section I – Coverage A,** paragraphs **(3), (4)** and **(6)** of Exclusion **j.** and Exclusion **k.** do not apply to the use of elevators.

The insurance afforded by this provision **12.** is excess over any valid and collectible property insurance (including any deductible) available to the insured, and the Other Insurance Condition is changed accordingly.

13. LEGAL LIABILITY – DAMAGE TO PREMISES

A. Under **Section I – Coverage A – Bodily Injury and Property Damage 2. Exclusions,** Exclusion **j.** is replaced by the following.

"Property damage" to:

(1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;

(2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;

(3) Property loaned to you;

(4) Personal property in the care, custody or control of the insured;

(5) That particular part of real property on which you or any contractors or subcontractors working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations; or

(6) That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraph **(2)** of this exclusion does not apply if the premises are "your work" and were never occupied, rented or held for rental by you.

Paragraphs **(1), (3)** and **(4)** of this exclusion do not apply to "property damage" (other than damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems) to premises including the contents of such premises, rented to you for a period of 7 or fewer consecutive days.

A separate limit of insurance applies to Damage To Premises Rented To You as described in **Section III – Limits Of Insurance.**

Paragraphs **(3), (4), (5)** and **(6)** of this exclusion do not apply to liability assumed under a sidetrack agreement.

Paragraph **(6)** of this exclusion does not apply to "property damage" included in the "products-completed operations hazard."

B. Under **Section I – Coverage A – Bodily Injury and Property Damage** the last paragraph of **2. Exclusions** is deleted and replaced by the following.

Exclusions **c.** through **n.** do not apply to damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems to premises while rented to you or temporarily occupied by you with permission of the owner.

A separate limit of insurance applies to this coverage as described in **Section III – Limits Of Insurance.**

C. Paragraph **6. Damage To Premises Rented To You Limit** of **Section III – Limits Of Insurance** is replaced by the following:

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6. Subject to **5.** above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage **A** for damages because of "property damage" to any one premises while rented to you or in the case of damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems, while rented to you or temporarily occupied by you with the permission of the owner. The Damage To Premises Rented To You Limit is the greater of:

   a. $500,000; or

   b. The Damage To Premises Rented To You Limit shown in the Declarations.

D. Paragraph **4.b.(1)(b)** of **Section IV – Commercial General Liability Conditions** is deleted and replaced by the following:

(b) That is property insurance for premises rented to you or temporarily occupied by you with the permission of the owner; or

E. This provision **13. (LEGAL LIABILITY – DAMAGE TO PREMISES)** does not apply if Damage To Premises Rented To You Liability under **Section I – Coverage A** is excluded either by the provisions of the Coverage Part or by endorsement.

14. NON-OWNED WATERCRAFT

Under **Section I – Coverage A – Bodily Injury and Property Damage,** Exclusion **2.g.,** subparagraph **(2)** is deleted and replaced by the following.

(2) A watercraft you do not own that is:

(a) Less than 55 feet long; and

(b) Not being used to carry persons or property for a charge.

15. NON-OWNED AIRCRAFT

Exclusion **2.g.** of **Section I – Coverage A – Bodily Injury and Property Damage,** does not apply to an aircraft you do not own, provided that:

1. The pilot in command holds a currently effective certificate issued by the duly constituted authority of the United States of America or Canada, designating that person as a commercial or airline transport pilot;
2. It is rented with a trained, paid crew; and
3. It does not transport persons or cargo for a charge.

16. BROAD KNOWLEDGE OF OCCURRENCE

You must give us or our authorized representative notice of an "occurrence," offense, claim, or "suit" only when the "occurrence," offense, claim or "suit" is known to :

(1) You, if you are an individual;

(2) A partner, if you are a partnership;

(3) An executive officer or the employee designated by you to give such notice, if you are a corporation; or

(4) A manager, if you are a limited liability company.

17. NOTICE OF OCCURRENCE

The following is added to paragraph **2.** of **Section IV – Commercial General Liability Conditions – Duties in The Event of Occurrence, Offense Claim or Suit:**

Your rights under this Coverage Part will not be prejudiced if you fail to give us notice of an "occurrence," offense, claim or "suit" and that failure is solely due to your reasonable belief that the "bodily injury" or "property damage" is not covered under this Coverage Part. However, you shall give written notice of this "occurrence," offense, claim or "suit" to us as soon as you are aware that this insurance may apply to such "occurrence," offense claim or "suit."

18. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS

Based on our reliance on your representations as to existing hazards, if unintentionally you should fail to disclose all such hazards at the inception date of your policy, we will not deny coverage under this Coverage Part because of such failure.

19. EXPECTED OR INTENDED INJURY

Exclusion **a.** of **Section I – Coverage A – Bodily Injury and Property Damage Liability** is replaced by the following:

a. "Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

20. LIBERALIZATION CLAUSE

If we adopt a change in our forms or rules which would broaden coverage provided under this endorsement without an additional premium charge, your policy will automatically provide the additional coverages as of the date the revision is effective in your state.

POLICY NUMBER	INSURED NAME AND ADDRESS
C 4034371554	IPS GROUP, INC 5601 OBERLIN DRIVE SUITE 100 SAN DIEGO, CA 92121

POLICY CHANGES
CA 2048 DESIGNATED INSURED

This Change Endorsement changes the Policy. Please read it carefully. This Change Endorsement is a part of your Policy and takes effect on the effective date of your Policy, unless another effective date is shown.

The following Form has been added:

Form #: CA2048 Title: Designated Insured

Any person or organization you have agreed in a written contract or written agreement to add as an additional insured on this Coverage Part, provided the written contract or written agreement was executed prior to:
a. The "bodily injury" or "property damage"; or
b. The offense that caused the "personal and advertising injury for which the additional insured seeks coverage under this Coverage Part. The written contract or written agreement must pertain to your ongoing operations for the additional insured, and must specifically require additional insured status according to the provisions of CG 20 48.
But notwithstanding the above, no person or organization is an additional insured for professional architectural or engineering services provided at or for the Location(s) of Covered Operations.

Thomas F. Motamed
Chairman of the Board

Jonathan Kanter
Secretary

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE POLICY

BLANKET WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS

This endorsement changes the policy to which it is attached.

It is agreed that **Part One Workers' Compensation Insurance G. Recovery From Others** and **Part Two Employers' Liability Insurance H. Recovery From Others** are amended by adding the following:

We will not enforce our right to recover against persons or organizations. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

PREMIUM CHARGE - $3,370

The charge will be an amount to which you and we agree that is a percentage of the total standard premium for California exposure. The amount is 5.%.

TECHNOLOGY ERRORS & OMISSIONS LIABILITY COVERAGE FORM

THIS INSURANCE IS WRITTEN ON A "CLAIMS" MADE BASIS AND PROVIDES COVERAGE FOR THOSE "CLAIMS" WHICH ARE THE RESULT OF "WRONGFUL ACTS" HAPPENING SUBSEQUENT TO THE RETROACTIVE DATE STATED ON THE DECLARATIONS AND WHICH ARE FIRST MADE AGAINST THE INSURED DURING THE POLICY PERIOD. NO COVERAGE EXISTS FOR "CLAIMS" MADE AGAINST AN INSURED AFTER THE END OF THE POLICY PERIOD UNLESS, AND TO THE EXTENT, AN EXTENDED REPORTING PERIOD APPLIES. "DEFENSE COSTS" REDUCE THE LIMIT OF INSURANCE AND ARE SUBJECT TO A DEDUCTIBLE.

Various provisions in this coverage form restrict coverage. Read the entire coverage form carefully to determine rights, duties and what is and is not covered.

Throughout this coverage form the words "you" and "your" refer to the Named Insured shown in the Declarations, or other person or organization qualifying as a Named Insured under this coverage form. The words "we," "us" and "our" refer to the Company providing this insurance.

The word "Insured" means any person or organization qualifying as such under Section **II, WHO IS AN INSURED**.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section **VIII, DEFINITIONS**.

I. COVERAGE

1. Insuring Agreement

A. We will pay those sums that the Insured becomes legally obligated to pay as "damages" because of a covered "claim" by reason of a "wrongful act" by the Insured or by someone for whom the Insured is legally responsible provided that:

(1) The "wrongful act" takes place in the "coverage territory;"

(2) The "wrongful act" occurs after the Retroactive Date shown in the Declarations and prior to the end of the policy period;

(3) A "claim" is first made against an Insured during the policy period and reported to us, in accordance with Section **IV, CONDITIONS**, paragraph **2, Duties in the Event of a "Claim;"** and

(4) Prior to the inception date of this Coverage Form or the first such Coverage Form issued and continuously renewed by us, of which this Coverage Form is a renewal, whichever is earlier,

a. no "executive officer" knew of any circumstances which might have resulted in a "claim;" and

b. the "wrongful act," or any "related wrongful act" has not been the subject of any notice given under any prior coverage form.

Subject to any applicable limit of insurance, we will also pay "defense costs" in connection with such covered "claim."

B. Vicarious Liability Coverage

Any entity you are required by written contract to include as an insured for liability of such entity for an Insured's "wrongful act" is insured under this Policy but solely to the extent that a "claim" is made against it for a "wrongful act," of an Insured and only so long as the written contract is entered into before such "wrongful act" occurs. Any coverage afforded by this Section is subject always to all of the Policy's terms and conditions, provided however:

(1) there is no coverage afforded to such entity for its "wrongful acts;" and

(2) nothing herein confers any rights or duties to such entity under this Policy, other than as provided in this Section.

C. Defense

(1) Defense

Except as set forth in paragraph **(2)** below we have the right and duty to defend all "claims," even if the allegations are groundless, false or fraudulent. We shall have the right to appoint counsel and to make such investigation and defense of a "claim" as we deem necessary. Alternatively we may, at our option, give our written consent to the defense of any such "claim" by the Insureds. Our obligation to defend any "claim" or pay any "damages" or "defense costs," shall be completely fulfilled and extinguished if the limit of insurance has been exhausted.

(2) Defense and settlement for "claims" brought outside the United States

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Jill M. Forsyth
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Government Finance Specialist

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Scottsdale, AZ 85254
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SUMMARY OF TERMS AND CONDITIONS

Date: October 10, 2013

Lessee: City of Sacramento, CA

Lessor: Banc of America Public Capital Corp, Bank of America NA or designee ("Lessor").

Equipment: **Essential Use Equipment**

Structure: Non Bank Qualified Master Lease Line of Credit. The lease line will be set for a total of $6MM.

Security: Lien on the assets

Term: 5 Years

Interest Rate: **Rate will be fixed for funding until November 26, 2013**

1.28% -

RATES: The current rates are locked from the date of this Term Sheet and will be honored so long as the transaction is funded before the date indicated on this term sheet. If the transaction does not fund by that time, the rate may need to be modified if there is a change in market conditions, but in no case will it be less than the rate quoted herein. ***Acceptance of this proposal must be done within 5 business day to have this rate locked.***

Payments: Semi-annually payments in arrears starting 6 months after funding.

Governmental Entity Lease: The Base Rent installments are calculated on the assumptions, and Lessee will represent, that Lessee is a state or political subdivision of a state within the meaning of Section 103(c) of the Internal Revenue Code (the

"Code"), and that this transaction will constitute an obligation of Lessee within the meaning of Section 103(a) of the Code, notwithstanding Section 103(b) of the Code. Lessee shall provide Lessor with such evidence as Lessor may request to substantiate and maintain such tax status. Lessee shall comply with the filing requirements of Section 149(e) of the Code. Lessee will pay Lessor amounts calculated at a taxable rate sufficient to maintain Lessor's yield in the Lease, in the event Lessor suffers a loss of Federal income tax exemption of the interest portion of the rentals.

Early Termination: Lessee may prepay the Schedule in whole with 30 days written notice on any rental payment date at 100% of principal, interest and any fees outstanding.

End of Term: At the expiration of the Lease Term, Lessee will purchase all (but not less than all) the Equipment for **$1.00** ("Purchase Price").

Opinion of Counsel: Lessee's counsel shall deliver a validity opinion to Lessor at closing, in form and substance satisfactory to Lessor, that covers the following matters: (1) The Lessee is a charter city of the State of California and is authorized by the Constitution and laws of that state to enter into the transactions contemplated by the transaction documents and to carry out its obligations under the transaction documents. (2) Lessee has the requisite power and authority to lease and acquire the equipment, to execute and deliver the transaction documents, and to perform its obligations under the Lease. (3) The Lease and all amendments to it have been duly authorized, approved, executed, and delivered by and on behalf of Lessee, and the transaction documents are valid and binding obligations of Lessee, enforceable in accordance with their terms. (4) The authorization, approval, execution, and delivery of the transaction documents and all other proceedings of Lessee relating to the transactions contemplated in the transaction documents have been performed in accordance with all open-meeting laws, public-bidding laws, and all other applicable state or federal laws. (5) To the current, actual knowledge of Lessee's counsel, Lessee has not been served with process in, or overtly threatened with, any lawsuit, administrative proceeding, or investigation in any court or before any governmental authority, arbitration board, or tribunal that, if adversely determined against Lessee, would adversely affect the transactions contemplated by the transaction documents or the security interest of Lessor or Lessor's assigns, as the case may be, in the equipment or other collateral under the transaction documents.

Tax Opinion: If any individual schedule drawn on the master lease is in excess of $5MM, the City must provide a tax opinion from bond counsel. The opinion of bond counsel will cover the following tax matters, in addition to other customary opinions:

(a) the portion of Base Rent designated as and constituting interest paid by Lessee and received by Lessor is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from state personal income taxes;

(b) such interest is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes; and

(c) counsel has examined, approved and attached the text of the enabling resolution of Lessee's governing body authorizing Lessee to enter into the Lease.

Escrow Account: In compliance with applicable regulations, including but not limited to arbitrage reporting, the proceeds of the Lease may be deposited into an escrow account acceptable to Lessor, and disbursements made therefrom to pay for the equipment upon execution and delivery of an acceptance certificate (and related documents) by Lessee and approved by Lessor.

Documentation: This transaction is subject to acceptable documentation in Lessor's sole discretion. It is anticipated we will use the existing document we have in place with the city.

Credit Approval: **This transaction has not been formally credit approved. Upon notice of award, we will quickly submit this to the Credit Committee and seek formal approval.**

Proposal Expiration: **This proposal will expire on October 21, 2013 and may be re-issued at Lessor's discretion.**

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Request for Proposals
Parking Meter Procurement
Bid Transaction
#P13151171027

City of Sacramento

Deadline:
July 3, 2013
4 PM

Prepared by:
IPS Group, Inc.
5601 Oberlin Drive
Suite 100
San Diego, CA 92121 U.S.A.
www.ipsgroupinc.com

Contact:
Chad P. Randall
Chief Operating Officer
IPS Group, Inc.
Direct: 858.404.0607
Fax: 858.408.3352
chad.randall@ipsgroupinc.com

INTRODUCTORY LETTER

July 2, 2013

Mr. Paul Sheridan
Department of Public Works
Parking Services Division
300 Richards Blvd., 2nd Floor
Sacramento, CA 95811

Dear Mr. Sheridan:

IPS Group, Inc. appreciates the opportunity and would like to express our strong interest in submitting this proposal to the City of Sacramento. IPS Group is proud to present our Single Space Parking Meter solution in response to the City of Sacramento's Request for Proposal (RFP) for Parking Meter Procurement Bid #P13151171027. IPS confirms that we have reviewed all of the RFP requirements, documentation and addendums associated with this RFP and we believe that IPS is submitting a proposal designed for the unique needs of the City of Sacramento.

Our Solution/Implementation Approach

Our goal is to develop a long-term partnership, rooted in open, honest communication, close cooperation, responsive customer service, and practical application of parking technologies. Our project approach for Sacramento is founded on IPS's proven technology, highly experienced team members, and various value-added items at no additional cost.

For the single-space meter requirement, the meter technology solution is the IPS credit card-enabled single-space meter, which retrofits into existing on-street meter housings, while incorporating additional payment options (credit/debit card, coins, smart card, pay-by-cell, contactless payment), access to real-time parking meter data, solar-power technology, a comprehensive web-based meter management system, and integration with proven pay-by-cell providers. Additionally, IPS will be subcontracting to Medeco to provide the electronic locks as part of our offering. This combination represents the most cost effective and user-friendly approach when upgrading to new meter technology, while also capitalizing on the finely tuned meter operations and maintenance programs in place today.

Relevant Experience to Proposed Solution

IPS has the most experience in the industry when it comes to credit card-enabled single-space parking meters. As the inventor of the credit card-enabled single-space parking meter, IPS operates more than 100,000 of these parking meters across the US and Canada, in more than 100 cities. We are the only company with proven technology and demonstrated ability to scale our single-space, credit card-enabled parking meter solution on a large scale basis of the scope and size of the City of Sacramento, as demonstrated in Californian cities like Los Angeles, San Francisco, Santa Monica, and many others. Complete details are contained in the sections that follow. IPS truly understands the need for superior service and support and we are committed to providing all of the necessary resources to make this project a complete success.

IPS Solution and Summary of Differentiators for The City of Sacramento	
PROVEN Technology	IPS provides the only proven single-space credit card-enabled parking meter that has demonstrated the ability to scale in a city of similar size to Sacramento. • 100,000+ credit card-enabled smart meters installed in 100 Cities with multiple large scale deployments of 5,000+ meters, including: San Francisco, Los Angeles, Santa Monica, Denver. • Approximately 4 million credit card transactions processed in real-time per month.
CALIFORNIA Based	Based in San Diego, CA, IPS manufacturing is conducted in California, ensuring the very best response to the City's needs, creating local jobs, and helping our local economy. Additionally, our meter management systems, card processing, information storage and engineering support are all based in California, ensuring maximum responsiveness, ongoing support and the ability to quickly adapt to the future requirements of the City.
SERVICE Focused	IPS has selected the very best team with exceptional field-based experience to provide local project implementation and ongoing service and support; including dedicated project management and field service resources located in Northern California (as well as support from San Diego), specifically focused on this project.
FLEXIBLE System	As a leader in parking meter technology, IPS understands the importance of listening to our customers. IPS is already able to comply with your desire to retrofit with three different housing styles, enable pay-by-cell functionality immediately, and ultimately provide a complete and customized suite of value added services that meet your needs for today and are adaptable to meet your changing needs in the future.
COST Conscience	IPS is proposing a competitive and transparent price proposal which represents a value based approach to meet the performance requirements while also balancing the financial needs of the City. We prefer to be up front and honest with our pricing options, in addition to offering alternatives for your consideration.

We clearly understand that the City is seeking the best meter and parking technology options available. We believe that when you compare the strength and experience of the IPS team, the proven nature of the IPS single-space solution proposed, and the superior total cost of ownership, that you will agree that our team is uniquely positioned to provide the City of Sacramento with outstanding products, people, and support.

We thank you for the opportunity to serve the City of Sacramento and greatly look forward to happy, successful and rewarding partnership.

Respectfully,

Chad P. Randall - Chief Operating Officer, IPS Group Inc. (*authorized to legally bind*)
Chad.Randall@ipsgroupinc.com
Direct: 858.568.7609
Mobile: 858.414.0872

This pricing proposal contained in the sealed envelope represents a firm offer, valid for a 180-day period

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1. Mandatory Requirements/Minimum Qualifications

a. Describe how the project manager and the team are qualified for this project. List any previous experience that uniquely qualifies the team for this type of project. Identify the employees and their roles for this project. Provide contact information, including phone number, cell phone number, email address, and fax number.

Team Organization: We are utilizing our most seasoned parking professionals for the City of Sacramento's Parking Meter Procurement project. Our dedicated team has over 100 years' combined experience in engineering, operations, administration and management and have worked together to successfully deploy IPS meters and sensors on a scale similar to or above that described in this RFP. Furthermore, IPS Group, Inc. is headquartered in San Diego, CA and performs all manufacturing, engineering, data hosting, customer support, marketing and more at our corporate headquarters. In doing so, IPS helps drive the California economy, provides jobs to local residents and is capable of providing the level of after-the-sale support that the City desires. Below are brief profiles of the team who will be directly involved with this project in the City of Sacramento.

Chad Randall, Chief Operating Officer

Role: Authorized to bind and negotiate
Contact Information: chad.randall@ipsgroupinc.com
Phone: (858) 404-0603
Cell phone: (858) 568-7609
Fax: (858) 408-3352
Experience: Chad Randall serves as Chief Operational Officer of IPS Group, Inc. As COO, Randall is responsible for the broad oversight of IPS Group's ongoing operations and maintains direct supervision of the Company's business development unit. Randall joined the Company in 2008 at his current position, bringing many years of Fortune 500 corporate experience in both the automotive and instrumentation industries. In addition to business management, Randall has functional experience in engineering, manufacturing, marketing and product line management. Prior to taking on the role of COO at IPS Group, Randall was responsible for a global product line of $100M+ for a Fortune 250 Corporation. Randall holds a Bachelor of Science in Mechanical Engineering from Rose-Hulman Institute of Technology and a Masters in Business Administration from Harvard Business School.

Alex Schwarz, Chief Technical Officer

Role: All meter and back office technical integration
Contact Information: alex.schwarz@ipsgroupinc.com
Phone: (858) 404-0603
Cell phone: (858) 353-0968
Fax: (858) 408-3352
Experience: Alex Schwarz serves as the Chief Technical Officer of IPS Group, Inc. As CTO, Schwarz has played a major role in the development of IPS' flagship product, the solar powered single-space parking meter and is responsible for the oversight of IPS Group's research and development efforts. Schwarz joined IPS Group in 1998 as a specialist in information technology and cellular telecommunications. Schwarz has comprehensive knowledge of the design and manufacturing of electronic peripherals, electronic parking meters and cellular interface technology (CDMA and GSM). As a telecommunications developer, he has worked extensively with all of the major cellular network providers, including Verizon and formerly Cingular Wireless.

Amir Sedadi, VP Intelligent Transportation Systems

Role: Senior Operations and Project Consultant
Contact Information: amir.sedadi@ipsgroupinc.com
Phone: (562) 373-4520
Cell phone: (213) 379-3456
Fax: (858) 408-3352
Experience: Mr. Sedadi has over 22 years of transportation management, engineering, and policy experience with expertise in the areas of intelligent parking management operations & policies; traffic operations and traffic control; transportation planning, design and construction; major special event planning; budget; and administration. Mr. Sedadi recently retired from the City of Los Angeles Department of Transportation (LADOT). As the Assistant General Manager, he was responsible for the Office of Parking Management, Planning and Regulations. Sedadi also served as Interim General Manager responsible for the entire Department of Transportation for a six month period at the request of Mayor Antonio R. Villaraigosa.

Lauri Keller, Director of Sales, Western Region

Role: Primary Sales Contact
Contact Information: lauri.keller@ipsgroupinc.com
Phone: (858) 404-0603
Cell phone: (619) 994-6232
Fax: (858) 408-3352
Experience: Lauri joined IPS Group in September 2009. With a primary focus on sales efforts in the western US, Lauri has over 15 years of experience of sales and marketing in the region. Prior to joining IPS, Lauri was the Director of Membership Development for TechAmerica from 2004-2009. Lauri also served as the Western Regional Marketing Manager for Lockheed Martin IMS (now ACS) Photo Enforcement Division. During her six years in the photo enforcement industry, Lauri secured many of the first-time red light and photo radar programs in the country. Lauri previously worked as a public affairs consultant and holds a Bachelor of Science degree from University of Oregon.

Paul Thomson, Technical Support Manager

Role: Technical Support Manager
Contact Information: paul.thomson@ipsgroupinc.com
Phone: (858) 404-0603
Cell phone: (612) 655-9578
Fax: (858) 408-3352
Experience: Paul Thomson serves as the primary support technician and manager of the technical support team for IPS Group. As a former operations manager, Thomson has experience managing teams of 100+ remote technicians, establishing a successful RMA program, providing timely and efficient customer support, and creating field service quality metrics. Thomson has over 20 years' experience in the high-tech industry, including telecommunications, biometric security and video-based fleet vehicle telematics.

Martin Plaisance, Product Support Engineer

Role: Lead Support Engineer
Contact Information: martin.plaisance@ipsgroupinc.com
Phone: (858) 404-0603
Cell phone: (619) 274-6676
Fax: (858) 408-3352
Experience: Martin Plaisance serves as IPS Group's lead product support engineer/technical support liaison to the engineering department, as well as the lead support engineer for resolving all cellular communication issues related to the IPS meter, working directly with IPS' cellular service provider. Starting with IPS in 2011 Martin started off leading installations for the product support team, and over the years he has developed the experience and knowledge base to be the first point of contact for all customers who have any questions or require technical support.

Plaisance joined IPS Group in the summer of 2011. Prior to working with IPS, Martin was a lead Field support Engineer for one of the largest medical supply companies in the world. Martin received a Bachelor's of Science degree from Coleman University in 2007 and has a background in Computer Networking and Customer Support and has proven leadership skills in addition to his technical experience.

TEAM FOR ON-SITE SUPPORT IN SACRAMENTO

IPS is committed to providing the City of Sacramento with a local project team of professionals for the term of the contract. Below we have included the resumes of three potential on-site project managers based on the final schedule of the project.

Julie Dixon, Dixon Resources Unlimited

Role: On-site Project Manager for City of Sacramento
Contact Information: julie@dixonresourcesunlimited.com
Phone: (858) 404-0603
Cell phone: (213) 716-6933
Fax: (858) 408-3352
Experience: With over 20 years of parking and transportation management experience, Julie Dixon has been directly supporting municipalities throughout the United States, including extensive California parking management experience. Her direct involvement with the City of Los Angeles Parking Meter Collections contract brings a perspective and operational knowledge allows our team to offer an innovative approach with an understanding of the direct impacts of our state-of-the-art approach. As her career path evolved, Ms. Dixon directed and managed all aspects of various complex transportation programs, including the City of Los Angeles Automated Enforcement Program and the City & County of San Francisco Parking Meter Counting, Collections and Management System. For the last six years, Ms. Dixon's primary focus has been the ongoing support for two of the largest parking programs in the country, the City of Los Angeles and the City & County of San Francisco, and for one of the most successful customer service-based parking enforcement programs, the City of West Hollywood. In 2008, Ms. Dixon began her direct involvement with San Francisco Municipal Transportation Agency (SFMTA) for the internationally-recognized SF*park* pilot program.

Enes Ceric, Project Manager

Role: On-site Project Manager for City of Sacramento
Contact Information: enes.ceric@ipsgroupinc.com
Phone: (858) 404-0603
Cell phone: (858) 568-7648
Fax: (858) 408-3352
Experience: Most recently Ceric served as the technical lead for Serco for SFMTA and Port of San Francisco. In this role Ceric served as the liaison between external vendors and SFMTA throughout the installation process for the SF*park* project. He is certified by all current parking meter vendors. Ceric also provided customer support during the installation of the new IPS M5 meters in Berkeley, as well as the deployment of IPS sensors in Walnut Creek. He is currently working with the City of San Jose on a pilot program involving 62 meters and 20 sensors. In addition to his expertise in project management, Ceric has experience in logistics and product support, having previously served as the Product Support Technician for the San Francisco Department of Parking and Traffic.

Steve Smeenge, Customer Support Manager

Role: On-site Project Manager for City of Sacramento
Contact Information: steve.smeenge@ipsgroupinc.com
Phone: (858) 404-0603
Cell phone: (858) 444-5540
Fax: (858) 408-3352
Experience: Steve Smeenge joined IPS Group in July 2010 and comes to IPS with a strong background in sales and marketing. Smeenge has over 17 years of experience providing technology solutions to local government and businesses. As Customer Support Manager, Smeenge offers customers the best in installation and ongoing support with both hardware and software. Steve has worked with many cities of similar size and scope to the City of Sacramento and will bring valuable experience to the project. Steve holds a Bachelor of Science degree from Central Michigan University.

b. The Vendor and its products must meet or exceed the following criteria:

• The Vendor or its principals shall demonstrate that they have been in the parking meter business for a minimum of seven years.

IPS Group, Inc. has been in the parking and telecommunications business for nearly 20 years (starting in South Africa), with installations in the US, Canada, South Africa, United Kingdom, Australia and New Zealand. IPS began as a wireless telecommunications company, providing pay-phone solutions and telephone management systems to countries all over the world. Today, while our telecommunications experience sets IPS apart, our focus on designing, manufacturing, and supporting the best parking meter on the market has become our focus. Currently, IPS operates more than 100,000 credit card-enabled single-space parking meters across the US and Canada, in more than 130 cities.

IPS Key Differentiators

- All manufacturing, credit card processing, data hosting, engineering and support services are based in California which drives our state economy and provides a high level of service to the City of Sacramento.
- IPS is the inventor of the credit card enabled single-space parking meter and has the most experience of any single-space parking meter company when it comes to credit card-enabled single-space parking meters
- IPS operates more than 100,000 credit card-enabled solar-powered single-space parking meters across the US and Canada, in more than 130 cities
- Approximately 4 million credit card transactions are processed by IPS per month
- Approximately $140 million in total City revenue in 2012 generated by IPS meters

IPS is a privately held corporation, establishing our US based operations in 2000 and is headquartered at 5601 Oberlin Drive, Suite 100, San Diego, CA 92121. Supporting California's economy, IPS's manufacturing processes, final assembly, engineering, card processing, database management, and web-hosting services are all located in San Diego, CA, and many of our suppliers are also located in the State of California.

We believe our experience in the technology and telecommunications industries has helped us create products that provide the best combination of convenience, user experience, enforceability and cost of ownership among any parking meter product in the industry today.

• The proposed technology manufacturer (if different from above) shall have been in the parking meter business for a minimum of seven years. N/A

IPS has more wireless devices deployed than our competitors combined.

• The proposed technology manufacturer shall have an electronic meter mechanism installation base of a minimum of 15,000 mechanisms in North American markets.

IPS is the only PROVEN credit card-enabled single-space parking meter vendor with more than 100,000 credit card-enabled single-space parking meters across the US and Canada, in more than 130 cities. While many of our competitors are just beginning to enter the credit card-enabled single-space market, IPS has been refining and advancing this technology and is offering the City of Sacramento our fifth-generation model, the M5. As outlined in detail within our proposal, the M5 incorporates enhanced payment options, unsurpassed power efficiency, and access to our state-of-the-art Data Management System.

Awards: We believe our experience in the technology and telecommunications industries has helped us create products that provide the best combination of convenience, user experience, enforceability and cost of ownership among any parking meter product in the industry today. As evidence of such, IPS has been recognized with many awards including:

- First place in the Deloitte Technology Fast 50 (an honor bestowed upon the fastest growing technology companies)
- International Design Award, 2009
- Clean Technology Award, 2009
- Connected Word Value Chain Award, 2012
- US Mayors for Excellence in Public/Private Partnership for Coin/Credit Parking Meter Technology Upgrade in the City of Los Angeles, CA January 2012.
- Vic Kops Humanitarian Award, Alonzo Awards, 2012

• The Vendor shall have participated in a minimum of two procurement projects of at least 5,000 devices within the last seven years.

1. City of San Francisco, SFMTA
- 5,900 single-space parking meters
- Trial in 2008/2009, procurement in 2010

2. City of Santa Monica, CA
- 6,000 single-space parking meters & 6,000 sensors
- Trial in spring 2011, procurement in fall 2011

3. City of Los Angeles, CA
- 33,000 single-space parking meters
- Trial in 2009, procurement in 2010

4. City of Denver, CO
- 5,700 single-space parking meters
- Procurement in 2008

Additionally, IPS meters are deployed on a large scale in the following cities:

1. City of Walnut Creek, CA
- 1,600 single-space parking meters and 1,000 sensors
- Procurement in 2010

2. City of Berkeley, CA
- 1,500 single-space parking meters
- Procurement in 2012

3. Washington, DC

- 3,000 single-space parking meters
- Procurement in 2012

4. City of Columbus, OH

- 2,800 single-space parking meters
- Procurement in 2011

5. City of New Haven, CT

- 1,500 single-space parking meters
- Procurement in 2011

6. City of Cincinnati, OH

- 1,400 single-space parking meters
- Procurement in 2011

7. City of Bloomington, IN

- 1,500 single-space parking meters
- Procurement in 2013

8. City of Indianapolis, IN

- 1,400 single-space parking meters
- Procurement in 2011

c. The Vendor must provide documentation of the following items:

• Proposed Meter Mechanism and/or Paystation payment software shall be Payment Application Data Security Standard (PA-DSS) validated by a Payment Application Qualified Security Assessor (PA-QSA) and be verified on PCI SSC's list of PA-DSS validated payment applications.

IPS Group is Payment Application Data Security Standard (PA-DSS) validated by a Payment Application Qualified Security Assessor (PA-QSA) and be verified on PCI SSC's list of PA-DSS validated payment applications. Please see the Appendix for copies of our certifications.

• Contractor's payment software submitted for PA-DSS validation should incorporate:

- "Hold and Send" protocol
- Contactless Payment
- Remote connections capability such as Short Messaging Service (SMS).

IPS complies. Our payment software incorporates the above features.

d. The Vendor's credit card gateway shall have appropriate Payment Card Industry Data Security Standards (PCI DSS) certification as a Level 1 Service Provider (https://www.pcisecuritystandards.org/index.shtml). The credit card gateway shall meet the credit card data security requirements outlined by the Payment Card Industry Security Standards Council (PCI SSC) for service providers and/or software vendors. Compliance with PCI DSS shall have been achieved through a third party audit process. The Proposer shall comply with Visa Cardholder Information Security Program (CISP) and MasterCard Site Data Protection (SDP) programs.

IPS complies. Please see the Appendix for copies of our PCI-DSS Level 1 certification as well as our listings with the Visa Cardholder Information Security Program (CISP) and MasterCard Site Data Protection (SDP) programs.

e. Annual Report on Compliance ("ROC") by Qualified Security Assessor ("QSA") or internal auditor if signed by officer of the company.

Per Addendum 1, issued on June 14, 2013, IPS Group is submitting a screenshot of IPS Group's listing on Visa's listing of Global List of Service Providers and on MasterCard's listing of Compliant Service Providers in lieu of item e. above. This information is provided in the Appendix found in Chapter 13. IPS will supply such confidential information to satisfying any further City requirements prior to contract signing.

f. Quarterly network scan by Approved Scan Vendor ("ASV").

Per Addendum 1, issued on June 14, 2013, IPS Group is submitting a screenshot of IPS Group's listing on Visa's listing of Global List of Service Providers and on MasterCard's listing of Compliant Service Providers in lieu of item f. above. This information is provided in the Appendix found in Chapter 13. IPS will supply such confidential information to satisfying any further City requirements prior to contract signing.

g. Attestation of Compliance (with PCI requirements) Form. For more information on these requirements, please go to the following site:
http://usa.visa.com/merchants/risk_management/cisp_merchants.html

Per Addendum 1, issued on June 14, 2013, IPS Group is submitting a screenshot of IPS Group's listing on Visa's listing of Global List of Service Providers and on MasterCard's listing of Compliant Service Providers in lieu of item g. above. This information is provided in the Appendix found in Chapter 13. . IPS will supply such confidential information to satisfying any further City requirements prior to contract signing.

Appendix C: Specification Compliance Worksheet

Each Technical Specification from Appendix F, *Single Space Meter Technical Specifications,* is summarized here (excluding Deliverables). The Proposer shall indicate its compliance with each of the complete specifications, as written in Appendix F. This document will be used to assist in scoring, and this document may become part of the binding procurement contract for Single-Space Parking Meters and Management System; as the Proposer is indicating whether or not it complies with each specification. By answering "Yes", Proposer is indicating full compliance with the specification as written in Appendix F. A "Yes" answer shall not be qualified in any way, as "Yes" shall mean full compliance; however, comments indicating how the proposer exceeds the specification are welcome.

		Yes or No	Comment
SECTION I: ADMINISTRATIVE			
A.	**Administrative: General Specification Requirements**		
	The meter hardware and software spec f cat ons n the Proposer's subm tta sha match the equ pment capab t es and support ng software that the Proposer de vers upon execut on of the contract.	Yes	IPS w comp y.
1)	**Training:**		
	a. The Contractor sha prov de the tra n ng per Sect on 1.A.1) Tra n ng:	Yes	See be ow.
	. Enforcement Tra n ng as spec f ed.	Yes	IPS can prov de the C ty w th on-s te tra n ng, web nars, and power po nt presentat ons as requested by the C ty. Add t ona y, IPS s prov d ng a oca project manager and f e d serv ce techn c an that can prov de ongo ng tra n ng at any t me requ red by Park ng Serv ces.
	. Co ect ons Tra n ng as spec f ed.	Yes	IPS w conduct on-s te co ect ons tra n ng to ensure C ty staff are we educated on the IPS meter co ect ons process. Co ect ons at the IPS meter w be very s m ar the C ty's current s ng e-space meter's co n co ect on process.
	. Techn ca Tra n ng as spec f ed.	Yes	Techn ca tra n ng w be conducted as requested by the C ty. The IPS meter s modu ar y des gned to ensure ease of ma ntenance n and out of the f e d.
	v. F nanc a and Adm n strat on Tra n ng as spec f ed.	Yes	IPS w comp y.
	v. Dep oyment Tra n ng as spec f ed.	Yes	IPS w comp y.
	v . Tra n and cert fy one or more Park ng Serv ces des gnees as spec f ed.	Yes	IPS w comp y.
	b. The Contractor sha prov de a on-s te tra n ng n Sacramento, Ca forn a, at a ocat on to be determ ned by Park ng Serv ces. The Contractor sha cover a trave and other costs assoc ated w th tra n ng.	Yes	IPS w comp y.
	c. If, at Park ng Serv ces' so e d scret on, more tra n ng s requ red, the Contractor sha prov de up to three add t ona , e ght-hour days of deta ed tra n ng cover ng dep oyment, ma ntenance, f nance/account ng/aud t, enforcement, and MMS usage, as schedu ed by Park ng Serv ces.	Yes	IPS w comp y.
	d. Contractor sha ensure that n t a tra n ng for system managers, Meter Shop f e d personne , enforcement staff, and co ect on staff s comp eted pr or to turn ng on the new meters accord ng to a schedu e to be approved by Park ng Serv ces.	Yes	IPS w comp y.
	e. Contractor sha supp y and keep current hard and d g ta cop es of a operat ng, tra n ng and repa r manua s. These comprehens ve manua s w ref ect a aspects of tra n ng descr bed above, to prov de a reference to personne .	Yes	IPS w comp y.

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	f. Contractor sha grant the C ty r ghts to reproduce a tra n ng and operat on manua s needed for staff.	Yes	IPS w comp y.
2)	**Customer Support**		
	a. The Contractor sha prov de the fo ow ng customer support:	Yes	See be ow.
	. A to -free number as spec f ed.	Yes	1-877-630-6638
	. If Customer Support s not ava ab e, ca backs as spec f ed.	Yes	IPS a so offers 24/7 emergency number n the case of afterhours, weekends or on ho days.
	. Subcontractor(s) are subject to the same ava ab ty standards.	Yes	IPS understands th s requ rement and w ensure comp ance w th a subcontractors.
	v. Contractor sha send a representat ve w th n four hours when on-s te reso ut on s requ red.	Yes	IPS has support staff ocated oca y and can prov de on-s te.
3)	**Warranty**		
	a. Warranty per od sha commence when the ent re phase s accepted n wr t ng.	Yes	IPS w comp y.
	b. The meters sha be warranted as spec f ed for at east f ve years.	Yes	IPS w comp y.
	c. The Contractor sha pay for warranty sh pments as spec f ed.	Yes	IPS w comp y.
	d. A new software and f rmware re eases prov ded at no cost, as spec f ed.	Yes	IPS w comp y.
	e. The Contractor sha supp y and ma nta n rep acement components as spec f ed.	Yes	IPS w comp y.
	f. Meter mechan sms sha be rep aced/repa red w th n two (2) bus ness days as spec f ed.	Yes	IPS w comp y.
	g. Meters sha be warrant ed to operate as proposed n spec f ed cond t ons.	Yes	IPS w comp y.
6)	**Installation**		
	a. Each mechan sm sha be de vered comp ete, as spec f ed.	Yes	IPS w comp y.
	b. Contractor sha be respons b e for hand ng and storage/warehous ng of a mater a s, as spec f ed	Yes	IPS can prov de oca storage fac t es pr or to de very and nsta t on, or can stage products as further d rected.
	c. Meters sha be proper y conf gured, tested, networked and fu y operat ona as spec f ed.	Yes	IPS can prov de a deta ed test ng requ rements from factory test ng upon request.
	d. The Contractor sha create e ectron c nventory records as spec f ed.	Yes	Our meter management system current y captures such nformat on and s ava ab e anyt me on ne.
	e. Insta at on scenar os:	Yes	See be ow.
	. An ex st ng meter w have a new mechan sm and dome nsta ed as spec f ed.	Yes	IPS w work w th the C ty to ensure the most eff c ent nsta at on of meters throughout the c ty as requested.
	. A po e w have a new hous ng, mechan sm and dome nsta ed as spec f ed.	Yes	IPS w comp y.
7)	**Certification and Compliance**		
	The proposed equ pment sha have and ma nta n the fo ow ng cert f cat ons, and sa d cert f cat ons sha be subm tted w th the proposa . If the Proposer s not ab e to meet a requ rement by the proposa subm tta dead ne, t sha nd cate the projected t me ne for obta n ng such cert f cat on.	Yes	IPS understands and current y comp es w th these requ rements. A cert f cat ons are ocated n Chapter 13 of th s proposa .
	a. PCI cert f cat on as requ red and spec f ed for the term of the Contract.	Yes	as per above.
	b. Mechan sms sha be manufactured under ISO 9001:2008 cert f ed qua ty processes.	Yes	as per above.
	c. The unass sted “Rea T me C ock” accuracy sha be cert f ed as spec f ed.	Yes	as per above.
	d. Mechan sms sha be FCC-approved as spec f ed, nc ud ng:	Yes	as per above.
	. Modem	Yes	as per above.
	. Contact ess Card Reader	Yes	as per above.
	. RFID Reader	Yes	as per above.

	v. ISM Band Transce vers (.e. veh c e sens ng techno ogy etc.)	Yes	as per above.
	e. Env ronmenta test ng and cert f cat on of the proposed Mechan sm sha be carr ed out by an ndependent th rd party test ab, and sha nc ude hot, co d and hum d ty test ng. If the Proposer s not ab e to meet th s requ rement by the proposa subm tta dead ne, t sha nd cate the projected t me ne for obta n ng such cert f cat on.	Yes	as per above.
	. Hot cyc e test ng as spec f ed.	Yes	as per above.
	. Co d cyc e test ng as spec f ed.	Yes	as per above.
	. Hum d ty cyc e test ng as spec f ed.	Yes	as per above.
8)	**Acceptance and Functionality**		
	a. Acceptance of the meters sha occur after successfu nsta at on as spec f ed.	Yes	IPS w comp y.
	b. A "funct ona meter" s as spec f ed.	Yes	A meters w be comm ss oned proper y and w funct on to the spec f cat ons of the C ty. The IPS nsta at on team w fo ow the check st g ven n order to ensure acceptance cr ter a are met.
	c. Acceptance of the ent re system based on cr ter a as spec f ed.	Yes	IPS w comp y.
	d. Acceptance sha occur upon C ty's de very of not ce to Contractor	Yes	IPS w comp y.
	e. Acceptance of rep acement parts sha occur upon rece pt by Park ng Serv ces	Yes	IPS w comp y.
B.	**Additional Administrative Requirements**		
1)	Mob e Payment Integrat on as spec f ed.	Yes	IPS a ready comp es.
2)	Park ng Meter Buyback	Yes	See pr c ng for add t ona deta s.
4)	Revenue Process ng	Yes	See be ow.
	a. The cred t card payment gateway prov der sha be compat b e w th and cert f ed for use as spec f ed.	Yes	IPS a ready comp es.
	b. Park ng Serv ces reserves the r ght to renegot ate gateway fees as spec f ed.	Yes	IPS understands and w comp y w th th s requ rement. However, certa n costs may app y for IPS to prov de such connect v ty, nc ud ng ntegrat on w th another 3rd party and wou d need to be determ ned at that t me based on the request of Park ng Serv ces.
	c. Depos ts must be made to a C ty-owned account.	Yes	IPS w comp y.
6)	Prov de a des gn for nstruct ona deca s.	Yes	IPS w offer the C ty an array of suggested nstruct ona deca s. Shou d the C ty need custom deca s des gned the IPS des gn team can deve op these qu ck y for the C ty.
SECTION II: METER MECHANISM			
A.	**Meter Mechanism General Specification Requirements**		
1)	**General**		
	a. The meter mechan sms must be compat b e w th ex st ng hous ngs as spec f ed.	Yes	Pr c ng for add t ona hous ngs compat b e w th those sted s g ven n Chapter 12 (separate enve ope).
	a. Lock n p ace nto the hous ng us ng the current ock/key system for each type of hous ng.	Yes	IPS w comp y.
	b. A mater a s and components of the meter sha be new and unused.	Yes	IPS w comp y.

	c. Meters and assoc ated systems comp y w th a app cab e ADA regu at ons as spec f ed.	Yes	IPS meters are a retrof t of ex st ng s ng e space meters and assummes that a ex st ng meter post/hous ng he ghts are comp ant. For the nsta at on of new posts/hous ngs or mod f cat ons as such, IPS w ensure ADA comp ance.
	d. Modu ar des gn to be exchanged or rep aced n the f e d n ess than 10 m nutes.	Yes	IPS meters are modu ar y des gned and are eas y exchanged or rep aced n the f e d.
	e. A e ectron c components, connect ons, CPU and w r ng sha be fu y weatherproofed for the r usefu fe.	Yes	A PCB's and connectors are conforma coated to protect aga nst mo sture. To further enhance weatherproof ng w th the co n va dator, the M5 has a shrouded connector to he p keep the connect on dry.
	f. Equ pped w th a m n mum of two SAMs sockets capab e of accept ng card schemes (e.g., trans t cards).	Yes	IPS meter mechan sms have two SAM sockets on the ma n board (J19 and J20).
	g. Bu t- n d agnost cs software that date- and t me-stamps a events as spec f ed.	Yes	The meter and handhe d w commun cate the date/t me stamps of ma ntenance events to the MMS. Meter ma ntenance app cat on s ava ab e on Andro d, Phone, and Pad app cat ons. Meter Ma ntenance manua s are ava ab e under the he p tab n the MMS and cop es are ocated n the Append x of th s proposa .
	h. Out-of-order funct on that date- and t me-stamps the out-of-order event as spec f ed.	Yes	Meter out-of-order fau ts are sent d rect y v a the w re ess network to the MMS system and date/t me stamps are automat c. Th s nformat on s sent v a ema and/or text message and s a so ava ab e v a the IPS meter ma ntenance app cat on. Further custom zat on of not f cat ons are ava ab e.
	. If the card reader fa s, a ow co n payment; f the co n chute fa s, a ow cred t/deb t card payment.	Yes	Messag ng on the meter s conf gurab e and genera y states “No Cards, Co ns On y” when the card reader s out of order and “No Co ns, Cards On y” when there s a co n va dator/chute fau t.
	j. The meter sha a ow for add ng t me to an ex st ng park ng sess on, up to the max mum t me m t.	Yes	Add t ona t me can be added w th any form of payment after the n t a payment.
	k. Meters sha accept a ava ab e types of payment for add ng t me.	Yes	A payment types a ow the motor st to add add t ona t me to the meter.
	. Meters sha per od ca y down oad and store the Hot st from the MMS as spec f ed.	Yes	Frequency can a so be adjusted upon request from the C ty.
2)	**Coin Chute**		
	a. Co ns sha be depos ted d rect y nto a sea ed conta ner n a separate vau t area of the meter.	Yes	The IPS meter passes co ns through the co n chute, wh ch w depos t co ns d rect y nto the meters sea ed conta ners n the ower vau t of the meter (separate from the upper hous ng).

	b. Meters sha prov de a count of a nva d co ns.	Yes	IPS meters w keep track of a nva d co ns depos ted n the meter. An accurate count of rejected co ns can be found n the MMS.
	c. If the co n s ot s noperab e, meters accept card payments.	Yes	If the co n s ot s noperab e, IPS meters w d sp ay a screen d rect ng the motor st to a ternate payment opt ons, such as "Card On y" for payment and w accept cred t/deb t, smart cards, and pay-by-ce transact ons.
	d. The co n chute or track sha be a free-fa type.	Yes	IPS comp es.
	e. The chute sha nc ude an ant -backup prov s on to prevent the retr eva of depos ted co ns.	Yes	The M5 va dator conta ns ant -f sh ng teeth and the meter f rmware detects co n reversa , ensur ng cred t s not g ven for co ns attempt ng to return through the va dator.
	f. The entrance to the chute sha be rep aceab e sta n ess stee to accommodate or screen out co ns.	Yes	The IPS meter ut zes a rep aceab e sta n ess stee co n entry s ot.
	g. The jam a arm sha on y stay act ve as ong as the cause of the jam s present n the co n chute.	Yes	The co n jam a arm stays act ve unt the jam s removed from the meter. The meter w ca n when a ma ntenance event occurs at the meter and the d agnost cs mode s ex ted.
	h. When the co n chute detects a jam, the jams sha be recorded n the ma ntenance og. At a m n mum:	Yes	See be ow.
	. bent paper c p	Yes	IPS comp es.
	. bent soda can tab	Yes	IPS comp es.
	. cotton	Yes	IPS comp es.
	v. toothp ck	Yes	IPS comp es.
	v. fo ded paper or cardboard (matchbook cover, bus ness card, etc.)	Yes	IPS comp es.
	v . fo ded p ast c straw	Yes	IPS comp es.
	v . coffee st rrer	Yes	IPS comp es.
	v . co n-wrapped n tape	Yes	IPS comp es.
3)	**Coin Validation**		
	a. Prov de a count of a va d co ns or va d tokens pass ng through the co n chute to an accuracy eve of 99%	Yes	IPS has run th s va dat on report for current customers and has been found to be comp ant w th th s requ rement.
	b. Programmab e to accept a m n mum of e ght d fferent co ns and/or tokens as spec f ed.	Yes	IPS mechan sms can be programmed to accept 16 d fferent co ns/tokens.
	c. Accept a user-def ned co ns and tokens through software parameter changes as spec f ed.	Yes	IPS s ab e to update meters remote y to accept new user def ned co ns (assum ng new co ns f t n the co n s ot). In eu of us ng a mob e/handhe d dev ce, new user def ned co ns can be added us ng the advanced meter d agnost c menu (co n test). Th s s ach eved by nsert ng at east 10 co ns of the user def ned type to tra n the meter.

	d. If U.S. M nt changes currency, the Contractor sha , at ts own expense, update the software as spec f ed.	Yes	IPS cannot know w th certa nty what k nds of co ns may be used, nc ud ng any unforeseen var ab es. However, IPS w comp y as ong as prov ded suff c ent t me to prof e the co ns.
	e. The Contractor sha be ab e to a ter the co n tab e as spec f ed.	Yes	IPS s ab e to update meters remote y to accept new user def ned co ns (assum ng new co ns f t n the co n s ot). In eu of us ng a mob e/handhe d dev ce, new user def ned co ns can be added us ng the advanced meter d agnost c menu (co n test). Th s s ach eved by nsert ng at east 10 co ns of the user def ned type to tra n the meter.
	f. Co n va dator and co n chute: no contact po nts that cou d be affected by gr me or mo sture, as spec f ed.	Yes	IPS comp es.
	g. The co n va dat on system sha reg ster both meta c and non-meta c jams.	Yes	IPS comp es.
4)	**Screen**		
	a. Screens sha have a conf gurab e back ght as spec f ed.	Yes	The IPS meter back ght feature can be conf gured to f t the C ty's needs, nc ud ng reg ster ng amb ent ght, etc. The IPS back ght feature s turned on once the meter has been "woken up" by push ng any button or beg nn ng a payment transact on (nsert ng co ns or card).
	b. Date and t me sha be d sp ayed on the screen at a t mes when the meter s "on."	Yes	Th s s a standard feature on a IPS meters.
	c. Meter ID sha be v s b e on one of the nformat on screens.	Yes	The nformat on screen can be conf gured to d sp ay the Post ID on any screen.
	d. Screens sha be ab e to e ectron ca y d sp ay:	Yes	P ease see examp es n the De verab es sect on of th s proposa .
	. Rates	Yes	as per above.
	. Days and hours of operat on	Yes	as per above.
	. Tow nformat on	Yes	as per above.
	v. Instruct ons to the customer	Yes	as per above.
	e. The screen sha be eg b e and v s b e under a dayt me and n ghtt me ght ng cond t ons as spec f ed.	Yes	The arge 160 x 160 p xe M5 meter d sp ay s v s b e n a ght ng cond t ons and at var ous ang es
	f. The screen sha be res stant to vanda sm.	Yes	The screen s protected by a z nc a oy dome and c ear Lexan cover, and has been f e d proven to be res stant to vanda sm.
	g. D sp ay current t me per od, rate or regu at on, and whether the meter has t me eft or s exp red.	Yes	IPS comp es.
	h. Fu y programmab e to d sp ay, at a m n mum, the fo ow ng cond t ons, a as spec f ed:	Yes	P ease see De verab es for examp es of cond t ons sted be ow.
	. Cond t on 1	Yes	as per above.
	. Cond t on 2	Yes	as per above.
	. Cond t on 3	Yes	as per above.
	v. Cond t on 4	Yes	as per above.
	v. Cond t on 5	Yes	as per above.
	v . Cond t on 6	Yes	as per above.

	v . Cond t on 7	Yes	as per above.
	v . Cond t on 8	Yes	as per above.
	x. Cond t on 9	Yes	as per above.
	x. Cond t on 10	Yes	as per above.
	x . Cond t on 11	Yes	as per above.
	x . Cond t on 12	Yes	as per above.
	x . Cond t on 13	Yes	as per above.
	x v. Cond t on 14	Yes	as per above.
	xv. Cond t on 15	Yes	as per above.
	xv . Cond t on 16	Yes	as per above.
	xv . Cond t on 17	Yes	as per above.
5)	**Meter Interface**		
	a. The meter sha have a mechan sm for nputt ng nformat on (e.g., buttons, keypad).	Yes	The IPS M5 uses mechan ca ergonom ca y des gned buttons rated at more than 250,000 cyc es, wh ch trans ates nto more than 10 years of use. The buttons are comp ete y env ronmenta y sea ed to prevent mo sture from affect ng performance. Add t ona y, the abe s on the buttons are cast (embedded) through the button so that wear and tear w not resu t n the abe degrad ng over t me.
	b. The meter sha have a mechan sm that prov des prompt ng and conf rmat on as spec f ed.	Yes	The meter mechan sm graph ca LCD screen prov des prompt ng and conf rmat on messages for the motor st dur ng the ent re payment process. These screens can be further custom zed by Park ng Serv ces f requ red.
6)	**Clock**		
	a. Meters sha automat ca y adjust nterna c ocks for Day ght Sav ng T me per od c changes.	Yes	IPS comp es.
	b. Meter c ocks sha be accurate to w th n p us or m nus two seconds per day.	Yes	See attached cert f cat ons.
	c. Meter c ocks sha be synced each t me they commun cate w th the MMS.	Yes	When the meter ca s nto the MMS t aff rms the correct t me w th the system and s concurrent y synced. The t me n synced to server t me, wh ch n turn s synced to a stratum 1 t me server (atom c c ock) to max m ze accuracy of t me.
	d. Meter c ocks sha track each day of the week.	Yes	Meter c ocks current y do th s and automat ca y ca cu ate the day of the week.
7)	**Power**		
	a. Meters sha nc ude a means to augment power through so ar techno ogy as spec f ed.	Yes	IPS meters have a so ar pane attached to the so ar board, wh ch prov des a tr ck e charge to the rechargeab e port on of the meter.

	b. Park ng Serv ces sha be ab e to purchase and rep ace battery components as spec f ed.	Yes	Both types of batter es are ab e to be rep aced nd v dua y, depend ng on the battery pack opt on Park ng serv ces has chosen. IPS s offer ng Park ng Serv ces mu t p e opt ons to extend battery fe n any cond t on. P ease see the Proposa De verab es sect on of th s proposa for deta ed nformat on.
	c. Batter es sha be standard “off-the-she f” battery products ava ab e for consumers.	Yes	IPS meters can be powered by the correct comb nat on of off the she f a ka ne batter es; The spec f c batter es used by IPS are des gned to max m ze battery fe better than what s ava ab e to consumers. These batter es can a so be purchased d rect y from battery supp ers and IPS w supp y th s nformat on to Park ng Serv ces to fu f th s requ rement. However, the IPS meter s best powered by an IPS battery pack wh ch s spec f ca y eng neered to prov de opt ma performance of the meter.
	d. Non-rechargeab e batter es sha not nc ude any e ectron c boards or components bes des w re connect on.	Yes	The e ectron cs have been des gned nto the M5 meter's ma n board, so the battery packs are str ct y ce s and connectors.
	e. Vo tage check system sha be ntegrated nto the mechan sm reset sequence.	Yes	The meter cont nua y mon tors the battery status and reports ssues to the management system. Once the meter s put nto d agnost c mode, the meter w d sp ay any battery fau ts and w a so d sp ay current vo tages of each battery.
	f. Ma ntenance personne sha be ab e to rep ace non-rechargeab e batter es w thout the use of too s.	Yes	The meter’s non-rechargeab e batter es are eas y rep aced by remov ng the battery door on the meter mechan sm (no too s needed) and unp ugg ng the battery pack from the un t.
	g. A ow battery remote a arm nd cator sha be nc uded to fac tate t me y rep acement of batter es.	Yes	Low battery a erts appear n the meter fau t menu as we as w th n the MMS and can be conf gured to be sent to mob e dev ces/ema for mmed ate not f cat on f requ red.
	h. Dur ng oss of power, meter reta ns programm ng, data, etc. as spec f ed.	Yes	Data retent on s ndependent of battery power and s stored n nonvo at e memory.
8)	**Visual Enforcement**		

	a. Meters have a means for a PEO to determ ne payment status through v sua nspect on of the meter tse f.	Yes	PEOs are ab e to determ ne payment status by v ew ng the d sp ay and LEDs ocated on the front and rear of the meter. Th s s true for payment at the meter (cards, co ns) and for remote payment, such as pay-by-ce , f conf gured to d sp ay t me on the meter when a remote payment s made.
9)	**Card Reader Payment and Processing**		
	a. Meters sha accept the fo ow ng: V sa, MasterCard, and NFC payment.	Yes	The M5 has the capab ty of accept ng NFC payment n add t on to magnet c str pe cred t/deb t cards – such as V sa, MasterCard, Amer can Express, D scover, and many more, assum ng the acqu rer s set up to process these cards. Future ch p based bank ng cards and other contact and contact ess types can opt ona y be accepted.
	b. Meters sha have the ab ty to be programmed for add t ona payment systems as spec f ed.	Yes	The M5 has the capab ty to be programmed for the C ty of Sacramento Park ng Card, trans t cards, th rd party payments, and s ntegrated w th Pay-by-Phone (Verrus), Parkmob e, and Mob eNow Pay-by-ce payments. Shou d the C ty dec de to offer payment at the meter w th the r current Park ng Serv ces card or trans t card, IPS wou d need a samp e card and assoc ated card mapp ng spec f cat ons to enab e programm ng of the meters.
	c. The max mum number of cred t card transact ons n “ho d and send” mode, sha be conf gurab e as spec f ed.	Yes	The system can be set to dec ne cards after a number of transact ons, or a spec f c do ar number has been met, on the backend system.
	d. Card reader sha be non- ock ng and a ways perm t customers to remove cards as spec f ed.	Yes	The card reader s non- ock ng and w a ow users to remove cards w thout damage to the card.
	e. If a cred t card s nserted mproper y , the card sha be eas y removed as spec f ed.	Yes	Cards nserted ncorrect y can be eas y removed and d sp ay screens can be programmed to d rect motor st to nsert the card proper y.
	f. If the card s ot or reader s noperab e, the meter sha accept co n and contact ess methods of payment.	Yes	When the card reader s noperab e, the meter w accept a other forms of payment and w d sp ay to the motor st wh ch forms of payment rema n acceptab e.
	g. The card connector sha be rated at more than 200,000 cyc es under dea cond t ons.	Yes	The card connector s rated at over 250,000 cyc es.
	h. The meter sha awaken automat ca y upon detect on of any va d card nsert on nto the card reader.	Yes	When a card s nserted the meter s woken up by a sw tch n the card reader.

	. A of the dr ver and dec s on-mak ng c rcu try sha be ocated on the ma n board as spec f ed.	Yes	The card reader does not have any e ectron c nte gence of ts own.
10)	**Revenue Audit Capabilities**		
	a. E ectron c nformat on (co n count and revenue tota s) sha be have the fo ow ng accuracy rates:	Yes	See be ow.
	. Co ns: greater than 99% accuracy between the MMS co ect on report and the phys ca co n count.	Yes	IPS comp es
	. Cred t Card: 100% accuracy between the gateway report and the bank depos t.	Yes	IPS comp es
	b. Proposed meters sha record/store the number and va ue of a va d co ns, as spec f ed.	Yes	IPS meters store the number and va ue of co n denom nat ons nserted, grouped by transact on and s t me stamped as a group. For examp e, a transact on may cons st of 2 n cke s, 1 d me, and 3 quarters – wh ch w a be ref ected n one transact on. It s poss b e to record the date and t me of each nserted nd v dua co n, but s norma y reserved for troub eshoot ng.
	c. Meters sha record/store a count of each nva d co n.	Yes	IPS comp es
	d. Meters sha record/store the number and va ue of va d pre-pa d and cred t card transact ons, as spec f ed.	Yes	A transact ons are recorded and transm tted to the MMS.
	e. Each type of payment nformat on (va d co ns, nva d co ns, e ectron c payments) sha be accounted for.	Yes	A transact ons are dent f ed by type and are stored n the mechan sm's memory.
	f. Aud t nformat on sha be ava ab e for retr eva through MMS as spec f ed.	Yes	Aud t nformat on s ava ab e for retr eva on standard MMS and mob e dev ces, nc ud ng the IPS Andro d/ Phone/ Pad ma ntenance app cat ons.
	g. F nanc a aud t data sha not be affected by ma ntenance or ma ntenance events.	Yes	Aud t data cannot be man pu ated by the act ons descr bed.
11)	**Collection Event Recording and Revenue Counter Reset**		
	a. The ab ty to reset mechan sm co n counters at the t me of the phys ca co n co ect on.	Yes	There are a number of opt ons to ach eve th s request. 1. Use of co n co ect on cards – current y Park ng Serv ces sw pes these cards when co ect ng the cash boxes. It records t me of co ect on, who co ected the co ns, and resets the co n counters. 2. IPS can offer a new smart cash box system to Park ng Serv ces. More nformat on conta ned n Chapter 7. 3. IPS s w ng to deve op a w red/w re ess vau t door so ut on w th add t ona nput from Park ng Serv ces. 4. IPS s w ng to work w th e ectron c ock manufacturers, such as Medeco, to ntegrate the e ectron c ock nformat on nto the IPS system for a fu y automat c system.
	b. The ab ty to record co ect on data as spec f ed.	Yes	A co ect on nformat on s transm tted and recorded n the MMS.

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	c. The ab ty to open vau t door for ma ntenance purposes w thout resett ng mechan sm co n counters.	Yes	When the current co ect on card system s used, the vau t door open ng and c os ng s ndependent of the co n counters, and w therefore not affect co n tota s.
	d. A phys ca co ect on events sha be entered nto the MMS and be ava ab e as report f ters.	Yes	Co ect ons are transm tted and stored n the MMS and reports can be produced and f tered by, for examp e – co ect on route and co ect on sub routes.
	e. The ab ty to reset mechan sms' co n counters remote y from the MMS as spec f ed.	Yes	The IPS meter has the ab ty to reset meter mechan sm co n counters remote y v a the MMS (s m ar to pay-by-ce transact on), however – th s s not recommended. Th s s due to the ssue of synchron zat on; by the t me co n counters are set remote y, co ns may have been added to the mechan sm and aud t tota s wou d become naccurate.
12)	**Communications**		
	a. Transm t payment and ma ntenance a ert data to the MMS w re ess y w th n 90 seconds as spec f ed.	Yes	IPS meters rout ne y send payment and ma ntenance a ert data to the MMS w th n 90 seconds w th ex st ng c ents of a s m ar scope and sca e to that of Sacramento. Current y IPS ach eves 94% n 90 seconds on average.
	b. Meters sha support secure on- ne author zat ons of cred t cards at the t me of the transact on.	Yes	IPS supports secure on ne author zat ons of cred t cards n rea t me.
	c. Meters sha support a conf gurab e "ho d and send" feature as spec f ed.	Yes	IPS meters can be conf gured to a ow "ho d and send" transact ons for card payments when on ne author zat on cannot be comp eted n a conf gurab e t meout w ndow.
	d. Meters sha n t ate commun cat on w th the MMS as spec f ed.	Yes	Current y, IPS meters are set to commun cate w th the MMS n regu ar nterva s regard ess of any events or transact ons occurr ng at the meter. Th s va ue can be a tered f necessary.
	e. Meters sha operate n an ndependent network env ronment as spec f ed.	Yes	
15)	**Maintenance**		
	a. Meters sha be eas y ma nta ned and serv ced, and sha be des gned as spec f ed.	Yes	A Ph ps screwdr ver s the on y too requ red. No spec a too s are needed. Meters detect both meta c and non-meta c jams, can be c eared from 3 d fferent ocat ons, nc udes ant -f sh ng capab t es and software enhancements to detected attempted fraud or vanda sm and report accord ng y.
	b. Meters sha return to fu funct ona ty w th n one m nute of rep ac ng a co n chute or track and/or and card reader.	Yes	IPS comp es

	c. Meters sha feature on-board d agnost cs as spec f ed, and sha prov de, at m n mum:	Yes	Meter has a se f-test n the d agnost cs menu wh ch w d sp ay error codes, d rect ng ma ntenance to the fau t affect ng the meter. IPS a so offers a smart phone ma ntenance app cat on. The user manua for th s product s ocated n the Append x.
	. V ew the current ass gned meter conf gurat on and software vers on.	Yes	Conf gurat on nformat on can be found on the f rst d agnost cs screen.
	. V ew the battery eve of the rechargeab e & non-rechargeab e battery, and the so ar pane charge eve .	Yes	The battery eve of each battery and so ar pane charge eve can be found on the vo tages screen.
	. Test the operat ng cond t on of the card reader.	Yes	Th s s done under the d agnost cs menu abe ed "Card Test".
	v. Test the operat ng cond t on of the co n va dator.	Yes	Th s s done under the d agnost cs menu abe ed "Co n Test".
	v. Test the ntegrated w re ess commun cat ons.	Yes	Th s s done under the d agnost cs menu abe ed "Comms Test".
	v . A ow for the meter to be turned off.	Yes	Th s s done under the d agnost cs menu and nstruct ng the meter to go nto "s eep mode".
	d. The ab ty to d sab e the record ng of cash and card revenue to add t me as spec f ed.	Yes	IPS prov des a meter ma ntenance cred t card wh ch w a ow techn c ans to add t me to the meter. Th s event s recorded as a un que transact on so that t can be d fferent ated from co n/other card transact ons and automat ca y reported on the MMS. The equ va ent do ar va ue s shown n the MMS however t does not contr bute to the tota s n the revenue reports. 24 hours worth of t me can be added to the meter f the conf gurat on s set appropr ate y.
	e. The ab ty to d sab e the record ng of cash and card revenue to a ow aud t data test purchases as spec f ed.	Yes	Th s s ach eved by enter ng a co n or card test n the d agnost cs menu. These tests are not recorded n the aud t data. If no act v ty takes p ace wh e n the d agnost c menu, the meter w automat ca y revert to norma operat ons after f ve m nutes (can be custom zed) or sooner f the techn c an presses the cance button.
B.	**Meter Mechanism Additional Specification Requirements**		
1)	**Screen:** The screen sha support dynam c messag ng funct ona ty to ref ect changes n pr c ng, regu at ons, d sp ay messages, format, or Conf gurat ons made n the MMS and commun cated w re ess y to the meter at east once per day.	Yes	IPS comp es w th th s requ rement and has exh b ted ts ab t es w th customers ut z ng demand based pr c ng. The M5 meter has a very arge d sp ay screen and w be ab e to re ay add t ona nformat on and graph cs on ts 160 x 160 p xe screen.

2)	**Card Reader Payment and Processing**		
	a. Meters sha accept a stored va ue “park ng card” as spec f ed.	Yes	IPS wou d need a samp e "park ng card" and assoc ated card mapp ng spec f cat ons to enab e programm ng of the meters.
	b. A payment by Park ng Serv ces park ng card sha cons st, genera y, of the fo ow ng steps:	Yes	See be ow.
	. Customer nserts Park ng Serv ces park ng card n card s ot.	Yes	IPS comp es.
	. Meter reads and d sp ays ba ance n the park ng card.	Yes	IPS comp es.
	. Customer adds/subtracts t me and money us ng meter nput mechan sm (e.g., w th +/- or ↑/↓ buttons).	Yes	IPS comp es.
	v. Customer conf rms payment us ng meter nput mechan sm (e.g., “OK” or √ button).	Yes	IPS comp es.
	v. Meter wr tes new ba ance back to card wh e d sp ay ng conf gurab e “p ease wa t” message.	Yes	IPS comp es.
	v . Meter d sp ays conf gurab e “transact on comp eted” message and starts count ng down t me.	Yes	IPS comp es.
3)	**Communications:** Meter Mechan sms sha support secure on- ne author zat ons of smart cards at the t me of the transact on.	Yes	IPS meters a ready support th s capab ty, but w need an assoc ated smart card spec f cat on to comp ete such an ntegrat on process.
	C. Meter Mechan sm Opt ona Spec f cat ons: Meters sha be equ pped w th GPS techno ogy, .e., MMS sha a ow for the end user to enter the meter term na number n the search f e d and generate a report w th the exact ocat on of the meter on the map.	Yes	Each meter a ready has an assoc ated GPS has the ab ty to query the current approx mate coord nates of a meter wh ch s on ne and d sp ayed on a map. If GIS nformat on does not ex st, IPS can prov de th s serv ce.
SECTION III: MMS, Meter Programming and Data Integration			
A.	**MMS, Meter Programming & Data Integration General Specification Requirements**		
1)	**MMS – General**		
	a. Log n to the MMS sha take ess than 60 seconds.	Yes	Log n response t me s few seconds or ess.
	b. MMS sha conta n, at a m n mum, the fo ow ng genera modu es:	Yes	Many more report ng capab t es are ava ab e or can be further custom zed upon request.
	. System Adm n strat on, as spec f ed.	Yes	System adm n strat on s prov ded by the Adm n sect on of the MMS.
	. Asset and Inventory Management, nc ud ng	Yes	Asset and nventory management pages are ava ab e n the Adm n sect on of the MMS.
	1. GPS ocat on of meters on a map, w th stat st ca mouse-over feature.	Yes	IPS comp es.
	2. Meter upt me (over t me, by zone, street, and meter number).	Yes	IPS comp es.
	3. Meter pa d occupancy reports.	Yes	IPS comp es.
	. Fau ts and Ma ntenance Reports, nc ud ng	Yes	Fau ts and ma nteanance reports as prov ded by the Except ons and Techn ca sect ons of the MMS, respect ve y.
	1. Co n box eve (% fu).	Yes	IPS comp es.
	2. Except on reports for un ts not perform ng as requ red (commun cat ons or payment fau ts).	Yes	IPS comp es.
	v. Revenue Reports, nc ud ng	Yes	Revenue reports are prov ded n the F nance sect on of the MMS.
	1. Cred t card reconc at on (da y, week y, month y, annua y).	Yes	IPS comp es.
	2. Cash co ect on reports (by date, t me, meter number, and co ector).	Yes	IPS comp es.
	3. Accumu at ve tota s of a cash and card transact ons (da y, week y, month y, or annua y).	Yes	IPS comp es.
	4. Revenue summary reports (da y, week y, month y, annua y, by zone, route, street or meter number).	Yes	IPS comp es.
	5. Ind v dua transact ons (cash or cred t) by meter number.	Yes	IPS comp es.

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	v. Management of User Perm ss ons and A arms	Yes	Management of user perm ss ons and a arms s prov ded n the Adm n sect on of the MMS.
	v . Hot st	Yes	Hot sts are current y on y ava ab e to IPS adm n strators but can be made v s b e to Park ng Serv ces adm n strators n the Adm n sect on of the MMS.
	v . Meter Behav or Programm ng	Yes	Meter behav or programm ng s prov ded by the Po e Conf gurat on port on of the Adm n sect on.
	v . Management of ma ntenance work orders	Yes	Management of the ma ntenance work orders s prov ded n the Techn ca sect on of the MMS.
	c. MMS sha be server-based and accessed v a the web as spec f ed.	Yes	The MMS s server-based and web access b e w thout any custom software other than a standard web browser. Goog e Chrome s recommended.
	d. The Contractor sha be respons b e to de ver any and a updates to ts MMS as spec f ed.	Yes	The MMS w be updated as necessary to ensure browser compat b ty.
	e. MMS sha offer a un form user nterface, as spec f ed.	Yes	The MMS has a un form user nterface w th standard zed co ors, fonts, nomenc ature, cons and ogos.
	f. Access to he p mater a s and user manua s sha be ava ab e on- ne.	Yes	Manua s and he p too s are ava ab e on ne 24/7/365. New v deo based capab t es w soon be offered as we .
	g. Capab e of export ng reports to a var ety of common M crosoft f e formats as spec f ed.	Yes	IPS comp es. XLS, CSV, PDF, etc.
	h. h. The MMS and supported meters sha be compat b e w th Park ng Serv ces' enforcement/c tat on p atform, the C ty of Ing ewood's ICMS.	Yes	IPS back off ce system s fu y capab e of support ng such ntegrat on and w need the assoca ted specf cat on and bus ness ru es to comp ete th s process.
	. It w be the respons b ty of the vendor to take every precaut on to ensure that a systems, f es, data, equ pment, commun cat ons, and fac t es are re ab e. In the event that a natura d saster or some other unant c pated event (ro ng b ack outs do not const tute an unant c pated event) does d srupt the system, the vendor must have a deta ed, C ty-approved recovery p an n p ace, tested, and ready to be mp emented for a key fac t es so that serv ces are restored qu ck y and n accordance w th C ty performance standards.	Yes	IPS current y has an emergency p an and system redundanc es n p ace to ensure unant c pated events do not d srupt the system. As such a p an s propr etary, IPS w prov de to the C ty for rev ew upon request.
2)	**MMS Documentation**		
	a. Standard reports fu y documented and exp a ned n the manua , nc ud ng a owab e va ues.	Yes	A MMS reports are documented n the Management System User Gu de n the He p menu. See MMS user manua nc uded n the append x of th s proposa .
	b. Behav or programm ng var ab es fu y documented and exp a ned, n the manua , nc ud ng a owab e va ues.	Yes	Meter behav or programm ng var ab es are documented n the Po e Conf gurat on sect on of the Management System User Gu de. See MMS user manua nc uded n the append x of th s proposa .

	c. Standard meter Backend Sett ngs fu y documented and exp a ned, n the manua , nc ud ng a owab e va ues.	Yes	Meter backend sett ngs are documented n the Adm n sect on of the Management System User Gu de. See MMS user manua nc uded n the append x of th s proposa .
3)	**MMS Users and Permissions**		
	a. MMS sha support a m n mum of 10 d fferent user groups, as spec f ed.	Yes	The MMS supports un m ted user groups, each w th ts own set of perm ss ons
	b. MMS sha a ow Park ng Serv ces to manage users and perm ss ons d rect y, as spec f ed.	Yes	The MMS a ows for the d rect management of users and perm ss ons. The User Adm n strat on page n the Adm n menu can be used to add new users and create or mod fy user perm ss ons.
4)	**Asset and Inventory Management:** MMS sha , at a m n mum, have the ab ty to record and d sp ay the fo ow ng nformat on:		
	a. Date- and t me-stamp of a ma ntenance, nventory, and aud t data.	Yes	The Ma ntenance Act v ty Report n the Techn ca menu can be used to d sp ay date and t me stamps of a ma ntenance act v ty by c ck ng on the deta nk. The Inventory Deta page n the Adm n menu d sp ays nsta dates of term na s n nventory. The Meter Po e Aud t page n the Deta menu d sp ays date and t me stamps of aud t data.
	b. Mechan sm ser a numbers, ma ntenance routes and descr pt ons, and Park ng Space IDs.	Yes	Mechan sm (term na) ser a numbers are d sp ayed on severa pages. Ma ntenance route (PMR) s d sp ayed on the Common Search page. Park ng space Post ID (po e) numbers and the r assoc ated RFID's are d sp ayed on severa pages.
	c. Aud t, ma ntenance, nventory and programm ng transact ons for a g ven space Park ng Space ID.	Yes	The Meter Po e Aud t page n the Deta menu d sp ays aud t data for a g ven po e. The Meter Ma ntenance H story report n the Techn ca menu d sp ays ma ntenance data for a g ven po e. The Po e H story page n the Adm n menu d sp ays nventory (term na) changes for a g ven po e. The Conf gurat on Update Log n the Adm n menu d sp ays programm ng transact ons (conf gurat on changes).
5)	**Faults and Maintenance**		
	a. The MMS sha conta n reports on meter hea th status.	Yes	The Fau t Summary and Fau ty Meters pages n the Except ons menu d sp ay meter hea th status.
	b. The MMS sha automat ca y record meter ma ntenance performed by repa r staff.	Yes	The Manage Work Orders page n the Techn ca menu records meter ma ntenance performed by repa r staff. Add t ona y, meter ma ntenance act v ty can be nput at the meter tse f or us ng the IPS smart phone ma ntenance app cat on.

	c. The MMS sha record a meters' genera status and performance, as spec f ed.	Yes	The MMS records the status and performance of a meters. Fau t and ma ntenance events are d sp ayed by severa pages n the Except ons and Techn ca menus, respect ve y. Park ng sess ons are d sp ayed by the Po e Transact on Deta page n the Deta menu. F nanc a transact ons (nc ud ng payment status) are d sp ayed by severa pages n the F nance menu.
	d. The MMS sha conta n, at a m n mum, the fo ow ng reports:	Yes	See be ow.
	. Ma ntenance act v ty by ser a number, Park ng Space ID, park ng meter repa rer, or operat ona status.	Yes	The Manage Work Orders page n the Techn ca menu d sp ays ma ntenance act v ty by mechan sm ser a number (term na) or PMR route and park ng space Post ID (po e). It s ab e to f ter by operat ona status (open or c osed work orders) and park ng meter repa rer (techn c an).
	. Except on report for meters not repa red.	Yes	The Manage Work Orders page n the Techn ca menu can be used to generate an except on report for meters that have not been repa red (open work orders). Th s s n add t on to the automat c fau ty meter report that s ava ab e n the MMS and ava ab e under Except ons.
	. Except on report for meters that have not commun cated as spec f ed.	Yes	The Non-report ng Meters page n the Except ons menu d sp ays meters wh ch have not ca ed n w th n the ast 24 hours, nc ud ng the number of hours s nce the r ast commun cat on. Non report ng meters are a so sted on the Fau ty Meters Report.
	v. W re ess s gna strength.	Yes	Th s report s based on the ast connect on to the system for each meter and s a so capab e of prov d ng s gna strength var ance over t me.

	v. Operat ona status by: mechan sm ser a number, Park ng Space ID, date and t me, as spec f ed.	Yes	The Term na Events (for mechan sm ser a number) and Po e Events (for Park ng Space ID) pages n the Techn ca menu d sp ay automat c hea th events created by a meter, as we as ma ntenance act v ty performed and entered by PMR's. The Ma ntenance Act v ty Report n the Techn ca menu d sp ays manua y entered ma ntenance act v ty (e.g. c eaned meter dome) and can be used to d sp ay mechan sm ser a number (term na), park ng space Park ng Space ID (po e), date and t me by c ck ng on the deta nk.
6)	**MMS Alarms**		
	a. The MMS sha og a a arms and reta n spec f ed nformat on.	Yes	The Fau t Summary and Fau ts Overv ew pages og a arms and reta n nformat on, nc ud ng t me of a arm. The Manage Work Orders page ogs who reso ved prob ems and the act ons taken.
	b. At a m n mum, n t a warn ng a arms and subsequent shutdown/fa ure a arms for the fo ow ng events:	Yes	Except on Reports are a so ava ab e n such cases through the MMS and can further be custom zed based on the nput of the C ty
	. Co n co ect on – when phys ca co ect on occurs.	Yes	The Route Co n Co ect on Report s ava ab e through the MMS.
	. Co n co ect on requ red – as spec f ed.	Yes	The Percentage Fu Report s ava ab e through the MMS.
	. Paper rep acement (f app cab e).	N/A	N/A
	v. In t a ow battery sett ng has been reached.	Yes	Low battery except ons are ocated n the Fau ty Meters Report.
	v. Battery s exper enc ng a fau t.	Yes	Battery fau t a arms are ocated n the Fau ty Meters Report.
	v . W re ess commun cat ons nterrupt on.	Yes	W re ess commun cat ons ssues are ocated n the Fau ty Meter and Non Report ng Meters Reports.
	v . Co n payment and/or card payment operat on fa ure.	Yes	These fa ures are ocated n the Transact on Except ons Report.
	v . Operat ng system fau t.	Yes	Th s a arm s found n the Fau ty Meters Report.
	x. Any abnorma operat ona funct ons.	Yes	These fa ures are ocated n the Fau ty Meters Report and Transact on Except ons Report, or a comb nat on thereof.

	x. Door open detect on (vau t and ma ntenance doors).	Yes	Add t ona sensors n the vau t and ma ntenance sect ons are requ red to ach eve th s. IPS can prov de add t ona so ut ons as desc bed n Sect on II.A.11.a. Add t ona sensors are not nc uded n the pr c ng sheet. IPS comm ts to support ng Park ng Serv ces to ref ne th s opt on for dep oyment upon request.
	x . Status/record of a f e transfer act v t es.	Yes	Conf gurat on f e updates are shown n the Conf g Update Log. Add t ona watchdog and f e transfer not f cat on serv ces can be prov ded upon further def n t on from the C ty at no add t ona cost.
	x . L ve a arm to detect commun cat on status.	Yes	Meters w th commun cat ons ssues are sted on the Fau ty Meters Report and commun cat on h story nc ud ng s gna strength can be v ewed on the Po e Status H story Report.
	x . Not ce of var ous n t a zat on and mach ne sett ng rout nes.	Yes	Ind v dua meter n t a zat on (resets) and conf gurat on updates (mach ne resett ng rout nes) are ogged and d sp ayed n the Po e Events Report.
	x v. Commun cat on fa ure a arm n MMS.	Yes	Issues n back off ce resu t ng n meters not be ng ab e to commun cate w be f agged n the Fau ty Meters under commun cat on ssues.
	xv. No transact on w th n def ned t meframe.	Yes	Th s a arm can be found n the Transact on Except ons Report.
	xv . No co n transact on w th n def ned t meframe.	Yes	Th s a arm can be found n the Transact on Except ons Report.
	xv . No card or cred t card transact on w th n def ned t meframe.	Yes	Th s a arm can be found n the Transact on Except ons Report.
	xv . MMS s “frozen” or down.	Yes	If the MMS s down, the webpage w d sp ay the MMS s current y down for ma ntenance.
	x x. Server that accepts meter data, and supports the MMS, s down.	Yes	Th s s an IPS on y a ert and s sent to IPS Adm n. Such a erts can a so be conf gured to be prov ded to the C ty f des red.
	c. The MMS sha a ert Park ng Serv ces for non-report ng meters as spec f ed.	Yes	The number of non-report ng meters s sted on the Non Report ng Meter Report. IPS s ab e to send the % of non-report ng meters report at a set t me to Park ng Serv ces def ned rec p ents.
7)	**Revenue Reports**		
	a. The MMS sha conta n summary revenue reports.	Yes	Month y/year y revenue, date range revenue stat st cs, and summary reports are ava ab e through the MMS.

	b. The MMS sha conta n deta revenue reports, to the meter eve .	Yes	A transact on deta s ava ab e at the po e (meter) eve through the MMS n the Po e Transact on Deta Report.
	c. The MMS sha report revenue broken down by payment type, as spec f ed.	Yes	The Transact on Deta Report, wh ch sts payment types such as the Park ng Serv ces "park ng card", cred t/deb t card, co n, etc. s ava ab e through the MMS. Breakdown of type of cred t card payment (V sa, Mastercard, Amex, etc.) used s a so ava ab e.
	d. The MMS nc ude a Transact on Deta Report that sts, for every transact on, at east the fo ow ng tems:	Yes	The MMS nc udes a Po e Transact on Deta Report wh ch sts a requ rements g ven. In order to prevent confus on to the user n the case where payment s made dur ng prepayment hours, the t me purchased at the meter and d sp ayed on the meter s represented n the MMS n order to a ow for appropr ate adjud cat on of what the users sees on the street.
	. Transact on ID	Yes	IPS comp es.
	. Transact on Date	Yes	IPS comp es.
	. Transact on Start T me	Yes	IPS comp es.
	v. Transact on End T me	Yes	IPS comp es.
	v. Amount Pa d	Yes	IPS comp es.
	v . Payment Type	Yes	IPS comp es.
	v . Park ng T me Start	Yes	
	v . Amount of Park ng T me Purchased, as spec f ed.	Yes	IPS comp es.
	e. The MMS at a m n mum, have the ab ty to generate the fo ow ng (or s m ar) reports by date/date range:	Yes	See be ow.
	. Revenue, as spec f ed.	Yes	Range Summary reports prov de th s nformat on.
	. Payment for park ng sess on, as spec f ed.	Yes	Co n and Card Payment Reports prov de th s nformat on
	. Current ocat on of mechan sm by mechan sm ser a number.	Yes	F nd Term na Reports prov de th s nformat on.

	v. Da y meter co ect on report w th meter numbers, route numbers and amount co ected by metered space.	Yes	Co ect on Reports prov de th s nformat on.
	v. Except on report for meters not co ected.	Yes	Co n Co ect on Except on Reports prov de th s nformat on.
	v . Revenue over a spec f ed t me per od.	Yes	The Range Summary Reports prov de th s nformat on.
	v . Co ect on revenue over a spec f ed t me per od.	Yes	The Co n Co ect on Summary Reports prov de th s nformat on.
	v . Number of meters and % of nventory out-of-order over a spec f ed t me per od.	Yes	The Turnaround T mes Report prov des th s nformat on and s ava ab e through the MMS.
	x. Average repa r t me over a spec f ed t me per od.	Yes	The Work Order Repa r T mes Report prov des th s nformat on and s ava ab e through the MMS.
	x. Rejected and Dec ned cards, as spec f ed.	Yes	The Dec ned Transact ons Except on report prov des th s nformat on.
	f. The MMS sha have f ex b ty of report ng funct ons, as spec f ed.	Yes	The MMS a ows for custom f ter ng and group ng of data, however f a spec f c customer report s requ red – IPS w deve op and pub sh for Park ng Serv ces at no add t ona cost, assum ng data s a ready ava ab e. T me requ red to create report depends on the comp ex ty of the report requ red, but shou d take on average 5-10 bus ness days.
	g. The MMS sha prov de t me and date range report ng capab t es of var ous payment statuses as spec f ed.	Yes	The Range Summary, Co ect on Report, Fau t Report, Po e Events Report, and Po e Status Report sat sfy these requ rements.
	h. Standard report show ng usage of ma ntenance cards, as spec f ed.	Yes	The Ma ntenance Cred t Card Usage Report prov des th s nformat on and s ava ab e through the MMS.
	. Standard report show ng the number of rejected smart cards and cred t cards as spec f ed, nc ud ng:	Yes	See be ow.
	. The card s on the Hot st	Yes	Th s report s current y ava ab e to IPS system adm n strators on y, but can be added to to the deta s sect on of the Po e Events Report upon request at no add t ona cost.
	. The bank dec ned the charge	Yes	In the event that the card s dec ned by the bank, a Dec ned Transact on Report generated MMS shou d be referenced.
	. A commun cat ons fa ure prevented an author zat on from be ng approved, and	Yes	Th s depends on wh ch type of acceptance po cy Park ng Serv ces w shes to mp ement, but IPS can segment wh ch transact ons were processed n rea t me or ho d-and-send.

	v. The card was unreadab e	Yes	If a card n unreadab e, the card s not dec ned. The meter w prompt the motor st to re nsert or use an a ternate form of payment. In add t on, a card read error s ogged and can be found n the Po e Events Report.
	j. Standard report show ng revenue from each co ect on day to the fo ow ng co ect on day.	Yes	The Co n Co ect on Deta Report s ava ab e through the MMS.
	k. Park ng Serv ces sha be ab e to ntroduce new payment types as spec f ed.	Yes	IPS s ab e to add any new payment types nto the MMS Revenue Reports that Park ng Serv ces requ res.
8)	**Management of Alarms:** The MMS sha be conf gurab e to send a arms to des gnated personne , by ema , text message, and/or vo ce message, f a meter has a fa ure. The type of not f cat on and whether to not fy sha be conf gurab e by type of fa ure.	Yes	The MMS can be conf gured to send an a arm to a personne sted on the D str but on L st.
9)	**Meter Location Assignment in MMS**		
	a. Accommodate at east twe ve symbo a pha numer c format of the meter ID number ng sequences, as spec f ed.	Yes	The Inventory Deta Report sts nformat on such as space, zone, area, route and enforcement.
	b. The MMS sha a ow for ass gnment of meter ocat ons n batches v a CSV f e.	Yes	CSV f es w th meter ass gnment ocat ons can be mported under mport/export page.
10)	**Meter Backend Settings**		
	a. The fo ow ng meter sett ngs sha be programmab e:	Yes	See be ow.
	. Standby mode and t mes	Yes	The meter operat ng schedu e s fu y programmab e, nc ud ng when the meter shou d be act ve or nact ve (standby).
	. Card payment sett ngs	Yes	Cred t card payment sett ngs can be programmed through the MMS. These nc ude cred t card types be accepted (V sa, MC, Amex, etc.), m n mum payment amount a owed, start va ue of transact on. The same type of sett ngs can be programmed for smart cards.
	. Co n payment sett ngs	Yes	Co n payment sett ngs can be programmed through the MMS, nc ud ng va ues accepted (quarters on y, etc.) transact on t meout w ndows, etc.
	v. Screen parameters	Yes	D sp ays can be conf gured us ng the MMS, nc ud ng contrast and back ght sett ngs.
	v. Back ght sett ngs	Yes	Back ght sett ngs, such as the d sp ay's br ghtness, how ong the back ght rema ns on, and cond t ons set for when the back ght shou d turn on (br ghtness or amb ent ght eve detected, etc.) can be conf gured us ng the MMS by c ck ng on the Ma n Contro tab.

	v. LED sett ngs	Yes	The LED sett ngs can be programmed through the Ma n Contro tab n the MMS, and then LED Behav or screen. From there the Red LED, Green LED, and Ye ow LED parameters (duty cyc e) can be adjusted.
	v. Mob e Payment d sp ay sett ngs	Yes	The Pay-by-Phone payment d sp ay can be conf gured us ng the d sp ay conf gurat ons.
	v. Other meter sett ngs as app cab e	Yes	The MMS can be used to program park ng rates, d sp ay streams, spec a days/events, cred t card sett ngs, ogg ng and sett ng rates. P ease refer to the MMS user's manua n the append x for add t ona nformat on.
	b. The meter card payment system sha be programmed w th a custom zab e t me de ay to cance a transact on.	Yes	To program a custom zab e d sp ay, the programmer wou d go to the Ma n Contro screen, then the Conf gurat ons Menu, and then D sp ay Parameters to ncrease card entry t meout wh ch w create a de ay for the user to cance a transact on.
	c. The Meter sha a ow program ng for a conf gurab e grace per od as spec f ed.	Yes	Through the MMS, go to the Ma n Contro screen, then the Conf gurat ons Menu, and then T m ng Parameters to ncrease or decrease the Grace Per od.
B.	**MMS, Meter Programming, & Data Integration Additional Requirements**		
1)	**MMS – General**		
	a. Date format sha be cons stent throughout the ent re MMS and sha be custom zab e by Park ng Serv ces.	Yes	Date format s custom zab e through the MMS.
	b. MMS sha nc ude a search modu e that a ows the user enter n a park ng space dent f er as spec f ed.	Yes	The app ed rate modu e sat sf es th s requ rement and can be found n the MMS under n the F nance sect on.
	c. The Contractor sha prov de and ma nta n for the term of the contract (at no cost to Park ng Serv ces) SFTP s te for the purpose of exchang ng a XML and CSV f es w th Park ng Serv ces, except for ncom ng transact on data XML.	Yes	IPS w comp y.
	d. The Contractor sha prov de a f e structure n the SFTP s te as spec f ed by Park ng Serv ces.	Yes	IPS w comp y once requ rements are rece ved. 0-60 days after rece pt of spec f cat on.
	e. MMS sha be ab e to transm t Mob e Payment status to the meter.	Yes	IPS can ntegrate w th any mob e payment prov der the C ty chooses and s pre ntegrated w th Parkmob e (proposed so ut on), PaybyPhone, and Mob eNow.
	f. The MMS a ows Park ng Serv ces to create ad-hoc reports comb n ng user-def ned and standard var ab es.	Yes	IPS comp es. Park ng Serv ces users can man pu ate reports through sort ng, f ters and drag and drop capab t es to meet th s requ rement. IPS w offer add t ona report creat on at no add t ona cost to Park ng Serv ces.
	g. The Proposer sha deve op (at no add t ona cost) up to 25 custom reports for the term of the contract.	Yes	IPS w comp y.
2)	**Meter Behavior Programming**		

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	a. The MMS sha accept meter programm ng n at east two d fferent ways:	Yes	Meter programm ng can be accomp shed both manua y and automat ca y as requested.
	. Manua y, v a web user nterface n the MMS or mob e MMS.	Yes	Th s can be accomp shed by ass gn ng a conf gurat on to a spec f c po e and then ett ng that meter connect to the MMS by "ca ng n".
	. Automat ca y, v a XML or CSV f e depos ted n SFTP s te, per the spec f cat ons n Attachments 1-4.	Yes	IPS w comp y.
	b. Park ng Serv ces determ nes wh ch var ab es re ated to a metered space may be ed ted as spec f ed.	Yes	IPS can enab e/d sab e any of these features ndependent y at the request of Park ng Serv ces.
	c. Accept programm ng for subsets of the ru es requ red n sect on III.B.2.c and as descr bed n Examp e III.B.2.c.	Yes	IPS current y supports a of the parameters sted.
	d. The MMS sha accept programm ng for a set of genera ru es as spec f ed and sted n Examp e III.B.2.d.	Yes	T me per ods can be programmed from the Conf gurat ons screen, then Park ng Rates. From here you can program the t me per od w th behav ors such as FREE, PREPAY, etc. On y one behav or may be se ected at a t me.
	e. Park ng Serv ces sha be ab e to program RULE TYPE "RATE" as spec f ed and ustrated n Examp e III.B.2.e.	Yes	IPS comp es w th th s requ rement and w d sp ay $0.00 as per the examp e.
	f. As ustrated n Examp e III.B.2.f, meters sha accept programm ng of t me m ts ndependent of rates.	Yes	IPS comp es w th th s requ rement and a ows var ous t me m ts to be ass gned to d fferent rate buckets. In add t on, the meter can be conf gured to hand e t me m t trans t ons as most restr ct ve, east restr ct ve, or def ned as per payment (arr va) t me.
	g. The user sha be ab e to program meters n batches, as spec f ed, and ustrated n Examp e III.B.2.g.	Yes	Deve opment t me for th s s 60-90 days based on further nput and f na spec f cat ons from Park ng Serv ces and s prov ded at no add t ona cost.
	h. If the programm ng parameters of any g ven meter sha be grouped n the MMS nto a Conf gurat on and ass gned a name, then the name of the Conf gurat on sha automat ca y ref ect the actua parameters that make up the Conf gurat on as we and an dent f er that descr bes the geograph c ocat on where the Conf gurat on s n effect, n a format mutua y agreed upon by the Contractor and Park ng Serv ces dur ng the deve opment and test ng phase. Park ng Serv ces' goa w th th s requ rement s to prevent d screpanc es between the name of a Conf gurat on and the actua parameters conta ned there n. Th s requ rement s ustrated n Examp e III.B.2.h.	Yes	IPS w use an agreed upon automat c nam ng convent on and w mod fy names n the conf gurat on as requested by Park ng Serv ces. Th s nc udes the nam ng convent on examp e g ven n III.B.2.h.
	. The meter sha never a ow a Customer to purchase t me n excess of, and as ustrated n Examp e III.B.2. :	Yes	See be ow.
	. The tota number of operat ng hours for the day, as spec f ed.	Yes	IPS comp es.
	. The tota number of hours eft n the operat ng hours at the t me the Customer conducts the transact on.	Yes	IPS comp es.
	. The max mum number of cont nuous operat ng hours from the t me of payment exc ud ng TOW per ods.	Yes	IPS comp es.
	v. The t me m t programmed n the meter	Yes	IPS comp es.
	j. Meters sha accept programm ng for a m n mum of 12 un que t me s ots w th n a 24-hr per od as spec f ed.	Yes	The IPS M5 meter can support up to 15 t me s ots per day (max mum tota s ots = 120). The meter's arge (160 x 160 p xe s) enab es a rate schedu es of the day to be d sp ayed

	k. Meter sha accept programm ng for t me s ots as sma as ¼ of an hour.	Yes	IPS comp es.
	. Meter sha accept programm ng for up to four d fferent types of days w th n a week, as spec f ed.	Yes	IPS comp es.
	m. Park ng Serv ces sha be ab e to program rates n $0.05 ncrements.	Yes	IPS rates can be programmed n ncrements of $0.01 or arger.
	n. If a meter s programmed w th two d fferent rates n adjacent t me s ots and a Customer pays for t me start ng n one t me s ot and end ng n the next, the meter sha prorate the amount charged w th n each t me s ot for the t me purchased, as ustrated n Examp e III.B.2.n.	Yes	IPS comp es.
	o. When programm ng meters v a the web user nterface, Park ng Serv ces sha be ab e to set the effect ve t me and date when the new meter Behav or takes effect.	Yes	IPS current y comp es w th th s requ rement. Future conf gurat ons and effect ve date/t me can be set n the MMS.
	p. At any g ven t me, meters sha behave n accordance w th programmed meter Behav or parameters unt such t me as a new set of parameters becomes effect ve.	Yes	Once set, the meter behav or parameters w rema n unchanged unt a new set of parameters s programmed or when the future conf gurat on effect ve date arr ves.
3)	**Initial Meter Behavior Programming**		
	a. The MMS sha support automat c n t a programm ng as spec f ed.	Yes	See be ow.
	. Park ng Space Inventory XML f e, as spec f ed n Attachment 1	Yes	IPS w comp y.
	. Operat ng Schedu e XML f e, as spec f ed n Attachment 2	Yes	IPS w accept the XML f e and then process the f e to generate the output wh ch s ava ab e on the MMS.
	. Pr ce Schedu e XML f e, as spec f ed n Attachment 3	Yes	IPS w accept the XML f e and then process the f e to generate the output wh ch s ava ab e on the MMS.
	v. Spec a event pr c ng and regu at on XML f e, as spec f ed n Attachment 4	Yes	IPS w accept the XML f e and then process the f e to generate the output wh ch s ava ab e on the MMS.
	b. Park ng Serv ces w requ re n t a programm ng of meters v a XML f e as fo ows:	Yes	See be ow.
	. After Not ce to Proceed, fo ow ng the programm ng deve opment and test ng phase: as spec f ed.	Yes	IPS w comp y.
	. Whenever new y-metered spaces are eg s ated n future, as needed.	Yes	XML f e w be sent w th po e ocat ons, zones, areas and ass gned conf gurat ons. Park ng Serv ces may change these n the MMS.

	. Whenever nd v dua meters are added to a ready-metered b ocks, as needed.	Yes	Th s may be managed n the MMS under Manage Po es screen. Go to Zones, and then c ck on the “Add Po e” feature. A ternat ve y, IPS w accept an XML f e as per above.
	c. Metered spaces subm tted for programm ng by 11:59:59 PM any day sha be programmed as spec f ed.	Yes	IPS w comp y.
	d. Fo ow ng meter programm ng, at Park ng Serv ces’ d scret on, the Contractor sha :	Yes	See be ow.
	. Prov de a reconc at on XML f e for ver f cat on n accordance w th the spec f cat on n Attachment 7	Yes	IPS w comp y.
	. Set the programmed metered spaces to “Act ve” so that they are ready to go ve on the street.	Yes	Th s act on can be done by IPS or Park ng Serv ces at the C ty's d rect on.
4)	**Meter Programming Reconciliation**		
	a. Fo ow ng n t a programm ng or re-programm ng of any batch of meters, at Park ng Serv ces’ request, the Contractor sha ssue an XML f e n accordance w th Attachment 7, “Reconc at on XML spec f cat on,” and depos t t n the Contractor’s SFTP s te for p ckup by Park ng Serv ces.	Yes	IPS w comp y.
	b. In add t on, the MMS sha a ow Park ng Serv ces to se ect any subset of meters us ng any comb nat on of standard and user-def ned f ters and an effect ve date, and generate an XML f e as spec f ed n Attachment 7, “Reconc at on XML spec f cat on,” and depos t t n the Contractor’s SFTP s te for p ckup by Park ng Serv ces.	Yes	IPS can create th s report and make t ava ab e on SFTP s te at no add t ona cost. A ternat ve y, IPS can automate th s procedure f requ red by Park ng Serv ces. Deve opment for the automated vers on s 60-90 days.
	c. The MMS sha ssue a reconc at on XML f e conta n ng the ent re Park ng Meter Space nventory and assoc ated Descr pt ve Var ab es (both user-def ned and standard) per the spec f cat on n Attachment 7 to the SFTP s te for p ckup by Park ng Serv ces. Park ng Serv ces w use the reconc at on XML to rout ne y compare the attr butes of metered spaces n the Park ng Serv ces’ and the Proposer databases for the purpose of ver fy ng programm ng and correct ng any d screpanc es that may ar se.	Yes	A reconc at on XML f e w be ssued as requested by Park ng Serv ces.
5)	**Screen Programming**		
	a. Commun cate rates and regu at ons for every t me s ot programmed n the meter, as spec f ed.	Yes	Us ng var ab es, many of the f e ds on the d sp ay are dynam ca y ca cu ated and d sp ayed so that the data s cons stent w th the re evant t me s ot. In add t on to mode based (Free, Prepay, Id e or Pa d) screens, there are conf gurab e nstruct ons/ nput screens (remove card, se ect amount to charge to card, etc), spec a event screens and a so a set of nformat ona screens that w d sp ay nformat on when the OK button s pressed. Severa screen shots are nc uded n the de verab es sect on of th s proposa and meant to be examp es of what can be done.
	b. If meter requ res more than one screen to d sp ay a t me s ots and rates for one day, then C ty sha be ab e to program nes that repeat across a screens and nes that change from screen to screen.	Yes	L nes can be repeated on mu t p e screens wh e other nformat on can change.
	c. MMS sha commun cate the programm ng ustrated n examp e III.B.5.c, ref ect ng requ rements 3.a and 3.b.	Yes	IPS w comp y.

	d. A messages on meter screens sha be based on pre-def ned var ab es, as spec f ed.	Yes	Messages on the screens are based on a m x of var ab es and f xed text, depend ng on the message need ng to be conveyed. IPS prov des most of th s funct ona ty today. Add t ona deve opment t me for add t ona var ab es w take 60 to 90 days.
	e. User sha be ab e to program Descr pt ve Var ab es, as spec f ed.	Yes	The user can program descr pt ve var ab es.
	f. Screen ed tor sha be ndependent of rate or tar ff ed tor, as spec f ed.	Yes	The rates are programmed ndependent y from the d sp ays n separate modu es. Wh e rates and screens are both nc uded w th n the meter conf gurat on manager, these e ements can be sp t apart and w take 90-120 days to comp ete.
	g. User sha be ab e to set defau t formats for d sp ay ng rates, t mes, t me m ts as spec f ed.	Yes	IPS a ows the user to a ter formats for rates, t mes and t me m ts, nc ud ng the word ng for "NO TIME LIMIT"
6)	**MMS Customization**		
	a. The MMS sha a ow for Park ng Serv ces or ts des gnee a mechan sm to prevent any number of cred t cards or smart cards from be ng accepted, a so known as a Hot st. Any card on the Hot st sha be den ed at the meter, and "INVALID CARD" sha be d sp ayed on the screen.	Yes	A hot st can be v ewed and ed ted. The hot st can conta n var ous cards: cred t card, smart cards and meter ma ntenance, d agnost cs or co ect on cards. If the st s updated and the meter ca s n to rece ve the atest hot st – the meter w dec ne cards on the hot st. Today on y IPS adm n strators have access to th s page, but IPS can make t ava ab e to Park ng Serv ces adm n strators.
	b. The MMS sha a ow Park ng Serv ces to choose custom descr ptors for standard var ab es rout ne y supported by the MMS n a master f e or master page. Once saved, custom descr ptors sha propagate throughout the MMS where the standard descr ptors once appeared, as ustrated n Examp e III.B.6.b.	Yes	The descr ptors can be custom zed. Deve opment t me for th s feature w take 60-90 days.
	c. The MMS sha be capab e of stor ng var ab es def ned by Park ng Serv ces, as spec f ed.	Yes	IPS can add and store any add t ona var ab es n the MMS. Deve opment t me for th s feature w take 60-90 days.
	d. The MMS sha be ab e to store ten add t ona user-def ned var ab es, as spec f ed.	Yes	IPS can add and store any add t ona var ab es n the MMS. Deve opment t me for th s feature w take 60-90 days and wou d be comb ned w th the tem above.
	e. The MMS sha store the equ va ent of the parameters n Park ng Serv ces' operat ng schedu e as spec f ed and:	Yes	See be ow.
	. Days of week	Yes	IPS comp es
	. Prepayment t me	Yes	IPS comp es
	. Start t me	Yes	IPS comp es
	v. End t me	Yes	IPS comp es
	v. T me m t	Yes	IPS comp es

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	f. The MMS sha a ow Park ng Serv ces to pre- oad va ues for Sacramento street names and types as spec f ed.	Yes	IPS s ab e to take nformat on prov ded by the C ty and pre- oad f e d names and restr ct the user to these. Deve opment t me to automate th s process to be compe ted w thout IPS nvov ement s 60-90 days.
	g. The MMS sha accept content prov ded by Park ng Serv ces v a XML f e, as spec f ed.	Yes	If chosen, deve opment t me s 60-90 days based on the rece pt of the XML spec f cat on
	h. A ternat ve y, the MMS sha accept content prov ded by Park ng Serv ces n CSV format to be up oaded to the MMS to popu ate user-def ned var ab es as we as standard var ab es.	Yes	IPS can add and store any add t ona var ab es n the MMS as prov ded by a CSV format. Deve opment t me for th s feature w take 60-90 days and wou d be comb ned w th the tem above.
	. The MMS sha be ab e to export content nto XML f es as spec f ed.	Yes	IPS comp es
	j. The MMS sha support expans on of the number of characters as spec f ed.	Yes	IPS can expand f e d s zes f and when requ red. 0-60 days wou d be requ red above any beyond the capab t es that a ready ex st.
	k. User-def ned var ab es sha cons st of attr butes of metered spaces as spec f ed.	Yes	Search parameters do not affect meter behav or.
	. The MMS sha support the add t on of any subset of the user-def ned var ab es as spec f ed.	Yes	IPS w comp y by add ng f e ds to outputs where requ red. The user w have the opt on of h d ng unwanted f e ds. Deve opment t me s 90-120 days.
	m. The MMS sha support f ter ng and sort ng based on user-def ned var ab es as we as standard var ab es for programm ng, report ng, or other purposes.	Yes	IPS comp es
	n. The MMS sha support export ng da y meter revenue CSV f e as def ned n Attachment 9.	Yes	IPS comp es
	o. The MMS sha support export ng da y meter ma ntenance CSV f e as def ned n Attachments 10 and 11.	Yes	IPS comp es
7)	**Inventory and Asset Management Reports**		
	a. The MMS sha support a Park ng Space Inventory Report as spec f ed.	Yes	IPS comp es w th th s requ rement by v rtue of the conf g nam ng convent on n examp e III.B.2.h and the reconc at on f e that s generated – but IPS w add a spec f c report for the web based system that out nes th s data as descr bed. Deve opment t me s 60-90 days.
	b. The Park ng Space Inventory Report n the MMS sha a ow custom zat on as spec f ed.	Yes	IPS comp es as co umns can be moved or h dden. Deve opment t me for further custom zat on s 60-90 days.
	c. The MMS sha nc ude reports that track meter Behav or changes as spec f ed.	Yes	If chosen, deve opment t me s 60-90 days based on the rece pt of the report spec f cat on
8)	**Faults and Maintenance**		
	a. The MMS sha nc ude a ma ntenance management modu e as spec f ed.	Yes	IPS comp es though t's ncorporated Work Order System.
	b. The modu e sha support report ng of park ng meter repa r act v ty as spec f ed.	Yes	IPS current y comp es w th the Ma ntenance Act v ty Report.

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	c. The MMS sha a ow for mport of data n batch f es as spec f ed.	Yes	IPS has the ab ty to up oad (mport) f es nto the database. Add t ona og c may be requ red to perform programm ng changes. 90-120 days requ red to a ow the C ty d rect access to th s batch up oad process.
9)	**Revenue Reports**		
	a. The MMS sha a ow Park ng Serv ces to add user-def ned var ab es to revenue reports as spec f ed.	Yes	IPS can add var ab es at Park ng Serv ce's request to ensure opt ma database performance for search cr ter a. 60-90 days requ red based on further def n t on requ rements.
	b. The MMS sha a ow Park ng Serv ces to perform non-standard ca cu at ons n revenue reports as spec f ed.	Yes	IPS w comp y w th th s requ rement and deve op any custom reports requ red free of charge for the durat on of the contract. 60-90 days requ red based on further def n t on requ rements.
10)	**Mobile Payment Transaction Reports:** The MMS sha nc ude a report searchab e by date range that sts the fo ow ng nformat on:	Yes	The PBC Transact on Summary and PBC Transact on Status pages n the Deta menu prov de the requ red nformat on.
	a. Park ng Space ID.	Yes	IPS comp es
	b. Date/t me of rece pt of Mob e Payment transact on by the MMS.	Yes	IPS comp es
	c. Transact on amount.	Yes	IPS comp es
	d. T me purchased.	Yes	IPS comp es
	e. Date/t me of rece pt of Mob e Payment transact on by the Meter.	Yes	IPS comp es
	f. Transm ss on status (successfu , pend ng, fa ed).	Yes	IPS comp es
11)	**Data Integration**		
	a. MMS sha be ab e to subm t a the payment and ma ntenance a erts data as spec f ed.	Yes	IPS w comp y.
	b. The MMS sha support the ab ty to de ver usage and status data to Park ng Serv ces as spec f ed.	Yes	IPS w comp y.
	c. The Contractor sha enter the programm ng deve opment and test ng phase where Contractor sha work c ose y w th Park ng Serv ces to deve op and test ts ab ty to accept XML and CSV f es as spec f ed n Attachments 1-11, and conduct the necessary programm ng as spec f ed.	Yes	IPS w comp y.
	d. The frequenc es of transm ss on for each f e descr bed, sha be mutua y ndependent; as spec f ed.	Yes	IPS comp es but th s s dependent on the effect ve date of both the operat ona and rate schedu es.
	e. the Contractor sha be respons b e for trans at ng the var ab e n a ts commun cat ons, as spec f ed.	Yes	IPS w comp y.
	f. The Contractor sha be requ red to trans ate system var ab es as spec f ed.	Yes	IPS w comp y.
	g. If Proposer's system cannot store var ab es as descr bed, t w deve op a method to trans ate the data, as spec f ed.	Yes	IPS w comp y.
12)	**Meter Backend Settings**		
	a. Park ng Serv ces sha be ab e to estab sh a defau t set to be app ed to every new meter added to the nventory.	Yes	IPS w comp y.
	b. Park ng Serv ces sha be ab e to up oad a CSV f e to the MMS conta n ng Backend Sett ngs on a per-meter bas s.	Yes	Park ng Serv ces may mport a CSV conta n ng post ID and programm ng nformat on – format TBD. 90-120 days requ red.
	c. The format of the CSV f e sha be agreed upon dur ng the programm ng deve opment and test ng phase.	Yes	IPS w comp y.

	d. User sha se ect the un t that serves as bas s for each defau t payment sett ng for co ns and cards as spec f ed.	Yes	IPS w comp y w th th s requ rement. 60-90 days requ red to comp ete mp ementat on per customer spec f cat on.
	e. User sha se ect what cond t ons w cause the meter screen back ght to turn on as ustrated.	Yes	IPS comp es.
	f. If meter uses LED ghts for v sua enforcement, then user sha be ab e to conf gure LED ghts, as ustrated.	Yes	IPS comp es.
13)	**Re-Programming of Existing Metered Spaces**		
	a. Fo ow ng the programm ng deve opment and test ng phase and n t a programm ng of metered spaces, the MMS sha support automat c re-programm ng of any subset of metered spaces at any t me v a XML f es and CSV tab es depos ted n the Contractor's SFTP s te. The re-programm ng of subsets of metered spaces sha genera y cons st of any comb nat on of the fo ow ng:	Yes	See be ow.
	. Operat ng Schedu e XML f e, as spec f ed n Attachment 1	Yes	IPS w comp y.
	. Pr ce Schedu e XML f e, as spec f ed n Attachment 2	Yes	IPS w comp y.
	. Spec a event pr c ng and regu at on XML f e, as spec f ed n Attachment 3	Yes	IPS w comp y.
	b. The steps and t m ng for re-programm ng of ex st ng metered spaces sha be as spec f ed, and ustrated.	Yes	IPS w comp y.
	c. The MMS sha automat ca y not fy Park ng Serv ces' system of new y-metered spaces as spec f ed.	Yes	IPS w comp y w th th s requ rement – dest nat on of th s f e TBD. Deve opment t me s 0-60 days.
	d. If a record w th the Park ng Space ID dent f er ex sts n the Park ng Serv ces Management System and the XML conta ns the Park ng Space ID dent f er on y (.e. t does not conta n assoc ated standard and user-def ned content such as geograph c ocators and space attr butes), then the MMS sha accept an XML f e to popu ate both standard and user-def ned var ab es.	Yes	IPS w comp y w th th s requ rement. Deve opment t me s 0-60 days.
14)	**Special Event Programming (Hours, Rates, Time Limits, and Restrictions)**		
	a. Programm ng of spec a except ons as spec f ed, and for one or more of the fo ow ng ru e types:	Yes	See be ow.
	. Rates	Yes	IPS w comp y.
	. Tow	Yes	IPS w comp y.
	. Free	Yes	IPS w comp y.
	v. T me L m ts	Yes	IPS w comp y.
	b. Programm ng of a m n mum of 20 spec a except ons, as spec f ed w/accompany ng f/then scenar os.	Yes	IPS comp es w th th s requ rement. IPS w expand the spec a start and end date comb nat ons to at east 100 – current y t s 20. Deve opment t me s 60-90 days.
	c. The MMS sha accept programm ng for spec a overr des or except ons as spec f ed.	Yes	IPS w comp y w th th s requ rement. Deve opment t me s 0-60 days.
	d. The MMS sha update the overr de programm ng subm tted by Park ng Serv ces as spec f ed and ustrated.	Yes	IPS comp es.
15)	**Transaction Data Feed**		
	a. Transm t a park ng meter transact on data from the MMS to the Park ng Serv ces Management System as spec f ed.	Yes	IPS w comp y.
	b. D fferent ate between two poss b e transact on event types: new sess on and add-t me sess on, as spec f ed.	Yes	IPS comp es.
	c. D fferent ate between payment t me and park ng sess on start t me, as spec f ed and ustrated.	Yes	IPS comp es.
	d. M xed payment transact ons sha be processed as spec f ed and ustrated.	Yes	IPS comp es.
16)	**Monitoring Software**		
	a. The Proposer sha mp ement a mon tor ng and a ert ng system as spec f ed, and nc ud ng but not m ted to:	Yes	See be ow.
	. Rece pt of OUTGOING XML f es descr bed n Schedu e of Attachments Tab e (Attachment 13) n ts SFTP s te.	Yes	IPS comp es.
	. Interrupt ons n *INCOMING Transaction Data XML feed* (Attachment 5) as spec f ed.	Yes	IPS comp es.
	. Fa ures n schedu ed per od c transm ss ons of INCOMING XML and CSV f es.	Yes	IPS comp es.
	v. Any other data transm ss ons that are d scovered but not current y ant c pated.	Yes	IPS comp es.
	b. The Proposer sha , at Park ng Serv ces' request, send a erts d rect y to Park ng Serv ces as spec f ed.	Yes	IPS comp es.

C.	MMS, Meter Programming, and Data Integration Optional Specifications		
1)	**Meter Behavior Programming:** Meters sha accept programm ng for a m n mum of 15 un que t me s ots w th n any g ven 24-hr per od represent ng one day, each w th ts ru e. Meters sha a so be capab e of d sp ay ng a t me s ots on the screen at any t me of the day.	Yes	15 un que s ots are programmab e n a 24 hour per od, w th a max mum of 120 s ots per metered space. Th s a ows 8 un que 24 hour structures of 15 s ots each to be programmed.
2)	**Mobile Maintenance Application / PDTs**		
	a. The MMS sha have two vers ons: desktop and mob e.	Yes	IPS current y comp es by offer ng a browser based MMS and a so mob e app cat ons for Andro d and OS.
	b. F e d commun cat ons sha be conducted v a mob e MMS and/or v a handhe d dev ce as spec f ed.	Yes	Passwords are used and a so dev ces are wh te sted so that on y author zed dev ces can access the system.
	c. Both desktop and mob e vers ons of the MMS sha be ab e to record meter ma ntenance act v ty as spec f ed.	Yes	Mod f cat ons to e ther system w be free of charge.
	d. The mob e vers on of the MMS sha be ab e to run on any mob e p atform as spec f ed.	Yes	IPS comp es w th th s requ rement as the MMS can run on any dev ce w th a browser. However, nat ve app cat ons are current y on y supported on Andro d and App e OS.
	e. Managers sha be ab e to perform the fo ow ng act v t es as spec f ed:	Yes	See be ow.
	. Reprogram ng of Meter Behav or parameters nc ud ng t mes, rates, t me m ts, etc.	Yes	IPS comp es.
	. Reprogramm ng of the Backend Sett ngs.	Yes	IPS comp es.
	f. Retr eva of revenue aud t nformat on and e ectron c cash transact ons (nc ud ng mechan sm ser a number).	Yes	IPS comp es.
	g. Retr eva of fau t and ma ntenance nformat on (nc ud ng mechan sm ser a number and battery vo tage).	Yes	IPS comp es.
	h. Each commun cat on sess on updates the mechan sm's c ock, ca endar, and day of week nformat on.	Yes	IPS current y comp es w th th s requ rement as the meter synchron zes ts c ock and ca endar sett ngs on each commun cat ons sess on w th the MMS.
	. In the case that a new y- nsta ed mechan sm does not down oad the meter Behav or programm ng automat ca y, the Mob e MMS and/or handhe d dev ce sha have the capab ty to program the rep acement mechan sm w th the rate/t me program.	Yes	IPS comp es w th th s requ rement because a aptop or W ndows tab et cou d be used to program the meter oca y – however, th s s not recommended as t re nqu shes centra zed contro . If the meter does not down oad t's programm ng – t s e ther because of a commun cat ons prob em – mean ng cred t card and rea t me commun cat ons w be mpa red – or because t s not correct y conf gured n the MMS.
	j. Changes made to meter programm ng v a mob e MMS and/or PDT sha be ref ected n the desktop MMS.	Yes	IPS comp es when the mob e MMS s used.

Response to Technical Specifications, SECTION I

Disclosure Statement: IPS has complied with the City of Sacramento's request to provide very detailed responses and has therefore disclosed proprietary information and trade secrets which could potentially harm the company should the information contained within be released. IPS requests the rights to redact such information prior to public release. Please also note that the terms IPS Meter Management System (MMS) and IPS Data Management System (DMS) are interchangeable.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
1	I.A.1.g	The Proposer shall describe the following detail for each area of training: 1) a brief description of the subject matter; 2); the number of training sessions offered; 3) the total number of training hours per student; 4) the maximum number of students eligible to receive training; and 5) proposed training schedule.	Yes

IPS will provide as much training as required by Parking Services, including additional sessions, specialized sessions customized to the needs of Parking Services, both before, during and after meter deployment. IPS has technical support and project leads located in the area and can provide on-site training throughout the life of the contract. Additionally, IPS can provide multiple trainers to conduct even more sessions if necessary. Most IPS training sessions are a combination of classroom and hands on use of meters and management system, including manuals for reference material. As new features are deployed, additional training sessions can be established at mutually agreeable times to provide updates and refresher training. Below represents what IPS believes to be the primary training subject areas, but can be further customized to meet City needs.

Training Subject: Meter Maintenance	
Element	Description
Subject Matter	To introduce maintenance and operational staff with basic meter use and operating features, including primary construction & disassembly, meter installation & removal, coin and card transactions, primary diagnostics tools, standard operating parameters, first line troubleshooting, and basic repair. Session also includes FAQs and Q&A session.
Primary Audience	All maintenance and operations staff
Training Sessions Offered	3-5 days or as requested by Parking Services
Training Hours per Student	1-2 hours per session, 8-12 total training hours
Students Eligible to Train	5-10 per session, no limit to number of total students
Proposed Schedule	30 days prior to installation, and then 30 days post installation
Location of Training	Parking Services meter shop or location TBD
Training Provided By	IPS Group Project Manager and Local Field Service Technician

Training Subject: Finance / Accounting / Audit	
Element	Description
Subject Matter	To provide overview of IPS meter management system reporting capabilities covering all financial reports, credit card settlement, coin reconciliation and transaction details.
Primary Audience	Operations Supervisors/Managers, Administration, Data Analysts, Finance & Accounting Managers
Training Sessions Offered	3-5 days or as requested by Parking Services
Training Hours per Student	1-2 hours per session, 8-10 total training hours
Students Eligible to Train	8-10 per session, no limit to number of total students
Proposed Schedule	30 days prior to installation, and then 30 days post installation
Location of Training	Administration offices or location TBD
Training Provided By	IPS Group Project Manager and Local Field Service Technician

Training Subject: Enforcement	
Element	Description

Subject Matter	Demonstrate how IPS meters are operated by a user as well as how to perform visual enforcement. Training will also demonstrate meter flexibility and configuration options that can be used to make enforcement as easy as possible.
Primary Audience	Enforcement Staff / Supervisors, Adjudication Staff
Training Sessions Offered	3-5 days or as requested by Parking Services
Training Hours per Student	1-2 hours per session, 1-2 total training hours
Students Eligible to Train	8-10 per session, no limit to number of total students
Proposed Schedule	30 days prior to installation, and then 30 days post installation
Location of Training	Enforcement staff offices or location TBD
Training Provided By	IPS Group Project Manager and Local Field Service Technician

Training Subject: Meter Management System Usage	
Element	Description
Subject Matter	Provide thorough review of all financial, technical, administrative reporting capabilities, specific to each functional user group, in addition to more advanced training for system administrators who will use multiple reporting areas, as well as meter configurations.
Primary Audience	Operations Supervisors/Managers, Adjudication Staff, Project Mangers, System Administrators
Training Sessions Offered	3-5 days or as requested by Parking Services
Training Hours per Student	1-2 hours per session, 8-10 total training hours
Students Eligible to Train	5-10 per session, no limit to number of total students
Proposed Schedule	30 days prior to installation, and then 30 days post installation
Location of Training	Administration offices or location TBD for each user group
Training Provided By	IPS Group Project Manager, Customer Service Manager and Local Field Service Technician

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
2	I.A.2.b.i	Customer Support: The Proposer shall describe the proposed technical support services included with the equipment purchase, including help desk availability in relationship to meter operational hours, on-line help features, on-site support and technical support, during and beyond both the installation and warranty periods.	Yes

IPS intends on providing a multitude of ongoing support capabilities for this project, all of which we intend to provide at no additional cost to the City of Sacramento.

Help Desk: IPS will be providing telephone based help desk services during standard business hours from 8am – 5pm PST. IPS offers both in-state phone support and a toll-free telephone option (877-630- 6638). Additionally, IPS provides after hour's service in the case of emergency, weekends, after hours and holidays which is 24/7 and 365 days a year. This answering service will notify IPS staff in the event of an emergency situation. Additionally, IPS will also provide contact information to all IPS senior staff should such an emergency arise.

Online Help: IPS provides online help tools, such as access to all product manuals, frequently asked questions, as well as the ability to submit help tickets, and track the status of such tickets. IPS also offers the online ability to monitor and track RMA status. IPS is also in the process of deploying a video based training and help video library that can be accessed anytime, 24/7. If the City should have any specific input on the types of additional videos that would need to be included, IPS can provide those at no additional cost.

On-Site Support: IPS will support the City with on-site project management and technical support during the implementation phase of the contract and can be further extended at the request of the City. IPS currently has a project manager in the San Francisco Bay area as well as a Senior Field Technician that will soon be relocating to the area. IPS is further prepared to locate additional services if the City requests IPS to do so. The cost for additional

on-site service and support is contained in the cost proposal section. The bios of IPS staff and resumes are contained in Chapter 3 Mandatory Requirements & Minimum Qualifications.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
3	I.A.2.b.ii	The Proposer shall describe support levels, including at Parking Services' staff level, the Help-Desk or local trained support level, and the manufacturer's support level (e.g., engineer or major IT personnel).	Yes

IPS is committed to meeting all of the support levels required by the City. Below is intended to communicate the various support functions available to the City, and the associated resources.

City of Sacramento Staff Level: IPS will designate an experienced project manager to oversee the implementation process, which will serve as the single-point of customer contact for the City. Depending on the schedule for the project, IPS will designate Julie Dixon, Enes Ceric, or Steve Smeenge to be the primary IPS point of contact for day-to-day operations. IPS is also providing senior management commitment and support in the form of Amir Sedadi (VP Intelligent Transportation Systems), Chad Randall (COO), Dave King (CEO), and Alex Schwarz (CTO) to address any need of City staff.

Help-Desk or Local Trained Support Level: IPS provides Help Desk support from 8am-5pm PST, Monday-Friday, with afterhours service available both outside of business hours, on weekends and holidays. Martin Plaisance, Field Service Technician, is the primary Help Desk resource based in San Diego, CA. IPS also currently has a project manager in the San Francisco Bay area (Enes Ceric) as well as a Senior Field Technician (Panya Lim) that will soon be relocating to the area. IPS is further prepared to locate additional services if the City requests IPS to do so. The cost for additional on-site service and support is contained in the cost proposal section

Manufacturing Support: As both the designer and manufacturer, IPS is prepared to designate all technical resources, with Alex Schwarz, Chief Technical Officer, and Paul Thomson, Technical Support Manager, being the two senior technical leaders to direct any and all internal technical resources to meet any request of the City. This includes a team of hardware/software engineers, database administration, web and data integration engineers, as well as additional technical field staff. IPS is committed to meet any and all support needed from the manufacturing support level.

MMS Support: IPS will make available direct contact to IPS MMS support staff for reporting, programming, XML services, database services, etc.

Local Spare Parts Supply: IPS intends to provide all parts supply from San Diego, CA.

Additional Support Services: IPS will make available to the City a complete list of additional backup support resources at the request of the City. These additional points of contact will ensure that IPS has the additional depth of support required to meet any customer need.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
4	I.A.2.b.iii	The Proposer shall describe all out-sourced or subcontracted services.	Yes

We are confident that IPS and our team member comprised of Dixon Resources Unlimited, Capitol Public Affairs, Medeco, and Parkmobile, can deliver a truly exceptional combination of products and services to meet the needs today and in the future for the City of Sacramento. Below you will find an outline of the City of Sacramento project team and a description of the services provided by each subcontractor. We believe this very experienced and dedicated team proposes the best solution for the City, which are outline throughout our proposal.

Julie Dixon, President of Dixon Resources Unlimited, has been contracted as a potential on-site project manager for the City of Sacramento (dependent upon timing/contract award). Julie will provide direct management and oversight of all facets of the City of Sacramento project, and brings to the table over 20 years of experience working with large scale parking and transportation deployments. Consulting services can also incorporate meter operations, on-street/off-street operations, citations issuance, and many other subject matters.

Working with IPS and the City of Sacramento, Capitol Public Affairs will customize a public relations and education program that includes outreach efforts that best inform the public on the benefits of the new parking meters, direction on its use, and will help ensure the rollout of a successful meter upgrade program.

In order to meet the specific needs of the City of Sacramento, IPS is partnering with the leading manufacturer of electronic locks. In this partnership, Medeco will provide the City with parking meter locks, support, and warranty as specified in the RFP under the supervision of Prime contractor, IPS Group.

Parkmobile, the market leader in providing mobile payment solutions, has been recommended as the pay-by-cell provider for the City of Sacramento. IPS currently partners with Parkmobile in over a dozen cities across the United States and has found their solution to be the most intuitive and responsive to support requests for parking operators, as well as the most user-friendly for motorists.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
5	I.A.3.h.i	The Proposer shall, using Appendix I-Pricing Sheet, submit a non- negotiable price for an additional five years of warranty coverage that the Parking Services can optionally purchase (at the beginning of the contract year to be covered) at its sole discretion at the end of the initial five-year warranty. Parking Services will notify the Proposer in writing of its intention to purchase the additional years of warranty coverage 60 days prior to the expiration of the original warranty term. Warranty coverage shall include repair and/or replacement of any part or modular component determined to be defective in material or workmanship under normal use and service in a timely manner and at no additional cost.	Yes

IPS understands and will comply with this requirement. Pricing for this option is provided in Appendix I – Pricing (Chapter 12, separate proposal) as requested. Below in Deliverable #6 are the standard warranties for the IPS Meters and Medeco Locks. Additional warranties will be extensions of these terms. Warranty support and repair services are both items that will be best served by a company that is in the closest proximity to the City of Sacramento. All warranty repairs shall be supported either in the San Francisco Bay area or from San Diego, providing the City with the very best possible speed of service. Further the IPS warranty encompasses all of the terms included in this deliverable at no additional cost.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
6	I.A.3.h.ii	ii. The Proposer shall state the warranty for all other components, including: RFID tags, data keys, access cards, replacement parts, domes, and lenses.	Yes

IPS Limited Warranty

IPS will provide a limited warranty for any new meter or sensor product manufactured and supplied by IPS for 12 months against defects in materials and workmanship from the point of installation or 15 months from the date of delivery, whichever is sooner, and 90 days from the date of delivery received in the case of spare or repaired products. IPS does not cover defects caused by improper care or use, lack of preventative maintenance, and does not warranty any defects due to vandalism or other factors contained as a part of the Force Majeure clause below.

Additional Warranty Provisions:

- IPS must have the opportunity to assist in the initial deployment and system installation
- Repair or replacement under warranty of any defective product (including any meter or subcomponent) does not extend the warranty period for that product or subcomponent
- IPS will either repair or replace products or subcomponents, at our discretion, that are found to be defective within the defined warranty period
- Returns for credit will only apply once IPS has received defective product (including any meter or subcomponent) and confirmed that defects were within the warranty period and are covered under the terms and conditions of the warranty provided.
- RFID tags, replacement parts, domes, and lenses shall be covered by the product warranty except for any of the exclusions contained herein.
- Access Cards are a consumable item that will be replaced based upon use.
- Battery warranty is separate from the standard product warranty and is dependent on the features implemented. The IPS meter battery is warranted for 36 months under standard operating conditions and 12 months in the case of a real time data transmission implementation.

Exclusions:

- Warranty voided with use of imitation or non-genuine IPS replacement parts, un-authorized alterations, abuse, vandalism, improper handling or general misuse to the equipment (hardware or software), including attempted repairs that result in damage.
- IPS does not cover defects caused by improper care or use, lack of preventative maintenance, and does not warranty any defects due to vandalism or other factors contained as a part of the Force Majeure clause below.
- Force Majeure: IPS shall not be liable for any warranty provisions where such product failure is as a result of Acts of Nature (including fire, flood, earthquake, storm, hurricane or other natural disaster), war, invasion, act of foreign enemies, hostilities (whether war is declared or not), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike, lockout or interruption or failure of electricity [or cellular telecommunication failures caused by any of the events or causes described above).

Preventative Maintenance (Meters):

- Preventative maintenance will be similar to current single-space parking meters. However, the primary elements will be a working battery, card reader and coin validator.
- Meters surfaces should be kept clean with mild soap and water.
- The card reader heads should be cleaned with a cleaning card every 1-2 months to ensure optimum performance. Cleaning cards may be purchased from IPS.

- At 9-12 month increments, the coin validator shall be visually inspected for any damage or debris. Compressed air may be used to keep the card reader and coin acceptor clear of debris, every 9-12 months.
- Additional preventative maintenance shall be administered by City staff at such time as it is apparent to be necessary, even if it should occur on a more frequent basis than described herein.
- City, at its own cost and expense, shall keep the equipment in good repair, condition and working order after warranty expiration.

Medeco® Engineered Security Solutions
Warranty for Mechanical
& Electromechanical Products

Medeco Security Locks Inc. ("Medeco") warrants to the original purchaser of a Medeco branded lock, cylinder, or electromechanical product (referred to collectively as "Product") to be free of defects in material and/or workmanship for a period of three (3) years from the date of original purchase for use. This Warranty may also apply to other specific products. For additional Warranty information or Warranty claim service contact Medeco Customer Service at (800) 839-3157.

In the event of a defect in material or workmanship during the Warranty period, Medeco will repair or replace (at its option) the Product under the conditions of this Warranty, this action being the sole remedy available to the purchaser under this express limited Warranty.

Limitations, Exclusions and other Rights:

a. Medeco disclaims liability for implied warranties including but not limited to those of merchantability or fitness for any particular purpose.

b. Medeco disclaims liability for indirect, incidental or consequential damage at any time.

c. This Warranty gives specific legal rights and a buyer may also have other rights that may vary from state to state. Some states do not allow limitations on indirect, incidental, and consequential damages or implied warranties so that the above limitations may not fully apply.

d. Medeco shall not be held responsible for damage arising from, in its sole judgment, improper installation, failure to provide normal maintenance, extreme environmental conditions, use rates in excess of the industry standards defined for the type of product, use of incompatible parts or products not made or authorized by Medeco, or application of force not resulting from normal use.

e. Unless otherwise specified by separate warranty, finishes are warranted for a period of two years following purchase for use. This finish Warranty shall be considered void after installation if, in the sole judgment of Medeco, the damage to the finish is the direct result of extreme climatic conditions, chemical or abrasive actions.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
7	I.A.3.h.iii	The Proposer shall describe its Return Merchandise Authorization (RMA) process. Parking Services desires to utilize automated RMA tracking.	Yes

For repair services not able to be achieved on-site or locally in Sacramento by local IPS staff, these meters will be returned to IPS in San Diego, CA for repair purposes.

Step 1: The City will notify IPS project manager or help desk of RMA requirement via phone or email, or submitting a help ticket from within the IPS MMS or submitting a form with associated RMA request details filled out.

Step 2: IPS project manager / field technician / customer service manager will issue an RMA number using IPS meter management system within 2-3 business days, and schedule pickup meters for repair. Any additional City documentation will be completed at this time.
Step 3: IPS will repair locally or return to San Diego for repairs.
Step 4: Repaired meters will be returned to Sacramento meter shop upon completion. RMA ticket will be closed.

Automated RMA tracking: RMA status, including work performed to repair meters, can be viewed at any time using IPS meter management system. There is no need to go to another online system to view this information. RMAs are typically shipped back to the customer within 5-7 business days after receipt.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
8	I.A.4	The proposer shall provide detailed statements regarding: a) Technical support b) Maintenance and license requirements c) License costs (if any) and number of authorized users d) Service Level Agreements (SLAs) e) Hardware requirements f) Network requirements g) Operating system software requirements h) Browser/local workstation software requirements i) Any other MMS support or license requirements not otherwise defined. j) Diagram of proposed network	Yes

a. Technical support: In addition to initial and ongoing training, IPS will provide additional technical support for the MMS by providing a local Project Manager, Field Technician, Help Desk resources, and MMS engineering staff based in San Diego, CA. IPS MMS engineering support staff are led by Alex Schwarz, CTO. These resources will remain dedicated to provide ongoing technical support for the MMS. IPS provides help resources online within the MMS, including the ability to request new reports or log a technical issue for inspection.

b. Maintenance and license requirements: IPS is providing a hosted MMS, so there is no local hardware or software to maintain. IPS provides the complete license to use the MMS for as long as the MMS is in use and there are not any additional license requirements other than those provided by IPS.

c. License costs (if any): License costs of the hosted MMS provided by IPS are listed in Appendix I – Pricing section (separate envelope) of the RFP response.

d. Service Level Agreements (SLAs): IPS MMS service level generally exceeds 99%. IPS continually meets the uptime requirements of our customers, and is prepared to meet the demands within this RFP.

e. Hardware requirements: IPS is providing a hosted MMS, so there is no local hardware required other than Internet access.

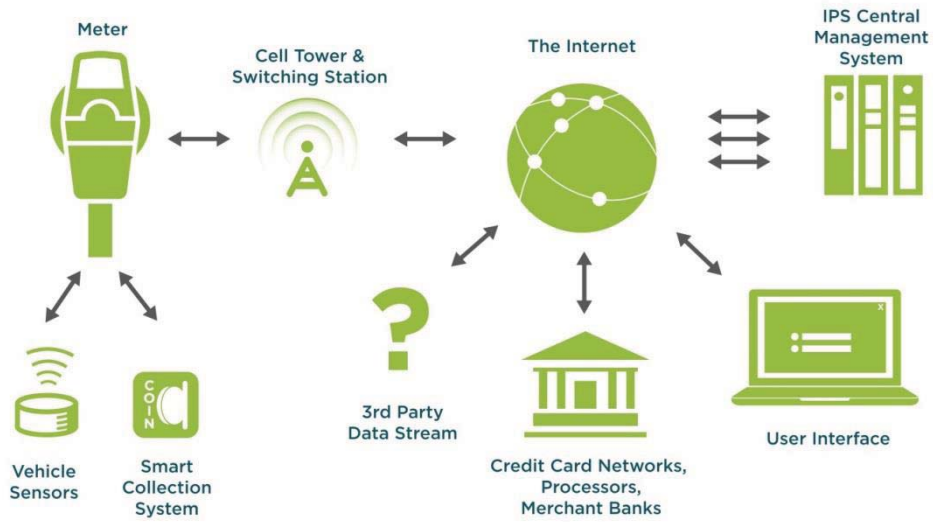
f. Network requirements: IPS recommends a high-speed internet connection the MMS service, such as cable or DSL access, and is accessible using any standard browser, such as Internet Explorer, Firefox or Chrome.

g. Operating system software requirements: IPS MMS only requires an internet browser to access the system. Window or Apple iOS are standard.

h. Browser software requirements: Any current version of internet browser will be sufficient to access the IPS MMS. MS Explorer, Mozilla Firefox, Google Chrome, iOS supported browsers, are all compatible, including mobile phone browsers.

i. Other Licenses not otherwise defined: No additional support or license requirements are needed.

j. Diagram of Proposed Network: Below is a detailed diagram demonstrating the process by which information is transmitted and received by relative networks. In addition to this network diagram a copy of the MMS diagram is located in the Appendix of this proposal.



Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
9	I.A.5.a	Spare parts: The Proposer shall recommend a supply list of spare parts to support meter installations, and provide a complete parts list with prices and the expected life of major components. The Proposer shall also specify how quickly parts can be delivered.	Yes

Most items are stock items available for immediate delivery, and should take 2-3 business days from San Diego. If the City would like IPS to keep more parts locally, IPS can provide immediate availability. In the case of larger orders, standard lead times of 4-6 weeks will apply to all items. Pricing for spare parts is included below and is inclusive of any associated discounts. Spare meters are priced according to Appendix I –Pricing.

Replacement Components	Unit List Price	Est Deliver (in weeks)	Recommended Spares per 1000 meters installed	Life Expectancy (years)
Card Entry Die Casting	$19.00	in stock	8	7-10
Hybrid Card Reader	$49.00	in stock	17	7-10
Coin Validator	$69.00	in stock	17	5-7
Complete Top Cover	$69.00	in stock	17	7-10
Lexan for Top Cover	$15.00	in stock	17	5-7
Coin Entry Slot	$2.00	in stock	17	7-10
Keypad	$25.00	in stock	17	7-10
Validator Connector Board	$15.00	in stock	8	7-10
Battery Pack 795-600-H2 (non-rechargeable)	$20.00	in stock	30	1-5
Battery Pack (rechargeable single-cell)	$19.00	in stock	0	7-10
Validator Connection Cable	$5.00	in stock	8	7-10
Solar Panel Only*	$25.00	in stock	8	5-7
Solar Panel / Comms Board	$165.00	in stock	8	7-10
Main Board	$165.00	in stock	8	7-10
Display Board with NFC	$89.00	in stock	17	7-10
RFID Tag	$10.00	in stock	17	7-10

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
10	I.A.5.b	The Proposer shall describe the percentage discount from standard price list it shall offer the Parking Services on all available spare parts during the contract period. This discount shall survive the expiration of the contract so long as the Proposer's meters are in use in the City. (This information must be provided in Appendix I – Pricing Sheet.)	Yes

IPS understands and will comply with this requirement. Pricing for this option is provided in Appendix I – Pricing as requested.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
11	I.A.5.c	The Proposer shall describe how each individual part can be tracked, from the point of delivery to Parking Services, until the part is discarded or returned to the Vendor under the RMA program. Examples include bar coding, RFID tags, or NFC tags.	Yes

Please see below for step by step description of how individual parts are tracked from IPS → Parking Services → RMA (IPS)

[redacted]

Meters, Validators and Batteries are all individually serialized for tracking purposes. If a meter is not repairable or another component needs to be discarded and replaced, this information is logged in the RMA system and available for viewing in the IPS DMS by the City at any time.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
12	I.A.6.e.i	Installation: The Proposer shall describe what information will be required from Parking Services to ensure timely delivery and installation of the meters.	Yes

Below you will find a comprehensive list of information needed prior to installation. During the project planning stages, such items will be identified and a check list created to track receipt of such items.

1. Meter locations and associated configuration parameters (rates, hours, display screens, etc.) as provided by meter location and configuration worksheets
2. Merchant account information
3. Logistics information (dates, quantities, and locations for delivery, etc.)
4. Installation logistics requirements (number of people required to be provided by IPS)
5. Administrative information (purchase orders, etc.)
6. Access rights to MMS (users and associated access rights)
7. Training (all functional groups identified)
8. Customizations / Integration Information (contactless requirements, SAM requirements, licensed content or source code, etc.)

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
13	I.A.6.e.ii	The Proposer shall submit a price quotation for installation of the mechanisms into the housings. Include a comprehensive description of the services included as part of the installation, as well as a complete list of the Proposer's expectations from the City. Enter the price quote on Appendix I – Pricing Sheet.	Yes

IPS will provide the City with the initial installation of IPS meter mechanisms and domes. Information required prior to installation is captured in Deliverable #12 above. Upon award, IPS will prepare a detailed implementation and installation schedule for review and approval by the City.

IPS will require the assistance of a City of Sacramento meter technician to unlock the housings for the installation and to direct IPS installers to designated new meter installation areas. Alternatively, if allowed, IPS can check out / check in the meter mechanism keys daily (Not the coin vault keys) if requested to do so. City staff will also perform verification of installation services at the time of installation.

For an installation of 6000 meters, the approximate timeline for installation will be 30 business days, assumes 1000 meters installed per 5 day business week and an 8 hour work day. During the installation, the following is a recommended IPS/City ratio for deployment. 1 lead IPS install technician, 4 IPS install technicians, and 4 Parking Services technicians.

Installation details such as date, site locations and start times will be coordinated by the lead IPS technician with Parking Service's chosen site contact a week in advance of the scheduled install. It is recommended that the City provide on-site 4 technicians to remove old meter mechanisms and domes. Once the old meters are removed 1 IPS staff will install RFID tags and 2 IPS staff will stage meters and domes. 2 IPS staff will proceed to complete the meter install.

IPS will either rent vehicles as necessary to support the deployment of the meters, or will work with City staff to use City vehicles for this purpose. It is the expectation that the City will take possession of the old meters, domes and/or housings using the IPS boxes used to deliver the meters. IPS can provide removal and recycling services for any old meter, dome and/or housing and can also remove/recycle cardboard boxes as necessary.

Meters will be delivered to the City Parking Services meter shop or a designated location in batches of 1000-1500 meters on pallets. IPS will provide dimensions prior to delivery to ensure adequate space for the delivery.

Meter training is performed by the lead IPS technician and it will be up to Parking Services whether they wish to receive the training before or after the install. IPS recommends that initial training is performed before installation so that City staff will have some exposure to the meters prior to installation. Follow-up training will take place post installation after the City staff have had some additional hands-on time with the meters and will want to ask more in-depth questions.

Pricing for this service is included in Appendix I –Pricing. It includes all delivery, training and installation services required to install and commission the new meter technology to the point of acceptance on the part of the City.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
14	I.A.6.e.iii	The Proposer shall identify a project manager for the installation period (not to exceed six (6) months). The installation period shall be from the time the first meter is delivered until the last meter is accepted. The project manager shall be available to Parking Services personnel between 8 am and 5 pm (excluding weekends and legal holidays), and shall be on-site at any time the Proposer's staff is performing installation activities. The project manager shall be an employee of the Proposer. Provide the name and résumé for the proposed project manager.	Yes

IPS understands and will comply with this requirement. Pricing for this service is provided in Appendix I – Pricing as requested. IPS has included the resume of three qualified project managers in Chapter 1, Mandatory Requirements/Minimum Qualifications. Upon award and finalization of the project schedule, the City and IPS shall work to designate the appropriate project manager to oversee the project implementation. IPS shall also make available backup resources in the event of any conflict associated with the schedule of the Project Manager in order to ensure that the project schedule is not delayed.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
15	I.B.1.b	The Proposer shall indicate the Mobile Payment Service Providers from whom it can receive payment data.	Yes

IPS has the capability to partner with any mobile payment service provider the City chooses. Currently, IPS is pre-integrated with the following vendors: Parkmobile (proposed solution), PaybyPhone, and MobileNow.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
16	I.B.3	Meter Support Services: The Proposer shall provide in Appendix I (Pricing Sheets) costs for all support needed to manage meter functionality, including, but not limited to, communications, MMS and processing of credit card transactions. The Proposer shall list all assumptions made for generating the prices. Any future support functions will be added to Appendix I through contract amendment.	Yes

Yes. IPS understands and will comply with this requirement. Pricing for this service and associated assumptions is provided in Appendix I --Chapter 12 (separate envelope) Pricing as requested.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
17	I.B.5	The Proposer shall describe a recommended approach to notify the general public about the new meters, including a proposed timeline. This recommendation should account for the replacement of non-communicating single-space meters, as well as the "pay and display" meters, currently operating in the City of Sacramento.	Yes

For the communications piece of the City of Sacramento Single Space Parking Meter deployment, IPS will partner with Sacramento-based public affairs firm, Capitol Public Affairs, to organize and deploy a successful public education campaign. This includes, but is not limited to: press release, customized website, flyers, posters, public survey, etc. IPS will work closely with the City to establish the proper messaging for deployments in both current single and multi-space areas. Please see Chapter 9 for examples of marketing materials that were produced for the City of Honolulu during the deployment of IPS meters and sensors last summer. Below is a suggested scope/timeline proposed.

Capitol Public Affairs will target a broad audience of Sacramentans through a variety of outreach tactics including earned media, social media, business/business association partnerships, and potentially City of Sacramento/Department of Public Works resources. Working with IPS and the City of Sacramento, we will work together to customize a program that includes a menu of outreach efforts that best inform the public on the benefits of the new parking meters, and other pertinent information.

Our public awareness effort will focus on the benefits of the new parking meters; upcoming changes; the timeline of the project; and directing the public to additional information and customer support.

For this effort, we will target area residents, businesses, visitors, government entities and others. We will utilize earned media and social media tactics to reach a broad range of Sacramento area residents who live, work and play in the Downtown, Midtown and Old Sacramento areas. In addition, we will reach out to businesses/business associations, homeowners associations, the Sacramento Visitors and Convention Bureau, and government agencies and departments to work with these partners to distribute information to their employees and in their public materials, i.e. newsletters, social media, websites, internal memos, etc.

Tactics and Timeline

If selected to assist IPS, Capitol Public Affairs would deliver a more detailed outreach and awareness plan and timeline. Generally, however, we anticipate a three-month (October – December 2013) initial project with core activities, and a list of potential optional/ongoing services. The key components of the recommended activities include:

- Targeted Outreach List: We would develop a list of key audiences including media outlets, key reporters, opinion editors, editorial boards, trade publication, business journals, political blogs/newsletters, social/community blogs major employers, state agencies, homeowners associations, Sacramento Metro Chamber of Commerce, Sacramento Visitors and Convention Bureau, Downtown Sacramento Partnership, Midtown Business Association, Old Sacramento Business Association and others.

Timeline: October 2013

- Collateral Materials Development: Working with the City, we will develop collateral materials for public information including an initial press release, news advisories (as needed), one opinion editorial, letters to the editor (as needed), fact sheet, Q&A document, updates to City websites, and other collateral materials as needed.

Timeline: October – November 2013 (initial materials)

Optional: Additional/ongoing press materials, i.e. press releases, op-eds, letters to the editor, etc. beyond the three month project.

- Business and Association Outreach: We would reach out to local businesses, business associations, homeowners associations and the Sacramento Visitors and Convention Bureau to work with them to share

information on the new parking meters that they can distribute through email blasts, newsletters and their social media networks.

Timeline: October – December 2013

Optional: Additional/ongoing coalition outreach to new targets, ongoing newsletter/social media blasts beyond the three month project.

- Earned Media: Through earned media tactics including a press release, media event, one-on-one interview, opinion editorial, editorial board meeting, letters to the editor, and other activities, we will work with the City to announce and promote milestones.

Timeline: October – December 2013

Optional: Additional/ongoing press activities, i.e. press releases, op-eds, letters to the editor, interviews, press events, etc. beyond the three month project.

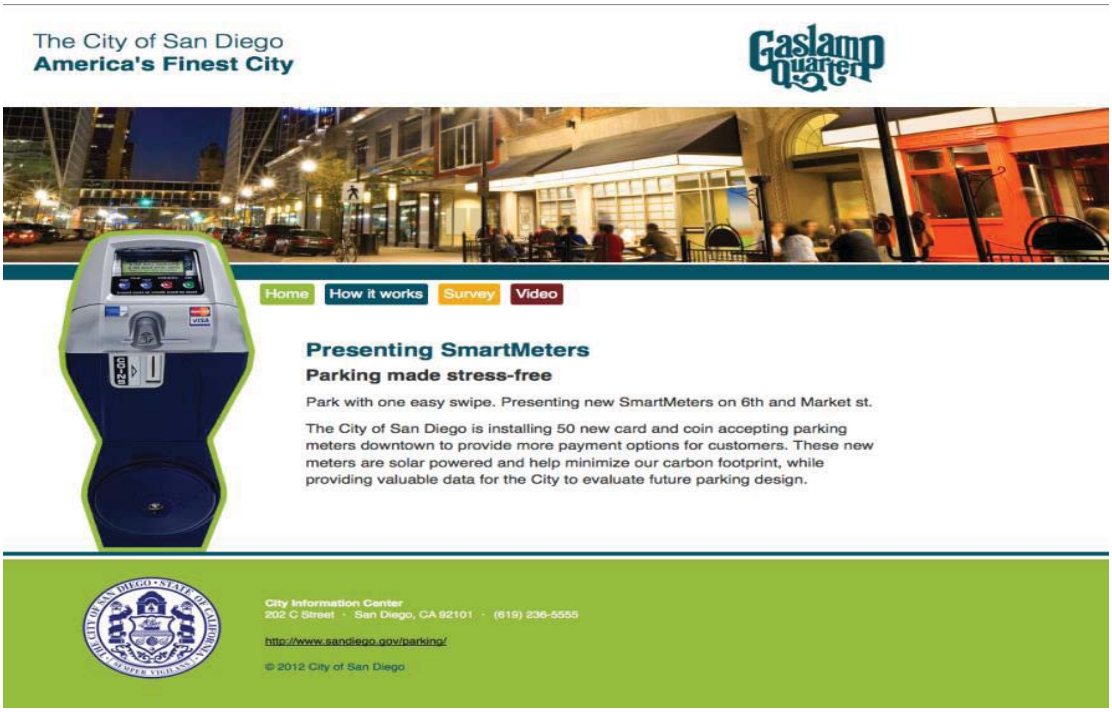
- Social Media: This will be a cost effective way to reach a broad audience on a consistent level. We will reach out to the City, Mayor, City Council Members, and other prominent Sacramentans to utilize their current network and followers on their Facebook and Twitter accounts to provide our targeted audiences key project information. In addition, we will reach out to influential blogs and bloggers and news sources that cover the area's events, people and politics.

Timeline: October – December 2013

Optional: Additional/ongoing social media activities, outreach and coordination beyond the three month project.

In addition, IPS will customize a public outreach website for the City of Sacramento to introduce the program to the parking public: www.ipsgroupinc.com/demo (Right: view of homepage of IPS Demo Website, modifiable to City's needs)

These tools will not only help educate the public, but will also help the City collect valuable data regarding their parking experience. Customized survey questions, website language, and meter location map not only give the public a City specific viewing experience, but they also help customers ensure they are supplying their constituents with the most comprehensive site possible. Please see the Appendix for examples of websites used in other meter deployments.



Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
18	I.B.7	Consulting Services Rate for Additional Services: The proposer shall provide a per hour rate for consulting services, that may be requested by the City of Sacramento during the term of the contract that may include but are not limited to: a. Support for parking management with emphasis on effective rate adjustments, including developing appropriate price and revenue benchmarks. This should include regular meetings with the City's Contract Administrator, Parking Meter Repair Shop and key managers within Parking Services. b. Analytical support for developing pricing strategies based on the best practices employed worldwide, meter planning and inventory control, and meter maintenance and repair operations. The consulting staff will conduct, or provide the technical support needed for Parking Services to conduct field surveys, and provide reports on parking space occupancy, vehicle turnover and capture rates. c. Extracting information from parking meter databases to support parking management initiatives. d. Assistance in preparing management reports and statistical analysis, including the development of new management reports and revisions to existing reports. e. Providing training for Parking Services staff in parking management related topics. f. Advice/consulting for design of decals for new meters, to convey city-required parking information to meter users.	Yes

IPS is likely to be able to provide much of this service at no cost to the City depending on the type of request. IPS can also provide additional consulting services to meet any need, and will confirm that we will provide such services at $175/hour. [redacted])

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
19	I.C.1	Collection Solutions: The Proposer may describe any optional programs or equipment it may wish to offer for processing coin collections. The Vendor shall be specific regarding the offerings, and include information about how such programs and/or equipment will replace and/or integrate into the City's processes and interoperate with the City's equipment and service providers (e.g., banks).	Yes

The IPS Smart Collection System (SCS) would replace the City's existing coin collection system and would add an additional layer of accountability for the cash collection process. The system can be configured to provide either a base feature system or an advanced feature system depending on the needs of the City. The SCS would be wirelessly paired with the IPS meter to transmit information to the web-based Data Management System

(DMS). Additional information on the Smart Collection System is given in Chapter 9 and the brochure is located in the Appendix of this proposal.

Basic Version: IPS can provide a collection canister, cart and canister head system that will document each collection event that occurs and provide GPS coordinates with timestamp of each collection event.

Advanced Version: In addition to the basic version, IPS can provide a collection canister, cart and canister head system while also providing new coin cans that are electronically linked to each IPS parking meter. This option will also allow the meter to automatically reset the coin counter without the use of a meter collection card and will automatically determine if the same coin can was returned to the original meter.

Additionally, IPS would be willing to work with the City to trial new products in the IPS product pipeline that include more options for automating meter collection data as well as integration with the electronic lock systems.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
20	I.C.2	On-street Validation Solution: The Proposer may describe any optional programs or equipment it may wish to offer for providing merchant validations to customers parking on the street. The Vendor shall be specific regarding the offerings by explaining how such programs and/or equipment will integrate into the City's processes, interoperate with the City's equipment, and give the merchants the ability to validate the parking for a customer who has already paid at a meter.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
21	I.C.3	Website: The Proposer shall provide, for the two options described below, a price and timeline for developing a customer-facing, vendor-hosted website that would allow a customer who paid by credit card- to print a receipt of his or her transaction(s) at home. The proposed website shall use "open architecture" to allow for integration with additional data sources. a. Option 1: creating a site whereby a Customer would enter only the three following pieces of information: i. Date and approximate time of day (plus or minus 60 minutes) the transaction began; ii. The parking space number; iii. Last four digits of credit card number. b. Option 2: creating a site whereby Customers would register their email addresses and credit card numbers. Whenever a registered credit card number was used at any meter, the customer would receive a receipt in a PDF format at the registered email address.	Yes

IPS currently is finalizing a receipt system available to City Staff only or publically available for customers, which instruct the motorist to register with the system and once registered, can login at any time on a web based browser. Once logged in, the motorist will insert relevant information (card number used and date range) and the system will pull up all parking transactions made at an IPS meter during that period with that card. The system can also be configured to email a PDF receipt to the user upon every use of a registered credit card (including email and SMS options). IPS will work with the City of Sacrament to determine which option the City would prefer to implement. Completion time for this service would be 90 days upon award of contract and notice to proceed.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
22	II.A.1.m.i	**General:** The Proposer shall describe its ADA compliance, and state requirements for the City to ensure the meters are compliant after installation on the street. The Proposer shall advise Parking Services on the correct length of poles required such that the meter display will be visible to an individual restricted to a reach of 48 inches.	Yes

As a retrofit product to the City's existing single-space poles and housings, IPS is making the assumption that all existing meter pole heights would already meet the ADA requirements. However, if this is not the case, IPS is prepared to conduct surveys and provide recommendations to standardize pole heights for this purpose on a City

wide basis. For new housing and pole installations, IPS will advise the City to ensure pole heights are compliant and that meters will meet all applicable ADA requirements.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
23	II.A.1.m.ii	The Proposer shall include a price quotation for additional meter housings. These housings should be compatible with the existing housings and must accommodate electronic vault locks. If the additional housings are not compatible with those listed in Section A.1.a, the Proposer must explain why it recommends a different housing.	Yes

IPS is proposing Duncan Model 90 (or equivalent) single space housings, which will be compatible with the City's existing housings and will accommodate electronic vault locks, such as Medeco Locks – which are being proposed with this bid submission. Pricing for this service is provided in Appendix I – Pricing as requested.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
24	II.A.1.m.iii	The Proposer shall indicate whether meters on which the coin chute and the card reader both have failed can still accept mobile payments and grant time.	Yes

Should the coin chute and the card reader both fail and pay-by-cell enabled on the meter, the meter will still be able to accept mobile payments and grant time on the meter. The meter screen can further be configured to provide this information to users.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
25	II.A.1.m.iii	The Proposer shall describe how the mechanisms and/or domes are resistant to graffiti and vandalism.	Yes

The IPS Meter consists of two primary elements: A meter mechanism and a top cover. The primary construction material for both of these elements is a Zinc Alloy, which provides exceptional weather protection and prevention of graffiti and vandalism. The outer surface of the meter dome is painted with an automotive grade material, which again provides excellent resistance to graffiti, weather and fading from sunlight. Within the Zinc Alloy dome is a UV stabilized Lexan cover, which has an opening to allow for sunlight to reach the solar panel on the back and to allow for clear viewing of the display screen in the front. Lexan is an extremely durable material and is often used to make bulletproof windows. IPS has been selling this style of meter dome for a very long time and our customers will attest to its resistance to graffiti, vandalism and other environmental factors.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
26	II.A.1.m.iv	The Proposer shall deliver three working meter samples, with three domes, with its proposal. These sample mechanisms and domes will be installed in three different housings: a POM Model E, a MacKay Model 98, and a Duncan Model 90. This will be a no-cost working pilot for evaluation by City staff. Each meter shall be configured for specific meter Behavior as outlined in Attachment 12. Meters will be available for the Proposer to pick up at the end of the review period. The working samples submitted shall demonstrate the functionality described in the proposal. If any specification will be met by a subsequent version of software or hardware but not available for submission along with the proposal, the Proposer shall clearly identify each exception. Note that the Proposer will receive lower scores for features that are not currently implemented and in use in meters on the street in other jurisdictions.	Yes

As requested per the RFP, IPS has submitted three working sample mechanisms (one M3 and two M5 Model 795) to the City which were received on June 24, 2013. Please note that the number of characters provided in the RFP slightly exceeded the capacity of the M5 enlarged screen, although the message was not impacted. To that end, the displays submitted on the M5s deleted the pole numbers (example: PKGS1250 EXPIRED). Your sample will simply show MAX 4 hr. on the first line, and the “TOW” was deleted, however during the hours of tow away, the display will read “Tow Away”.

The dome retrofit for the POM E housing to support the M5 meter will be production available starting in July 2013, and due to this time constraint, we have provided our M3 model to demonstrate the installation capability to the POM E style housing . You will also see that the M3 submitted for the POM housing is the original, smaller screen. IPS intends to provide M5 meters for the full production if awarded.

The only other feature not fully implemented and in-use on the streets in other jurisdictions is the NFC and contactless card reader. Except for on other RFP, this feature has not been requested. This feature is planned to be released in line with the contract and delivery schedule associated with this RFP.

Should the City desire the larger screen, or the M5, for the POM housings, that model will be available by the city’s desired timeline for installation. A sample can be sent by July 31, 2013.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
27	II.A.2.i	Objects that Jam: The proposer shall describe any other objects its meters can detect.	Yes

IPS meters can detect any item that prevents the coin from progressing through the coin chute. IPS coin validators and card readers both have sensors that can detect any obstruction, whether metallic or non-metallic. In either case, any object that obstructs or triggers the sensors will set an alarm, in which case, the meter will notify the client based

on a notification distribution list of the customer's choice. Such jams will also be displayed in the meter management system until the jam is removed.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
28	II.A.4.i.i	Screen: The Proposer shall describe how the screen is designed to address potential cloudiness and condensation build-up.	Yes

The IPS LCD screen is completely covered by the dome lens, creating physical separation that prevents any cloudiness or condensation on the screen itself. Additionally, the internal surface of the IPS dome lens is coated with a permanent anti-fog coating that prevents any internal cloudiness or condensation build-up that would impair the view of the LCD.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
29	II.A.4.i.ii	The Proposer shall describe how it will ensure easy viewing in direct sunlight.	Yes

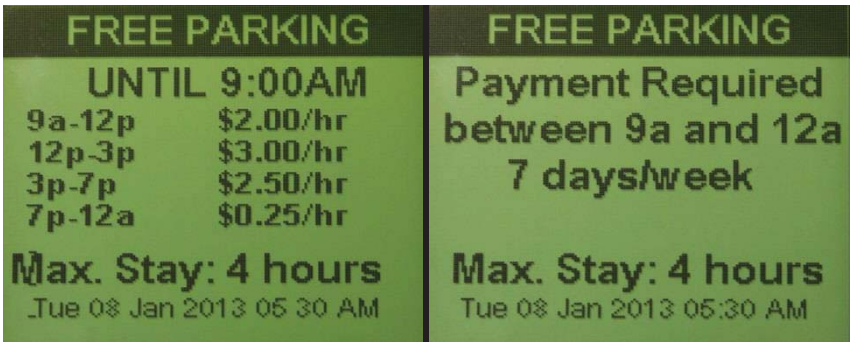
IPS incorporates a number of features to make viewing the screen as easy as possible in all light conditions, including direct sunlight. First, IPS uses a large monochromatic graphical LCD. The monochromatic nature of the screen and the green underlying tint of the screen itself minimize any glare from direct sunlight, making the text as visible as possible. Additionally, IPS meters offer the ability to customize the contrast of the LCD itself. This can be done manually at the meter or can be configured to a desired level using the meter management system. Lastly, IPS can employ options, such as inverse video (to have the meter's text be light and the background dark on the display screen).

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
30	II.A.4.i.iii	The Proposer shall describe how the screen is resistant to vandalism.	Yes

The IPS M5 meter display screen is covered within the meter dome, which contains a UV stabilized Lexan window within the zinc alloy frame. As a testament to its durability, Lexan is commonly used as bullet-resistant windows. The meter's dome is securely fastened to the meter housing, which protects the meter mechanism. IPS has been selling this style of meter dome for a very long time and our customers will attest to its resistance to graffiti, vandalism and other environmental factors. We encourage the City to speak with our references in this matter.

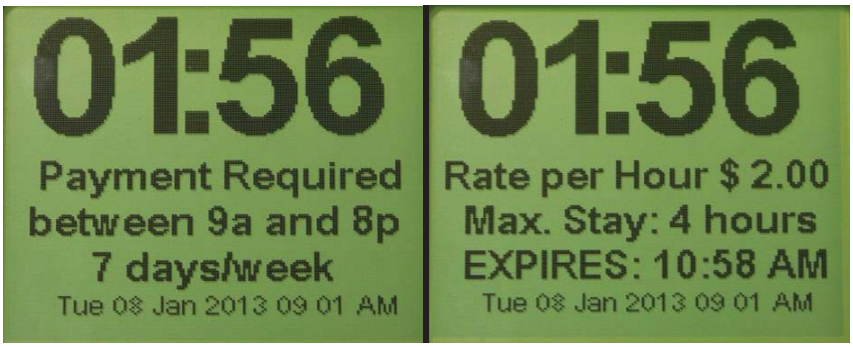
Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
31	II.A.4.i.iv	The Proposer shall provide screen shots demonstrating examples of conditions 1-17 listed in requirement II.A.4.h.	Yes

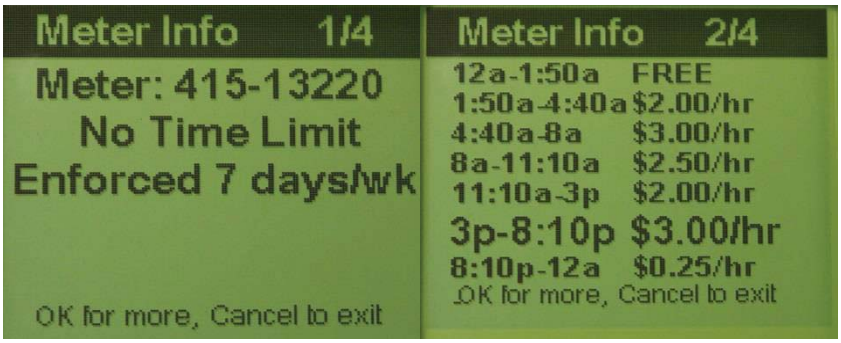
Condition 1: meter is “on” and Idle before operating hours. Information: Days/hours of operation, time slots, rates, regulations; configurable “Free” message (e.g., “Free until XX:XX).



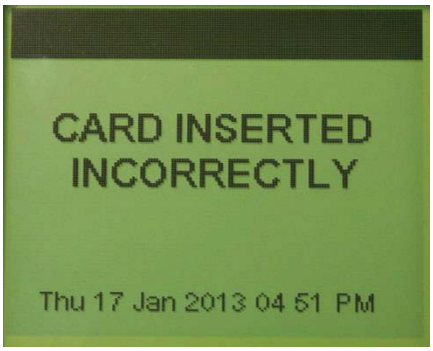
Condition 2: meter is “on,” Idle, and unpaid during operating hours. Information: Days/hours of operation, time slots, rates, regulations; configurable “Expired” message.

Condition 3: meter is “on,” Idle, and paid during operating hours. Information: Days/hours of operation, time slots, rates, regulations; countdown of time left before meter expires.

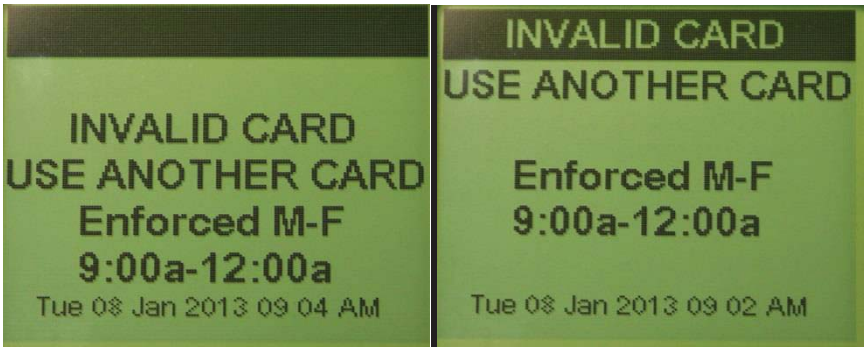




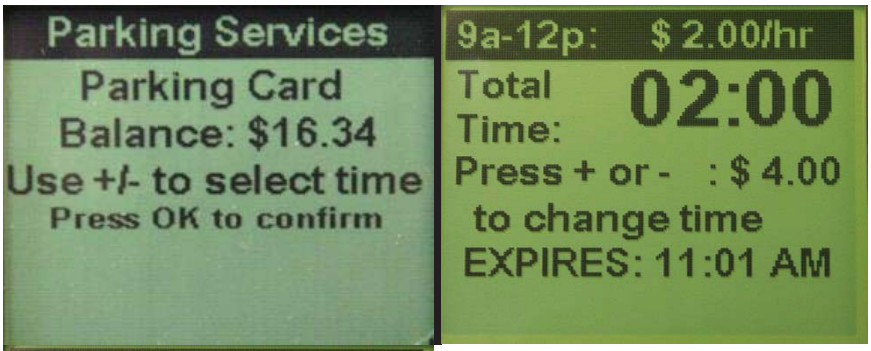
Condition 4: Customer inserts a card incorrectly during operating hours. Information: Error message specific to condition (e.g., “card inserted incorrectly”).

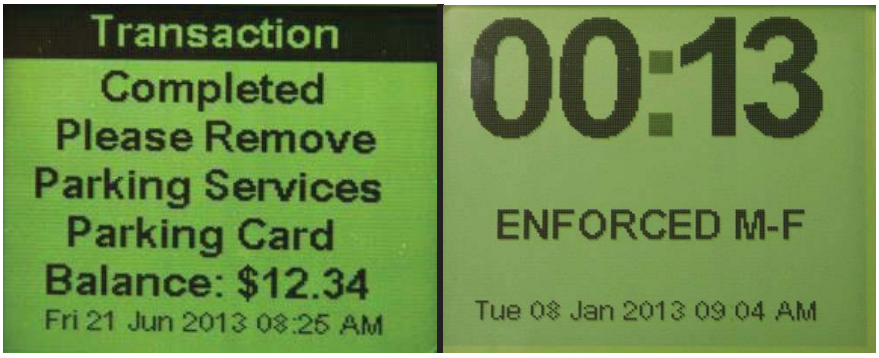


Condition 5: Customer inserts credit card and it is declined. Information: Error message specific to condition (e.g. “Invalid card; use another card”)



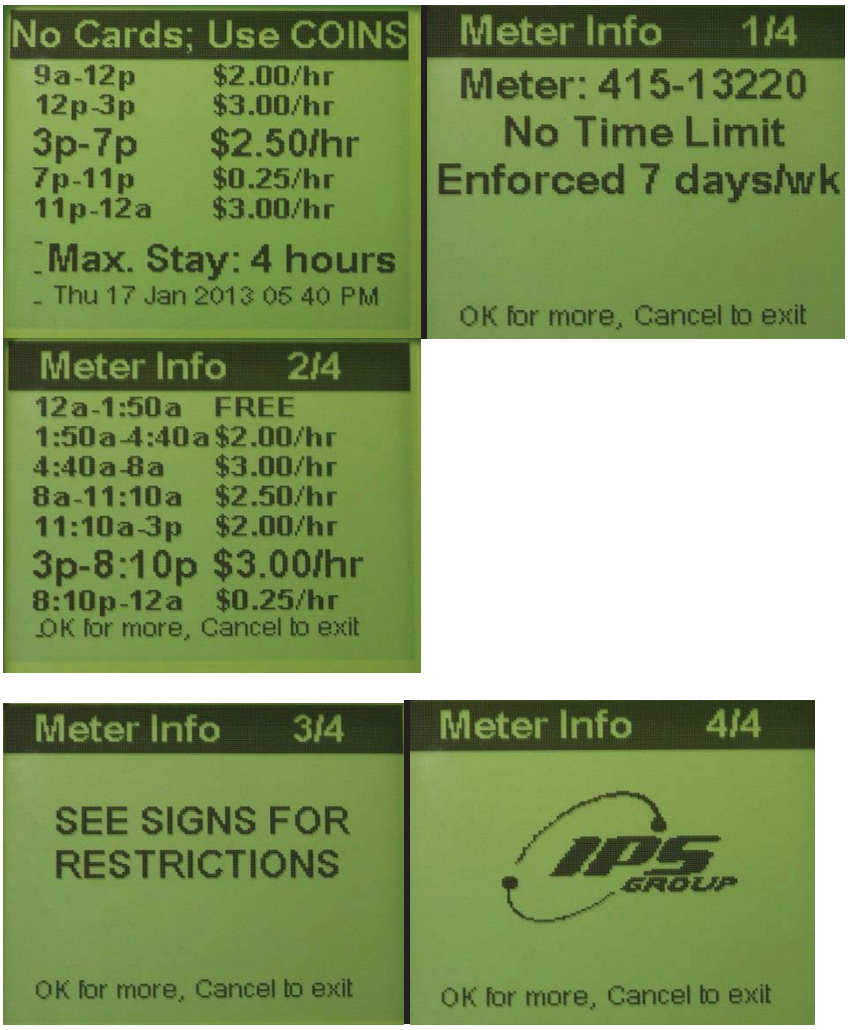
Condition 6: Customer inserts parking card causing the meter to become Active, adds/subtracts time and money using meter inputs (e.g., +/- buttons), and confirms transaction (e.g., presses “OK” button). Information: configurable “please wait” message followed by configurable “transaction completed” message.



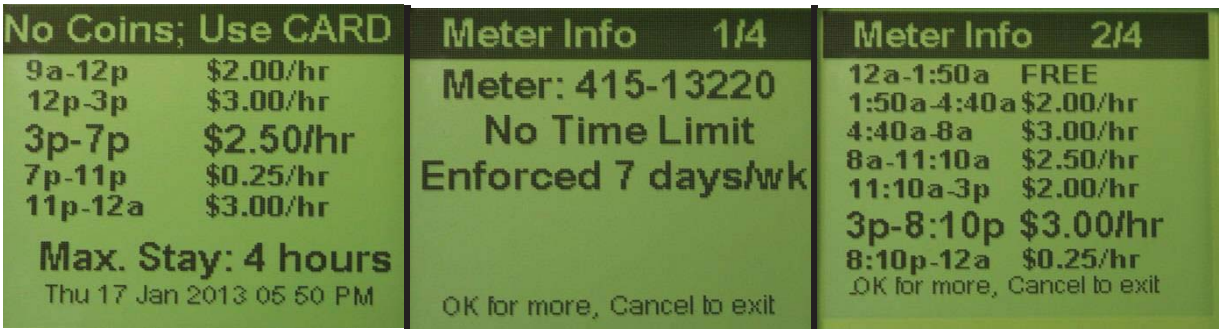


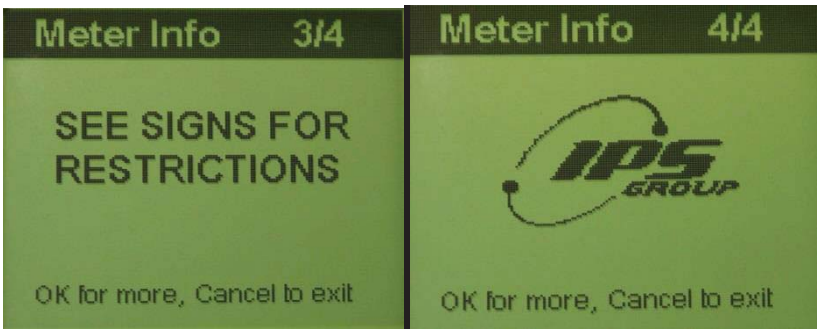
Condition 7: Customer inserts parking card causing the meter to become Active, but pulls card out before transaction is completed. Information: Configurable “transaction cancelled” message.

Condition 8: Card slot is inoperable. Information: Days/hours of operation, time slots, rates, regulations; configurable error message specific to condition (e.g. “no cards; use coin”).

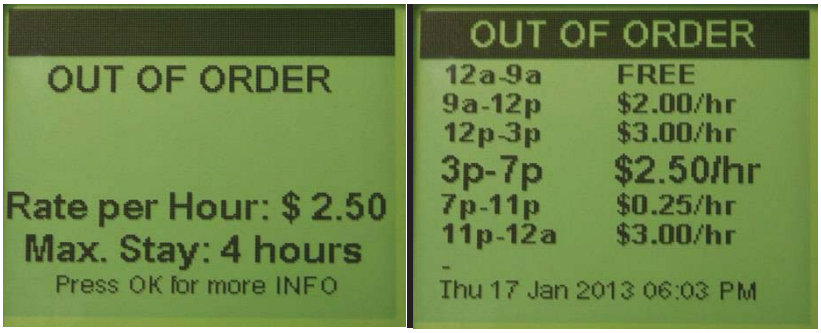


Condition 9: Coin slot is inoperable. Information: Days/hours of operation, time slots, rates, regulations; configurable error message specific to condition (e.g., “no coins; use card”).



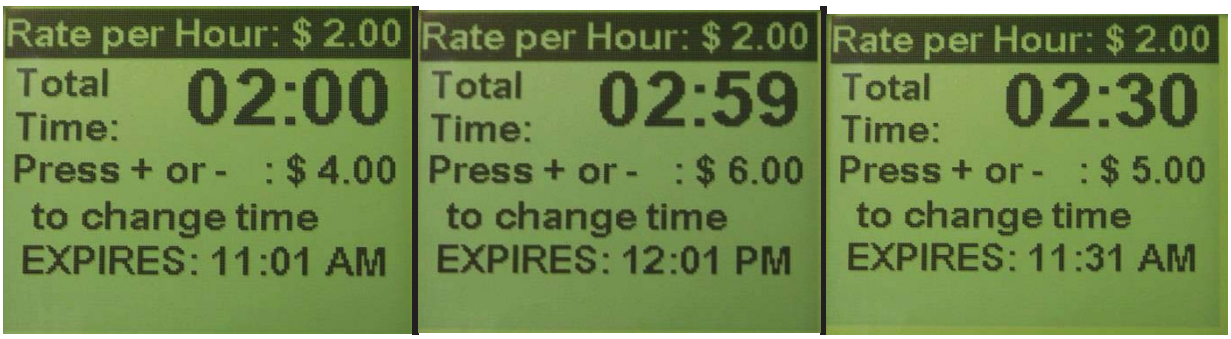


Condition 10: Both coin and card slots are inoperable. Information: Configurable message specific to condition (e.g., "out of order").

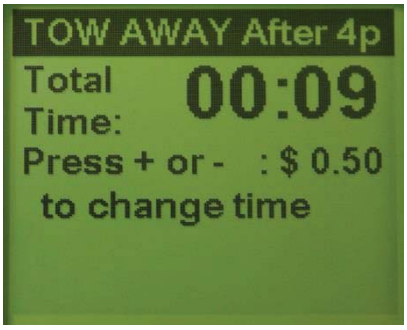


Condition 11: Customer presses "cancel" button. Information: Configurable "transaction cancelled" message.

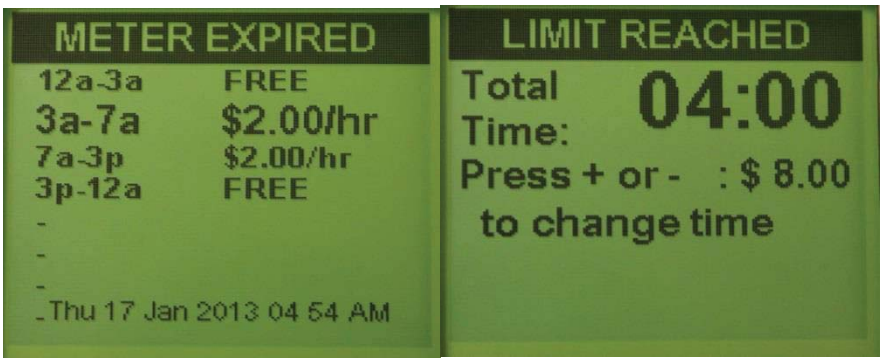
Condition 12: Meter is Active (payment is in progress). Information: current time slot and rate, time and corresponding payment stepping up or down as Customer adds coins or presses the +/- buttons to add/subtract time.



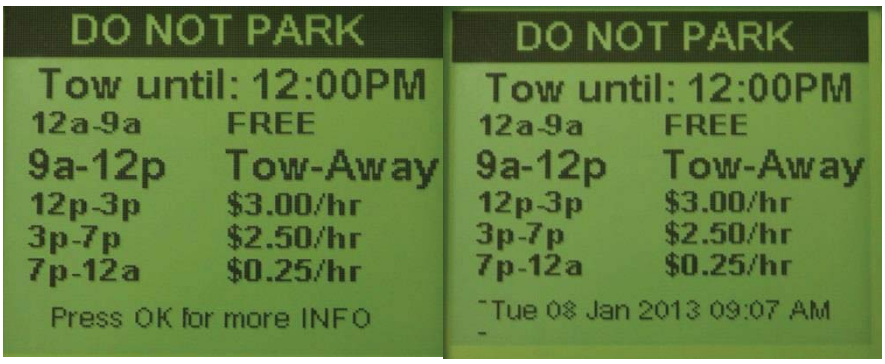
Condition 13: Meter is Active, current time slot has a rate assigned, next time period has a Tow regulation in the next time period; Customer adds money/time up to the beginning of Tow regulation. Information: Configurable “limit reached” message (e.g., “Limit Reached; Tow after XX:XX”).



Condition 14: Meter is Active, current time slot has a rate assigned. Customer adds money/time up to the time limit programmed in the meter. Information: Configurable “limit reached” message (e.g., “4-hr limit reached”).



Condition 15: Meter is Idle, current time slot has Tow regulation. Information: Configurable “tow” message (e.g., Tow until XX:XX; DO NOT PARK”).

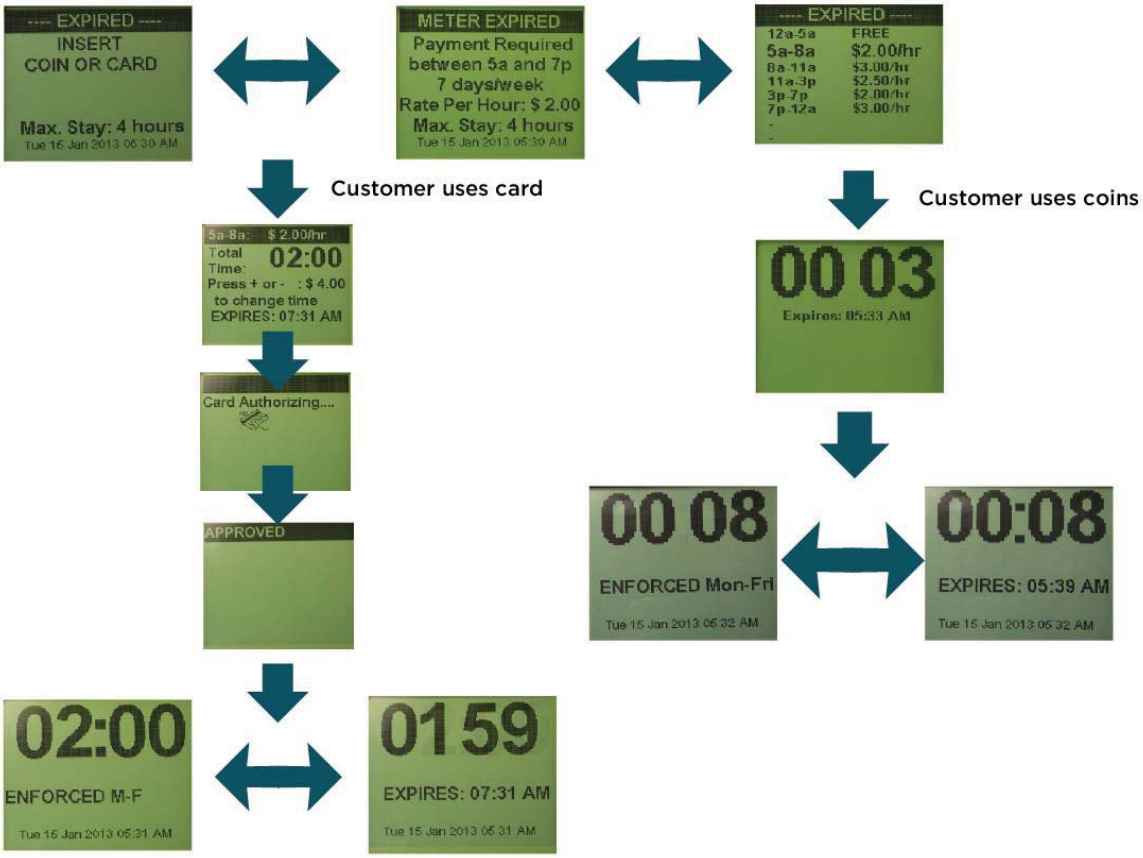


Condition 16: Meter is “on” and Idle after operating hours. Information: Configurable “Free” message (e.g., “No payment accepted”).

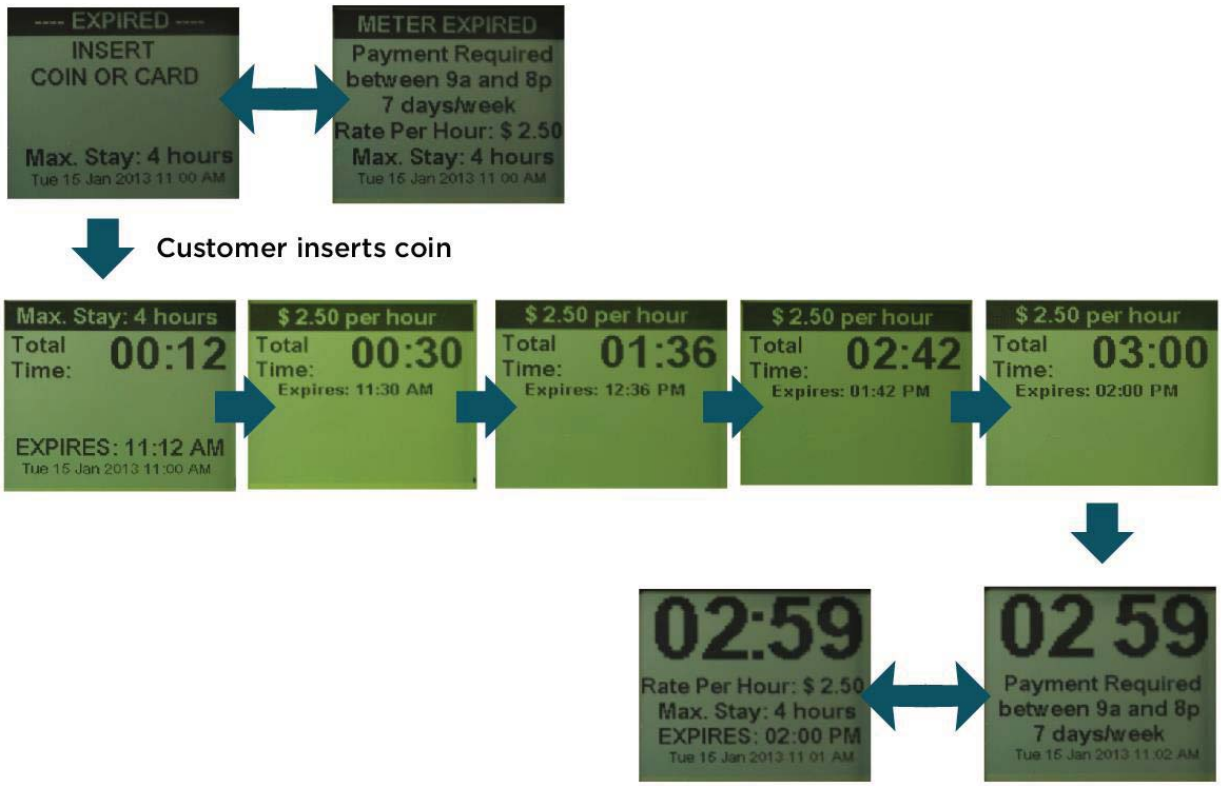
Condition 17: Meter has special programming in effect. Information: Days/hours of operation, time slots, rates, regulations; configurable “special” message specific to the special programming.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
32	II.A.4.i.v	The Proposer shall provide flowchart diagrams describing the sequence of screens given the following three meter programming and scenarios: a. Scenario 1: Customer arrives Tuesday at 5:30am and meter is expired. Customer inserts a card or a coin in the meter. b. Scenario 2: Customer arrives Tuesday at 11:00 am and meter is expired. Customer uses coins to purchase three hours of parking. c. Scenario 3: Customer arrives on Sunday at 10:30am. Meter is Idle and has 30 min left. Customer inserts a credit card and adds time/money to the time limit on the meter.	Yes

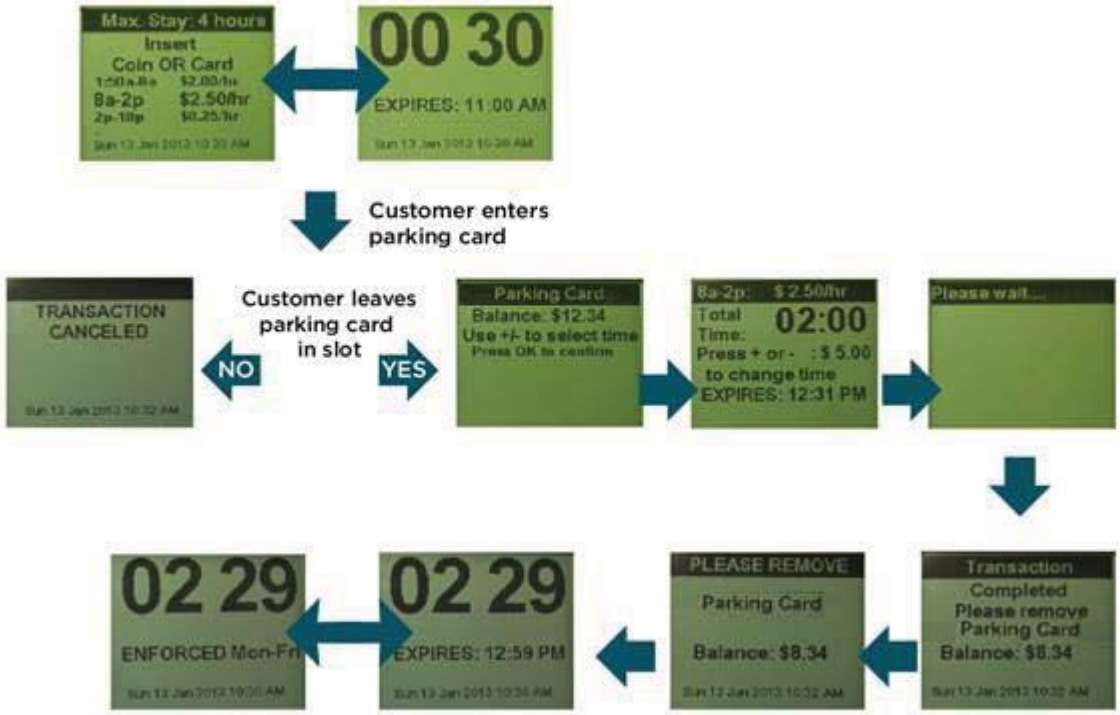
SCENARIO #1: Customer arrives Tuesday at 5:30 AM and meter is expired. Customer inserts a card or a coin in a meter.



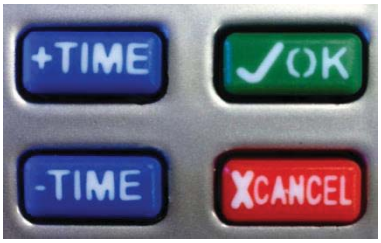
SCENARIO #2: Customer arrives Tuesday at 11:00 AM and meter is expired. Customer uses coins to purchase three hours of parking.



SCENARIO #3: Customer arrives on Sunday at 10:30 AM. Meter is idle and has 30 minutes left. Customer inserts a parking card and adds time/money to the limit on the meter.



Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
33	II.A.5.c.i	Meter Interface: The proposer shall describe all inputs on the meter, i.e. if the meter uses buttons, describe the type (e.g., mechanical or touch), the quantity, all functions, and any permanent labels. If buttons have different functions in different modes or at different times, Proposer shall describe all possible functions.	Yes



The IPS M5 uses mechanical solid-state buttons rated at more than 250,000 cycles, which translates into much more than 10 years of use. The buttons are also completely environmentally sealed to prevent moisture from affecting performance. The buttons are both labeled with symbols, words and are color coded to provide the most intuitive, and ergonomic user experience possible. Additionally, the labels on the buttons are cast (embedded) completely through the button so that wear and tear will not result in the label degrading over time.

Primary Function:

(+TIME) Add more time to a credit card or a smart card transaction in increments defined within the meter management system.

(-TIME) Subtract more time to a credit card or a smart card transaction in increments defined within the meter management system.

(✓OK) Confirm the amount of time to be purchased on a credit card or smart card transaction.

(X CANCEL) Cancel a credit card or smart card transaction before the transaction has been confirmed.

Secondary Function:

(+ TIME /- TIME) Buttons can be used to scroll up or down through the meter diagnostics menus.

(✓OK / X CANCEL) Used to enter into and exit from specific diagnostics menu capabilities

Tertiary Function:

(✓OK) If configured, can be used to allow the public access additional information screens on the meter

Further Options: While these are the current functions provided, it is possible to add additional capabilities base on the further input of the City.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
34	II.A.5.c.ii	The Proposer shall describe how the meter demonstrates to the Customer how the transaction is progressing and confirms if a payment has been successful.	Yes

Please note that while all standard screen images are shown below, all of them can be customized to meet the desired needs of the City of Sacramento.

Prompt: The screens prior to payment are used to any amount of information regarding rates, hours of operation, date and time, and instructions to initiate payment.

Coin: As a user inserts coins, accumulated time and $$ inserted will be displayed. Once a user has inserted all of the coins desired, the meter will display the total amount of time and $$ inserted. It will then wait a pre-determined (and configurable) amount of time (a timeout) and then display the amount of time purchased.

Credit Card: A user inserts a card and the meter prompts the user to remove the card to initiate the payment process. If the card is invalid (such as an expired card), the display will inform the customer immediately. If valid, the screen then displays “please wait” for a few seconds before showing the amount of time and $$ to be purchased starting at a default value set in the meter management system. The user then uses the +/- buttons to select the desired amount of time and $$. The user can select CANCEL to stop the process. Or the user can select OK to confirm the purchase. A screen will inform the user that the card is being processed, and will also confirm either successful authorization or card declined. Once successfully authorized, the screen will display the amount of time purchased.

Smart Card: A user inserts a card chip side up. If the card is invalid, the display will inform the customer immediately. If valid, the screen will first display the current smart card balance, and then show the amount of time and $$ to be purchased starting at a default value set in the meter management system. The user then uses the +/- buttons to select the desired amount of time and $$. The user can select CANCEL to stop the process. Or the user can select OK to confirm the purchase. A screen will inform the user of the remaining balance on the smart card, and the user can then remove the card. The screen will then display the amount of time purchased.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
35	II.A.7.i.i	The Proposer shall describe the type of battery(ies) provided, and the minimum life expectancy for both rechargeable and non- rechargeable batteries assuming the following operation parameters: • Operating hours are Monday-Saturday, 7 a.m. to 8 p.m. and Sunday, 12 p.m. to 6 p.m. • Meters shall transmit payment status for all types of payment (e.g., coins, smart card, credit card, NFC) to the MMS within 90 seconds after determining the transaction to be completed. • Meter receives, on average, 3 hours of direct sunlight each day. • Meter conducts, on average, 6 transactions per day. • Meter backlight is activated by any button push or by initiating the payment (e.g., coin drop, credit card or smart card insertion), and remains illuminated for 20 seconds. • NFC payment mode is activated by any button push. • Meter modem needs to be on continuously during operating hours to listen for Mobile Payment information (or vendor may propose an alternative). • Pre-payment for all the meters begins at 4:30 AM seven days a week, including enforced holidays.	Yes

Battery Options – M5

1 [redacted]

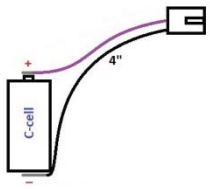


Figure 3 - 795-600-H1

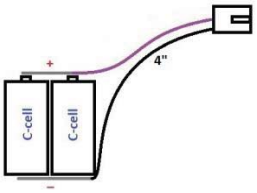


Figure 3 - 795-600-H2

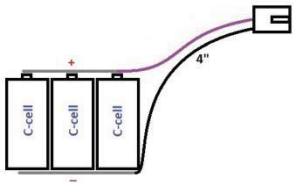


Figure 5 - 795-600-H3

Figure 6 - 795-600-D3 or C3

Pack	Technology	Spares Price	Comment	Capacity mAh
795-600-H1	Li-SOCl2	$10.00		9000
795-600-H2	Li-SOCl2	$20.00	included in meter pricing	18000
795-600-H3	Li-SOCl2	$30.00		27000
795-600-C3	Alkaline holder only w/ regulator	$9.00	each cell approx $1.50 x 3 = $4.50	5000
795-600-D3*	Alkaline holder only w/ regulator	$10.00	each cell approx $2.00 x 3 = $6.00	12000

Life Expectancy – the following matrices show the life expectancies for the non-rechargeable packs under various lighting conditions and related to hours of pay by phone functionality – since this is the single biggest consumer of power. Note this is a model only and the hours of direct, full sunlight may vary.

It is to be noted that under the conditions cited in the RFP – a backup (non-rechargeable) never is depleted as 3 hours full direct sunlight is sufficient to supply the PBP requirement of listening for 11 hours. However, the tables are included to compare performance under other scenarios. The RFP condition is indicated by the yellow cell.

1. 795-600-H1

[redacted]

[redacted]

2. 795-600-H2

[redacted]

[redacted]

3. 795-600-H3

[redacted]

[redacted]

4. 795-600-C3

[redacted]

[redacted]

5. 795-600-D3

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
36	II.A.7.i.ii	The Proposer shall describe how battery life is determined and calculated (e.g., by percentage).	Yes

The calculation based on current consumption of the meter, features enabled, amount of adequate sunlight, non-rechargeable battery capacity.
[redacted]

Non-rechargeable battery life (in Days) = Battery Capacity / Energy Deficit

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
37	II.A.7.i.iii	The Proposer shall describe the maximum storage period available, and what data will be stored for that period.	Yes

IPS meters use non-volatile flash memory for the secure storage of all meter event and transaction information as permitted by PA-DSS and PCI-DSS requirements. This includes payment transactions, maintenance events, diagnostic events, coin collections, meter faults, battery status, and all other event data within the meter. This information can be stored indefinitely, but for an active meter, this amounts to 60 days of operation without a connection to the meter management system. [redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
38	II.A.7.i.iv	The Proposer shall describe available options/upgrades to the stock battery, including the trade-offs and disadvantages.	Yes

All information regarding battery options, including some pros & cons are completely listed in Deliverable #35.

Additionally, it should be noted that the primary trade-offs are between the cost of the battery systems and the longevity (and cost) which is a function of the features that are implemented. The more power intensive features used, like real time reporting and real time pay-by-cell features, the less battery life and more cost the City will incur.

Additionally, while the City may wish to pursue off the shelf options, IPS strongly encourages the City to utilize IPS battery packs, which are specifically designed and engineering for this meter application. If awarded IPS will work closely in partnership with the City to implement a power system that balances these pros/cons.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
39	II.A.7.i.v	The Proposer shall describe the effect on battery life of "bagging" the meters for various time periods. Meters may be bagged to temporarily reserve one or more parking spaces for activities such as construction or special events.	Yes

During bagging periods, IPS recommends that the meter(s) be placed into sleep mode if the meter(s) is going to be bagged for a 48hr period or longer. This will ensure the meter's battery life is maintained while the meter's solar panel is covered. This recommendation is simply due to the fact that traditional bagging will ensure 0 solar energy capture. Alternatively, IPS can supply meter bags that have a built in window for the solar panel to allow the meter to continue to charge while allowing the City to keep the meters active during bagging periods. Several IPS customers have implemented such a procedure already.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
40	II.A.7.i.vi	The Proposer shall describe the effect on battery life of sending cell phone payments to the meter mechanisms, and strategies for minimizing the impact on battery life.	Yes

The impact of pay-by-cell is detailed thoroughly in the charts associated with Deliverable #35 above, based on the number of hours that the pay-by-phone payments are active. [redacted]

The pay-by-cell feature is the most power intensive feature available. Consider your personal smart phone. Today, it is rare for a modern smart phone to go more than 24 hours without requiring it to be charged. You could save tremendous battery life by turning the phone off, and only turning it on when you know you are going to get a phone call or email. However, this is not practical.

Similarly, when the meter is constantly awaiting the possibly pay-by-cell transaction, or makes multiple connections to see if a payment is waiting, this is very inefficient. IPS would recommend a couple of primary power saving techniques.

[redacted]

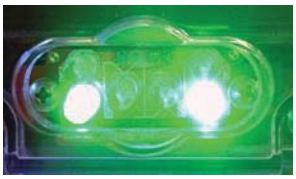
As the only company who has deployed pay-by-cell in a real time fashion in any scale, IPS has the expertise to advise the City on a strategy that balances features, costs and battery life.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
41	II.A.8.b	The Proposer shall describe the enforcement process for its meters, including a description of how PEOs determine the paid status of each parking space. The description shall include a means to determine meter payment status (and other status) visually.	Yes

The meter display will always show any remaining purchased time on the meter display LCD, however, the primary method of enforcement is flashing LEDs.

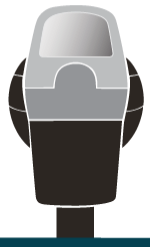
IPS meters utilize highly visible LEDs in both the front (red, green and yellow) and the back (pairs of red, green and yellow) of the meter to provide a status indication for enforcement. The purpose of the rear facing LEDs are for in-car enforcement and larger distances. The front LEDs are for the user as well as enforcement. The LEDs are capable of being configured to a specific rate of flashing and can be turned on or off during paid, expired, idle and grace period. While this can be configured to the specific preference of the City of Sacramento, the standard configuration is as follows.

Red: Meter is expired and/or idle without payment
Green: Meter is paid or within the defined grace period
Yellow: Meter requires maintenance

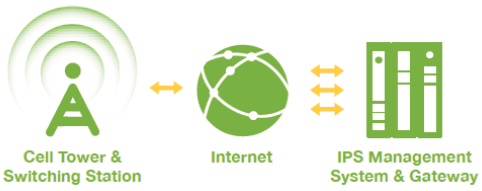


Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
42	II.A.9.j.i	The Proposer shall describe, in detail, the step-by-step process for accepting credit card payments, from the time a Customer inserts his/her card into the meter, to the time the money is deposited in the City's account (with accounting for the elapsed time for each step and potential lag in deposits). Include the name of the gateway processor (if using a third party) and the name of the gateway software (if the firm uses in-house software). The Proposer shall list all subcontractors involved in each step (e.g., cellular providers or gateway companies).	Yes

Below are the steps of the credit card process. IPS does not require a 3rd party for card processing services and is a certified PCI-DSS level 1 gateway provider. Changes to the gateway are fully programmable by IPS. IPS can utilize T-mobile (GSM) or Verizon (CDMA) as our cellular carrier, however, IPS will conduct a signal strength test in the City to determine the best possible option. [redacted]



1 The customer makes a purchase at a IPS meter (also referred to as the point of purchase) after swiping his/her credit card.



2 The information is securely transmitted wirelessly via the Level 1 PCI-DSS certified payment gateway. The gateway links into the Merchant Bank's Processor.

3 The Merchant Bank's Processor submits the transaction to the Credit Card Network (a system of financial entities that communicate to manage the processing, clearing, and settlement of credit card transactions). Examples include Visa, MasterCard, Discover, and American Express.

4 The Credit Card Network routes the transaction to the Customer's Credit Card Issuing Bank. The Issuing Bank checks the account of the customer and issues authorization or declines the transition. This information is then transmitted all the way back to the point of purchase, and payment is accepted or declined at the point of purchase (meter.)

5 If authorized, the Customer's Credit Card Issuing Bank sends the appropriate funds for the transaction to the Credit Card Network, which passes the funds to the Merchant's Bank. The bank then deposits the funds into the merchant's bank account. This step is known as the settlement process and typically the transaction funds are deposited into your primary bank account within one to four business days, depending on the Credit Card Network used.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
43	II.A.9.j.ii	The Proposer shall identify its gateway provider, or its gateway software, along with verification that it is certified. The Proposer shall be responsible for its gateway provider's continued acceptance with the City's merchant bank (currently Bank of America).	Yes

IPS is providing a certified PCI-DSS level 1 gateway and our certification is attached. IPS is familiar with the City's processing needs and has interfaced with the Bank of America in multiple accounts. [redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
44	II.A.9.j.iii	The Proposer shall identify all costs from the Proposer and/or its subcontracted gateway company that are charged for credit card transactions, and the basis for the costs (percentage, sliding scale, fixed cost, or other). If none, then so state.	Yes

In terms of credit/debit card processing, IPS typically offers 2 pricing options depending on the volume of transactions to be considered. These fees are designed in conjunction with ongoing month data and licensing fees to achieve a combined total cost of ownership. IPS will provide complete details in Chapter 12 (separate envelope) – Pricing.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
45	II.A.9.j.iv	The Proposer shall list all card types that can be accepted at the meter.	Yes

IPS meters can accept payment by credit/debit card (Visa, MasterCard, Amex, Discover, etc.), contact based smart cards, other magnetic stripe cards (if applicable), and is capable of accepting NFC payments and other contactless cards if configured to do so.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
46	II.A.9.j.v	The Proposer shall describe the authorization procedure during loss of communication and other preventative processes, including duplicate card transactions.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
47	II.A.9.j.vi	The Proposer shall describe Hotlist capabilities.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
48	II.A.9.j.vii	The Proposer shall describe how its meters and system will deal with credit card transactions • When the modem is not available (e.g., modem is malfunctioning or broken) • When the credit card processor is not available • When communication is not available (e.g., antenna is malfunctioning or broken)	Yes

General Overview:

[redacted]

[redacted]

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
49	II.A.9.j.viii	The Proposer shall describe how the card reader is designed and engineered to guide credit card insertion without having to align the card in a particular way prior to use.	Yes

The IPS card reader is designed such that a card will be inserted in the most natural way possible and that if done incorrectly will also feel instinctively incorrect to the user. This will take the form of the card not sliding easily while in the reader. The display will also inform the customer that the card was not properly read and that the card should be re-inserted. IPS also offers a decal on the card reader to indicate the correct orientation for card use.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
50	II.A.9.j.ix	The Proposer shall describe how the meter mechanism discourages Customers from inserting any object other than a standard sized credit or debit card (e.g., a coin) into the card reader.	Yes

The downward angle of IPS card reader and the physical opening is very restrictive to anything other than a standard sized credit card. If a smaller thinner object was able to be inserted, IPS has designed the card reader with a cutout to allow such foreign objects to fall through and prevent card reader obstruction.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
51	II.A.9.j.x	The Proposer shall describe how the meter will be upgradable to future credit/debit card technologies, including "chip and pin" (EMV) cards (such as those used currently in Europe and Canada.	Yes

There is much debate in terms of whether card transactions of the typical value of an on-street parking transaction, for example less than $5.00, will be applicable to the chip and pin EMV standards, as these standards are primarily to target higher value transactions. For applications such as parking meters, it may even be possible to authorize a transaction without a real time authorization due to the available funds that can be authorized directly from the chip card itself, due to the low transaction amount. It is also unclear if EMV chip and pin will even be applicable for devices that do not have a pin pad. Still further, most every chip card will also come with a mag-stripe, so that the card can continue to be used in a traditional manner for the foreseeable future. However, while there are many unknowns, the IPS meter has been engineered to be adaptable to these standards if and when they were to be implemented in the USA. Likely, IPS would only be required to provide a software update as the IPS meter already incorporates a chip card reader and the processing capabilities. As more information becomes available, IPS will be certain to inform the customer of any potential impact that these future technologies may have.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
52	II.A.10.j	Revenue Audit Capabilities: The Proposer shall describe the mechanism's ability to store audit records: **i.** How many records can be stored? **ii.** How long can the records be stored? **iii.** Can records be retained in the mechanism's memory after they have been sent to the MMS? **iv.** What are the attributes of the stored audit records? **v.** Can stored records be retrieved by a mobile device such as handheld or smart phone with using an appropriate application? **vi.** Do the stored records include information to discriminate between amount of payment and amount of time purchased?	Yes

i. How many records can be stored?
Approximately 300 transactions or 60 days of transactions without a communication event. However, the meter will clear memory of transactions that were successfully transmitted to the MMS.

ii. How long can the records be stored?
All meter events and transactions are stored in non-volatile memory, so storage is indefinite.

iii. Can records be retained in the mechanism's memory after they have been sent to the MMS?
No. Once any record is transmitted and verified as such with the MMS, the record is removed from the meter to prevent any potential for event duplication. The only records retained are specific to the meters programming.

iv. What are the attributes of the stored audit records?
Typical attribute transactions include:

- Post ID and device serial number
- Date and time stamp
- Method of payment
- Value of payment
- Time purchased (if applicable), implies end of parking session
- Time transmitted to the MMS

v. Can stored records be retrieved by a mobile device such as handheld or smart phone with using an appropriate application?
Any record transmitted record can be retrieved through the standard MMS, on a mobile device, or through the MMS meter maintenance application. Any event or record that has not been transmitted due to a communication failure can be retrieved and transmitted to the MMS by re-establishing the wireless connection or via manufacturer's in-house terminal software provided by an authorized IPS technician.

vi. Do the stored records include information to discriminate between amount of payment and amount of time purchased?
Yes. IPS stores all of this information and is used as the basis of many reports in the DMS.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
53	II.A.11.f	Collection Event Recording/Revenue Counter Reset The Proposer shall describe the various ways the mechanism can be triggered for recording of a collection event, resetting the revenue counters, and transmission of the associated audit data	Yes

There are a number of options to achieve this request. In all cases described below, the meter counter will be reset and the audit data transmitted in real time.

1. Use of coin collection cards – currently Parking Services swipes these cards when collecting the cash boxes. It records time of collection, who collected the coins (i.e., which card was used), and resets the coin counters. It does require the additional step of swiping a card, but this takes only a second and is the cheapest method to quickly and accurately reset the meter counter.

2. IPS can offer the new smart cash box system to Parking Services. More information contained in the Chapter 9 and in the brochure located in the Appendix of this proposal. This is a brand new system that uses a wireless connection to the meter to determine if a cash canister has been removed and if the same canister is returned to the coin vault. This system is designed to automate the collection process and provide additional cash audit capabilities, but is also more expensive to implement.

3. IPS is willing to test new wired/wireless vault door switch solutions with additional input from Parking Services.

4. IPS is prepared to work with electronic lock manufacturers, such as Medeco, to create a trigger to reset meters at the time of collection and also integrate the electronic lock information into the IPS system for a fully automatic system.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
54	II.A.12.f.i	Communications: The Proposer shall describe the proposed communications modem in detail. Include the communication type (e.g., GPRS, CDMA) and the list of potential wireless communications providers currently operating cellular networks in Sacramento, with compatible modems (e.g., Verizon, AT&T, Sprint). From the providers available, the Proposer shall identify a primary provider and an alternate provider to cover those areas where the primary provider's signal is weak or non-existent, and describe how the switch over process will work. Because carriers are starting to phase out their 2G networks, Parking Services assumes that any proposed offering with a 2G modem will include an automatic, free upgrade to 3G once the carrier announces its plans for discontinuing support for 2G in Sacramento.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
55	II.A.12.f.ii	The Proposer shall describe the minimum, maximum, and average time in seconds the meter takes to transmit transactions of different payment types (coin, credit card, parking card, other) to the MMS, including what parameters or conditions will affect transmission times and what percentage of each type of transaction can be expected to be transmitted within the average transmission time.	Yes

Once the transaction is complete (OK button is pressed after credit/debit or parking card transaction or coins have been deposited and the configurable coin timeout window is reached), the meter attempts to send the transaction to the MMS (if configured for real-time transaction reporting). The speed of this transmission depends on the modems

connection status (off, stand-by waiting for pay-by-cell, etc.) and network availability. Generally, in real time applications, 95% of all data is transmitted and received by the IPS DMS within 120 seconds or less.

For All Payment Types (if configured to transmit in real time)

Minimum: The minimum duration can be 1 or 2 seconds;

Average: 95% of all data is arriving within 120 seconds.

Maximum: Could be in hours if connectivity is not available.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
56	II.A.12.f.iii	The Proposer shall describe the sequence of events starting with a coin drop or card payment at the meter and timing of each step in the transmission of transaction data to the MMS. A sample scenario follows: • Customer arrives and pays the meter with a credit card at time T. • Credit card authorization is completed and Customer walks away at time X. • Meter considers transaction completed at time T+X. • Transaction data appears in the MMS at time T+X+Y.	Yes

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Under these settings, after the user has pressed OK– the transaction appears in MMS in approximately 10+10= 20 seconds.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
57	II.A.12.f.iv	The Proposer shall describe the sequence of events when a meter attempts to communicate with the MMS and fails, including how many attempts it makes and how often.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
58	II.A.12.f.v	The Proposer shall describe its policy for suspending Meter communications and related charges for those mechanisms in Parking Services' spare inventory. Meters can be in spare inventory for longer than 12 months. Parking Services will not pay monthly costs for meters/mechanisms that are not active.	Yes

IPS has two primary ways of handing such a situation.

Recommended Option 1: The SIM or Electronic ID remains on and activated indefinitely. In such a case, no additional reactivation is required. Network settings will remain active, even though meters should be turned off to conserve energy. This means that even after 12 months (or longer), the meter can be powered up and made to communicate without any additional steps needed. IPS is proposing this method for the City of Sacramento. While there is a cost to having this meter active on the wireless network, it creates less hassle on the part of the City for deactivating/reactivating and depending on the number of spare meters, the cost savings may not justify the additional process.

Option 2: After a certain period of time of inactivity, meaning no use for a period, the SIM or Electronic ID of each meter can be set to deactivate. In such a case, the meter would need to be reactivated prior to putting the meter into service. Alternatively, IPS can provide City technicians with such functionality on the IPS smart phone maintenance application, whereby the technician can use the app to suspend and/or reactivate a meter as needed.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
59	II.A.13.a	Communication Dead Zones: The Proposer shall describe its policies and procedures regarding communications dead zones, including: i. Any pre-installation surveys the Proposer plans to conduct and the tools to be used. ii. Past history with the Proposer's selected cellular service provider in resolving dead zones in other cities. iii. Alternative communications methods (e.g., powered repeater, different provider).	Yes

The Proposer shall describe its policies and procedures regarding communications dead zones, including:

i. Any pre-installation surveys the Proposer plans to conduct and the tools to be used.
IPS will conduct pre-installation surveys using both IPS meter equipment and handheld multi-carrier single-strength testers (Squid tester) to highlight any potential problem areas and address with carrier in advance of the deployment. Such surveys can either be conducted at each specific meter location or at both ends and the middle of each block in order to provide representative data. If any trouble spots are found, IPS will bring the carrier in for additional survey and remediation in advance.

ii. Past history with the Proposer's selected cellular service provider in resolving dead zones in other cities.

IPS has achieved excellent connectivity with the 100,000 currently deployed in across the United States. However, on occasion, we have discovered weak signal / dead zones and have escalation policies in place to address this with the carrier. While a communication failure with IPS equipment is very rare, in the event of such a communication failure, IPS has many tools at its disposal.

- Meter connectivity logs – to determine a repeatable issue that may be due to signal
- Signal Strength Analyzers – although meter communications are tested at the point of installation to identify any issues with connectivity, IPS can provide additional services.
- Meter Diagnostics – ability to force a meter to make a connection with the IPS back office. This resolves 99% of all connectivity issues. Training will be provided as part of our solution.

Incident prioritization IPS has a process for wireless coverage incident prioritization, including target response times. Six levels of priority are available within the IPS process for problem management and the logging of incidents reported by Customers or detected by surveillance teams. Below is a summary of the priority levels and response times.

Priority Level	Targeted Response*	Description
Priority 1	15 minutes	Affects more than 50% of user base
Priority 2	30 minutes	Affect significant proportion of user base (25%-50%)
Priority 3	1 hour	Affects a sizeable proportion of user base (0%-25%)
Priority 4	8 hours	Affecting multiple individual Customer end users and resulting in an intermittent, partial or total loss of one more services to these end users.
Priority 5	24 hours	Incident or problem affecting a single Customer end user and resulting in an intermittent, partial or total loss of one more services to that end user.

* after completion of initial diagnostics

iii. Alternative communications methods (e.g., powered repeater, different provider).

If one carrier cannot remedy an issue, IPS is prepared to provide an alternative carrier. The use of another carrier will be completely seamless for Parking Services.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
60	II.A.13.b	The Proposer shall describe in detail how it has addressed communications challenges at other installations (e.g. network failures), including: i. Nature of the problem(s). ii. How they were detected. iii. How they were corrected. iv. How long, on average, the Proposer took to correct each type of problem.	Yes

There is also the potential for environmental and cellular carrier issues that are outside of our control. Depending on the complexity of such problems resolutions could take as little as a few hours and as long as many days. However, prolonged network and communication failures are extraordinarily rare for IPS meters.

i. Nature of the problem(s).
We witnessed a drop in signal strength after a previously uninterrupted period of time without incident.

ii. How they were detected.
Detection was first discovered using the MMS reports for non-communicating meters. Meter communication and data logs show degradation in signal strength over time in the affected areas.

iii. How they were corrected.
IPS utilized our incidence prioritization plan to get the carrier involved using signal strength data supplied by IPS. The carrier was able to adjust tower transponder and system settings to resolve the matter.

iv. How long, on average, the Proposer took to correct each type of problem.
Total time after initial notification was 48-72 hours.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
61	II.A.14.a	Network: The Proposer shall describe how its processor and proposed technology enables flexible payment and communication options.	Yes

The IPS meter has been designed and built on a technology platform with expansion and future possibilities in mind. The modular construction and expansion port options mean that no matter what future payment or communications options are required, IPS meters are designed to adapt.

<u>Generally:</u>

- **Payment**: The IPS M5 meter currently accepts coins, tokens, credit/debit card, and is capable of NFC payments and smart card payments.
- **Switching Card Processors:** The IPS system is designed as such that switching between different processors of the cities choosing is easily done, and IPS has successfully demonstrated this in several customer locations when switching from one City authorized processing to another. There is no one else to contact other than IPS.
- **Communication:** IPS can offer both GPRS/GSM and CDMA communication options as part of this contract.

Additional Examples:

- Pre-existing integration with pay-by-cell provider PayByPhone, ParkMobile and ParkNow. This platform establishes a standard for any other 3rd party remote payment system.
- Built in NFC radio capabilities for payment and other smart phone and peripheral interaction directly with the meter.
- 2 SAM card expansion slot for additional card payment options.
- Built-in ISM radio link to speak with vehicle sensors or other peripheral devices.
- Expansion port on communications board allows for plug in capabilities for additional processors, wired links, wireless radios to enable unforeseen wireless links to peripheral devices, payment technologies or other card systems.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
62	II.A.14.b	The Proposer shall name its proposed communications provider(s).	Yes

1. Primary wireless communications provider: Verizon (CDMA)
2. Secondary wireless communications provider: T-Mobile (GPRS)
   Final recommendation or primary and secondary to be based on data gathered from on-site signal strength testing.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
63	II.A.14.c	The Proposer shall describe auditing and reconciliation procedures that track electronic revenues to and from the meter through the credit card processor, including authorization messages, message security, compliance services, and deposits to the designated bank.	Yes

IPS provides thorough and fully transparent auditing capabilities for credit card transactions. Parking Services will also be able to use IPS daily and monthly credit card settlement reports to 100% reconcile with the Parking Services merchant account statements. This provides fully transparent audits on all transactions. IPS provides complete details on each transaction that occurs including time, meter location, amount, and authorization code.

[redacted]

[redacted]

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
64	II.A.14.d	The Proposer shall describe how the system shall be easily adaptable to operate on other wireless networks including 802.11.	Yes

The IPS meter communications board is a modular, replaceable PCBA that hosts all of the electronics required to establish wireless communications. This board can be configured for any wireless connection, such as GPRS, CDMA or other network such as 802.11 by replacing the board with the associated network configuration. IPS does not currently sell a version of meter today that communications on 802.11 as we believe that main stream cellular connectivity is the most stable, reliable and long term solution for such meter applications. We have experimented with 802.11 and have found it to be less reliable and more power intensive vs cellular. As previous experience has highlighted, many issues in installing and maintaining a private, reliable, and secure network infrastructure over a vast metropolitan area such as the City of Sacramento. We continue to monitor this kind of technology and should if prove viable will consider it as an alternative. We have seen several reports issued on WiFi, and reference you to a wireless networks prepared by Kimley-Horn for the City of Phoenix in the Appendix of this proposal.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
65	II.A.14.e	The Proposer shall describe backup options when communication to the network is lost during the credit card authorization process (i.e., what happens to ensure that payments are properly recorded, credited to the meter and forwarded to Parking Services when communication interruptions occur).	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
66	II.B.2.c.i	The Proposer shall describe its smart card system, including customer purchase, registration, use in meters, reloading, and reconciliation with amounts still in float.	Yes

IPS has successfully integrated with other 3rd party smart card vendors, such as the Parking Card in San Francisco, which is supplied by J.J. MacKay, and the parking cards in other Cities like San Diego(CA), Santa Monica(CA), and Denver(CO). Therefore, the IPS meters and DMS are fully capable of reading and recording all smart card transactions and providing the associated reconciliation reports.

IPS is also capable of supplying a new smart card (stored value card) system upon request. These cards can either be pre-loaded with time and sold at local retail stores, or can be sold directly by the City and loaded/reloaded by City staff at the time of purchase. IPS can supply the card recharge stations as well. All purchases at meter are recorded and reported from within the IPS DMS.

Additionally, if the City is interested in pursuing a closed loop mag-stripe based card and pre-paid account system, IPS is prepared to develop this solution and implement it with the City of Sacramento upon request.

Below are the steps in making a smart card payment at an IPS meter:

Smart Card: A user inserts a card chip side up. If the card is invalid, the display will inform the customer immediately. If valid, the screen will first display the current smart card balance, and then show the amount of time and $$ to be purchased starting at a default value set in the meter management system. The user then uses the +/- buttons to select the desired amount of time and $$. The user can select CANCEL to stop the process. Or the user can select OK to confirm the purchase. A screen will inform the user of the remaining balance on the smart card, and the user can then remove the card. The screen will then display the amount of time purchased.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
67	II.B.2.c.ii	The Proposer shall describe if and how it can accommodate smart (stored value) cards currently in use in the City of Sacramento (the Duncan MeterCash Card and the J.J. MacKay Parking Meter Card).	Yes

IPS has successfully integrated with other 3rd party smart card vendors, such as the Parking Card in San Francisco, which is supplied by J.J. MacKay, and the parking cards in other Cities like San Diego(CA), Santa Monica(CA), and Denver(CO). Therefore, IPS can certainly provide such integration services, but will required the detailed smart (stored value) card specification and card mapping documents from the associated vendors and sufficient time to complete the technical integration process. If there any additional costs to be charged by such other vendors, those costs are not reflected in the IPS pricing proposal.

Alternatively, if the City would prefer to replace those systems, IPS can also provide a stored value card system. Further discussion about the longer term City strategy are required to provide a thorough recommendation on the future smart (stored value) card systems.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
68	III.A.1.i.i	The Proposer shall describe the functionality for managing the user security privileges for individuals and groups.	Yes

Each user that securely logs into the IPS MMS is required to provide a username and password. Each user will also be assigned to a defined user profile that defines which reports are visible and which ones are not accessible. Samples of these profiles include Administrator, Coin Collection, Customer Service, Manager, Financial Analyst, Utility Manager, and Technician. These profiles and available reports within each user profile can be customized to the specific needs of Parking Services, and can also be managed by Parking Services system administrator without requiring IPS to be involved if desired. However, IPS is prepared to assist Parking Services in providing this ongoing managed service.

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
69	III.A.1.i.ii	The Proposer shall describe who shall host the server.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
70	III.A.1.i.iii	The Proposer shall describe the MMS data filter functionality.	Yes

IPS MMS reports can be sorted and filtered in a variety of ways. Many reports have built in filters at the top of the report allowing the user to sort by zone, area, collection route, etc.

[redacted]

Other reports allow the user to simply click on any hyperlink to drill down into greater detail.

[redacted]

Additionally, the IPS MMS supports dynamic filtering and sorting functionality that can be accomplished by simply clicking on the header of any column to sort by ascending to descending order.

Ascending:

Pole
571-06010
571-06030
571-06050
571-06070
571-06150
571-06170
571-06190
571-06210

Descending:

Pole
571-06210
571-06190
571-06170
571-06150
571-06070
571-06050
571-06030
571-06010

Lastly, the IPS MMS has sorting functionality that acts in a very similar fashion to MS Excel Pivot tables, allowing the user to drag and drop column header information into a custom, user preference format. This option provides maximum ease of use and flexibility for all users.

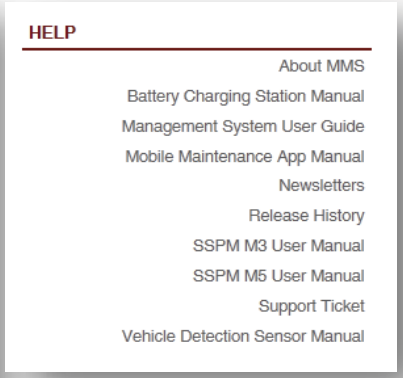
Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
71	III.A.1.i.iv	The Proposer shall describe the MMS data filter functionality.	Yes

IPS MMS reports can be sorted and filtered in a variety of ways. Many reports have built in filters at the top of the report allowing the user to sort by zone, area, collection route, etc. A wide selection of IPS MMS screen shots can be found in the Appendix in this proposal. Also refer to the MMS user's manual in the Appendix as well as Deliverable #70 above.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
72	III.A.1.i.v	The Proposer shall describe the MMS customizable features to encourage ease of use, including labels for all icons and a built-in help menu.	Yes

Extensive customization is provided by reports with grid views allowing for dynamic column grouping, ordering, sorting and filtering. For example, users are able to customize their dashboard (examples seen below) with frequently viewed data and charts. A built-in Help menu is provided at the top of each page.

[redacted]



Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
73	III.A.1.i.vi	The Proposer shall describe the server system and how the Proposer shall ensure its reliability.	Yes

[redacted]

[redacted]

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
74	III.A.1.i.vii	The Proposer shall describe in detail its security policy, what level of redundancy the system employs (including parallel servers at secondary locations if applicable), the location of the servers, and list the annual uptime percentage.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
75	III.A.1.i.viii	The Proposer shall provide a detailed diagram of the MMS.	Yes

A copy of this diagram is located in Appendix A of this proposal. In order to provide maximum protection, IPS considers this information confidential.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
76	III.A.1.i.ix	The Proposer shall provide the location and ownership (e.g., server X is owned by the Proposer, server Y is owned by Gateway Provider Z) of each component of the MMS.	Yes

IPS provides all hosting services using all IPS owned equipment only. IPS owns all server equipment used in our solution. While IPS runs a variety of software solutions, such as security, firewalls, data management, card processing, etc., IPS utilizes our own server system for managing all aspects the wireless connectivity and payment

gateway at all server locations. IPS can provide additional information is requested, but as this is a security risk, IPS would request the ability to submit this detailed diagram separately and confidentially upon request.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
77	III.A.1.i.x	The Proposer shall provide the percentage of actual uptime for the MMS, excluding time downtime for routine maintenance, during the past two calendar years, in at least two other municipalities of comparable size.	Yes

Actual uptime for all IPS customers, including San Francisco, Los Angeles, Denver and Santa Monica as measured by available third-party metrics, indicate a MMS uptime percentage of 99.99% when tracked at minute intervals.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
78	III.A.1.i.xi	The Proposer shall provide a detailed listing of all reports available, as well as sample MMS reports showing example data and layouts.	Yes

Sample MMS reports are provided in the Appendix of this proposal and are also located in the MMS Manual which can be found under the Help tab in the MMS and in Appendix C of this proposal. A detailed list of reports available is also given in the MMS Manual.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
79	III.A.1.i.xii	The Proposer shall describe how the MMS supports exporting financial and activity data to spreadsheet software and an external database, including any limitations (e.g., if only 5,000 rows can be exported at a time).	Yes

The IPS MMS supports exporting of data to a variety of external formats. MMS reports with built-in export functionality allow for the exporting of data in spreadsheet format or CSV format (suitable for exporting to external databases). PDF and RTF formats are also available. There are currently no fixed restrictions on exporting data. In addition to the standardized formats and options listed below, IPS is prepared to provide additional customized exporting queries at no additional cost upon request.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
80	III.A.1.i.xiii	The Proposer shall describe how the MMS allows report creation and modification by the City or its designees.	Yes

The IPS MMS provides a thorough set of reports today for our customers. We have taken the feedback of our clients and implemented many elements to provide a complete set of reporting capabilities meeting the needs of the various stakeholder and user groups. To that end, the IPS MMS incorporates a variety of filtering and sorting capabilities to allow users the ability to manipulate any standardized reports for specific purposes, including functionality that acts in a very similar fashion to MS Excel Pivot tables, allowing the user to drag and drop column header information into a custom, user preference format. This option provides maximum ease of use and flexibility for all users.

Additionally, for those custom reports that may need to be used on a regular basis, IPS is able to create any such additional new reports at no additional cost to the City of Sacramento.

Below is an example, whereby a user can drag and drop any header to any location or remove it from the report. The user has the ability to completely filter, and customize each report in this manner.

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
81	III.A.1.i.xiv	The Proposer shall describe how multiple payment methods (coins, credit cards, Parking Card, SAM-capable cards, are recorded and what MMS reporting is available for the end user reports and/or for exporting. Specify what export formats are available (e.g., .XLS, .CSV, .PDF). The Proposer shall include a description of how a “mixed payment” (such as coin + credit card) is recorded and transmitted.	Yes

The MMS includes reports that differentiate between multiple payment methods (coin, credit card and smart card). Each type of transaction is categorized into its respective payment time and the MMS presents the transactions independently as such. The MMS includes summary reporting, financial detail reporting, pole or terminal transaction details, and several more. Sample MMS reports are provided in the Management System User Guide in the Appendix

of this proposal. Exporting capability is available in multiple formats (XLS, CSV, PDF and RTF). See below for an example of the summary reporting and pole transaction detail capabilities with these various payment methods identified. Any future payment types will be automatically integrated into this format.

SUMMARY EXAMPLE

[redacted]

POLE TRANSACTION DETAIL

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
82	III.A.1.i.xv	The Proposer shall thoroughly explain its disaster recovery and back-up plan, which, at a minimum, should address the following: 1. Procedures for back-up of all software and computer programs, files, computerized procedures, etc. 2. Off-site duplication of all software and computer programs, files, computerized procedures, etc. 3. Repair procedures for all hardware, communications, and other equipment in order to minimize the time required to restore service 4. Alternate processing arrangements to meet business resumption requirements 5. Proposed annual and comprehensive testing of emergency procedures 6. Alternate processing arrangements in the event of a lack of access to the vendor's main processing site.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
83	III.A.6.d.i	MMS Alarms: The Proposer shall describe how and which alarms are sent by email and/or text message to authorized personnel. The Proposer shall describe how alarm designations can be modified (e.g., if the low battery alarm is by default sent to an email address, can Parking Services customize the alarm to be sent via text message instead).	Yes

When an alarm is triggered the IPS meter will establish a wireless connection to the IPS MMS. The MMS can then relay the alarm message to a distribution list of the City's choosing, which allows for alerts to be sent to those with responsibility for a specific zone or area. Alerts can be sent using email, text message or both. The City of Sacramento retains full authority to update the distribution list and the method of delivery at any time within the MMS. Any alarm or error that registers in the MMS can be sent via email or text message to anyone that the City chooses. A list of the most common alarms include: card blockage, coin blockage, battery low, oscillator fault, configuration error, card read error, coin box level alarm.

Recipients of these reports can be modified by using the distribution list and the City has the ability to customize where alarms are sent (text message vs. email).

ALARM DISTRIBUTION LIST MANAGER:

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
84	III.A.6.d.ii	The Proposer shall describe the alarm reporting system operations and include all available alarm categories and functions.	Yes

IPS meters provide a variety of alarm reporting capabilities. These alarms can be sent via email and/or text message, and are also recorded in both the meter (terminal) and pole event reports. Any outstanding alarms are made visible in the meter fault summary report, which highlights the current meter faults at the time of running the report. Any alarm or error that registers in the MMS can be sent via email or text message to anyone that the City of Sacramento chooses. A list of the most common alarms include: card blockage, coin blockage, battery low, oscillator fault, configuration error, non-reporting meter, card read error, coin box level alarm.

It is important to note that if the City would like additional custom alarms and associated notifications based on certain parameters being met, for example, meters that have not reported any revenue in the last 7 days, these additional alarms can be triggered and the City will be notified.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
85	III.A.9.c	Meter Location Assignment: The Proposer shall describe in detail the method whereby meters recognize their location and download the correct meter Behavior parameters from the MMS. If this is done through an RFID solution, the Proposer shall describe whether the RFID is restricted to “inside the housing,” or if it can be mounted on or in the pole to facilitate use by other location-aware applications. If this requirement is met through another solution, the Proposer shall describe how it can prevent loss or intentional removal of the device(s) used for this method.	Yes

IPS utilizes a patent pending RFID tag and location based configuration system. Each meter post has an assigned meter configuration within the IPS MMS, and is restricted to use inside the housing. An RFID tag with a unique serial number (affixed to the inside of meter housing) is associated to each meter post location within the IPS database. Once a meter is installed into a new meter housing, it will read the RFID tag serial number, contact the IPS database, and download the configuration assigned to the specific meter post location based on the associated RFID serial number. This makes both meter configuration and asset tracking extraordinarily simple and eliminates the need to manually assign meters to post locations.

For other location aware applications, IPS can provide a QR code capability that can be scanned from the meter display in order to enable other methods of interactivity between the user and the specific meter location. This is done instead of a decal or other tag that could more easily be removed or vandalized.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
86	III.A.10.d.i	Meter Backend Settings: The Proposer shall include a list of backend programming settings under each category listed in requirement III.A.10.a with descriptions of what they mean and allowable values.	Yes

IPS offers exceptional flexibility and functionality when it comes to backend programming. IPS has included a list of backend programming settings for each category listed in the MMS Manual, which can be found in the Appendix. Below are the requested categories and associated setting options and the page number of the MMS manual.

Settings	Page number in MMS manual
i. Standby mode and times	84
ii. Card payment settings	85
iii. Coin payment settings	85
iv. Screen parameters	85
v. Backlight settings	85
vi. LED settings	85
vii. Pay-by-Phone payment display settings	85
viii. Sensor settings (if applicable)	85
ix. Other meter settings as applicable	84

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
87	III.A.10.d.ii	The Proposer shall include a screen shot of the search module output.	Yes

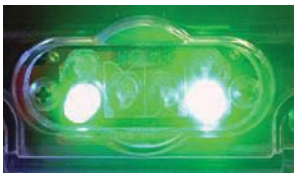
The IPS MMS offers a quick search feature at the top of every page which requires in the user to input the pole or meter terminal number. The search result provides a report of all associated attributes of the location, assigned zone/area, current configuration, RFID number, date/time and type of most recently recorded transactions, firmware version, among other attributes. Additionally, pole transaction detail and pole event report shortcuts are available for the identified location to retrieve additional underlying details. More information is contained in the MMS user's manual in the Appendix.

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
88	III.A.10.d.iii	The Proposer shall indicate the methods to program the manner(s) by which a customer or Parking Enforcement Office can determine that a paid parking session has expired.	Yes

Please also refer to Deliverbable # 41. The meter display will always show any remaining purchased time on the meter and the meter displays can be customized to meet the specific requirements of the PEO, however, the primary method of enforcement is flashing LEDs.
IPS meters utilize highly visible LEDs in both the front (red, green and yellow) and the back (pairs of red, green and yellow) of the meter to provide a status indication for enforcement. The purpose of the rear facing LEDs are for in-car enforcement and larger distances. The front LEDs are for the user as well as enforcement. The LEDs are capable of being configured to a specific rate of flashing and can be turned on or off during paid, expired, idle and grace period. While this can be configured to the specific preference of the City of Sacramento, the standard configuration is as follows.

Red: Meter is expired and/or idle without payment
Green: Meter is paid or within the defined grace period
Yellow: Meter requires maintenance



Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
89	III.B.1.h.i	The Proposer shall describe in detail the various reporting outputs from the MMS, including pre-programmed inquiries that result in on- screen or printed reports. The comprehensive description shall include samples of inquiries, screen shots, and sample reports, as applicable. The Proposer shall explain how data can be "exported" to files, such as Excel or PDF, to be shared with other systems. The Proposer shall also describe the various dashboards, business intelligence, and analytics provided by the MMS, depicting usage, revenue, and scenarios, and the manners in which the data can be classified and sorted ("sliced and diced"). The screen shots and report samples for this section may be placed in an appendix to the proposal and omitted from the page count restrictions.	Yes

Please refer to the IPS DMS user manual for samples of all the available standard reports, screen shots and capabilities included in the IPS DMS.

The IPS MMS supports exporting of data to a variety of external formats. MMS reports with built-in export functionality allow for the exporting of data in spreadsheet format or CSV format (suitable for exporting to external databases). PDF and RTF formats are also available. There are currently no fixed restrictions on exporting data. In addition to the standardized formats and options listed below, IPS is prepared to provide additional customized exporting queries at no additional cost upon request.

IPS offers both dashboard and new analytical tools that can be used to measure performance against key performance indicators and metrics. For an example of the standard dashboard capabilities, please refer to the screen shot in Deliverable # 72. This example dashboard can be further customized based on the input of the City.

IPS will soon be offering a new suite of graphical dashboards, analytical and forecasting tools meant to allow our clients to slice and dice data in a visual and meaningful way, provide unparalleled flexibility to view and sort data in a virtually unlimited manner. Screen shots from this new analytical tool are provided below. This tool is currently in a Beta phase and IPS would be happy to share this tool with the City of Sacramento for evaluation.

[redacted]

Analytics Report: Forecasting (Above)

[redacted]

Analytics Report: Revenue (Above)

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
90	III.B.1.h.ii	The Proposer shall describe in detail how its solution can integrate with other vendors of parking solutions, such as parking guidance, enforcement, or financial reporting systems.	Yes

At the heart of the IPS DMS is a database structure and associated web services that can exchange information as specified in either a real time format (such as XML) or batch files in a pre-determine time frame (such as daily CSV). The protocols for data transfer would be very similar to those that are included in the technical specifications of this RFO. IPS has successfully demonstrated this capability in multiple locations and projects. So long as a data specification and transfer protocol is provided, IPS can integrate into any other vendor that the City would designate. In each case, IPS would work closely with the City to understand the use model for each data set in order to advise the City on the best methodology to achieve the end result.

Examples: (*listing the largest integration for each type, and not a complete list*)

Parking Guidance - ParkMe: Santa Monica (CA)
Mobile Payments – ParkMobile: Los Angeles (CA), PayByPhone: San Francisco (CA)
Enforcement – Xerox: Los Angeles(CA)
Financial Systems - Bank of America

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
91	III.B.2.q.i	Meter Behavior Programming: The Proposer shall describe the step-by-step process for programming a meter or a group of meters.	Yes

Each IPS meter configuration is comprised of several user inputs, such as Standby mode and times, Card payment settings, Coin payment settings, Screen parameters, Backlight settings, LED settings, Pay-by-Phone payment display settings, etc. Please refer to the MMS user manual in Appendix C for additional information and description of all configuration capabilities. Once all of this information has been correctly input, the configuration can be assigned citywide, by zone, by area, by sub-area, by route or by pole using the Assign Configuration tool within the MMS. In addition, IPS will assist in all aspects in configuring and maintaining configurations for the life of the contract.

How to Configure an IPS Meter in the MMS:

Step 1: Go to Pole Configuration page under the admin page. Select the pole configuration that you would like to change for the selected zones. Assuming the parking rates are the standard configuration, there would be no need to change the configuration. Should the City desire to change the configuration, IPS support staff will walk the City through the training to ensure all steps are being addressed.

Step 2: Go to the Display Strings page. The standard configurations would be in pages: 00, 01, 02, 03, 20, 21, 22, 23. Change these strings to display the information you would like. This can be done in the new screens feature where you have the ability drag and drop the special functions as well. Make sure to press the update or save button before switching pages or else the configuration will not be saved.

Step 3: To select the maximum stay, go to the main control page. Underneath the maximum stay (both on coin and card), enter the amount of minutes that a person can stay parked. 60 minutes for an hour, 120 minutes for two hours, 180 minutes for three hours, etc. IPS will pre-program all configurations per city requirements prior to installation and assignment simply requires a few steps by selecting the Zone, Area, or Meter and the configuration, then update.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
92	III.B.2.q.ii	The Proposer shall describe how remote programming of the meters is supported using standard communications protocols. The Proposer shall also indicate how many configuration modifications are allowed within a given month for the monthly communications fee amount provided in the Pricing Sheet.	Yes

IPS meter configuration, firmware and all other communications are supported using the standard cellular connectivity between the MMS and the meter. No additional or special communication is required to achieve such changes as they are automatically managed by the IPS and the MMS. Our pricing is based on an unlimited number of configurations and rate changes, but anticipates that it will not take place more than 1-2 times per month.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
93	III.B.2.q.ii	The Proposer shall describe how many different rate schedules can be stored in the meter's memory with future effective dates. Describe how meters can be grouped for programming purposes.	Yes

[redacted]

In terms of programming, configurations can be assigned at the City wide level, a zone, area, sub-zone or even down to the level of an individual meter. Additionally, IPS can offer customized assignment of configurations if they require a more customized selection of meters and associated configurations.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
94	III.B.14.e	The Proposer shall describe in detail the maximum number of special events, the maximum time those events can be programmed in the future, and how special programming is accomplished in its system.	Yes

There are 20 special events that can be programmed at anytime. To program special rates, the administrator goes into the MMS / Admin Tab / Pole Configurations / Show Configurations /Special Days Tab (Slider) and enters relevant informaiton into the system. Special days are activated during dates/times selected automatically as programmed.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
95	III.B.15.e	The Proposer shall describe the minimum, maximum, and average amount of time in seconds the MMS will take to transmit transactions of different payment types (coin, credit card, parking card, other) to the Parking Services Management System, including what parameters or conditions will affect transmission times and what percentage of each type of transaction can be expected to be transmitted within the average transmission time.	Yes

From the MMS the data is sent to the designated data warehouse, as to be provided by Parking Services. The overall time from meter to the IPS DMS averages 95% in 120 seconds. On average almost, all data will then be transferred to the PSMS in 10 seconds or less. Much of that time is accounted if you assuming a 5 second scheduler cycle and another 5 seconds to processing and transmission times.

IPS is prepared to demonstrate more detailed information from projects such as SFpark and LA ExpressPark, however, IPS will first require permission from those customers to provide such information. We certainly encourage the City of Sacramento to validate these facts with the respective Cities.

For All Payment Types (time from IPS DSM to PSMS)

Minimum: The minimum duration can be 1 or 2 seconds;

Average: 95% of all data is arriving within 10 seconds.

Maximum: Could be in hours if connectivity is not available.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
96	III.B.16.c	Monitoring Software: The Proposer shall describe in detail how the monitoring and alerting software will detect problems and monitor the transmissions described in requirement III.B.16, including redundancies and alerts.	Yes

[redacted]

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
97	III.C.2.k.i	Mobile Maintenance Application / PDTs: The Proposer shall describe the proposed mobile MMS and/or handheld solution.	Yes

The IPS MMS is a hosted system, which means that the MMS can be accessed by any computer or device with an internet connection, including mobile devices and handheld solutions. The result is a mobile MMS solution available from any connected device.

Additionally, IPS offers a meter maintenance application on both Android and Apple (iOS) to provide complete maintenance logging, reporting and other typical field functions. Both applications are available to the City of Sacramento at no additional costs. Please refer to the Mobile Maintenance Application User Manual in Appendix C.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
98	III.C.2.k.ii	The Proposer shall describe meter remote and field programming features. Field programming shall be user friendly as determined by Parking Services and should be able to be completed very quickly; i.e., less than 3 minutes for operational and rate profiles to be downloaded.	Yes

Using the RFID system programming is completed in typically less than a minute. IPS utilizes a patent pending RFID tag and location based configuration system. Each meter post has an assigned meter configuration within the IPS MMS. An RFID tag with a unique serial number (affixed to the inside meter housing) is associated to each meter post location within the IPS database. Once a meter is installed into new meter housing, it will read the RFID tag serial number, contact the IPS database, and download the configuration assigned to the specific meter post location based on the associated RFID serial number. This makes both meter configuration and asset tracking extraordinarily simple and eliminates the need to manually assign meters to post locations

Additionally, any mobile device with an internet connection can access the IPS MMS and make changes on the fly. Please refer to the IPS MMS User Manual in the Appendix for meter configuration information.

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
99	III.C.3	Parking Services wishes to conduct global rate changes, various attributes reconciliation, special event pricing and other global programing features within the MMS without any significant involvement of the Contractor. Please describe, in detail, how this functionality will be achieved.	Yes

IPS complies with part of this requirement through the XML programming system required for Parking Services. Further customizations are included in our offer to empower Parking Services to make programming changes as described. IPS would need details on features the City would like to manage and how they would like to do it and IPS will provide this service at no additional charge. This Deliverable will require development time of 120-180 days.

Appendix J
Deliverables Checklist - Single Space Meter Mechanisms

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
1	I.A.1.g	**Training Plan:** The Proposer shall describe the following detail for each area of training: 1) a brief description of the subject matter; 2); the number of training sessions offered; 3) the total number of training hours per student; 4) the maximum number of students eligible to receive training; and 5) proposed training schedule.	Yes
2	I.A.2.b.i	**Customer Support:** The Proposer shall describe the proposed technical support services included with the equipment purchase, including help desk availability in relationship to meter operational hours, on-line help features, on-site support and technical support, during and beyond both the installation and warranty periods.	Yes
3	I.A.2.b.ii	The Proposer shall describe support levels, including at Parking Services' staff level, the Help-Desk or local trained support level, and the manufacturer's support level (e.g., engineer or major IT personnel).	Yes
4	I.A.2.b.iii	The Proposer shall describe all out-sourced or subcontracted services.	Yes
5	I.A.3.h.i	**Warranty:** The Proposer shall, using Appendix I-Pricing Sheet, submit a non-negotiable price for an additional five (5) years of warranty coverage that the City of Sacramento can optionally purchase (at the beginning of the contract year to be covered) at its sole discretion at the end of the initial five-year warranty. Parking Services will notify the Proposer in writing of its intention to purchase the fourth and fifth year of warranty coverage 60 days prior to the expiration of the current warranty term. Warranty coverage shall include repair and/or replacement of any part or modular component determined to be defective in material or workmanship under normal use and service in a timely manner and at no additional cost.	Yes
6	I.A.3.h.ii	The Proposer shall state the warranty for all other components, including: RFID tags, data keys, access cards, replacement parts, domes, and lenses.	Yes
7	I.A.3.h.iii	The Proposer shall describe its Return Merchandise Authorization (RMA) process. Parking Services desires to utilize automated RMA tracking.	Yes

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
8	I.A.4	**MMS Support and Licensing:** The Proposer shall provide detailed statements regarding: a. Technical support b. Maintenance and license requirements c. License costs (if any) d. Service Level Agreements (SLAs) e. Hardware requirements f. Network requirements g. Operating system software requirements h. Browser software requirements i. Any other MMS support or licensing requirements not otherwise defined. j. Diagram of proposed network.	Yes
9	I.A.5.a	**Spare Parts:** The Proposer shall recommend a supply list of spare parts to support meter installations, and provide a complete parts list with prices and the expected life of major components. The Proposer shall also specify how quickly parts can be delivered.	Yes
10	I.A.5.b	The Proposer shall describe the percentage discount from standard price list it shall offer the City of Sacramento on all available spare parts during the contract period. This discount shall survive the expiration of the contract so long as the Proposer's meters are in use in the City. (This information must be provided in Appendix I – Pricing Sheet.)	Yes
11	I.A.5.c	The Proposer shall describe how each individual part can be tracked, from the point of delivery to Parking Services, until the part is discarded or returned to the Vendor under the RMA program. Examples include bar coding, RFID tags, or NFC tags.	Yes
12	I.A.6.e.i	**Installation:** The Proposer shall describe what information will be required from Parking Services to ensure timely delivery and installation of the meters.	Yes
13	I.A.6.e.ii	The Proposer shall submit a price quotation for installation of the mechanisms into the housings. Include a comprehensive description of the services included as part of the installation, as well as a complete list of the Proposer's expectations from the City. Enter the price quote on Appendix I – Pricing Sheet.	Yes
14	I.A.6.e.iii	The Proposer shall identify a project manager for the installation period (not to exceed six (6) months). The installation period shall be from the time the first meter is delivered until the last meter is accepted. The project manager shall be available to Parking Services personnel between 8 am and 5 pm (excluding weekends and legal holidays), and shall be on-site any time the Proposer's staff is performing installation activities. The on-site project manager shall be an employee of the Proposer. Provide the name and résumé for the proposed project manager.	Yes
15	I.B.1.b	The Proposer shall indicate the Mobile Payment service providers from whom it can receive payment data.	Yes

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
16	I.B.3	**Meter Support Services:** The Proposer shall provide in Appendix I (Pricing Sheets) costs for all support needed to manage meter functionality, including, but not limited to, communications, MMS and processing of credit card transactions. Proposer shall list all assumptions made for generating the prices. Any future support functions will be added to Appendix I through contract amendment.	Yes
17	I.B.5	The Proposer shall describe a recommended approach to notify the general public about the new meters, including a proposed timeline. This recommendation should account for the replacement of non-communicating single-space meters, as well as the "pay and display" meters, currently operating in the City of Sacramento.	Yes
18	I.B.7	**Consulting Services Rate for Additional Services:** The Proposer shall provide a per hour rate for consulting services, that may be requested by the City of Sacramento during the term of the contract that may include but are not limited to: a. Support for parking management with emphasis on effective rate adjustments, including developing appropriate price and revenue benchmarks. This should include regular meetings with the City's Contract Administrator, Parking Meter Repair Shop and key managers within Parking Services. b. Analytical support for developing pricing strategies based on the best practices employed worldwide, meter planning and inventory control, and meter maintenance and repair operations. The consulting staff will conduct, or provide the technical support needed for Parking Services to conduct field surveys, and provide reports on parking space occupancy, vehicle turnover and capture rates. c. Extracting information from parking meter databases to support parking management initiatives. d. Assistance in preparing management reports and statistical analysis, including the development of new management reports and revisions to existing reports. e. Providing training for Parking Services staff in parking management related topics. f. Advice/consulting for design of decals for new meters, to convey city-required parking information to meter users.	Yes
19	I.C.1	**Collection Solutions:** The Proposer may describe any optional programs or equipment it may wish offer for processing coin collections. The Vendor shall be specific regarding the offerings, and include information about how such programs and/or equipment will replace and/or integrate into the City's processes and interoperate with the City's equipment and service providers (e.g., banks).	Yes

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Deliverables Checklist - Single Space Meter Mechanisms

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
20	I.C.2	**On-Street Validation Solution:** The Proposer may describe any optional programs or equipment it may wish to offer for providing merchant validations to customers parking on the street. The Vendor shall be specific regarding the offerings by explaining how such programs and/or equipment will integrate into the City's processes, interoperate with the City's equipment, and give the merchants the ability to validate the parking for a customer who has already paid at a meter.	Yes
21	I.C.3	**Website:** The Proposer shall provide, for the two options described below, a price and timeline for developing a customer-facing, vendor hosted website that would allow a customer who paid by credit card to print a receipt of his or her transaction(s) at home. The proposed website shall use "open architecture" to allow for integration with additional data sources. Option 1: creating a site whereby a Customer would enter only the three following pieces of information: • Date and approximate time of day (plus or minus 60 minutes) the transaction began; • The parking space number; • Last four digits of credit card number. Option 2: creating a site whereby Customers would register their email addresses and credit card numbers. Whenever a registered credit card number was used at any meter, the customer would receive a receipt in a PDF format at the registered email address.	Yes
22	II.A.1m.i	**General:** The Proposers shall describe its ADA compliance, and state requirements for the City to ensure the meters are compliant after installation on the street. The Proposer shall advise Parking Services on the correct length of poles required such that the meter display will be visible to an individual restricted to a reach of 48 inches.	Yes
23	II.A.1m.ii	The Proposer shall include a price quotation for additional meter housings. These housings shall be compatible with the existing housings and must be accommodate electronic vault locks. If the additional housings are not compatible with those listed in Section A.1.a, the proposer must explain why it recommends a different housing.	Yes
24	II.A.1m.iii	The Proposer shall indicate whether meters are on which the coin chute and the card reader both have failed can still accept mobile payments and grant time.	Yes
25	II.A.1.m.iv	The Proposer shall describe how the mechanisms and/or domes are resistant to graffiti and vandalism.	Yes

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Deliverables Checklist - Single Space Meter Mechanisms

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
26	II.A.1.m.v	The Proposer shall deliver three working meter samples, with three domes, with its proposal. These sample mechanisms and domes will be installed in three different housings: a POM Model E, a MacKay Model 98, and a Duncan Model 90. This will be a no-cost working pilot for evaluation by City staff. Each meter shall be configured for specific meter Behavior as outlined in Attachment 12. Meters will be available for the Proposer to pick up at the end of the review period. The working samples submitted shall demonstrate the functionality described in the proposal. If any specification will be met by a subsequent version of software or hardware but not available for submission along with the proposal, the Proposer shall clearly identify each exception. Note that the Proposer will receive lower scores for features that are not currently implemented and in use in meters on the street in other jurisdictions.	Yes
27	II.A.2.i	**Objects That Jam:** The Proposer shall describe any other objects its meters can detect.	Yes
28	II.A.4.i.i	**Screen:** The Proposer shall describe how the screen is designed to address potential cloudiness and condensation build-up.	Yes
29	II.A.4.i.ii	The Proposer shall describe how it will ensure easy viewing in direct sunlight.	Yes
30	II.A.4.i.iii	The Proposer shall describe how it will ensure the screen is resistant to vandalism.	Yes
31	II.A.4.i.iv	The Proposer shall provide screen shots demonstrating examples of conditions 1-17 listed in requirement II.A.4.h	Yes
32	II.A.4.i.v	The Proposer shall provide flowchart diagrams describing the sequence of screens given the following three meter programming and scenarios: a. Scenario 1: Customer arrives Tuesday at 5:30am and meter is expired. Customer inserts a card or a coin in the meter. b. Scenario 2: Customer arrives Tuesday at 11:00 am and meter is expired. Customer uses coins to purchase three hours of parking. c. Scenario 3: Customer arrives on Sunday at 10:30am. Meter is Idle and has 30 min left. Customer inserts a credit card and adds time/money to the time limit on the meter.	Yes
33	II.A.5.c.i	**Meter Interface:** The Proposer shall describe all inputs on the meter; i.e., if the meter uses buttons, describe the type (e.g., mechanical or touch), the quantity, all functions, and any permanent labels. If buttons have different functions in different modes or at different times, Proposer shall describe all possible functions.	Yes
34	II.A.5.c.ii	The Proposer shall describe how the meter demonstrates to the Customer how the transaction is progressing and confirms if a payment has been successful.	Yes

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Deliverables Checklist - Single Space Meter Mechanisms

Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
35	II.A.7.i.i	The Proposer shall describe the type of battery(ies) provided, and the minimum life expectancy for both rechargeable and non-rechargeable batteries assuming the following operation parameters: • Operating hours are Monday-Saturday, 7 a.m. to 8 p.m. and Sunday, 12 p.m. to 6 p.m. • Meters shall transmit payment status for all types of payment (e.g., coins, smart card, credit card, NFC) to the MMS within 90 seconds after determining the transaction to be completed. • Meter receives, on average, 3 hours of direct sunlight each day. • Meter conducts, on average, 6 transactions per day. • Meter backlight is activated by any button push or by initiating the payment (e.g., coin drop, credit card or smart card insertion), and remains illuminated for 20 seconds. • NFC payment mode is activated by any button push. • Meter modem needs to be on continuously during operating hours to listen for Mobile Payment information (or vendor may propose an alternative). • Pre-payment for all the meters begins at 4:30 AM seven days a week, including enforced holidays.	Yes
36	II.A.7.i.ii	The Proposer shall describe how battery life is determined and calculated (e.g., by percentage).	Yes
37	II.A.7.i.iii	The Proposer shall describe the maximum storage period available, and what data will be stored for that period	Yes
38	II.A.7.i.iv	The Proposer shall describe available options/upgrades to the stock battery, including the trade-offs and disadvantages.	Yes
39	II.A.7.i.v	The Proposer shall describe the effect on battery life of “bagging” the meters for various time periods. Meters may be bagged to temporarily reserve one or more parking spaces for activities such as construction or special events.	Yes
40	II.A.7.i.vi	The proposer shall describe the effect on battery life of sending cell phone payments to the meter mechanisms, and strategies for minimizing the impact on battery life.	Yes
41	II.A.8.b	**Visual Enforcement:** The Proposer shall describe the enforcement process for its meters, including a description of how PEOs determine the paid status of each parking space. The description shall include a means to determine meter payment status visually.	Yes
42	II.A.9.j.i	**Card Reader Payment and Processing:** The Proposer shall describe, in detail, the step-by-step process for accepting credit card payments from the time a Customer inserts his/her card to the time the money is deposited in the City’s account (with accounting for the timeline and potential lag in deposits). Include the name of the gateway processor (if using a third party) and the name of the gateway software (if the firm uses in-house software). The Proposer shall list all subcontractors involved in each step (e.g., cellular providers or gateway companies).	Yes

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
43	II.A.9.j.ii	The Proposer shall identify its gateway provider, or its gateway software, along with verification that it is certified. The Proposer shall be responsible for its gateway provider's continued acceptance with the City's merchant bank (currently Bank of America).	Yes
44	II.A.9.j.iii	The Proposer shall identify all costs from the Proposer and/or its subcontracted gateway company that are charged for credit card transactions, and the basis for the costs (percentage, sliding scale, fixed cost, or other). If none, then so state.	Yes
45	II.A.9.j.iv	The Proposer shall list all card types that can be accepted at the meter.	Yes
46	II.A.9.j.v	The Proposer shall describe authorization procedure during loss of communication and other preventative processes, including duplicate card transactions.	Yes
47	II.A.9.j.vi	The Proposer shall describe Hotlist capabilities.	Yes
48	II.A.9.j.vii	The Proposer shall describe how its meters and system will deal with credit card transactions: 1) When the modem is not available (e.g. modem is malfunctioning or broken); 2) When credit card processor is not available and 3) When communication is not available (e.g. antenna is malfunctioning or broken).	Yes
49	II.A.9.j.viii	The Proposer shall describe how the card reader is designed and engineered to guide credit card insertion without having to align the card in a particular way prior to use	Yes
50	II.A.9.j.ix	The Proposer shall describe how the meter mechanism discourages Customers from inserting any object other than a standard sized credit or debit card (e.g., a coin) in to the card reader	Yes
51	II.A.9.j.x	The Proposer shall describe how the meter will be upgradable to future credit/debit card technologies, including "chip and pin" (EMV) cards (such as those used currently in Europe and Canada).	Yes
52	II.A.10.j	**Revenue Audit Capabilities:** The Proposer shall describe the mechanism's ability to store audit records: i) How many records can be stored? ii) How long can the records be stored? iii) Can records be retained in the mechanism's memory after they have been sent to respective MMS? iv) What are the attributes of the stored audit records? v) Can stored records be retrieved by mobile device such as handheld or smart phone with using an appropriate application? vi) Do the stored records include information to discriminate between amount of payment and amount of time purchased?	Yes

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
53	II.A.11.f	**Collection Event Recording/Revenue Counter Reset:** The Proposer shall describe the various ways the mechanism can be triggered for recording of a collection event, resetting the revenue counters, and transmission of the associated audit data.	Yes
54	II.A.12.f.i	**Communications:** The Proposer shall describe the proposed communications modem in detail. Include the communication type (e.g., GPRS, CDMA) and the list of potential wireless communications providers currently operating cellular networks in Sacramento, with compatible modems (e.g., Verizon, AT&T, Sprint). From the providers available, the Proposer shall identify a primary provider and an alternate provider to cover those areas where the primary provider's signal is weak or non-existent, and describe how the switch over process will work. Because carriers are starting to phase out their 2G networks, Parking Services assumes that any proposed offering with a 2G modem will include an automatic, free upgrade to 3G once the carrier announces its plans for discontinuing support for 2G in Sacramento.	Yes
55	II.A.12.f.ii	The Proposer shall describe the minimum, maximum, and average time in seconds the meter will take to transmit transactions of different payment types (coin, credit card, parking card, other) to the MMS, including what parameters or conditions will affect transmission times and what percentage of each type of transaction can be expected to be transmitted within the average transmission time.	Yes
56	II.A.12.f.iii	The Proposer shall describe the sequence of events starting with a coin drop or card payment at the meter and timing of each step in the transmission of transaction data to the MMS. An sample scenario follows: • Customer arrives and pays the meter with a credit card at time T. • Credit card authorization is completed and Customer walks away at time X. • Meter considers transaction completed at time T+X. • Transaction data appears in the MMS at time T+X+Y.	Yes
57	II.A.12.f.iv	The Proposer shall describe the sequence of events when a meter attempts to communicate with the MMS and fails, including how many attempts it makes and how often.	
58	II.A.12.f.v	The Proposer shall describe its policy for Meter communications and charges for those mechanisms in Parking Services' spare inventory. Meters can be in spare inventory for longer than 12 months. Parking Services will not pay monthly costs for meters/mechanisms that are not active.	
59	II.A.13.a	**Communication Dead Zones:** The Proposer shall describe its policies and procedures regarding communications dead zones, including: i. Any pre-installation surveys Proposer plans to conduct and the tools to be used. ii. Past history with the Proposer's selected cellular service provider in resolving dead zones in other cities. iii. Alternative communications methods (e.g., powered repeater, different provider).	

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
60	II.A.13.b	The Proposer shall describe in detail how it has addressed communications challenges at other installations (e.g. network failures), including: i. Nature of the problem(s). ii. How they were detected. iii. How they were corrected. iv. How long, on average, Proposer took to correct each type of problem.	Yes
61	II.A.14.a	**Network:** The Proposer shall describe how its processor and proposed technology enables flexible payment and communication options.	Yes
62	II.A.14.b	The Proposer shall name its proposed communications provider(s).	Yes
63	II.A.14.c	The Proposer shall describe auditing and reconciliation procedures that track electronic revenues to and from the meter through the credit card processor, including authorization messages, message security, compliance services, and deposits to the designated bank.	Yes
64	II.A.14.d	The Proposer shall describe how the system shall be easily adaptable to operate on other wireless networks including 802.11.	Yes
65	II.A.14.e	The Proposer shall describe backup options when communication to the network is lost during the credit card authorization process (i.e., what happens to ensure that payments are properly recorded, credited to the meter and forwarded to Parking Services when communication interruptions occur).	Yes
66	II.B.2.c.i	**Card Reader Payment and Processing:** Proposer shall describe its smart card system, including customer purchase, registration, use in meters, reloading, and reconciliation with amounts still in float.	Yes
67	II.B.2.c.ii	Proposer shall describe if and how it can accommodate smart (stored value) cards currently in use in the City of Sacramento (the Duncan MeterCash Card and the J.J. MacKay Parking meter Card).	Yes
68	III.A.1.i.i	**MMS General:** The Proposer shall describe the functionality for managing the user security privileges for individuals and groups.	Yes
69	III.A.1.i.ii	The Proposer shall describe who shall host the server.	Yes
70	III.A.1.i.iii	The Proposer shall describe the MMS data filter functionality.	Yes
71	III.A.1.i.iv	The Proposer shall provide screen shots of its various modules (e.g., financial and maintenance reports, collection activity, alarms).	Yes
72	III.A.1.i.v	The Proposer shall describe the MMS customizable features to encourage ease of use, including labels for all icons and a built-in help menu.	Yes

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
73	III.A.1.i.vi	The Proposer shall describe the server system and how Proposer shall ensure its reliability.	Yes
74	III.A.1.i.vii	The Proposer shall describe in detail its security policy, what level of redundancy the system employs (including parallel servers at secondary locations if applicable), the location of the servers, and list the annual uptime percentage.	Yes
75	III.A.1.i.viii	The Proposer shall provide a detailed diagram of the MMS.	Yes
76	III.A.1.i.ix	The Proposer shall provide the location and ownership (e.g., server X is owned by the Proposer, server Y is owned by Gateway Provider Z) of each component of the MMS.	Yes
77	III.A.1.i.x	The Proposer shall provide the percentage of actual uptime for the MMS during the past two calendar years in at least two other municipalities, excluding time downtime for routine maintenance.	Yes
78	III.A.1.i.xi	The Proposer shall provide a detailed listing of all reports available, as well as sample MMS reports showing sample data and layouts.	Yes
79	III.A.1.i.xii	The Proposer shall describe how the MMS supports exporting financial and activity data to spreadsheet software and an external database, including any limitations (e.g., if only 5,000 rows can be exported at a time).	Yes
80	III.A.1.i.xiii	The Proposer shall describe how the MMS allows report creation and modification by the City or its designees.	Yes
81	III.A.1.i.xiv	The Proposer shall describe how multiple payment methods (coins, credit cards, Parking Card, SAM-capable cards) are recorded and what MMS reporting is available for the end user reports and/or for exporting. Specify what export formats are available (e.g., .XLS, .CSV, .PDF)	Yes
82	III.A.1.i.xv	The Proposer shall thoroughly explain its disaster recovery and back-up plan, which at a minimum should address the following: 1. procedures for back-up of all software and computer programs, files, computerized procedures, etc. 2. off-site duplication of all software and computer programs, files, computerized procedures, etc. 3. repair procedures for all hardware, communications, and other equipment in order to minimize the time required to restore service 4. alternate processing arrangements to meet business resumption requirements 5. proposed annual and comprehensive testing of emergency procedures 6. alternate processing arrangements in the event of a lack of access to the vendor's main processing site.	Yes

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
83	III.A.6.d.i	**MMS Alarms:** The Proposer shall describe how and which alarms are sent by email and/or text message to authorized personnel. The Proposer shall describe how alarm designations can be modified (e.g., if the low battery alarm is by default sent to an email address, can Parking Services customize the alarm to be sent via text message instead).	Yes
84	III.A.6.d.ii	The Proposer shall describe the alarm reporting system operations and include all available alarm categories and functions.	Yes
85	III.A.9.c	**Meter Location Assignment:** The Proposer shall describe in detail the method whereby meters recognize their location and download the correct meter Behavior parameters from the MMS. If this is done through RFID solution, the Proposer shall describe whether the RFID is restricted to "inside the housing," or if it can be mounted on or in the pole to facilitate use by other location-aware applications. If this requirement is met through another solution, the Proposer shall describe how it can prevent loss or intentional removal of the device(s) used for this method.	Yes
86	III.A.10.d.i	**Meter Backend Settings:** The Proposer shall include a list of backend programming settings under each category listed in requirement III.A.10.a with descriptions of what they mean and allowable values.	Yes
87	III.A.10.d.ii	The Proposer shall include a screen shot of the search module output.	Yes
88	III.A.10.d.iii	The Proposer shall indicate the methods to program the manner(s) by which a customer or Parking Enforcement Officer can determine that a paid parking session has expired.	Yes
89	III.B.1.h.i	The Proposer shall describe in detail the various reporting outputs from the MMS, including pre-programmed inquiries that result in on-screen or printed reports. The comprehensive description shall include samples of inquiries, screen shots, and sample reports, as applicable. The Proposer shall explain how data can be "exported" to files, such as Excel or PDF, to be shared with other systems. The Proposer shall also describe the various dashboards, business intelligence, and analytics provided by the MMS, depicting usage, revenue, and scenarios, and the manners in which the data can be classified and sorted ("sliced and diced"). The screen shots and report samples for this section may be placed in an appendix to the proposal and omitted from the page count restrictions.	Yes
90	III.B.1.h.ii	The Proposer shall describe in detail how its solution can integrate with other vendors of parking solutions, such as parking guidance, enforcement, or financial reporting systems.	Yes
91	III.B.2.q.i	**Meter Behavior Programming:** The Proposer shall describe the step-by-step process for programming a meter or a group of meters.	Yes
92	III.B.2.q.ii	The Proposer shall describe how remote programming of the meters is supported using standard communications protocols. The Proposer shall also indicate how many configuration modifications are allowed within a given month for the monthly communications fee amount provided in the Pricing Sheet.	

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Deliverable #	Technical Requirement Ref.	Description	Submitted (Yes/No)
93	III.B.2.q.iii	The Proposer shall describe how many different rate schedules can be stored in the meter's memory with future effective dates. Describe how meters can be grouped for programming purposes.	Yes
94	III.B.14.e	**Special Programming:** The Proposer shall describe in detail the maximum number of special events, the maximum time those events can be programmed in the future, and how special programming is accomplished in its system.	Yes
95	III.B.15.e	**XML Transaction Data Feed:** The Proposer shall describe the minimum, maximum, and average amount of time in seconds the MMS will take to transmit transactions of different payment types (coin, credit card, parking card, other) to the Parking Services Management System, including what parameters or conditions will affect transmission times and what percentage of each type of transaction can be expected to be transmitted within the average transmission time.	Yes
96	III.B.16.c	**Monitoring Software:** The Proposer shall describe in detail how the monitoring and alerting software will detect problems and monitor the transmissions described in requirement III.B.16, including redundancies and alerts	Yes
97	III.C.2.k.i	**Mobile Maintenance Application/PDTs:** The Proposer shall describe the proposed mobile MMS and/or handheld solution.	Yes
98	III.C.2.k.ii	The Proposer shall describe meter remote and field programming features. Field programming shall be user friendly as determined by Parking Services and should be able to be completed very quickly; i.e., less than 3 minutes for operational and rate profiles to be downloaded.	Yes
99	III.C.3.	**Programming Without Contractor:** Parking Services wishes to conduct global rate changes, various attributes reconciliation, special event pricing and other global programing features within the MMS without any significant involvement of the Contractor. Please describe how this functionality can be achieved.	Yes

Response to Electronic Locks Technical Specifications, SECTION II

Disclosure Statement: IPS is providing Medeco locks as part of our offering to the City of Sacramento. IPS has complied with the City of Sacramento's request to provide very detailed responses and has therefore disclosed proprietary information and trade secrets which could potentially harm the company should the information contained within be released. IPS requests the rights to redact such information prior to public release.

Item/Description	IPS Response
1) Electronic Locks	
A. Locks shall be made from new material and be weatherproof.	Yes the locks will be made from new material and be weather resistant to a IP55 Rating
B. All parking meter vault door locks shall be of electro-mechanical design. Access shall be controlled electronically, while the actual rotating of the lock cylinder is performed by turning a collection key device.	Yes. IPS will comply with this requirement.
C. The electronic locks shall require no power from the parking meter itself. All power for operating the lock must come from key.	Yes the locks will require no power from the meter itself all power comes from the key.
D. The electronic lock memory shall store no less than 1,000 access related events (e.g. collections, unauthorized attempted access, collection key not in the system, collection key is out of schedule, collection key not on route, etc.). After the threshold is reached, the oldest record must be deleted.	The electronic lock memory will store no less than 2,000 access events when the threshold is reached the oldest record will be deleted.
E. The electronic lock shall not allow the key to be removed from the lock while the vault door is open.	The electronic lock does allow the key to be removed while the door is open. The key can only be removed when the lock is in the locked position. The operator must ensure that the meter vault door is properly closed before removing the key.
F. Electronic locks shall incorporate a stainless steel, drill-resistant face plate.	Yes the electronic lock does incorporate a stainless steel drill resistant face plate.
G. The face plate must be constructed to break away and spin freely for resistance to attack by torque.	Yes the face plate is constructed to break-away and spin freely to resist attack by torque.
H. Electronic locks shall have break-away plug face to fail leaving the vault secure in the event of over-torqueing.	Yes the electronic locks have a break-away face and will leave the vault door secured if attacked.
I. Electronic locks shall have a stainless steel plug face and shall resist adverse environmental conditions, including but not limited to, wind-blown grime, rain, fog, humidity, sun (including direct sunlight), and vibrations.	Yes the locks have a stainless steel plug face and does resist adverse environmental conditions, including but not limited to, wind-blown grime, rain, fog, humidity, sun (including direct sunlight), and vibrations.
J. Electronic locks shall have drill-resistant inserts.	Yes the locks have drill resistant inserts.
K. The cylinder configuration of electronic locks shall fit all types of existing vault doors and housings in use in the City of Sacramento.	The cylinders may not fit all types of existing vault doors in use by the City. In this event new vault doors that can accommodate the cylinder may be necessary.
L. Electronic locks shall support a secure communications session between the lock and an electronic key, using a combination of schemes including DES, AES and designated proprietary encryption developed by the electronic lock manufacturer.	Yes the locks support secure communications between the lock and key incorporating DES and proprietary encryption developed by the electronic lock manufacturer..
M. The electronic lock cylinders shall tolerate the following environmental conditions:	See below.
a. Extreme high temperature: 160º F	Yes
b. Extreme low temperature: -10º F	Yes
c. Extreme temperature cycling: -10º F to 160º F	Yes

d. ASTM-B-117 Salt Fog Testing: Greater than 48 hours.	Yes
N. The electronic lock cylinders shall surpass or meet the following electronic testing specifications:	See below.
a. ESD Protection: +/- 15kV	Yes
b. Over-voltage Protection: Cylinder Security Protected	Yes
O. The electronic lock cylinders shall surpass or meet the following mechanical specifications:	See below.
a. Plug Front Breakaway Torque: 90 In-Lb	Yes
b. Plug front successfully spins and cylinder remains secure	Yes
c. Shock and Vibration: Test samples withstanding the vibration conditions specified without physical damage, and continue to exhibit normal performance	Yes
P. The electronic lock cylinders shall tolerate the following vibration specifications:	The lock has not been tested to all of these standards but the manufacturer will agree to test and provide the results if selected as part of this RFP.
a. 5 to 2000 Hz, at an input level of 1G.	See above
b. Front to Back Axis	See above
c. Side to Side Axis	See above
d. Top to Bottom Axis	See above
e. Slow Sweep – Resonant Frequency	See above
f. Slow Sweep – Low Frequency	See above
g. 10% to +10% of sample resonant frequency, at an input level of 1G	See above
h. 69Hz to 84Hz, at an input level of 1G	See above
i. High resistance to high speed steel and carbide drills	Yes
j. Cylinder resistant to over 6-foot drop	Yes
Q. The electronic lock assembly as mounted in the MacKay MKV 97HD housing shall be tested for its resistance to physical attack methods and shall have the following performance characteristics:	Yes to all.

Test	Description	Measured Value
Plug Drill	Drill plug and gain access	9/64 drill; 4 minutes; no entry to cash vault
Plug Punch	Punch the plug to gain access	3 lb hammer; 5/8 punch; five blows; no entry to cash vault.
Plug Pull	Pull the plug to gain access	Greater than 3,000 lbs; no entry to cash vault.
Plug Torque	Attempt to open by rotating plug with a tool inserted in key way.	Shall allow for fail secure at torque of 65 inch pounds; no entry to cash vault.
External Heat	Heat with a propane torch.	Direct heat 3 minutes; no entry to cash vault.
Hammer Bounce	Use a 2-lb hammer and a tool inserted in the key way to gain access to the vault.	Two sets of 25 blows while attempting to turn a tool in the lock; no entry to cash vault

2) Electronic Keys	
A. The electronic keys shall be made from new material, with an all-metal housing, and shall be durable, weatherproof, and water-resistant.	Yes
B. The electronic key shall have a durable, replaceable, hardened steel key tip.	Yes
C. The electronic key tip shall last without replacement for a minimum of 150,000 lock openings	Yes, under normal operating conditions.
D. The electronic key circuitry components shall be securely potted inside the body of the key.	Yes
E. The electronic key memory shall be non-volatile and protected by a separate internal battery.	Yes
F. The electronic key shall be programmable to operate specific locks during specified schedules, and not to operate past expiration.	Yes
G. The electronic key shall provide all power to the lock.	Yes

H. The electronic key shall include a rechargeable battery with a life cycle of no less than 2,000 openings per charge.	Yes
I. The electronic key shall incorporate replaceable data contacts for electronic communications with electronic locks.	Yes
J. The electronic key shall withstand all adverse weather conditions (e.g. fog, moisture, grime, dirt, heat, cold etc.).	Yes
K. The electronic key shall be able to store a minimum of 10,000 electronic lock cylinders to be opened.	Yes
L. The electronic key shall be able to store audit events and prevent the loss of audit trail data.	Yes
M. The electronic key shall be able to collect and transfer audit data events (e.g. collections, access, unauthorized collection attempts etc.) from electronic locks to lock management system.	Yes
N. The electronic key shall be able to have an activation period from one day to 30 days.	Yes
O. The electronic key shall use commonly available "off-the-shelf" rechargeable batteries.	Yes
P. The electronic key battery indication should be visible during key programming.	Yes
Q. The electronic key internal battery shall be able to protect audit and collection route/subroute data; "non-volatile" memory shall be protected for a minimum of one year and shall be programmable via management system.	Yes
R. The electronic key shall support a secure communications session between the key and host PC using a combination of schemes including DES, AES and designated proprietary encryption developed by the electronic lock manufacturer.	Yes
S. The electronic key shall be damage resistant to a drop of up to six feet.	Yes

Section III: Electronic Lock Management System (ELMS)

Item/Description	IPS Response
A. ELMS shall allow combining parking meter location IDs into a minimum of ten various groups (e.g. blocks, areas, streets, collection subroutes, collection routes, parking meter districts, etc.).	Yes
B. ELMS shall allow customization of support group names, report columns and headings. ~~controlled electronically, while the actual rotating of the lock cylinder is performed by turning a collection key device.~~	Yes. IPS will comply with this requirement, the bottom section does not relate to the question.
C. ELMS database shall store all the electronic lock codes in encrypted format.	Yes
D. ELMS shall have multiple security levels including but not limited to administrative keys, customer unique pins (e.g. system password), and manufacturer's generated lock codes specific to the Agency.	Yes
E. ELMS shall allow for secure software logins and user definable modular permissions to grant and control various levels of software access.	Yes
F. ELMS shall allow assignments and managing of multiple location ID's as a group; e.g. assigning multiple location ID's to the appropriate collection subroute or parking meter repair route.	Yes
G. ELMS shall allow assignments and managing multiple software users/groups permissions at the same time.	Yes
H. ELMS shall allow assignment of the key to a particular	Yes

user or group of users.	
I. ELMS shall track software user activity (e.g. who and when created a route, subroute, collection schedule, assigned or edited location id, added or removed locks from the inventory, etc.).	Yes
J. ELMS shall have the ability to use a calendar feature, to program, display, and color code scheduling of lock openings based on various grouping of location ids collection subroutes, routes, areas, assignments etc.	Yes
K. ELMS shall allow editing and deleting of routes, locations, meters and employees together with summaries of routes, locations, meters, keys and locks.	Yes
L. ELMS shall allow for automated programming of collection keys. In particular, the following features shall be supported:	Yes
a. Detection and automated collection key programing	Yes
b. Scheduling time to automatically program all or some of the collection keys at once	Yes
c. Scheduling and automated collection key programing for various physical locations, assuming all locations are part of one network. A minimum of four locations must be available; e.g., an operator must be able to schedule and program collection keys at Parking Services' headquarters, the Meter Shop, and the "corporation yards."	Yes
M. ELMS shall have a function to "import" meter location IDs, along with the various groupings, for initial setup and mass updates	Yes
N. ELMS shall have a reporting module that provides data mining capabilities.	Yes
O. ELMS shall be able to export all reports into various formats (including, but not limited to, CSV, XML, PDF, EXCEL, WORD, TXT, HTML).	Yes
P. ELMS database shall store all the collection and access data in history tables, which can be queried for historical reports.	Yes
Q. ELMS shall be able to provide the following predefined reports:	See below.
a. Daily Collection Route Report – after completion of the collection activities, ELMS shall allow reporting on daily collection assignments by individual collection key, group of keys or all daily activity. This report shall support variable data range parameter.	Yes
b. Collection Route Activity Report - after completion of the collection assignment, ELMS shall allow retrieval of the collection route data from the schedule grid.	Yes
c. Software Activity Report – this report shall be able to display any and all software activity (e.g. creation of new location id, collection route/subroute, lock assignments, user software logins and durations of active session, schedule creation and modification etc.). The Software Activity Report shall be able to provide historical usage data for a given date or for a range of dates.	Yes
d. Schedule Summary Report – this report shall be able to display all the scheduling activity within specified time period. Report shall include assigned work summary (e.g. location ids, collection routes, repair routes, etc.), collection key number, collector name, scheduler login information, date and time of the scheduled events.	Yes
e. Collection Activity Report – this report shall provide accurate records of collections activities performed by a specific collection key or set of keys.	Yes

f. Collection Route Content Report – this report shall provide the list of assets, locks, and other attributes associated with a particular collection route or collection subroute. This report shall generate an inventory of these elements giving the selected parameters.	Yes
g. Lock Installation Report – this report shall provide accurate records of lock assignments that occur within specified date range.	Yes
h. Lock History Assignment Report – this report shall display lock assignment history within specified data range. The report shall include lock #, location ids, any route information, date of each assignment and person performing the changes.	Yes

Section III: Electronic Lock Management System (ELMS)

Item/Description	IPS Response
A. The Proposer shall indicate whether its products and services meet all specifications in Sections II and III. All exceptions shall be noted, along with Proposer's recommended workarounds, if any.	See below.
B. The Proposer shall provide pricing (including a three year warranty) for the following:	Yes. IPS will comply with this requirement. Pricing sheet attached.
1. Electronic locks for 480 POM Model "E" vaults	Will require a new vault door
2. Electronic locks for 2,275 MacKay Model 98 vaults	Model 98 is not a valid MacKay part number. If these are standard round door style, a new door will be needed.
3. Electronic locks for 34 MacKay Model MKV 97HD vaults	Yes, requires new door.
4. Electronic locks for 880 Duncan Model 90 vaults	Yes, requires new door.
5. Electronic locks for 315 Parkeon Stelio vaults	Will require inspection of the unit
6. Electronic locks for15 Parkeon Strada vaults	Will require inspection of the unit
7. 8 collection keys (pricing should include key network cradles, communication software and hardware equipment)	Yes
8. ELMS software with 4 concurrent, nontransferable, perpetual licenses	Yes
9. Two one year extension options for warranty	Yes
10. ELMS Hosting Solution:	
a. Client Hosting	Yes, local network
b. Vendor Hosting	Not available at this time.
c. Cloud Hosting	Not available at this time.
d. Client PC Terminals	Yes
The Proposer shall indicate that its prices are valid for purchases of additional quantities through the warranty period, including any purchased extended warranty periods. The Proposer shall also indicate whether any additional discounts will apply at any specific quantity thresholds.	

NOTE: In reference to Appendix L Medeco will not agree to the terms included to Appendix L. Medeco will address any issues found with the operation of the ELMS under our attached warranty and subsequent agreements between the parties. Medeco will also assume the installation and setup of the system, to include software installation, data transfer into the software, training system operators and collections staff. In addition Medeco will provide ongoing support the City/department at no charge for a reasonable period of time to be determined.

Medeco® Engineered Security Solutions Warranty for Mechanical & Electromechanical Products

Medeco Security Locks Inc. (“Medeco”) warrants to the original purchaser of a Medeco branded lock, cylinder, or electromechanical product (referred to collectively as “Product”) to be free of defects in material and/or workmanship for a period of three (3) years from the date of original purchase for use. This Warranty may also apply to other specific products. For additional Warranty information or Warranty claim service contact Medeco Customer Service at (800) 839-3157.

In the event of a defect in material or workmanship during the Warranty period, Medeco will repair or replace (at its option) the Product under the conditions of this Warranty, this action being the sole remedy available to the purchaser under this express limited Warranty.

Limitations, Exclusions and other Rights:

a. Medeco disclaims liability for implied warranties including but not limited to those of merchantability or fitness for any particular purpose.

b. Medeco disclaims liability for indirect, incidental or consequential damage at any time.

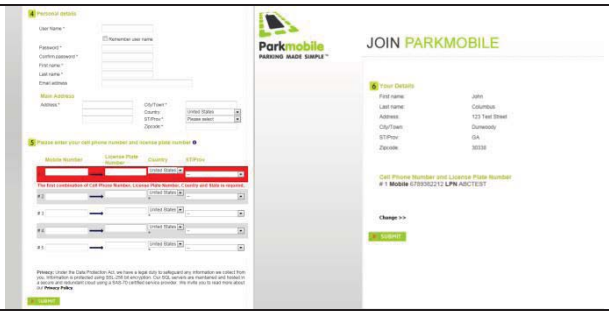
c. This Warranty gives specific legal rights and a buyer may also have other rights that may vary from state to state. Some states do not allow limitations on indirect, incidental, and consequential damages or implied warranties so that the above limitations may not fully apply.

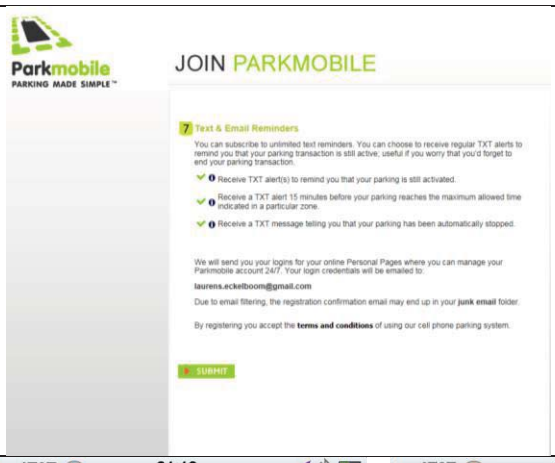
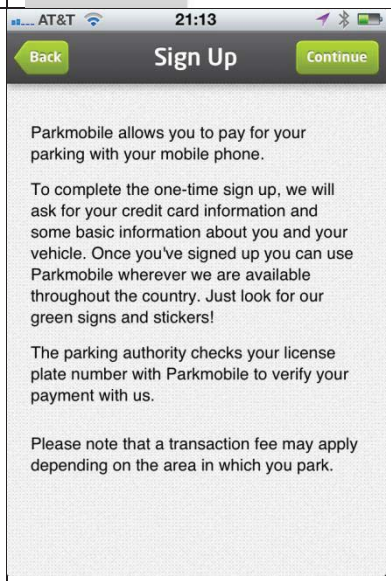
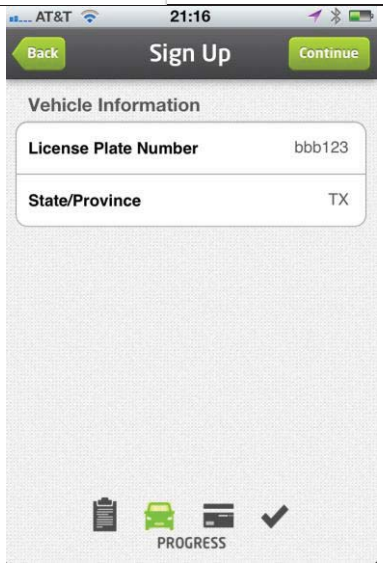
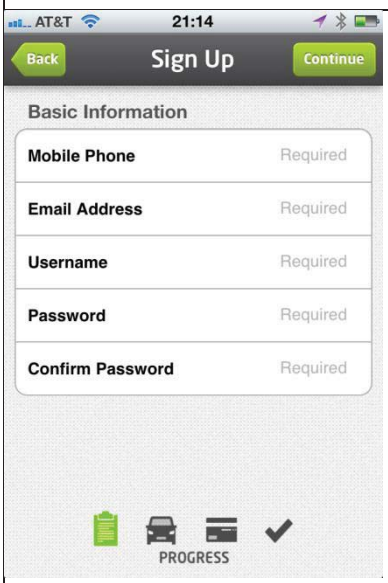
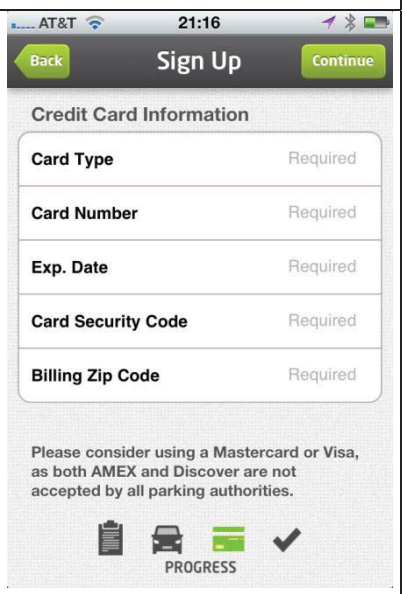
d. Medeco shall not be held responsible for damage arising from, in its sole judgment, improper installation, failure to provide normal maintenance, extreme environmental conditions, use rates in excess of the industry standards defined for the type of product, use of incompatible parts or products not made or authorized by Medeco, or application of force not resulting from normal use.

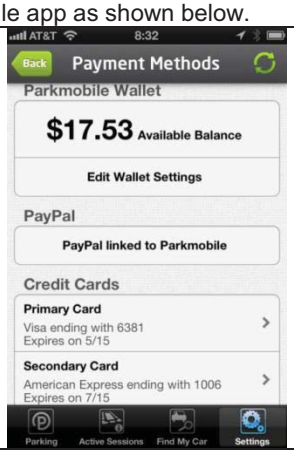
e. Unless otherwise specified by separate warranty, finishes are warranted for a period of two years following purchase for use. This finish Warranty shall be considered void after installation if, in the sole judgment of Medeco, the damage to the finish is the direct result of extreme climatic conditions, chemical or abrasive actions.

Appendix M – Mobile Payment Service Requirements and Performance Standards

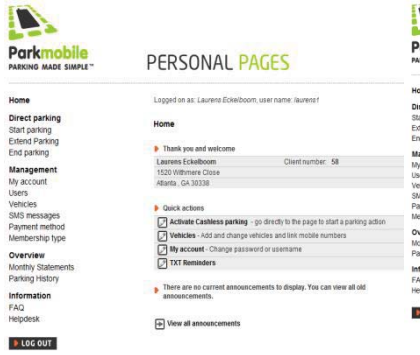
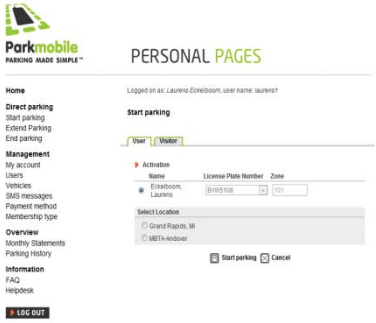
2. Description of Services	
Through the Mobile Payment Service, Customers shall be able to pay for parking with the following methods, at minimum:	
• Phone call to Contractor's IVR and/or DTMF system (through any phone)	The Parkmobile system allows customers to call into our award winning IVR system from any phone (mobile or fixed line). Parkmobile has been a leading innovator in supporting both voice response and DTMF solutions for mobile payments / parking for over ten (10) years.
• Use of a web browser on a mobile device, allowing the Customer to enter a space number	Parkmobile customers can utilize the web browser on any mobile device (or computer) to start a parking session including the input of location identifiers such as zone and space/stall number.
• Use of an app on a smartphone (at minimum, iOS and Android devices) where the user enters a space number	Parkmobile offers customers four native applications (in addition to the mobile web browser) to support iOS, Android, Windows and BlackBerry 10 devices. Parkmobile's apps are consistently ranked in the top categories at the various app stores and are rated 4.5 stars. In addition, we have received numerous awards for our apps as sampled below: 2013 Top 40 Innovative Company in Georgia TAG Technology Association of Georgia; Appy Awards 2013; TAG SSA Southeastern Software Association
• Recognizing an NFC tag (affixed to a meter or pole) that launches and app on a smartphone (at minimum, Android devices)	Parkmobile's Android application supports NFC recognition as a method to launch the application (if it is already present on the device) or link to a site to download the application.
• Scanning a QR code that launches an app on a smartphone (at minimum iOS and Android devices)	Parkmobile's iOS and Android applications supports QR code scanning as a method to launch the application (if it is already present on the device) or link to a site to download the application.
B. Customer and Service Interface Requirements	
1. Parking Space Coverage	Parkmobile confirms that service will be available at a minimum of 98 percent of the agreed-upon City-managed on-and off-street parking spaces. Service Level Agreement (SLA) shall state <2% of spaces may be excluded due to inadequate wireless coverage.
2. Service Availability	Parkmobile confirms that the Service will be available to Customers during any and all hours that the City has paid parking in force, seven days per week, including holidays. SLA shall state 99.5% availability of service during operating hours.
	a) i.) Parkmobile confirms that a customer will be able to dial a Sacramento area phone number (provided by the City) to initiate a parking transaction. Number will be returned to the City upon termination of the agreement at no additional cost to the City.
	ii.) Parkmobile confirms that a customer can utilize an "app" on a smartphone or other device, either launched by the customer or by the phone's recognition of any event designed to launch the app, to initiate a parking transactions.
	iii) Parkmobile confirms that a customer can use a web page accessible from a browser on a mobile phone or other wireless device to initiate a parking payment.
	b) Parkmobile confirms that the Interactive Voice Response/DTMF (IVR) system and web server(s) are both capable and available to receive requests from mobile devices and process the transaction at the requested location.
	b) Parkmobile's system is designed (and audited – SSAE-16 and PCI Level1) to insure that the recording of payments and parking sessions is done in an accurate and secure manner.
	c) Parkmobile's parking rights management system supports both direct and indirect query from handheld units utilized by the City's Enforcement Officers. Parkmobile's system currently supports over

	100 enforcement integrations with multiple vendors.
3. Customer Service Inquiries	Parkmobile's IVR system is capable of supporting customizations. Parkmobile is happy to work with the City on solutions which improve the user experience.
4. Response to City of Sacramento Staff Inquiries	Parkmobile will provide the City of Sacramento staff with a unique phone number for communicating service related issues during the business day and an escalation number for emergencies. In addition, Parkmobile utilizes the ZEN desk trouble ticketing solution which allows the City to open trouble tickets directly. SLA shall state response times of 90% of priority calls to emergency number within 15 minutes and 100% within 2 hours plus 90% of all other calls within 1 business day and 100% within 2 business days. Performance logs on contacts will be made available to the City upon request.
5. Online Account	Parkmobile's system allows a customer to create and view their account on line or from the mobile application. **End Users (description of Customer Interface):** Parkmobile offers users fast and easy (on-street) account set up options. Customers can register via internet (www.parkmobile.com), download one of our native mobile apps (iPhone, Blackberry10, Android, Windows Phone 7/8) utilize our mobile browser version, website or call the toll free 800 number and register via the IVR. Required information: ▶ Customer information (Phone number, email address, etc.) ▶ License plate number and State of registration ▶ Credit card information (number, CVC, expiration date) *Go to www.parkmobile .com and click on 'sign up now' for free registration.*
Step 1 Choose your user profile *Step 2 Choose your user plan* *Step 3-5 Enter credit card information, address information, license plate number(s) and cell number(s)*	
	

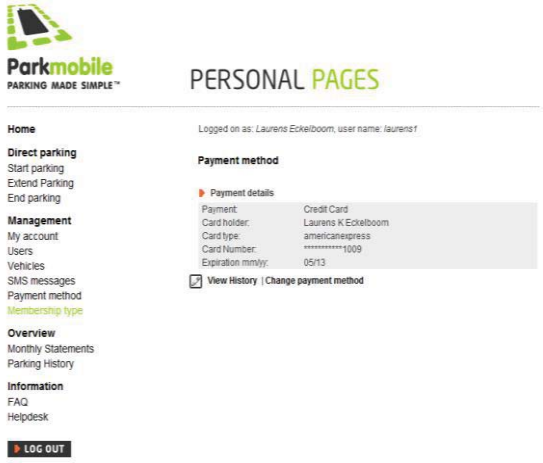
Step 6 Check if your information is correct *Step 7 Subscribe to free text reminder service*	
Mobile App Registration	   
	Customers can also register via the Parkmobile IVR platform. Process involves following prompts and providing either a voice or DTMF response to questions related to setting up an account and starting a

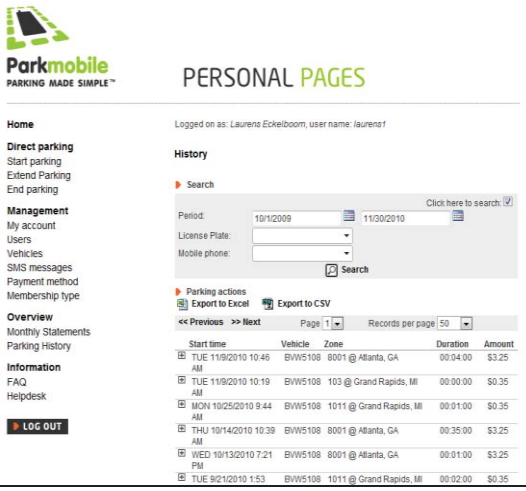
	parking transaction. Access requirements are internet service for the web, mobile phone with data service for the native mobile applications and or a working telephone for the IVR platform.
	Parkmobile's customers are able to view & manage their account profile through the internet or via their mobile app as shown below.
Session History in mobile app (left) Payment Methods in mobile app (right)	

Parkmobile's customers are able to securely view their account profile via the internet by entering secure login credentials (username and password). On these "personal pages", customers are able to review their current user profile and add or change data. The personal pages also provide real time parking information via the parking history and a monthly statement of all parking transactions in PDF format. Credit card details can be changed in a PCI DSS level 1 process. Parking data history can be exported, with several query options, to excel or CSV. Parkmobile also offers customers the option to start and stop a parking transaction online.

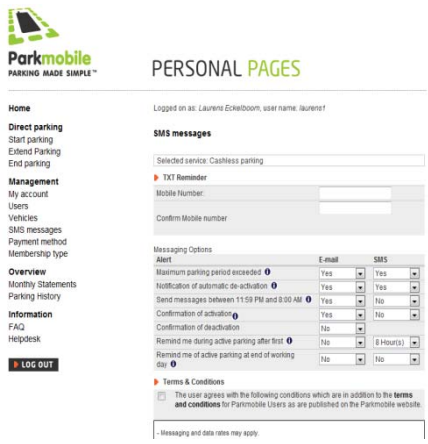
Home page Online Account 'Personal Pages' (left) *Visitor parking option with zone number tracker (right)*	 

The personal pages offer users a convenient and intuitive way to manage their accounts. Additional information, such as zone number (meter number) information is available. The padlock icon is a guarantee for safety and security.

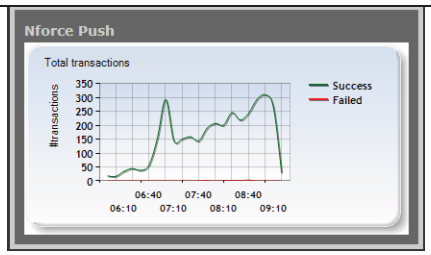


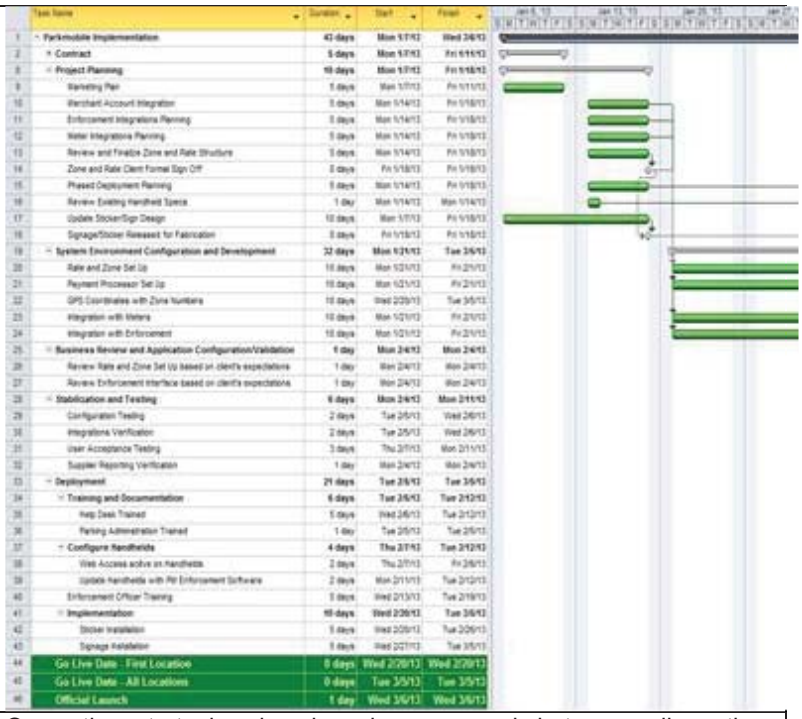


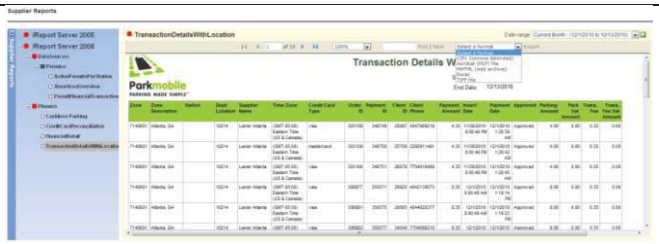
Credit cards details are stated according to PCI DSS level 1 compliance protocol. The parking history states real time

parking information with all required information available.	
6. Parking Confirmation	Customers will receive a confirmation upon successful payment via the means through which they initiated the transaction. This same method will show unsuccessful transactions (no separate SMS will be sent). Customers have the ability to manage their messaging to include email, SMS and push notification of parking start, reminder (15 minute) and end of transaction. Reminders show the time location and amount of the transaction.
Customization TXT / email alerts management (left) *SMS message example (right)*	
The SMS/TXT message page allows parkers to opt-in and customize their reminder and alert profile. Parkmobile will send reminder messages upon action creation – delivery of messages is a function of the customer's carrier of choice.	
7. Minimum Purchase	Parkmobile will support a minimum parking time (at the request of the City) and associated purchase requirement for Customers using the mobile payments program. SLA shall state >98% adherence to this requirement if implemented.
8. Decals and Signage	Parkmobile will provide meter decals, signage and associated installation in support of the Mobile Payments program. Parkmobile will work with the City on design and will obtain the City's written approval of graphics prior to production. Signs and stickers will meet the specifications outlined in the RFP document and Parkmobile will provide stickers and signage to support additional growth as required during the contract period.
9. Public Awareness and Advertisements	Parkmobile will provide a marketing campaign to support Public Awareness of the Service. Parkmobile understands the importance of a strong marketing and public awareness campaign on the overall adoption of our service. As a continuous learning and improvement organization, Parkmobile leverages the experience gained in each deployment to help drive success in future efforts.
	PR & On-Street and Social Media Communications
	▶ Create on-street signage and meter stickers ▶ Strategy / kickoff meeting with the City of Sacramento to outline pre and post launch marketing campaign ▶ Develop flyers and / or Wallet Cards for distribution at launch ▶ Agree on press release announcing new service ▶ Contact local media regarding launch of service ○ Business accounts ○ Facebook ○ Parkmobile Blog ▶ Engage social media campaign ○ Personal accounts ○ Twitter ▶ Registration link on Parking Services and Parkmobile websites

10. Web Content	Parkmobile will provide the City with web content including detailed instructions on setting up a new account, how to use the system, descriptions/examples of signage and stickers used in the program and contact information for additional assistance.
11. Announcement	Parkmobile will support the announcement requirement of this RFP for customers utilizing the local Sacramento phone number based on the terms outlined in the RFP. a) At volumes less than 50,000 mobile transactions per month for three consecutive months upon mutual agreement b) At volumes above 50,000 mobile transactions per month for three consecutive months at the discretion of Parking Services. c) Continuation of program dependent upon call abandonment rates and mutual agreement
12. Meter Feeding/Time Limits	The Parkmobile system supports no-return times which limit extensions or new parking sessions once the maximum time limit has been reached. SLA shall indicate adherence of >98% of all transactions within a 30 day period
13. Erroneous Citation Issuance	Parkmobile will notify Parking Services of any circumstance that would contribute to erroneous citation issuance including the nature, time and duration as well as a listing of potentially effected transactions.
14. Error Handling	Parkmobile supports error handling in the outlined instances a) Space validation service rejects invalid parking space numbers b) No parking times reject transactions started during restricted hours c) Time selection is limited to valid choices (customer cannot select 4 hours if only 2 are allowed).
C. Pricing Requirements	
1. Pricing	Parkmobile will charge a convenience fee per transaction for all successful transactions (including extensions). Parkmobile offers a stored value solution (virtual smart parking card) that is made available to the users which offers a lower transaction fee.
2. Convenience Fee Modifications	Parkmobile agrees to the terms of the Convenience Fee Modification clause (both a) and b)) as provided in the RFP.
D. System Requirements	
1. Data Communications	Parkmobile agrees to this requirement.
2. Meter Location Number	Parkmobile agrees to this requirement.
3. Processing of Parking Rate Data	Parkmobile agrees to this requirement. Parkmobile agrees to this requirement – Parkmobile currently works with other municipalities that provide pricing and rule updates via XML feed.
4. Accuracy of Parking Rates	Parkmobile agrees to this requirement. SLA shall indicate >99% accuracy of parking transactions measured over a 30 day period.
5. Real Time Transaction Feed	Parkmobile agrees to this requirement. The Parkmobile service provides pushed real-time data transmission and is fully integrated with Duncan AutoCITE for enforcing Pay-by-Space.
6. Parking Services Management System Transmission Failures	Parkmobile agrees to this requirement. The Parkmobile service logs all activities and is set to automatically retry communications in the event of a failure to connect.
7. Meter Vendor Transmission Failures	Parkmobile agrees to this requirement. The Parkmobile service logs all activities and will provide said logs to the meter vendor for analysis and resolution.
8. Enforcement/Citation Management Transmission Failures	Parkmobile agrees to this requirement. The Parkmobile service logs all activities and will provide said logs to the enforcement vendor for analysis and resolution. Parkmobile actively tracks delivery of parking

	rights. 
9. Hosting	Parkmobile agrees to this requirement. Parkmobile's service is hosted at QTS facilities and is engineered to provide redundant connectivity and failover protection.
10. Service Levels	Parkmobile agrees to this requirement. The SLA shall be composed of the requirements set forth in this RFP.
11. Security	Parkmobile agrees to this requirement. Parkmobile is PCI Level 1 Compliant and undergoes ongoing penetration testing and annual audits. In addition, Parkmobile undergoes semi-annual SSAE-16 (formerly SAS-70) audits for operational and financial compliance. Our system is designed and operated utilizing best industry practices including strict firewall and access protection.
12. Time Synchronization	Parkmobile agrees to this requirement.
E. Data Requirements	
1. Data Privacy	Parkmobile agrees to this requirement.
2. Data Ownership	Parkmobile agrees to this requirement.
3. Archived Data	Parkmobile agrees to this requirement.
F. Payment Processing Requirements	
1. Registration	Parkmobile agrees to this requirement. Required information: ▶ Customer information (Phone number, email address, etc.) ▶ Credit card information (number, CVC, expiration date) ▶ License plate number and State of registration
2. Fee Notification	Parkmobile agrees to this requirement. The Parkmobile system provides pricing information for confirmation by the customer prior to initiating the transaction.
3. Customer Payment	Parkmobile agrees to this requirement. Although this is a function of the authorizing processor, Parkmobile is confident that the thresholds are realistic.
4. Payment Processing Standards	Parkmobile agrees to this requirement. Parkmobile is PCI Level 1 compliant – see http://www.mastercard.com/us/company/en/docs/SP_Post_List.pdf page 31.
5. Credit Card Security	Parkmobile agrees to this requirement.
6. Rejected Credit Cards	Parkmobile agrees to this requirement.
7. Processing Fees	Parkmobile agrees to this requirement.
8. Settlement of Funds	Parkmobile agrees to this requirement.
G. Project Management Requirements	
1. Methodologies	
Implementation Process	Parkmobile clearly understands the work to be accomplished and is committed to ensuring all the requirements of the scope of service are met in a timely and expedient manner. We have vast experience in successfully deploying our mobile payment solution to municipalities all across the United States. While Parkmobile follows a disciplined approach when planning implementations, we also recognize that every implementation exhibits unique elements.
Step 1 – Envisioning and Planning – approximately 1 week	
	The first step in Parkmobile's process will be to interview key participants associated with the mobile payment solution. This session will include city representatives as well as any other third-party representatives the city deems appropriate.

	
	Once the strategic plan has been agreed between all parties, Parkmobile will incorporate them into a specific planning document that will be circulated for final review. Upon formal approval of this plan, Parkmobile will begin the detailed process of collecting information, drafting marketing campaigns, initiating artwork for stickers, and performing on-site scouting trips to obtain all remaining relevant data necessary to ensure a seamless offering of the mobile payment solution.
Step 2 – Development and Stabilization – approximately 4 weeks	
	The next major step relating to the implementation process will involve the completion of any additional interfaces required by the City. Utilizing the strategic plan developed in Step 1, Parkmobile's internal development team will use the business requirements to create any custom integration between the Parkmobile operating platform and the hardware & software solutions utilized by each city. Once an integration has been completed, Parkmobile will perform extensive quality assurance testing with city's systems to ensure that the tools built are stabilized and work as anticipated. Parkmobile will begin its own internal training process on any custom-built integration so that the City's employees and other stakeholders will be subsequently trained properly.
Step 3 – Training & Deployment – approximately 1 week	
2. Issue Resolution	Parkmobile agrees to this requirement. Parkmobile utilizes Zendesk as a trouble ticketing and issue resolution tool.
3. Testing	Parkmobile agrees to this requirement.
H. Reporting Requirements	
	Parkmobile's reporting portal provides the City with reports covering both operational (usage, location, vehicle) and financial (usage, location, type of payment, amounts, etc.). Report periods are selectable by the City.
○ ○	▶ **Secured Web-based Reporting Interface with Username and Login Credentials** ▶ **Financial Reports available** •Cashless Parking •Credit Card Reconciliation

	•Financial Details ○ Payment Methods ○ **Transactional Reports available**
▶	○ Transaction Details with Location (all)
	▶ **Files can be exported in Excel, HTML, , CSV, , PDF**
1. Daily Reporting	
a. Daily Detailed Credit card Transaction Report	 Parkmobile agrees to this requirement.
b. Daily Summary Credit Card Transaction Report	Parkmobile agrees to this requirement
c. Daily Customer Service Report	Parkmobile agrees to this requirement
d. Daily Revenue Report	Parkmobile agrees to this requirement
2. Monthly Reporting	The Parkmobile portal provides processor paid times that can be utilized to provide hourly parking revenue. Hourly deposit reporting is a function of the City's financial institution in conjunction with its merchant service provider.
a. Mobile Payment Status Response Time Report	Response time from the Enforcement handheld should be captured from the enforcement solution provider as in the current configuration the Enforcement handheld is communicating with an enforcement solution provider central server. If the Enforcement handhelds are configured to directly connect to the Parkmobile service then Parkmobile can produce a report on the number of connection requests.
b. Monthly Cellular Dead Zone Report	Parkmobile will work with the City to facilitate the delivery of the requested information which will include working with the Enforcement division to identify locations with service quality problems which can be directed to the carrier in question.
c. Monthly Meter Service Report	Parkmobile will work with the City to meet this requirement.
d. Monthly Revenue Report	Parkmobile's reporting service can provide the details for transaction periods by the hour by the day by the week. Specific revenue deposit reports are available from the City's merchant account.
3. Reports Web-Site	Parkmobile agrees to this requirement
4. Citation Adjudication	Parkmobile agrees to this requirement
5. Records	Parkmobile agrees to this requirement
6. Jurisdiction-Level-Reporting	Parkmobile agrees to this requirement.
I. Integration Requirements	
1. Web-site Access Restrictions	Parkmobile will work with the City's vendors to ensure access for payment verification purposes.
2. Citation Issuance System	Parkmobile will work with the City's vendor on integration. Parkmobile will be responsible for normal and appropriate charges for such integration work based on written approval of Parkmobile. Responsibility is strictly limited to functionality related to Parkmobile's initial integration requirement.
3. New Parking Technologies	Parkmobile will work with the City to determine costs associated with integration into PSMS and will reimburse the City for reasonable costs.
4. Dead Zones	Parkmobile will perform a cell coverage survey prior to the launch of service – spaces found to be in areas of little or no cellular cover shall be excluded from the service and shall be so identified.
5. Mobile Payment Status Request	Parkmobile agrees to this requirement.
6. Mobile Payment Status Reponses (Excluding Third-Party Data Transmission Times)	Parkmobile understands this requirement and will work with the Enforcement handheld vendor, the Parking Enforcement Office to meet this requirement.
7. Mobile Payment Status Responses (Including Third-Party Data Transmission	Parkmobile understands this requirement and will work with the Enforcement handheld vendor, the Parking Enforcement Office and

Times)	third-party data providers to meet this requirement.
8. Confirmation of Status Request Response	Parkmobile agrees to this requirement.
9. Confirmation of Status Request Format	Parkmobile agrees to this requirement.
10. Integration with Third-Party Software and Hardware	Parkmobile agrees to this requirement. Parkmobile is integrated with most hardware and software solutions providers in the parking vertical market.
J. System Start-Up	
Parkmobile will ensure that the Mobile Payment Program is available for service with 180 calendar days. Typical implementation times post contract signing are 45-60 days.	

K. Additional Technologies	
	Parkmobile agrees to work with the City on additional technologies that enhance the service being offered to the Citizens of Sacramento. Parkmobile offers validation codes, virtual permits and event parking among other additional services to be considered.
L. Staff Training Requirements	
	The final critical step before launching the mobile payment service will involve training of the City's customer service division and enforcement staff. This training will focus upon two key areas and will be handled repeatedly up until the date of deployment: reporting and enforcement. **Reporting:** Parkmobile will designate one of its own staff members to review thoroughly with the city's staff the transaction and adjudication reports produced from Parkmobile's database. Moreover, Parkmobile will show in a demo environment (pre-launch) the ability to access detailed transaction as well as revenue summary reporting via an internet portal designed specifically for the City.
	Parkmobile will work with the city to create user names and passwords to utilize when accessing the online reporting database. Finally, Parkmobile will make this staff member available to assist the City with follow up training questions and reporting needs over the course of the term of the engagement. **Enforcement:** Parkmobile will provide training to the enforcement officers so that they understand the steps required in order to enforce successfully.

SUPPORTIVE INFORMATION – ADDITIONAL PRODUCT OFFERING

IPS is the market leader in providing credit card-enabled single-space parking meters to clients across North America. In addition, we offer a suite of complementary products and services such as:

- In-ground vehicle detection sensors
- Smart cash collection system
- Marketing and public awareness strategies and collateral
- Donation meters and CSR partnerships
- Multi-space pay station retrofit kits
- Sacramento-based public affairs support

IPS Vehicle Detection Sensors

The IPS Sensor System is designed specifically to pair only with IPS meters in order to provide the most cost effective vehicle detection system available on the market today for on-street metered spaces. Please note, the IPS system is not designed to be used to monitor un-metered spaces. The IPS sensor communicates directly with IPS meters and data is transferred using the available cellular link inside each IPS meter. We believe this to be the preferred and most cost effective method vs. installing an additional wireless communications network that would be mounted on City utility, street light, and traffic signal poles, consume City electricity and be difficult for the City to maintain. In addition, we believe that it is imperative that the vehicle detection sensors communicate directly with the parking meter in order to allow meters and sensor systems to make local decisions vs. requiring local decisions to be made by a back-end management system. This is especially true if the City would like to allow a courtesy time capability, meter reset capability, anti-meter feeding or directed enforcement.

Finally, IPS uses magnetic based sensing, which is the most accurate and reliable technology available in the world. It is not prone to the negative effects of snow, rain, people standing between a meter and a parking space, or vandalism as on-pole sensors are. All of these environmental factors will negatively impact the performance of any ultra-sonic and other "line-of-sight" sensing technologies or "pole mounted" technologies.

Installation

The installation process of the IPS embedded sensor requires approximately 5-10 minutes per space. A 3.5 inch diameter by 3 inch depth core is drilled into the street space, the sensor is inserted into the hole, and a DOT grade epoxy is used to seal the sensor into the ground. The number of teams installing sensors can be scaled in order to meet the installation schedule required.

Vehicle Detection Sensors

IPS uses state of the art magnetic based sensing which is not negatively impacted by snow, rain or people standing in front of a meter.

Benefits of IPS Sensors

- Only PROVEN sensor technology currently deployed in the US.
- Ability to reset the meter to zero when a vehicle departs the parking space
- Ability to prevent meter feeding, thereby generating turnover.
- Ability to offer courtesy time resulting in positive public acceptance of the meters.
- Access to real time occupancy data.
- Installed under the ground, eliminating the need for additional infrastructure.
- Increased revenues.

IPS Vehicle Detection Sensors

IPS is empowering cities with data to drive decision making by providing the tools required to evaluate real-time occupancy using state-of-the-art application-specific sensing technologies. IPS sensors communicate directly to IPS single space meters and APS pay stations, which eliminates the need for expensive and unreliable mesh networks. Additionally, IPS sensors allow the meter to be reset after a vehicle departs and can also aid in the enforcement of anti-meter feeding.

Magnetic Sensor

- **Definition:** Magnetic sensors detect a change in the field immediately around the sensor
- **Application:** In-ground or surface mount (generally on-street)
- **Advantages:**

- Magnetic based sensory technologies are the most reliable
- Baseline magnetic readings can be easily adjusted in the web-based management system to accommodate different on-street scenarios
- Contains separate replaceable battery pack which will increase sensor life expectancy

Magnetic/Infra-red Sensor

- **Definition:** Magnetic/Infra-red sensors provide an optical detection capability in the space immediately above the senors
- **Application:** In-ground or surface mount in garages
- **Advantages:**

- Infra-red sensory technology will only detect the vehicle in the designated garage space
- Easily accessible for service or replacement
- Can be used as an IR sensor, magnetic sensor, or both

Ultrasonic Sensor

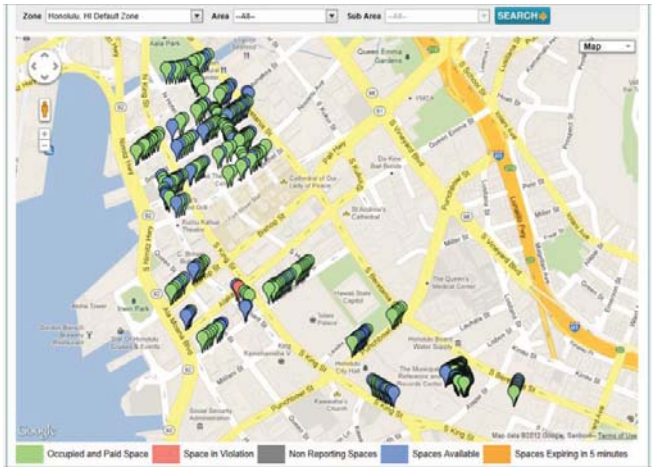
- **Definition:** Ultrasonic sensors measure the unobstructed distance in the sensor's line of sight
- **Application:** Surface mount above vehicle in garage
- **Advantages:**

- Ideal for a multi-level garage environment
- Easily accessible for service or replacement

Sensor Reporting Features

Sensors report directly to the IPS meter, which communicates to the IPS Data Management System. Through the management system the City will be able to look at real-time occupancy in multiple formats, including via Google Maps. These tools will assist the City in directing enforcement to spaces in violation and can be directed to mobile devices. We believe our ability to reset the meters to zero function, the capability to prevent meter feeding, as well as the occupancy and enforcement tools will ultimately give the City of Sacramento the best solution to increase revenue and collect valuable data.

Real-time Occupancy Report



Sensors provide the City with valuable occupancy data which can be viewed in multiple formats.

Financial Benefits to the City

The use of IPS sensors in combination with the meters will allow the City to make data-driven parking decisions based on real-time occupancy information. In addition, the sensors allow the City to employ the "reset function" which automatically resets the meter to zero once a vehicle has departed the parking space. Customers have reported 10% or more revenue increases from the reset capability alone, and revenue increases ranging from 35-50% due to the IPS system overall. Other clients have been able to negotiate more favorable bank rates or card processing rates due to the data provided by IPS sensors. Even retail property valuations can be more easily assessed based upon the occupancy rates of parking spaces. For more information on the financial and other benefits of sensors, please reference the City of Santa Monica case study located in the Appendix where over 6,000 IPS meters and in-ground vehicle detection sensors are currently deployed.

Mobile Guidance Application

With IPS sensors ParkMe can provide a mobile parking guidance app which alerts drivers to vacant parking spaces.

ParkMe Mobile Guidance Application

IPS Group can partner with ParkMe to offer the City of Sacramento an intuitive customer interfacing application, which has been tested and proven effective in numerous cities.

The ParkMe mobile phone application will alert the driver to the location of available parking spaces and displays the various costs of parking areas on the map. Drivers will be able to find spaces in real-time and space availability will be the most accurate in the market today. To the left you will see the mobile application for ParkMe. This app provides users with detailed information regarding rates, hours, spaces available, and the maximum stay.

IPS Enforcement Application

IPS Group also offers an intuitive, proven enforcement application other customers are currently utilizing. Both maps and alerts are used to send enforcement to spaces that are occupied, but have not paid.

Below you will find an example of a real-time enforcement maps application currently in use.

IPS Enforcement Application

[redacted]

The IPS Enforcement Application alerts the City to spaces that are occupied and unpaid.

Smart Collection System

As part of the IPS smart technology suite, the Smart Collection System offers additional accountability in the collections process. The patented IPS cash tracking system gives customers access to additional meter data and provides greater transparency for their collections program.

- Wirelessly paired with IPS meter to transmit information to web-based Data Management System
- Coins are counted by smart cans for dual accountability
- Automatically registers the person performing the collections via key fob
- Time stamps when the collection can is removed, deposited and if correct can is returned
- Powered by “green” rechargeable battery system

Smart Collection System

The Smart Collection System provides dual accountability for collections and can identify the collector via key fob.

IPS Visual Analytics Tool

The IPS Data Management System (DMS) is the most advanced meter backend system available in the single-space market today. Reporting features and analytical tools have been developed and refined at the request of our customers, ensuring practical application and functionality for all IPS customers. Our flexible management system platform allows for customization to meet the needs of the City of Sacramento, which is above and beyond industry standards.

In addition to our advanced DMS, IPS has developed a Visual Analytics tool which allows users to identify patterns and analyze data. This tool can be used to make informed data-driven decisions based on past and current trends and is accessible by mobile devices and laptops. Visual Analytics reports include:

- Alerts
- Coin Collection
- Forecasting
- Inventory
- Occupancy
- Revenue

IPS Visual Analytics Tool

[redacted]

The Visual Analytics Tool allows the City to observe and forecast trends in revenue, occupancy and more.

Multi-space Pay Station Retrofit Kits – Revolution

IPS Group, through its subsidiary, American Parking Systems is proud to offer the Revolution Retrofit Kit. With the retrofit, the City can benefit from IPS' state-of-the-art technology and backend management system, at a fraction of the cost. The upgrade process requires less than 15 minutes to complete.

Product Highlights

- Intuitive interface featuring InteliTouch (detects the presence of a customer and automatically awakens the machine)
- Large LCD display
- Pre-integrated with pay-by-cell, NFC reader and vehicle detection sensors
- Easy to maintain with a clutter-free interior

Revolution Retrofit Kit

The Revolution provides Cities with new technology at a fraction of the cost.

Multi-space Pay Station – Freedom

Freedom Pay Station

The Freedom Pay Station is made in America for the American market.

The Freedom Pay Station is available in pay-by-space, pay-and-display, and pay-by-plate models. The solar-powered pay station is ADA-compliant and features an intuitive design which is user friend and convenient to use. The sleek design of the pay station complements the streetscape and is modularly designed for easy replacement and servicing.

Product Highlights

- Real-time online secure credit card authorizations, coin payment and wireless download of rates and messages via the cellular network
- Transaction can be processed in an sequence
- Optional NFC contactless payment capabilities
- Solar powered for extended battery life averaging more than three years
- Secure cash box with optimal coin capacity of 600+ quarters
- Wirelessly networked to the IPS Data Management System, providing comprehensive set of financial and technical *reports, and administrative management* tools

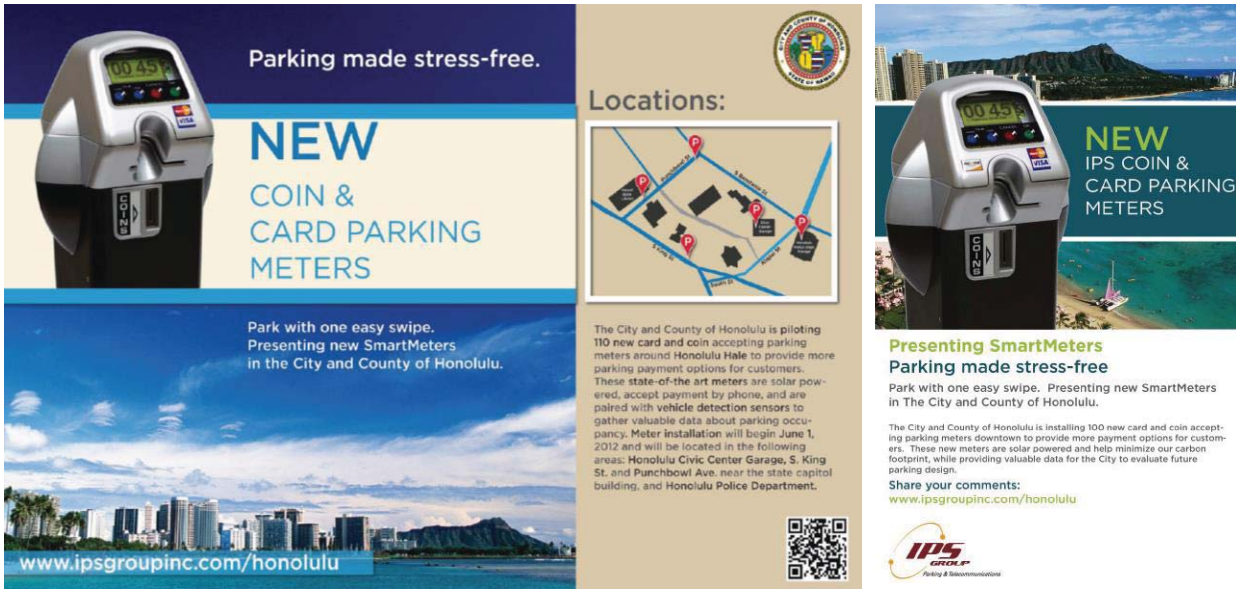
Marketing and Public Awareness Strategy

Formulating the right messaging and raising public awareness is key for the successful deployment of new parking initiatives. If selected, IPS Group will partner with Capitol Public Affairs, a Sacramento-based public affairs agency to deploy a successful public education campaign. Capitol Public Affairs will target a broad audience in Sacramento through a variety of outreach tactics including earned media, social media, business/business association partnerships, and potentially City of Sacramento/Department of Public Works resources. Working with IPS and the City of Sacramento, Capitol Public Affairs will focus on the benefits of the new parking meters; upcoming changes; the timeline of the project; and directing the public to additional information and customer support.

For this effort, area residents, businesses, visitors, government entities and others will be targeted through the use of earned media and social media tactics to reach a broad range of Sacramento area residents who live, work and play in the Downtown, Midtown and Old Sacramento areas. In addition, we will reach out to businesses/business associations, homeowners associations, the Sacramento Visitors and Convention Bureau, and government agencies and departments to work with these partners to distribute information to their employees and in their public materials, i.e. newsletters, social media, websites, internal memos, etc.

Marketing and public awareness materials can be customized to the specific needs of the City's programs. Examples are shown below of possible marketing collateral which were produced for the City of Honolulu in collaboration with local PR firm Red Monarch during the deployment of IPS meters and sensors in Honolulu last summer.

Posters and Flyers



Sample poster (left) and sample marketing flyer introducing the new meters (right).

Banners and Signage

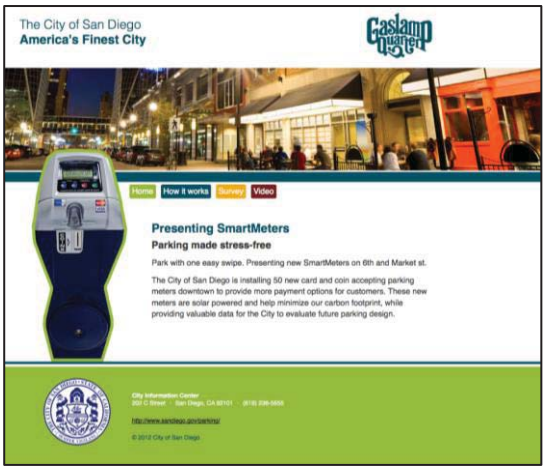
The following are examples of banners introducing the pilot program and providing a website for customers to share their experiences and provide feedback. These tools will not only help educate the public, but will also help the City of Sacramento collect valuable data regarding their parking experience. Customized survey questions, website language, and meter location map not only give the public a City specific viewing experience, but they also help customers ensure they are supplying their constituents with the most comprehensive site possible.

Sample banner announcing pilot program and website for customer feedback survey.

Customized Web Site

In order to help the City introduce IPS SmartMeters to their parking public, IPS Group is offering the City of Sacramento a custom designed website for the public to:

City of Sacramento Web Site



The web site can be customized to meet the City's needs and is provided as a complimentary service with the purchase of IPS meters.

1. Learn how to use the parking meter through written directions and a how-to video tutorial
2. Answer questions through an online survey tool regarding their experience with the meter
3. Better understand why the change has been implemented

www.ipsgroupinc.com/demo

Donation Meters and CSR Partnerships

IPS Group, Inc. believes very strongly in making a positive impact in the world, and that includes making a difference to our cities' employees, community and constituents. With a focus on the triple bottom line (people, planet, and profit), IPS is ensuring that we remain mindful of the public's interest. As IPS achieves rapid growth, it is our goal to include the public's interest with our success.

To that end, IPS has woven a corporate social responsibility (CSR) goal into our mission statement. IPS is committed to offering our customers a public-private partnership as a means of giving back to the community through the profit of our parking meters. This approach is customized for each city.

Currently IPS Group has (or is in progress) partnered with the following Cities to offer donations for their preferred charitable programs:

- City of Denver, CO
- City of San Diego, CA
- City of Athens, GA

Upon bid award, IPS Group would be happy to work with the City of Sacramento to help fund their selected local charity by providing IPS meters to take donations at City designated location(s). The program garners widespread public support and offers the City a way to give back to the local community. Additional public relations and marketing support will be provided by IPS Group.

Denver's Road Home Program

IPS Group recently donated 85 light blue donation meters to Denver's Road Home program. The credit card-capable donation meters will help raise funds for mental health services and substance abuse treatment.

- Typically donations increase by 50% when IPS meters are installed at donation stations.
- The Better Way to Give campaign has raised more than $200,000.00 for Denver's Road Home Campaign.
- This program marks IPS Group's largest CSR effort to date.

Denver mayor, Michael B. Hancock, makes a donation at an IPS donation meter.

IPS Group References

IPS is the only company with the proven technology and experience to provide the single-space solution the RFP has described. IPS has successfully demonstrated this technology in numerous cities across the country and has selected six references which demonstrate our strong presence in the region, as well as our ability to deploy meters and sensors on a large scale. It is important to note the sample projects described within this proposal are established contracts using single-space credit card-enabled parking meters, and are not trial projects or older style coin-only traditional parking meters.

Project Reference #1

Jurisdiction/Customer: The City of San Francisco, SFMTA
Population: 805,235
Make and Model: IPS Single Space Parking Meter – Model 147
Quantity of Meters Installed: 5,900
Project Dates: Trial in 2008/2009, SF*park* in 2010
Primary Contact: George Reynolds, SFMTA Parking Meter Program Manager, Email:George.Reynolds@sfmta.com, Tel: (415) 550-2712
Secondary Contact: Alexiy Sukhenko, Email: alexiy.sukhenko@sfmta.com, Tel: (415) 701-5478
Address: 901 Rankin Street, San Francisco, CA 94124

Project Description:

With 25,000 single space meters throughout San Francisco, the SFMTA manages the 4th largest on-street parking operation in the US. In 2009, IPS deployed a field trial, and subsequently, was awarded the new single-space credit card meter contract as part of the SF*park* project in 2010. This project was the first of its kind to incorporate real-time data feeds from parking meters, sensors and other data sources in order to study the effect of changes in parking rates due to demand. IPS is the sole provider of the single-space meters for this innovative project. (www.sfpark.org)

Project Reference #2

Jurisdiction/Customer: The City of Los Angeles
Population: 9,830,420
Make and Model: IPS Single Space Parking Meter – Models 147/ 795
Project Dates: Trial in 2009, Procurement starting August 2010
Quantity of Meters Installed: 33,000 in total (5,600 in ExpressPark™)
Primary Contact: Daniel Mitchell, Senior Transportation Engineer, Parking Meter Division, Email: Dan.Mitchell@lacity.org, Tel: (213) 473-8276
Secondary Contact: Peer Ghent, Senior Management Analyst, Email: peer.ghent@lacity.org, Tel: (213) 473-0651
Address: 555 Ramirez Street, Los Angeles, CA 90012

Project Description:

With 40,000 metered spaces meters throughout Los Angeles roadways, this is IPS's largest account to date. Initially starting with a trial of 800 meters in 2009, Los Angeles has procured 33,000 IPS Single-Space Meters through a lease-to-own agreement as well as the most recent RFP for the Demand-based pricing LA ExpressPark™ project in 2010. The lease-to-own option was a way for the City to rapidly upgrade meters at a time when the budget would not allow. It was through this innovative partnership that both IPS and the City of Los Angeles were recognized for an Award of Excellence in a Private/Public Partnership by the US Conference of Mayors. Based on an official City report, LADOT reported the following after installing the first 10,000 IPS meters:

- IPS meters operating at greater than 99% up-time
- Complaints to the Meter Hotline down 55% (for all meters Citywide)
- Parking meter citations up 15%
- Contested meter citations are down 75%
- Meter revenue has increased nearly 50%
- Credit card payments account for more than 40% of meter revenue
- Estimated net increase of $3 million annually In parking meter revenue

Project Reference #3

Jurisdiction/Customer: The City of Santa Monica
Population: 88,000
Make and Model: IPS Single Space Parking Meter – Model 795
Project dates: Trial in Spring 2011, contract award in Fall 2011
Quantity of Meters Installed: 6,000 meters and 6,000 sensors
Primary Contact: Frank Ching, Parking Administrator, Email: frank.ching@smgov.net , Tel: (310) 458-8299
Secondary Contact: Anthony Mazeika, Parking Operations Specialist, Anthony.mazeika@smgov.net
Address: 1717 4th Street, Suite 150, Santa Monica, CA 90401

Project Description:

After a successful trial during the summer of 2011, Santa Monica approved a contract to procure a city-wide upgrade of all 6,000 on-street meters, along with 6,000 vehicle detection sensors. All 6,000 meters were installed in a two month period, in the months of December 2011 and January 2012, with the vehicle sensors completed during the Summer of 2012.

Project Reference #4

Jurisdiction/Customer: The City and County of Denver
Population: 600,158
Make and Model: IPS Single Space Parking Meter – Model 795
Project Dates: RFP & Trial in 2008/2009, purchase in 2010
Quantity of Meters Installed: 6,000 meters and 500 sensors
Primary Contact: Bill Miles, Manager 1, Department of Public Works, Email: bill.miles@denvergov.org, Tel: (720) 913-8509
Secondary Contact: Dominic Vaiana, Public Works Manager 1, Email: dominic.vaiana@denvergov.org Tel: (720) 865-2523
Address: 201 Colfax Ave. Denver, CO 80202

Project Description:

The City of Denver's move to accept credit card as a paid parking option is a cautionary tale for multi-space. To date, Denver has 6,000 IPS single-space, credit card-enabled meters. Initially, and prior to 2008 when the IPS meter was not yet on the market, the City of Denver began purchasing multi-space meters. After customer and merchant backlash, primarily in the Cherry Creek shopping district, the City learned of the IPS meter and began a trial. With great success in just a few months' time, the City decided to remove several multi-space machines and replace them with the IPS single-space meter.

Project Reference #5

Jurisdiction/Customer: The City of Berkeley
Population: 113,905
Make and Model: IPS Single Space Parking Meter M3 and M5
Project Dates: Trial 2009, 2010; Program Expansion September 2012.
Quantity of Meters Installed: 1,500 meters
Primary Contact: Danette Perry, Email: DPerry@ci.berkeley.ca.us, Tel: (510) 981-7057
Secondary Contact: Samantha Baker, Parking Meter Collections and Maintenance Supervisor, Email: sbaker@cityofberkeley.info, Tel: 510-981-6472
Address: 1947 Center Street, 3rd floor, Berkeley, CA 94704

Project Description:

Following a successful trial in 2009, the City of Berkeley approved an additional purchase of the new fifth generation IPS meter, the M5, bringing the total number of meters in Berkeley to 1,500 to date.

Project Reference #6

Jurisdiction/Customer: The City of Walnut Creek
Population: 65,211
Make and Model: IPS Single Space Parking Meter and Vehicle Detection Sensors
Project Dates: Trial in 2010; Procurement and Program Expansion 2010-2013
Quantity of Meters Installed: 1,600 meters and 1,000 sensors
Primary Contact: Matt Huffaker, Assistant to the City Manager, E-mail: huffaker@walnut-cree.org, Tel: (925) 256-3580
Secondary Contact: Heather Ballinger, Email: ballenger@walnut-creek.org, Tel: (925) 256-3593
Address: 1666 North Main Street, Walnut Creek, CA 94596

Project Description:

The City began with a trial of 31 IPS single-space parking meters in April 2010. Due to the immediate success of the trial, the City quickly procured the trial meters and added another 71 within one year. In January of 2013, the City had updated most of their mechanisms citywide and now has 1,600 IPS SSPM. Additionally, the City issued an RFP for vehicle detection sensors which was subsequently awarded to IPS. As of May, 2013, the City now has 1,000 vehicle detection sensors installed and operating in conjunction with the IPS meters.

ACORD

DATE (MM/DD/YYYY)

X

X

D

1,000,000

THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

Janet Astata

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

TECHNOLOGY GENERAL LIABILITY EXTENSION ENDORSEMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Coverage afforded under this extension of coverage endorsement does not apply to any person or organization covered as an additional insured on any other endorsement now or hereafter attached to this Coverage Part.

1. ADDITIONAL INSURED – BLANKET VENDORS

WHO IS AN INSURED (Section **II**) is amended to include as an additional insured any person or organization (referred to below as vendor) with whom you agreed, because of a written contract or agreement to provide insurance, but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business, subject to the following additional exclusions:

1. The insurance afforded the vendor does not apply to:

a. "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;

b. Any express warranty unauthorized by you;

c. Any physical or chemical change in the product made intentionally by the vendor;

d. Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;

e. Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;

f. Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;

g. Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or

h. "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:

(1) The exceptions contained in Subparagraphs **d.** or **f.;** or

(2) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.

2. This insurance does not apply to any insured person or organization, from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

3. This provision **1.** does not apply to any vendor included as an insured by an endorsement issued by us and made a part of this Coverage Part.

4. This provision **1.** does not apply if "bodily injury" or "property damage" included within the "products-completed operations hazard" is excluded either by the provisions of the Coverage Part or by endorsement.

2. MISCELLANEOUS ADDITIONAL INSUREDS

WHO IS AN INSURED (Section **II**) is amended to include as an insured any person or organization (called additional insured) described in paragraphs **2.a.** through **2.h.** below whom you are required to add as an additional insured on this policy under a written contract or agreement but the written contract or agreement must be:

1. Currently in effect or becoming effective during the term of this policy; and

2. Executed prior to the "bodily injury," "property damage" or "personal injury and advertising injury," but only the following persons or organizations are additional insureds under this endorsement and coverage provided to

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such additional insureds is limited as provided herein:

a. Additional Insured – "Your Work"

That person or organization for whom you do work is an additional insured solely for liability due to your negligence specifically resulting from "your work" for the additional insured which is the subject of the written contract or written agreement. No coverage applies to liability resulting from the sole negligence of the additional insured.

The insurance provided to the additional insured is limited as follows:

(1) The Limits of Insurance applicable to the additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less. These Limits of Insurance are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations.

(2) The coverage provided to the additional insured by this paragraph. **2.a.,** does not apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" unless:

(a) It is required by the written contract or written agreement; and

(b) "Bodily injury" or "property damage" included within the "products-completed operations hazard" is not excluded either by the provisions of the Coverage Part or by endorsement.

(3) The insurance provided to the additional insured does not apply to "bodily injury," "property damage," or "personal and advertising injury" arising out of the rendering or failure to render any professional services.

b. State or Political Subdivisions

A state or political subdivision subject to the following provisions:

(1) This insurance applies only with respect to the following hazards for which the state or political subdivision has issued a permit in connection with premises you own, rent, or control and to which this insurance applies:

(a) The existence, maintenance, repair, construction, erection, or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoistaway openings, sidewalk vaults, street banners, or decorations and similar exposures; or

(b) The construction, erection, or removal of elevators; or

(2) This insurance applies only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit.

This insurance does not apply to "bodily injury," "property damage" or "personal and advertising injury" arising out of operations performed for the state or municipality.

c. Controlling Interest

Any persons or organizations with a controlling interest in you but only with respect to their liability arising out of:

(1) Their financial control of you; or

(2) Premises they own, maintain or control while you lease or occupy these premises.

This insurance does not apply to structural alterations, new construction and demolition operations performed by or for such additional insured.

d. Managers or Lessors of Premises

A manager or lessor of premises but only with respect to liability arising out of the ownership, maintenance or use of that specific part of the premises leased to you and subject to the following additional exclusions:

This insurance does not apply to:

(1) Any "occurrence" which takes place after you cease to be a tenant in that premises; or

(2) Structural alterations, new construction or demolition operations performed by or on behalf of such additional insured.

e. Mortgagee, Assignee or Receiver

A mortgagee, assignee or receiver but only with respect to their liability as

mortgagee, assignee, or receiver and arising out of the ownership, maintenance, or use of a premises by you.

This insurance does not apply to structural alterations, new construction or demolition operations performed by or for such additional insured.

f. Owners/Other Interests – Land is Leased

An owner or other interest from whom land has been leased by you but only with respect to liability arising out of the ownership, maintenance or use of that specific part of the land leased to you and subject to the following additional exclusions:

This insurance does not apply to:

(1) Any "occurrence" which takes place after you cease to lease that land; or

(2) Structural alterations, new construction or demolition operations performed by or on behalf of such additional insured.

g. Co-owner of Insured Premises

A co-owner of a premises co-owned by you and covered under this insurance but only with respect to the co-owners liability as co-owner of such premises.

h. Lessor of Equipment

Any person or organization from whom you lease equipment. Such person or organization are insureds only with respect to their liability arising out of the maintenance, operation or use by you of equipment leased to you by such person or organization. A person's or organization's status as an insured under this endorsement ends when their written contract or agreement with you for such leased equipment ends.

With respect to the insurance afforded these additional insureds, the following additional exclusions apply:

This insurance does not apply:

(1) To any "occurrence" which takes place after the equipment lease expires; or

(2) To "bodily injury," "property damage," or "personal and advertising injury" arising out of the sole negligence of such additional insured.

Any insurance provided to an additional insured designated under paragraphs **b.** through **h.** above does not apply to "bodily injury" or "property damage" included within the "products-completed operations hazard."

As respects the coverage provided under this endorsement, Paragraph **4.b. SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS** is deleted and replaced with the following:

4. Other Insurance

b. Excess Insurance

This insurance is excess over:

Any other insurance naming the additional insured as an insured whether primary, excess, contingent or on any other basis unless a written contract or agreement specifically requires that this insurance be either primary or primary and noncontributing. Where required by written contract or agreement, we will consider any other insurance maintained by the additional insured for injury or damage covered by this endorsement to be excess and noncontributing with this insurance.

3. NEWLY FORMED OR ACQUIRED ORGANIZATIONS

Paragraph **3.a.** of **Section II – Who Is An Insured** is deleted and replaced by the following:

Coverage under this provision is afforded only until the end of the policy period or the next anniversary of this policy's effective date after you acquire or form the organization, whichever is earlier.

4. JOINT VENTURES / PARTNERSHIP / LIMITED LIABILITY COMPANY COVERAGE

A. The following is added to **Section II – Who Is An Insured:**

4. You are an insured when you had an interest in a joint venture, partnership or limited liability company which terminated or ended prior to or during this policy period but only to the extent of your interest in such joint venture, partnership or limited liability company. This coverage does not apply:

a. Prior to the termination date of any joint venture, partnership or limited liability company; or

b. If there is other valid and collectible insurance purchased specifically to insure the partnership, joint venture or limited liability company.

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B. The last paragraph of **Section II – Who Is An Insured** is deleted and replaced by the following:

Except as provided in **4.** above, no person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

5. PARTNERSHIP OR JOINT VENTURES

Paragraph **1.b.** of **Section II – Who Is An Insured** is deleted and replaced by the following:

b. A partnership (including a limited liability partnership) or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.

6. EMPLOYEES AS INSUREDS – HEALTH CARE SERVICES

For other than a physician, paragraph **2.a.(1)(d)** of **Section II – Who Is An Insured** does not apply with respect to professional health care services provided in the course of employment by you.

7. PROPERTY DAMAGE – PATTERNS, MOLDS AND DIES

Paragraphs **(3)** and **(4)** of Exclusion **j. Damage to Property** of **SECTION I – EXCLUSIONS** do not apply to patterns, molds or dies in the care, custody or control of the insured if the patterns, molds or dies are not being used to perform operations at the time of loss. A limit of insurance of $25,000 per policy period applies to **PROPERTY DAMAGE – PATTERNS, MOLDS AND DIES** and is included within the General Aggregate Limit as described in **SECTION III – LIMITS OF INSURANCE.**

The insurance afforded by this provision **7.** is excess over any valid and collectible property insurance (including any deductible) available to the insured, and the Other Insurance Condition is changed accordingly.

8. BODILY INJURY

Section V – Definitions, the definition of "bodily injury" is changed to read:

"Bodily injury" means bodily injury, sickness or disease sustained by a person, including death, humiliation, shock, mental anguish or mental injury by that person at any time which results as a consequence of the bodily injury, sickness or disease.

9. EXPANDED PERSONAL AND ADVERTISING INJURY

A. The following is added to **Section V – Definitions,** the definition of "personal and advertising injury":

h. Discrimination or humiliation that results in injury to the feelings or reputation of a natural person, but only if such discrimination or humiliation is:

(1) Not done intentionally by or at the direction of:

(a) The insured; or

(b) Any "executive officer," director, stockholder, partner, member or manager (if you are a limited liability company) of the insured; and

(2) Not directly or indirectly related to the employment, prospective employment, past employment or termination of employment of any person or persons by any insured.

B. Exclusions of **Section I – Coverage B – Personal and Advertising Injury Liability** is amended to include the following:

p. Discrimination Relating To Room, Dwelling or Premises

Caused by discrimination directly or indirectly related to the sale, rental, lease or sub-lease or prospective sale, rental, lease or sub-lease of any room, dwelling or premises by or at the direction of any insured.

q. Fines Or Penalties

Fines or penalties levied or imposed by a governmental entity because of discrimination.

C. This provision **9. (EXPANDED PERSONAL AND ADVERTISING INJURY COVERAGE)** does not apply to discrimination or humiliation committed in the states of New York or Ohio. Also, **EXPANDED PERSONAL AND ADVERTISING INJURY COVERAGE** does not apply to policies issued in the states of New York or Ohio.

D. This provision **9. (EXPANDED PERSONAL AND ADVERTISING INJURY COVERAGE)** does not apply if **Section I – Coverage B – Personal And Advertising Injury Liability** is excluded either by the provisions of the Coverage Part or by endorsement.

10. MEDICAL PAYMENTS

A. Paragraph **7. Medical Expense Limit,** of **Section III – Limits of Insurance** is deleted and replaced by the following:

7. Subject to **5.** above (the Each Occurrence Limit), the Medical Expense Limit is the most we will pay under **Section – I – Coverage C**

for all medical expenses because of "bodily injury" sustained by any one person. The Medical Expense Limit is the greater of:

(1) $15,000; or

(2) The amount shown in the Declarations for Medical Expense Limit.

B. This provision **10. (Medical Payments)** does not apply if **Section I – Coverage C Medical Payments** is excluded either by the provisions of the Coverage Part or by endorsement.

C. Paragraph **1.a.(3)(2)** of **Section I – Coverage C – Medical Payments,** is replaced by the following:

The expenses are incurred and reported to us within three years of the date of the accident; and

11. SUPPLEMENTARY PAYMENTS

A. Under **Section I – Supplementary Payments – Coverages A** and **B,** Paragraph **1.b.,** the limit of $250 shown for the cost of bail bonds is replaced by $2,500:

B. In Paragraph **1.d.,** the limit of $250 shown for daily loss of earnings is replaced by $1,000.

12. PROPERTY DAMAGE – ELEVATORS

With respect to Exclusions of **Section I – Coverage A,** paragraphs **(3), (4)** and **(6)** of Exclusion **j.** and Exclusion **k.** do not apply to the use of elevators.

The insurance afforded by this provision **12.** is excess over any valid and collectible property insurance (including any deductible) available to the insured, and the Other Insurance Condition is changed accordingly.

13. LEGAL LIABILITY – DAMAGE TO PREMISES

A. Under **Section I – Coverage A – Bodily Injury and Property Damage 2. Exclusions,** Exclusion **j.** is replaced by the following.

"Property damage" to:

(1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;

(2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;

(3) Property loaned to you;

(4) Personal property in the care, custody or control of the insured;

(5) That particular part of real property on which you or any contractors or subcontractors working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations; or

(6) That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraph **(2)** of this exclusion does not apply if the premises are "your work" and were never occupied, rented or held for rental by you.

Paragraphs **(1), (3)** and **(4)** of this exclusion do not apply to "property damage" (other than damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems) to premises including the contents of such premises, rented to you for a period of 7 or fewer consecutive days.

A separate limit of insurance applies to Damage To Premises Rented To You as described in **Section III – Limits Of Insurance.**

Paragraphs **(3), (4), (5)** and **(6)** of this exclusion do not apply to liability assumed under a sidetrack agreement.

Paragraph **(6)** of this exclusion does not apply to "property damage" included in the "products-completed operations hazard."

B. Under **Section I – Coverage A – Bodily Injury and Property Damage** the last paragraph of **2. Exclusions** is deleted and replaced by the following.

Exclusions **c.** through **n.** do not apply to damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems to premises while rented to you or temporarily occupied by you with permission of the owner.

A separate limit of insurance applies to this coverage as described in **Section III – Limits Of Insurance.**

C. Paragraph **6. Damage To Premises Rented To You Limit** of **Section III – Limits Of Insurance** is replaced by the following:

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6. Subject to **5.** above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage **A** for damages because of "property damage" to any one premises while rented to you or in the case of damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems, while rented to you or temporarily occupied by you with the permission of the owner. The Damage To Premises Rented To You Limit is the greater of:

a. $500,000; or

b. The Damage To Premises Rented To You Limit shown in the Declarations.

D. Paragraph **4.b.(1)(b)** of **Section IV – Commercial General Liability Conditions** is deleted and replaced by the following:

(b) That is property insurance for premises rented to you or temporarily occupied by you with the permission of the owner; or

E. This provision **13. (LEGAL LIABILITY – DAMAGE TO PREMISES)** does not apply if Damage To Premises Rented To You Liability under **Section I – Coverage A** is excluded either by the provisions of the Coverage Part or by endorsement.

14. NON-OWNED WATERCRAFT

Under **Section I – Coverage A – Bodily Injury and Property Damage,** Exclusion **2.g.,** subparagraph **(2)** is deleted and replaced by the following.

(2) A watercraft you do not own that is:

(a) Less than 55 feet long; and

(b) Not being used to carry persons or property for a charge.

15. NON-OWNED AIRCRAFT

Exclusion **2.g.** of **Section I – Coverage A – Bodily Injury and Property Damage,** does not apply to an aircraft you do not own, provided that:

1. The pilot in command holds a currently effective certificate issued by the duly constituted authority of the United States of America or Canada, designating that person as a commercial or airline transport pilot;

2. It is rented with a trained, paid crew; and

3. It does not transport persons or cargo for a charge.

16. BROAD KNOWLEDGE OF OCCURRENCE

You must give us or our authorized representative notice of an "occurrence," offense, claim, or "suit" only when the "occurrence," offense, claim or "suit" is known to :

(1) You, if you are an individual;

(2) A partner, if you are a partnership;

(3) An executive officer or the employee designated by you to give such notice, if you are a corporation; or

(4) A manager, if you are a limited liability company.

17. NOTICE OF OCCURRENCE

The following is added to paragraph **2.** of **Section IV – Commercial General Liability Conditions – Duties in The Event of Occurrence, Offense Claim or Suit:**

Your rights under this Coverage Part will not be prejudiced if you fail to give us notice of an "occurrence," offense, claim or "suit" and that failure is solely due to your reasonable belief that the "bodily injury" or "property damage" is not covered under this Coverage Part. However, you shall give written notice of this "occurrence," offense, claim or "suit" to us as soon as you are aware that this insurance may apply to such "occurrence," offense claim or "suit."

18. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS

Based on our reliance on your representations as to existing hazards, if unintentionally you should fail to disclose all such hazards at the inception date of your policy, we will not deny coverage under this Coverage Part because of such failure.

19. EXPECTED OR INTENDED INJURY

Exclusion **a.** of **Section I – Coverage A – Bodily Injury and Property Damage Liability** is replaced by the following:

a. "Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

20. LIBERALIZATION CLAUSE

If we adopt a change in our forms or rules which would broaden coverage provided under this endorsement without an additional premium charge, your policy will automatically provide the additional coverages as of the date the revision is effective in your state.

[redacted]

POLICY CHANGES
CA 2048 DESIGNATED INSURED

This Change Endorsement changes the Policy. Please read it carefully. This Change Endorsement is a part of your Policy and takes effect on the effective date of your Policy, unless another effective date is shown.

The following Form has been added:

Form #: CA2048 Title: Designated Insured

Any person or organization you have agreed in a written contract or written agreement to add as an additional insured on this Coverage Part, provided the written contract or written agreement was executed prior to:
a. The "bodily injury" or "property damage"; or
b. The offense that caused the "personal and advertising injury
for which the additional insured seeks coverage under this Coverage Part. The written contract or written agreement must pertain to your ongoing operations for the additional insured, and must specifically require additional insured status according to the provisions of CG 20 48.
But notwithstanding the above, no person or organization is an additional insured for professional architectural or engineering services provided at or for the Location(s) of Covered Operations.

Thomas F. Motamed
Chairman of the Board

Jonathan Kanter
Secretary

G-56015-B (ED. 11/91)

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE POLICY

BLANKET WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS

This endorsement changes the policy to which it is attached.

It is agreed that **Part One Workers' Compensation Insurance G. Recovery From Others** and **Part Two Employers' Liability Insurance H. Recovery From Others** are amended by adding the following:

We will not enforce our right to recover against persons or organizations. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

PREMIUM CHARGE - [redacted]

The charge will be an amount to which you and we agree that is a percentage of the total standard premium for California exposure. The amount is [redacted]

City of
SACRAMENTO
Department of Public Works

Parking Services Division

300 Richards Boulevard, 2nd Floor
Sacramento, CA 95811
916-808-5110

REQUEST FOR PROPOSALS
PARKING METER PROCUREMENT
Bid Transaction # P13151171027
ADDENDUM #1

June 14, 2013

To all Potential Proposers:

Attached hereto are addenda items, which shall be incorporated into the proposal for above noted project. These changes shall be considered as part of the original documents, as if they were originally provided therein, and as such shall be used as contractual documents. All other terms, conditions, and specifications of the RFP remain unchanged.

Vendors must acknowledge receipt of this addendum within the proposal submitted. RFP responses missing acknowledgement of any addendum or information requested in this RFP will be considered non-responsive and the Vendor will be eliminated from evaluation.

Updated attachments to Appendix F are included with this addendum. These were edited to update some obsolete references; no changes have been made to the data formats represented within the attachments.

Appendices I and J are revised as described in the Questions and Answers. Further, Appendix J is provided as a separate, unlocked file so that vendors can edit it without having to print and scan.

Contents of this addendum:

1. Pre-submittal Meeting Minutes
2. Pre-submittal Meeting Sign-in Sheet
3. Vendors' Questions and Answers
4. Updated Appendix F, Attachment 4
5. Updated Appendix F, Attachment 6
6. Updated Appendix F, Attachment 7
7. Updated Appendix F, Attachment 10
8. Updated Appendix I, revised 061413 (separate file)
9. Updated Appendix J, revised 061413 (separate file)

The deadline for submitting questions related to this RFP has passed, and no more questions will be addressed.

City of Sacramento RFP for Parking Meters and Related Services

Pre-submittal Meeting Minutes
Thursday, June 6, 2013 10:00 am
Facilitator: Dan Kupferman, Walker Parking Consultants

1) Introductions (in attendance)

- Mike King, Parking Meter Operations Manager, City of Sacramento
- Kim Eger, Meter Shop Supervisor, City of Sacramento
- Dennis Vance, Parking Enforcement Supervisor, City of Sacramento
- Paul Sheridan, Program Analyst, City of Sacramento
- Lauri Keller, Director of Sales, IPS Group
- Brad Magee, RVP Sales, Duncan Solutions
- Carl Muirbrook, President, QuickPay
- Logan Tiel, Estimator, Siemens

2) Review of RFP Schedule
3) Recap of Pilot Program
4) Discussion of Scoring Criteria
5) Open forum for questions (to be included in *RFP Questions and Answers*)
6) Adjournment

IPS Group, Inc. acknowledges and complies with the information set forth in Addendum 1 issued on June 14, 2013.
Signed: _____
Chad Randall, Chief Operating Officer, IPS Group, Inc.

City of
SACRAMENTO
Department of Public Works

Parking Services Division

300 Richards Boulevard, 2nd Floor
Sacramento, CA 95811
916-808-5110

REQUEST FOR PROPOSALS
PARKING METER PROCUREMENT
Bid Transaction # P13151171027
ADDENDUM #2

June 20, 2013

To all Potential Proposers:

Presented herein is an addendum item, which shall be incorporated into the proposal for above noted project. This change shall be considered as part of the original documents, as if they were originally provided therein, and as such shall be used as contractual documents. All other terms, conditions, and specifications of the RFP remain unchanged.

Vendors must acknowledge receipt of this addendum within the proposal submitted. RFP responses missing acknowledgement of any addendum or information requested in this RFP will be considered non-responsive and the Vendor will be eliminated from evaluation.

Contents of this addendum:

1. Clarification of response in Vendors' Questions and Answers

IPS Group, Inc. acknowledges and complies with the information set forth in Addendum #2 issued on June 20, 2013.
Signed: _____
Chad Randall, Chief Operating Officer, IPS Group, Inc.

City of
SACRAMENTO
Department of Public Works

Parking Services Division

300 Richards Boulevard, 2nd Floor
Sacramento, CA 95811
916-808-5110

REQUEST FOR PROPOSALS
PARKING METER PROCUREMENT
Bid Transaction # P13151171027
ADDENDUM #3

June 25, 2013

To all Potential Proposers:

Presented herein is an addendum item, which shall be incorporated into the proposal for above noted project. This change shall be considered as part of the original documents, as if they were originally provided therein, and as such shall be used as contractual documents. All other terms, conditions, and specifications of the RFP remain unchanged.

Vendors must acknowledge receipt of this addendum within the proposal submitted. RFP responses missing acknowledgement of any addendum or information requested in this RFP will be considered non-responsive and the Vendor will be eliminated from evaluation.

Contents of this addendum:

1. Modification of project schedule (page 4 of the RFP)

Due to Staff availability, the date for **Short List Interviews (if any)** has been changed to **July 22, 2013,** instead of July 19. Please incorporate this change into your planning. Invitations will be sent to specific vendors should the Contractor Selection Panel determine the need for interviews.

Due to City Policy, if an addendum is issued within three working days of deadline for proposals, the due date must be extended by one week. Therefore, the revised due date for vendors' proposals is hereby changed to **Wednesday, July 3, 2013, at 4 pm PST**.

IPS Group, Inc. acknowledges and complies with the information set forth in Addendum 3, issued on June 25, 2013.

Signed: _____

Chad Randall, Chief Operating Officer, IPS Group, Inc.

Schedule of Attachments

Attachment	Description	Purpose	Anticipated Frequency	Delivery Date (60, 90, 120, or 120+ days) from the Effective Date
Attachment 1 – OUTGOING PSI XML	Contains both standard and user-defined variables describing attributes of the metered spaces not related to meter behavior.	Populate attributes of newly-metered spaces in MMS.	as-needed	*Insert projected timeline here as indicated above*
		Routine changes/edits to individual metered spaces in MMS.	nightly	60-90 days
Attachment 2 – OUTGOING Operating schedule XML	Contains variables that govern the overall hours meters are in effect; may include TOW, prepayment settings, time limits, and other restrictions.	Program meter behavior and screens of newly-metered spaces with hours, prepayment, TOW, and time limits.	as-needed	60-90 days
		Routine changes/edits to individual metered spaces.	nightly	
		Re-program meter behavior and screens of existing metered spaces with new hours, prepayment, TOW, or time limits.	1x/month avg.	
Attachment 3 – OUTGOING Price schedule XML	Contains variables that govern meter hourly rates for specific time slots.	Program meter behavior and screens of newly-metered spaces with time slots and hourly rates.	as-needed	60-90 days
		Routine changes/edits to individual metered spaces.	nightly	
		Re-program meter behavior and screens of existing metered spaces with new time slots and rates.	1x/month avg.	

Schedule of Attachments

Attachment	Descriptions	Purpose	Anticipated Frequency	Delivery Date: (60, 90, 120, or 120+ days) from the Effective Date
Attachment 4 – OUTGOING Special event pricing and regulation XML	Contains variables that govern the overall hours meters are in effect; may include TOW, prepayment settings, time limits, other restrictions, or rates for specific time slots that override standard operating and price schedules only on specific dates listed in the XML file.	Program meter behavior and screens of newly-metered spaces with special hours, prepayment, TOW, time limits, time slots, hourly rates, or other regulations to override standard operating and price schedules on specific dates.	as-needed	*Insert projected delivery date here as indicated above* 0-60 days
		Re-program meter behavior and screens of existing metered spaces with special hours, prepayment, TOW, time limits, rates, or other regulations to override standard operating and price schedules on specific dates.	Periodic, TBD	
Attachment 5 – INCOMING Transaction Data XML	Contains data related to every transaction conducted at the meter including start/end times of parking sessions, payment times, amounts, and payment type.	Deliver parking transaction data to Parking Services.	real-time	30 days
Attachment 6 – INCOMING PSI changes XML specification	Contains standard and user-defined variables stored in the MMS.	Deliver standard and user-defined variables describing attributes of the metered spaces not related to meter behavior to Parking Services for comparison to Parking Services' records.	weekly	60 days

Schedule of Attachments

Attachment	Descriptions	Purpose	Anticipated Frequency	Delivery Date: (60, 90, 120, 120+ days) from the Effective Date
Attachment 7 – INCOMING Reconciliation XML	Contains variables that govern meter behavior stored in the MMS.	Deliver metered space programming information including hours, prepayment, TOW, time limits, rates, or special event programming to Parking Services for comparison to Parking Services' records	on-demand	*Insert projected delivery date here as indicated above* 60-90 days
Attachment 8 – INCOMING Faults & maintenance codes XML	Contains faults and maintenance codes transmitted by the meters to the MMS.	Deliver meter faults reported by meters and maintenance codes entered by Parking Services staff at the meters to Parking Services.	nightly	60 days
Attachment 9 – INCOMING Meter Revenue CSV	Contains meter revenue by Post ID.	To populate PSMS with meter revenue data.	nightly	60 days
Attachment 10 – INCOMING Meter Maintenance CSV	Contains meter maintenance data by Post ID.	To populate PSMS with meter maintenance events.	nightly	60 days
Attachment 11 – List of Faults and Maintenance Codes	Contains list of faults and maintenance codes.	Used in conjunction with Attachment 10.	nightly	N/A
Attachment 12 – Pilot Meter Programming Behavior	Meter Behavior to program for pilot	To program three working meter samples to be submitted with the proposal	At the time of the proposal submittal	N/A

Certificate of Compliance

This award acknowledges that

IPS Group

has successfully completed the

Payment Card Industry Assessment

Level 1 Service Provider

performed by

Tevora, Inc.

A Qualified Security Assessor (QSA)

Valid: October 12 2012

Expires: October 11 2013

Ray Zadjmool, President
Tevora Business Solutions, Inc.

This designation is subject to re-qualification at 12-month intervals.
©2012 Tevora, Inc.

Certified Customer Name:	IPS Group
Certified Customer Address:	5601 Oberlin Drive, Suite 100 San Diego, CA 92121
Certified Service Area:	POS Managed Services Payment Gateway Services
Certified Co-Location Sites:	San Diego, CA

This certificate is only issued to organizations that have met PCI security program requirements.

This certificate is for the sole purpose of indicating compliance with PCI security programs. Tevora, Inc. makes no express or implied warranty or representations with respect to whether the customer's systems are secure against compromise.

Customers must retain all detailed assessment documentation for review upon request by organizations authorized under PCI security programs. Tevora, Inc. retains all detailed documentation and working papers in order to comply with PCI security program requirements.

Customers are responsible for maintaining compliance with the PCI Standard. Periodic and ongoing reassessments are requirements under PCI security programs. Significant customer changes may require reassessment.

It is understood that Tevora's assessment represents a point in time interpretation of the customers adherence to the PCI Data Security Standards (v. 2.0) based upon the standardized documents and procedures provided under PCI security programs.

This designation is subject to re-qualification at 12-month intervals.
©2012 Tevora, Inc.

TEVORA
Business Solutions

Certificate of Compliance

This award acknowledges that

Single Space Parking Meter v 3.2.18

Parking Meter Manager v2.1.0.10

has successfully completed the

Payment Application

Data Security Standard Assessment

performed by

Tevora Business Solutions, Inc.

Ray Zadjmool, President
Tevora Business Solutions, Inc.

Certified on: September 18, 2009
Re-validated on: September 17, 2012
Valid until: October 28, 2013

This designation is subject to re-qualification at 36-month intervals.
©2009 Tevora Business Solutions, Inc.

Certified Customer Name:	IPS Group Inc.
Certified Customer Address:	5601 Oberlin Drive, Suite 100 San Diego, CA 92121
Certified Payment Application and Version:	Single Space Parking Meter (SSPM) v 3.2.18 Parking Meter Manager v 2.1.0.10

This certificate is only issued to organizations that have met PA-DSS Security Standards program requirements.

This certificate is for the sole purpose of indicating compliance with the Payment Card Industry PA-DSS Security Standards program. Tevora Business Solutions makes no express or implied warranty or representations with respect to whether the customer's systems are secure against compromise.

Customers must retain all detailed assessment documentation for review upon request by organizations authorized under PA-DSS Security Standards program. Tevora Business Solutions retains all detailed documentation and working papers in order to comply with PA-DSS Security Standards program requirements.

Customers are responsible for maintaining compliance with the Payment Card Industry PA-DSS Security Standards. Periodic and ongoing reassessments are requirements under the PA-DSS Security Standards program. Significant customer changes may require reassessment.

It is understood that Tevora's assessment represents a point in time interpretation of the customers adherence to the Payment Card Industry PA-DSS Security Standards (v. 1.2) based upon the standardized documents and procedures provided under Payment Card Industry PA-DSS Security Standards program.

This designation is subject to re-qualification at 36-month intervals.
©2009 Tevora Business Solutions, Inc.

Visa's Global Registry of Service Providers

As Of Dec 21, 2012

PCI DSS Validated Service Providers

Service Providers that store, process or transmit cardholder data must be registered with Visa and demonstrate PCI DSS compliance. Annual PCI DSS compliance validation is required for all Level 1 and Level 2 service providers. Inclusion on the registry indicates only that the service provider (Level 1) successfully validated PCI DSS compliance with an on site assessment, based on the report of an independent Qualified Security Assessor (QSA) and has met all applicable Visa program requirements*.

Visa Third Party Agent Program (Independent Sales Organizations / Encryption Support Organizations)

Third Party Agents that perform solicitation activities (ISO) or perform ATM support activities (ESO), without touching cardholder data, must be registered with Visa. Inclusion on the registry indicates only that the service provider successfully completed registration with Visa(2).

*The companies listed were validated as being PCI DSS compliant by a QSA as of the "VALIDATION DATE (1)". Service providers are required to revalidate their compliance to Visa on an annual basis, with the next annual Attestation of Compliance (AOC) due to Visa one year from the "VALIDATION DATE". Entities are listed in each Visa region where they have been registered by at least one client, including: AP Asia Pacific, CEMEA Central Europe / Middle East / Africa, LAC Latin America / Caribbean, CAN Canada, U.S. United States. Visa clients are responsible for and are required to use compliant service providers and to follow up with service providers directly if there are any questions about their compliance status. Visa clients are liable for the service providers they use. Visa Inc. publishes this listing based on information provided by the service provider. This listing does not replace the due diligence responsibilities for members who are required to conduct their own risk assessment for service providers. Visa Inc. accepts no responsibility for the accuracy of the information provided. Visa has no duty to clients, merchants, processors or other third parties to obtain or review reports from any party required to submit a report. Visa is not responsible to any party for the timeliness, accuracy or completeness of any report. Visa does not endorse the service providers or their business processes or practices. Visa has sole discretion to include or exclude entities on this list.

(1)PCI DSS assessments represent only a "snapshot" of security in place at the time of the review, and do not guarantee that those security controls remain in place after the review is complete. These reviews did not cover proprietary software solutions that may be used or sold by these service providers.
(2)Currently listing ISOs and ESOs in the Americas only.

Company	Validation Date	Services Provided	Programs Participation	Assessor Company	Region of Operation
IPS Group Inc. www.ipsgroupinc.com U.S.A.	31 Oct 2012	Back Office Services Payment Gateway/Switch Payment Processing ATM Clearing & Settlement Network Provider/Transmitter	PCI DSS	Tevora Business Solutions Inc	U.S. CAN

The MasterCard SDP Program (Site Data Protection)

Compliant Service Providers

Company Name	AOC Date	Assessor
1&1 Internet AG	5/2/2012	Security Research & Consulting
1Link (Guarantee) Limited	11/18/2011	Trustwave
1ShoppingCart.com (Web.com)	7/16/2012	SecurityMetrics
1stPayGateway	5/28/2012	IBM Internet Security Systems (IS
2000 Charge, Inc.	11/11/2011	Tevora Business Solutions
24 Solutions AB	6/14/2012	NTT Security Ltd.
3 Delta Systems, Inc.	10/16/2012	Fortrex
3dCart (Informat 2000 Corp)	2/14/2012	SecurityMetrics
888extramoney.com (Extrameasures)	6/22/2012	Coalfire Systems, Inc.
A3 IT Services (A3ITS)	12/27/2011	Trustwave
A6IT Ltd.	5/14/2012	Kyte Consultants, Ltd.
ABC Financial Services, Inc.	5/17/2012	Trustwave
Abtran Ltd.	10/1/2012	Rits
Acadaca, LLC	3/22/2012	Fortrex

Company Nam e	AOC Date	Assessor
IPG Holdings Ltd.	11/13/2012	403 Labs, LLC
IPS Group Inc.	**10/12/2012**	**Tevora Business Solutions**
iQmetrix Software Development Corp.	9/5/2012	Seccuris Inc.
Iridium Corporation Limited	11/1/2011	SecuriCentrix
Iron Mountain Information Management, Inc.	8/29/2012	Trustwave
ITAGroup, Inc.	9/13/2012	Trustwave
Iveri Payment Technology (Pty) Ltd	6/29/2012	Trustwave
J.J. Mackay Canada Limited / Mackay Meters, Inc.	11/19/2012	Trustwave
Jack Henry and Associates, Inc. (ProfitStars)	9/4/2012	Coalfire Systems, Inc.
JCC Payment Systems	4/13/2012	Trustwave
Jelecos	1/27/2012	Continuum Worldwide
JetPay	5/14/2012	ANXeBusiness Corp.
JHA Payment Processing Solutions	6/15/2012	Coalfire Systems, Inc.
JNR, Inc.	1/31/2012	Moss Adams LLP
Joint Electronic Teller Services Limited (JETCO)	3/6/2012	Verizon/Cybertrust
Joint Stock Company Transcreditcard	9/28/2012	EVRAAS.IT.
JP Morgan Chase Loyalty Solutions (JPMCLS, CLS)	12/20/2011	Trustwave
J-Payment Inc.	4/28/2012	International Certificate Authority
JSC Banks Processing Center	10/21/2011	Informzaschita
JSC Georgian Card	10/5/2012	Trustwave

Bid # 13151171027
City of Sacramento Parking Meters
IPS Group Inc.
5601 Oberlin Drive, Suite #100
San Diego, CA. 92121

Attention: Chad @ IPS Group

Thank you for taking a look at the industry leader in Credit Card Processing and Check Guaranteeing at the POS. First Data is the Processor that successful Business' and Banks and Credit Unions us for their Electronic Transactions. Now that you are dealing directly with the source, you can save time and money. And have the personalized attention of a local sales rep.

General Assumptions:

Projected Annual Volume:	$2,700,000.00
Average Ticket:	$1.50
Transaction Type:	100% POS at Meter
Processing Mode:	Retail Tiered Pricing Structure
Equipment Status:	Unknown at Present
Annual Transactions:	1,800,000
Number of Locations:	1

Quote		**First Data**
Debit Card Swiped	(including Access Fee)	Interchange Plus $0.0545
Credit Card Swiped	(including Access Fee)	Interchange Plus $0.0545
Monthly Service Fee		$9.95
Monthly Minimum Charge		$25
PCI Compliance Charge	(Annually)	$99.95
One Time Setup (Application Fee)		$95.00

Eric Andrus
Senior Account Executive
First Data Commercial Services
435-760-9282

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Wireless Communications

Practically all new parking meters use wireless communications to transmit data between the parking meters and the parking management center. Wireless parking meters offer many advantages over hard wired meters, such as lower installation costs and more flexibility in the placement of the meters. Wireless communications also allow for remote monitoring of the parking meters and for real time encrypted credit card transactions that meet PCI security standards functionalities not possible in stand alone parking meters. There are two primary wireless communications technology options for parking meters: cell phone technology and Wi Fi broadband technology.

In parking meters using cell phone technology for wireless communications, the source modem inside the parking meter transmits data to a nearby cell phone tower, which then relays that data to a destination modem at the parking management center via other cell phone towers. Data can be transmitted through buildings and trees over relatively long distances between the modems and towers. Existing third party cell phone carrier networks and towers need to be in place in order for communication to be possible between the parking meter and the parking management center. These third party cell phone carriers (e.g., Verizon and AT&T Wireless) assess monthly fees of $3 $20/month/meter for the "airtime" used by the parking meter wireless communications. Most existing parking meters utilize cell phone technology for wireless communications because of the low initial cost and the ease of installation and maintenance of the communications network.

In parking meters using Wi Fi broadband technology for wireless communications, the source modem inside the parking meter transmits data to a nearby router, which then relays that data to a destination modem at the parking management center via other routers and gateways. Gateways are the transition point where wireless communications are converted to wire communications (e.g., a fiber optic cable). Data can be transmitted through buildings and trees over relatively short distances between the modems and routers. Routers need a clear line of sight to be able to transmit long distances.

While both methods of communications are technically feasible, the city should be careful when making a selection to choose one alternative over the other. By utilizing the city's Wi Fi network, the city may be placing unnecessary risk on its system by assuming PCI compliance responsibility. **The recommendation of this study is to utilize the selected vendor's traditional wireless communication channels as the primary means of communicating between meter data transactions and back-end software.** While the use of the city's Wi Fi network may prove cost effective, the PCI compliance responsibility outweighs the overall cost savings that could be achieved.

Julie Dixon | President, Dixon Resources Unlimited

Phone: 213 716 6933 E-Mail: Julie@dixonresourcesunlimited.com

EXPERIENCE

President, Dixon Resources Unlimited **2012– Present**

- Committed to providing 'best in class' municipal parking solutions from across a broad spectrum of areas including operations management, technology, customer service, field maintenance, financial reporting and integrated solutions. Providing consulting service with a commitment to attaining results and achieving client goals while delivering a level of service that will exceed the City of Sacramento's expectations.

Director – West Coast Operations, Serco Inc. **2007-2012**

- Responsible for the retention and expansion of the West Coast parking contract base, including a sole source $23M award. Increased revenue & profit for all assigned projects. Improved overall customer satisfaction & project delivery

Vice President – West Coast Operations, Nestor Traffic Systems, Inc. **2000-2006**

- Implemented the most innovative technological advancement in automated enforcement systems; directed all photo enforcement programs for the Western United States. Responsible for the negotiation, implementation, maintenance and enhancement of contract agreements.

Manager of Client Relations, *Lockheed Martin IMS* **1998-2000**

- Managed all operational aspects of the Southern California photo enforcement contracts with City and County municipalities. Served as the catalyst for all communications and correspondences between the corporation and clients. Instrumental in program development, contract expansions and program presentations.

CSO Coordinator, University of California Police Department, Santa Barbara, CA **1993 – 1998**

- Developed, trained & maintained specialized programs to increase awareness of and promote safety for the campus and community. Responsible for implementing and marketing the escort, safety/security, parking enforcement and bike programs for the University Police Department.

Parking Enforcement Officer, Santa Barbara County Sheriff's Department **1995-1997**

- Developed the parking enforcement officer program for the Santa Barbara County Sheriff's Department.

EDUCATION

B.A., Sociology, University of California, Santa Barbara

Certificate, 832 P.C. Reserve Officer Orientation, Santa Barbara City College

Bluewater Project Management Services, LLC was started in 1998 to provide cost efficient project and construction management, cost engineering, scheduling and claims mitigation consulting services. Our clients include the Port of Seattle's SeaTac Airport and Seaport Divisions, the Washington State A & E Division, Weyerhaeuser, Microsoft and Boeing's Facility Division. In 2004, we were selected by the Seattle Department of Transportation to plan and manage the modernization of the on-street parking payment system. Bluewater has actively supported Seattle's on-street parking planning and operations staff and the Parking Enforcement section with a series of contract engagements from 2004 to the present. In addition to the work with the Seattle parking programs, Bluewater was selected as a member of the team that recently and successfully introduced paid parking into Tacoma's downtown retail core. Bluewater's responsibilities included technology application recommendations, system design, revenue forecasting, equipment acceptance-testing and implementation project management. During the past 18 months, Bluewater has provided or is actively engaged in on-street parking system design and management consulting, occupancy analysis and technology application programs for a number of municipal organizations and industry vendors.

William Timmer is the principal of Bluewater Project Management Services, LLC. Prior to starting Bluewater, he managed large industrial engineering, operations, maintenance and construction projects for Procter and Gamble, Boise Cascade and Weyerhaeuser. Bill has focused his last 10 years working with municipal on-street paid parking and enforcement systems. From late 2003 through 2009, he provided professional services support to the City of Seattle, primarily with the parking planning, operations and enforcement organizations associated with all aspects of their on-street paid parking program. His knowledge of and experience with planning and implementing municipal wireless parking payment systems and the introduction of paid on-street parking to previously free urban business centers were the subject of international parking convention presentations in 2005, 2007 and 2010, respectively. He has recently been selected to help them evaluate equipment and enforcement asset renewal options.

Beginning in 2010, he has provided parking system design and implementation services to other municipal parking operations and industry vendors. Bill was the implementation manager for Tacoma's conversion of the downtown retail core from free to paid parking. He has developed innovative system parking designs and implementation cost estimates for Reno, Tucson, Salt Lake City, Oakland, Honolulu, the Los Angeles ExpressPark program and Washington DC. These systems have included working with all of the major parking payment equipment vendors, occupancy sensor providers, coordinated information and operations management systems and pay-by-phone payment. Each project included an analysis of parking and citation revenue improvement associated with the parking management systems.

Since May 2012, Bill has been the parking equipment vendor's implementation manager for Honolulu's replacement of their aging on-street payment equipment. The new system integrates the on-street meter with an occupancy sensor system. After six months of operation, the first phase on the system has demonstrated enhanced capacity for data management, system control and higher revenue generation. The results of this program were shared at the May 2013 IPI Conference.

APPENDIX III.A.1.I.IV – MMS SAMPLE REPORTS

DASHBOARD REPORTS

Dashboard

[redacted]

Historical Meter Health Area

[redacted]

Historical Meter Health Report

[redacted]

Historical Meter Health Sub Area

[redacted]

Historical Meter Health Zone

[redacted]

Historical Revenue Area

[redacted]

Historical Revenue Report

[redacted]

Historical Revenue Sub Area

[redacted]

Historical Revenue Zone

[redacted]

Manage Sub-Areas

[redacted]

Manage Zones

[redacted]

Meter Health Area

[redacted]

Meter Health Report

[redacted]

Meter Health Sub-Area

[redacted]

Meter Health Zone

[redacted]

Modes of Payment

[redacted]

Revenue Chart Sub-Area

[redacted]

Revenue Chart Area

[redacted]

Revenue Chart Report

[redacted]

Revenue Chart Zone

[redacted]

Screen Shot 2013-01-15 at 1.22.52PM

TAT Error Resolving Area

TAT Error Resolving Report

[redacted]

TAT Error Resolving Sub-Area

[redacted]

Type of Faults Zone

[redacted]

Types of Faults Report

[redacted]

Uptime Chart

[redacted]

MAPS REPORTS

Meter Locations Error

[redacted]

Meter Locations Finance

[redacted]

Meter Locations Standard

[redacted]

Sensors

[redacted]

[redacted]

[redacted]

ROUTES REPORTS

Coin Collection Routes

[redacted]

FINANCE SCREENSHOTS

Applied Rate

[redacted]

Coin Collection Detail

[redacted]

For Coin Collection Summaries

[redacted]

[redacted]

[redacted]

For Credit Card Settlements

[redacted]

Credit Card Types

[redacted]

Current Coin Revenue

[redacted]

Monthly Billing Reconciliation

[redacted]

Monthly Billing Report

[redacted]

Refund – Credit Card

Refunds – Processed

[redacted]

Revenue Between Collections

[redacted]

Smart Card Report

[redacted]

SUMMARY SCREENSHOTS

For Annual Revenue

[redacted]

[redacted]

For Coin Acceptance Summaries

[redacted]

[redacted]

Coin Collection Average

[redacted]

Coin Collection Totals

[redacted]

For Daily Revenues

[redacted]

Daily Statistics

[redacted]

Hourly Revenue

[redacted]

Meter Coin Collector Outsource

[redacted]

Monthly Revenue

[redacted]

Monthly Statistics Enhanced

[redacted]

Monthly Statistics

[redacted]

New Dashboard

[redacted]

Range Summary

[redacted]

Transaction Summary

[redacted]

DETAIL REPORTS

Enforcement Card Summary

[redacted]

Enforcement Card Usage

[redacted]

Find Pole

[redacted]

Meter Access Card

[redacted]

Meter Coin Collector Card Report

[redacted]

Meter Coin Collector Report

[redacted]

Meter Credit Card

[redacted]

Meter Diagnostic Card Report

[redacted]

Meter Pole Audit

[redacted]

Pole Transaction by Detail

[redacted]

Violations by Meter Report

[redacted]

TECHNICAL SCREENSHOTS

Adjudication

[redacted]

Battery Voltage

[redacted]

Call-in Count

[redacted]

Maintenance Activity Report

[redacted]

Pole Events

[redacted]

Pole Status History

[redacted]

Power System Health

[redacted]

Solar Voltage

[redacted]

Terminal Events

[redacted]

Terminal Stats History

[redacted]

EXCEPTIONS REPORTS

Coin Box Exception

[redacted]

Coin Collection Exceptions

[redacted]

Declined Transactions

[redacted]

Fault Summary

[redacted]

Faulty Meters

[redacted]

Monthly Events Summary

[redacted]

Non-Reporting Meters

[redacted]

Transaction Exceptions

[redacted]

ADMIN REPORTS

For Assign Configurations

[redacted]

For Assign RFID

[redacted]

Assign Terminals

[redacted]

For Configuration Update Log

[redacted]

[redacted]

[redacted]

[redacted]

Distribution List

[redacted]

Email PMR Report

[redacted]

Find RFID

[redacted]

Inactive Poles

[redacted]

Installation Report

[redacted]

Inventory Detail

[redacted]

Manage Areas

[redacted]

Manage Poles

[redacted]

Manage Route

[redacted]

Manage Screen Rights

[redacted]

Manage Sub-Areas

[redacted]

Manage Zones

[redacted]

Orphan Poles

[redacted]

Pole Configuration Assignment Log

[redacted]

Pole Configurations

[redacted]

Pole Configuration Details (Admin)

[redacted]

Pole Configuration Details (Display Strings)

[redacted]

Pole Configurations Details (Logging)

[redacted]

Pole Configuration Details (MagCard)

[redacted]

Pole Configuration Details (Main Control)

[redacted]

Pole Configuration Details (Op Config)

[redacted]

Pole Configuration Details (Parking Rates)

[redacted]

Pole Configuration Details (Special Days)

[redacted]

Pole Configuration Details (View Coins)

[redacted]

Pole History

[redacted]

Reassign Terminal Location

[redacted]

For Sensor Occupancy Summaries

[redacted]

[redacted]

[redacted]

Set Terminal Location

[redacted]

Spare RFIDs

[redacted]

Terminal Location History

[redacted]

User Administration

[redacted]

MY ACCOUNT REPORTS

Change Password

[redacted]

Customize Dashboard

[redacted]

Update Profile

[redacted]

City and County of **Honolulu**

Home | How it works | Survey | Video | FAQ

Presenting SmartMeters

Parking made stress-free

Park with one easy swipe. Presenting new SmartMeters in the City and County of Honolulu.

The City and County of Honolulu is piloting 340 new card and coin accepting parking meters around Honolulu to provide additional parking payment options for customers. These state-of-the art meters are solar powered, accept payment by phone, and are paired with vehicle detection sensors to gather valuable data about parking occupancy. Phase 1A of the pilot was installed on June 4, 2012 and the new meters are located in the following areas: Honolulu Civic Center Garage, S. King St. and Punchbowl St. near the state capitol building, and Honolulu Police Department. Phase 1B of the pilot was installed in the Chinatown and Financial Districts on July 23, 2012.

Parking Chief, Department of Transportation Services
650 S. King Street, Honolulu, Hawaii 96813
Rae Gee, Parking Chief
Phone: 808-768-8357 Email: parking@honolulu.gov

© 2012 City of Honolulu

City and County of **Honolulu**

Home | How it works | Survey | Video | FAQ

When visiting the City of Honolulu, you now have more options when paying for parking. In an effort to provide added convenience for customers, the Honolulu Department of Transportation Services is piloting 340 new card and coin parking meters in the Capitol District. The new meters will accept Visa and MasterCard credit/debit cards, in addition to coins. Simply park, pay, and be on your way!

The new meters are easy to use and convenient for motorists, which will help get you to your downtown destination as quickly as possible.

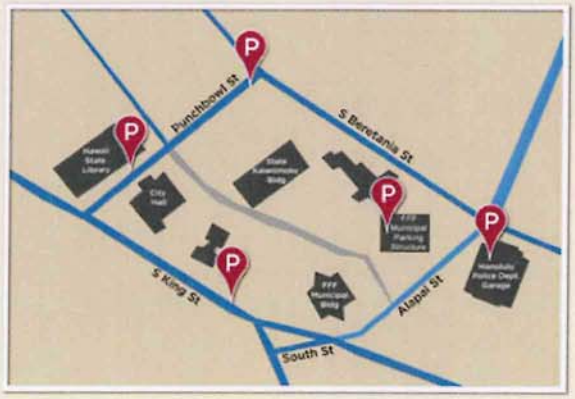
Follow these easy steps to complete an easygoing parking experience:

- Look at the SmartMeter's lit display to find parking rates, hours, time limits and other pertinent information.
- Insert then remove your debit/credit card. We accept Visa and MasterCard.
- With the blue [+] or [-] buttons, select your payment amount.
- Press green [OK] button to confirm your payment, or red [CANCEL] button to stop your transaction.
- Wait for authorization of the card.
- The display will then show the amount of paid time approved and when your time is up or the meter will request another card.
- Or just pay with coins!

Pay-by-cell | 877-727-5719

Here's where.

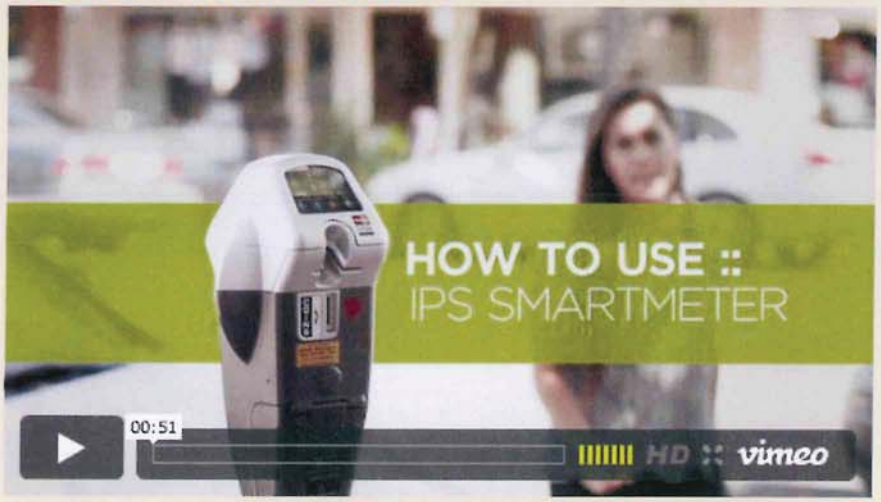
Use the new SmartMeters in the downtown area.



City and County of Honolulu

Home | How it works | Survey | Video | FAQ

How to use IPS SmartMeter



Customer convenience is the number one reason cities and universities around the world are upgrading their parking operations. IPS Meters are not only convenient because they take both credit cards and coins, but they also allow the parking public to pay where they park. They simply pull up, pay, and walk away. It's that simple. Watch this Demonstration Video and see for yourself.

San Diego-based IPS Group, Inc. is a design, engineering and manufacturing company focused on low power wireless telecommunications and parking technologies.

Parking Chief, Department of Transportation Services
650 S. King Street, Honolulu, Hawaii 96813
Rae Gee, Parking Chief
Phone: 808-768-8357 Email: parking@honolulu.gov

© 2012 City of Honolulu

City of Phoenix
Government at your Service

PARKPHX

Home | How it works | Survey | Video

Presenting SmartMeters

Parking made stress-free

Park with one easy swipe. Presenting new SmartMeters in Downtown Phoenix, AZ

The City of Phoenix will install 545 new card and coin accepting parking meters downtown to provide more payment options for customers. These new meters are solar powered and help minimize our carbon footprint, while providing valuable data for the City to evaluate future parking design.

City of Phoenix
200 W. Washington St. · Phoenix, AZ 85003 · 602-261-8090

http://phoenix.gov/streets/parkingmeters/index.html

© 2013 City of Phoenix

City of Bloomington
Gateway to Scenic Southern Indiana

Home | How it works | Survey | Video

Presenting SmartMeters

Parking made stress-free

Now you can park using your Credit Card, SmartCard, Pay to Park or change!

Presenting new IPS SmartMeters in downtown Bloomington.

City of Bloomington
Parking Enforcement · 812-349-3436

http://bloomington.in.gov/

© 2013 City of Bloomington

SINGLE-SPACE

PARKING METERS

M5™

IPS GROUP™

SINGLE-SPACE

PARKING METERS

IPS single-space meters provide customers and their patrons with a simple and consistent parking user experience, which is more cost effective, customer friendly, and more reliable than alternatives. The patented IPS solution uniquely provides a credit card enabled single-space meter mechanism that retrofits into your current on-street parking meter housing. IPS smart meters offer multiple payment options (credit/debit card, contactless payment, coins, smart card, and tokens), access to real-time data, solar power technology, and a comprehensive web-based management system.

PHYSICAL

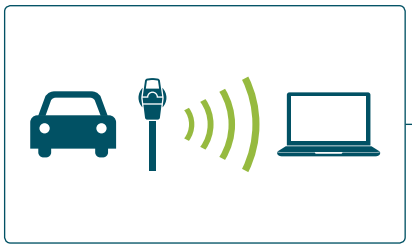
- Universal single-space meter mechanism retrofits almost all single-space meter housings, including: Duncan, MacKay, and POM
- Easy retrofit installation takes less than 15 seconds and requires zero modifications to existing housing
- Mechanism is protected by zinc alloy meter dome and UV resistant anti-fog Lexan cover
- Key pad has four easy-to-read mechanical buttons for intuitive payment navigation which are rated at more than 250,000 cycles
- Tri-colored LED lights on front and back of meter alert enforcement officers of meter status: paid (green), unpaid (red), and meter fault (yellow)
- Vandal resistant coin slot/chute allows for worry free operation and quick servicing
- Meters use an environmentally friendly solar panel and combination rechargeable/back-up battery pack to maximize ongoing power
- Proven to operate under varying environmental conditions: snow, sleet, rain, humidity, dust storms, and in extreme cold and heat
- RFID Technology – Not only is meter inventory 100% accurate, but even if you swap a meter, RFID technology will automatically identify the meter location and download the correct operating parameters for the exact meter location

"By reusing our existing poles and using clean solar power, these new Coin and Card meters are a win-win for customers, the city, and the environment."

— Los Angeles Mayor Villaraigosa

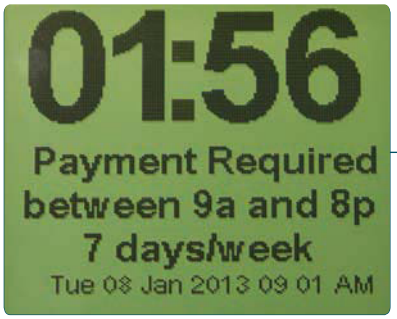
PAYMENT OPTIONS

- Meters accept payment with credit/debit card, coins, tokens, and smart card at the meter terminal
- Optional contactless payment and NFC applications
- Integrates with pay-by-cell applications for additional customer convenience options
- PA-DSS and Level 1 PCI-DSS certification ensures secure credit card transactions for customers



WIRELESS

- Meters communicate wirelessly via the cellular network and are connected to a web based management system
- No additional communication hardware needs to be installed other than meter mechanism
- No additional customer software other than an internet browser is needed to access the management system
- Meters wirelessly notify parking operations staff of any faults, such as card reader or coin validator jam, via text message, email, or both



GRAPHICAL DISPLAY

- Large 160 X 160 pixel backlit LCD operates at temperatures of -40°F to +185°F (-40°C to +85°C)
- Display toggles between multiple screens which can display metered time, parking rates, maximum stay period messages, current time of day (including when meter will expire), and other alpha-numeric or graphical messages depending on the status of the meter
- Remote programming via web-based management system
- In the event of a coin jam, meter will continue to allow payment via credit/debit card, smart card, or pay-by-cell and will display "Cards Only, No Coins" on the display and the message is reversed if there is a card reader jam

CENTRALIZED DATA MANAGEMENT SYSTEM

- Meter communicates wirelessly via the cellular network to a central data management system
- Ability to integrate with other meter, enforcement, and third party management systems
- Comprehensive set of financial and technical reports, and administrative tools
- Revenue and payment information available in real-time to validate parking enforcement
- Wireless integration of vehicle detection sensors and smart cash collection system for additional enforcement features and parking operations analysis

PROVEN PARKING METER RETROFIT

NEW Model M5

Model 132

Model 147

Model 795

Scan to view install video

Operational within seconds. The IPS Single-Space Parking Meter is engineered to be a direct replacement upgrade that fits into the city's existing single-space housings. Simply remove the original top and mechanism and replace it with the new ones. The meters will be operational within seconds, thereby minimizing installation time, cost and risk.

Let us prove it to you with a risk-free 90 day field trial.

IPS GROUP™
Parking & Telecommunications

We are a design, engineering and manufacturing company focused on ultra-low power wireless telecommunications and parking technologies. With installations across the US and Canada, we've quickly grown to be the leading supplier of single-space credit card enabled parking meters, vehicle detection sensors, and parking management software. We are continually developing new and innovative technologies to meet customer's needs and ensure our products are supported by an outstanding customer service team.

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Call for an on-site demo: **858.404.0607** | Toll Free: **877.630.6638**

WEB-BASED

DATA MANAGEMENT

WEB-BASED

DATA MANAGEMENT SYSTEM

The IPS Data Management System (DMS) is a real-time, web-based application that allows parking professionals to remotely monitor their parking network from anywhere, at any time. A comprehensive set of financial, technical, and administrative reporting features and remote meter configuration make this system both intuitive and powerful. The DMS allows managers to seamlessly integrate parking meters, vehicle detection sensors, pay-by-cell, and other smart technology suite applications.

All reports can be exported into various formats, including XLS, CSV and PDF

FINANCIAL REPORTS

- Provide real time financial information on meters, sensors, and smart coin collection system
- Ability to individually audit each meter for revenue and coin content
- Meters are logically grouped to clearly display revenue of a particular city block, street, or neighborhood for easy rate evaluation
- Monthly statistics report provides a summary of all transactions for the year by month
- Pole transaction detail report assists in parking ticket adjudication by displaying the date/time and amount of time purchased, in addition to transaction type

TECHNICAL REPORTS

- Provides real time information and live alerts on the status of meters and sensors, including battery status, occupancy status, full coin box, and any faults such as coin or credit card jams
- View detailed events for each meter, including every transaction, operational status and maintenance logs
- Easily monitor the health of the meter's power systems, such as battery voltages and solar voltages

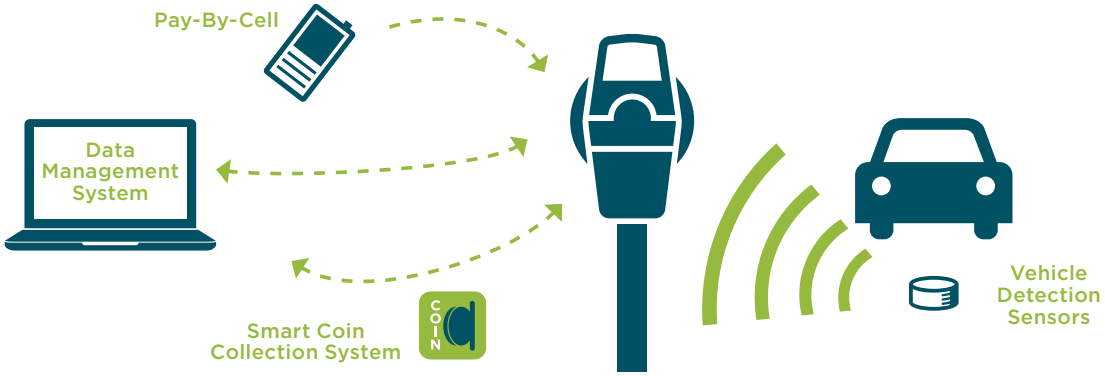
ADMINISTRATIVE TOOLS

- Notification alerts regarding faults and status of meters are distributed to staff via email, text message, or both to increase meter up time and help improve program efficiency
- Installation and inventory reports provide accurate inventory control and asset management
- Meter configuration tools allow for easy adjustment of rates, hourly settings, and parking exceptions
- User profiles are created to control and monitor user access to the Data Management System

UTILITY APP FOR ANDROID OS

- View current maintenance requirements and log all service activity on your smart phone
- Easily create a customized list for fault logging using current City standards
- Ability to change configurations and swap RFID tags remotely
- Review meter fault list in the field and be directed to identified meters

IPS PRODUCT FAMILY



The IPS solution utilizes wireless technology to allow meters and sensors to talk to one another and then transfer data to a centralized data management system. IPS single-space parking meters work as a team with vehicle detection sensors and our web-based Data Management System (DMS) to help customers effectively evaluate parking trends and adjust programs accordingly. Cities are able to quickly upgrade existing meters, easily track revenue, send enforcement directly to vehicles in violation, and improve the efficiency of overall parking operations; all while holding customer satisfaction at a premium.

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Parking Meters | Data Management System | Vehicle Detection Sensors | Smart Technology Suite

SENSORS

(Actual Size)

SENSORS

IPS Vehicle Detection Sensors provide a reliable detection system for the presence and absence of a vehicle in a parking space. The IPS sensor uniquely directs all sensing information via the IPS parking meter cellular communications backbone, saving customers the hassle of installing additional network equipment and dramatically reduces the cost of ownership.

The IPS sensor uses multiple sensing technologies to detect large metal objects. Its unique design provides the most accurate data on the sensor market and allows for quick installation and servicing.

"Thanks to visionaries like Donald Shoup, cities are discovering the power of demand based pricing and realizing the true value of their on-street parking by utilizing smart parking meters and sensors to collect valuable data."

— Dave King,
CEO IPS Group

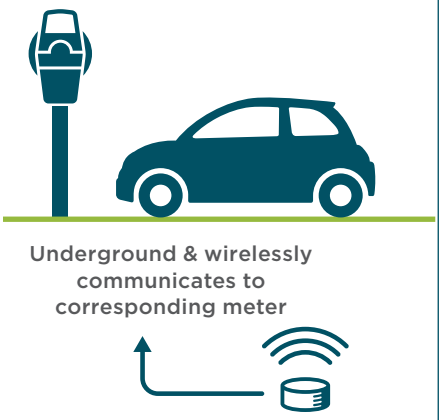
FEATURES

- Sensor is wirelessly paired with an IPS parking meter to detect the presence or absence of a vehicle
- Sensors are 3" in diameter and 7/8" in height and weigh .14 kg (0.3lbs)
- Sensor is fully encapsulating and contains the power source and antenna for a completely wireless solution
- Power is maintained by an integrated lithium battery pack for maximum battery life
- IPS utilizes an air/water tight sensor housing, which allows sensor to be easily removed or serviced in the field

Sensor alerts meter when vehicle arrives/departs

SENSING METHODOLOGY

IPS Vehicle Detection Sensors use multiple sensing elements to produce maximum sensor sensitivity. A ferrous object, such as a vehicle's engine block, alters the local magnetic field surrounding the sensor. As a car pulls into a parking space, the sensor detects the change in the magnetic field and relays the information to the IPS parking meter. The sensor can be fine tuned to register a movement of a vehicle in a specific space; increasing accuracy and making data received more valuable.



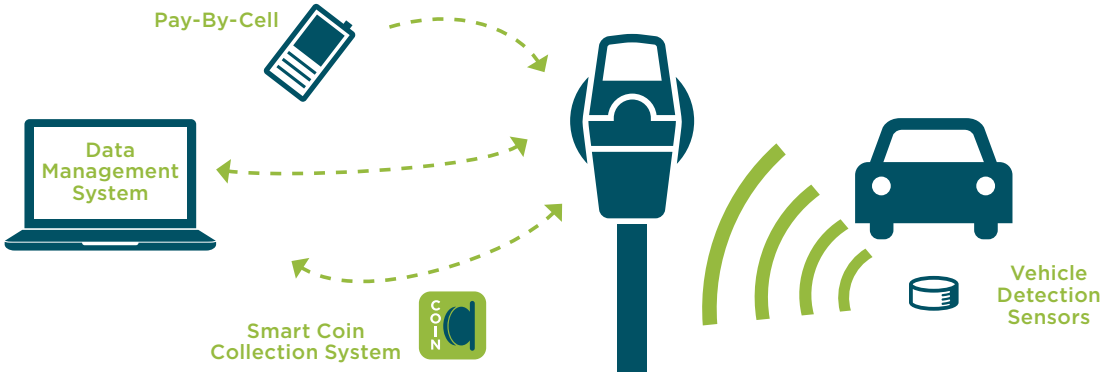
INSTALLATION

Sensor installation is easy and can be done in coordination between City and IPS staff. For best performance, sensors are installed below grade, typically 2 3 inches below the surface. For the most accurate results, sensors should be installed under the area where the engine of the car is expected to be.

BENEFITS

- Sensor communicates directly to IPS meter rather than a mesh communication network, providing the most reliable communication transmission available at a significantly lower cost
- Real time occupancy data is available via web based data feed, supporting maps and smartphone applications
- Supports anti meter feeding policies
- Option to reset meter when car pulls away (Scan QR code for a demonstration)
- Provides cost effective option to implement demand based pricing strategies
- Ability to add courtesy time on the meter, which gives motorists free time when they first pull into a space

IPS PRODUCT FAMILY



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Parking Meters | Data Management System | Vehicle Detection Sensors | Smart Technology Suite

COLLECTION
CART S. No.:
0000060

SMART COLLECTION

SMART COLLECTION SYSTEM

As part of the IPS smart technology suite, the Smart Collection System offers additional accountability for the collection process.

The patented IPS cash tracking system gives customers access to additional meter data and provides greater transparency for their collection program.

FEATURES

- Wirelessly paired with IPS Meter to transmit information to the web-based Data Management System
- Coins are counted as they are deposited into the smart cash canister for dual accountability
- Registered key fob notifies the system who the person is that is doing the collections
- Time stamps are reported to management system when cash can is removed, deposited, and if the correct can is placed back in the vault
- Mobile application to manage Cash Can assignment

BENEFITS

- Coins collected can be reconciled against the Data Management System reports, providing an additional level of accountability
- Cash Box is secure and tamper resistant
- Collection cart utilizes GREEN technology to recharge itself via wheel motion-generated energy

AUDITING CAPABILITIES

- Provides three levels of assurance – when coins pass through the validator, they are registered in the DMS; when collected using the IPS Smart Collection System; and when reconciled against bank statements
- Can be reconciled with the Cash Cart Collections Report to verify that the amount of coins in the cart matches the quantity shown in the DMS

INSTALLATION

- **STEP 1** Replace old Cash Can with Smart Cash Can
- **STEP 2** Assign new Cash Can to pole using mobile app
- **STEP 3** Place new Smart Cash Can into meter and lock

COLLECTION PROCESS

- **STEP 1** Identify the collector using Fob
- **STEP 2** Pick up Cash Can for collection
- **STEP 3** Empty coins into secured canister
- **STEP 4** Replace Smart Cash Can into meter and lock

IPS PRODUCT FAMILY

The IPS solution utilizes wireless technology to allow meters and sensors to communicate with one another and then transfer data to a centralized data management system. IPS offers a complementary product suite comprised of single-space parking meters, vehicle detection sensors and a state-of-the-art web-based Data Management System (DMS) which allows customers to evaluate real-time parking data, forecast trends, and to make data-driven adjustments to their parking programs. By partnering with IPS, customers are able to quickly upgrade existing meters, easily track revenue, send enforcement directly to vehicles in violation, and improve the efficiency of overall parking operations while at the same time enhancing the customer experience.

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IPS™ GROUP
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IPS manufactures its parking meters in the US and has been delivering world-class solutions to the telecommunications and parking industries for over 20 years. The company is best known for their patented credit card-enabled, solar powered single-space parking meter and comprehensive web-based meter management system, and continues to deliver cutting edge and innovative parking solutions to meet the evolving needs of its diverse customer base.

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