



Information Technology

COUNTY OF TULARE

AGENDA ITEM

BOARD OF SUPERVISORS

ALLEN ISHIDA
District One

PETE VANDER POEL
District Two

PHILLIP A. COX
District Three

J. STEVEN WORTHLEY
District Four

MIKE ENNIS
District Five

AGENDA DATE: June 2, 2009

Public Hearing Required	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Scheduled Public Hearing w/Clerk	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Published Notice Required	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Advertised Published Notice	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Meet & Confer Required	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Electronic file(s) has been sent	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Budget Transfer (Aud 308) attached	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Personnel Resolution attached	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Resolution, Ordinance or Agreements are attached and signature line for Chairman is marked with tab(s)/flag(s) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>						

CONTACT PERSON: Peg Yeates PHONE: 636-4805

SUBJECT: Purchase of a new mainframe computer system to support property tax assessment and collection.

REQUEST(S):

That the Board of Supervisors:

1. Approve the agreement with Levi, Ray and Shoup, Inc, (LRS) Inc. for the implementation of a new IBM Mainframe computer system to replace the County's current system, and to provide ongoing hardware support for this system for a period of 3 years for the mainframe computer and two years for the disk and tape subsystems. LRS, Inc. will work with County staff to upgrade the mainframe support software used by the County to supported release levels, and to migrate the County's mainframe computer environment and applications to the new hardware and operating system.
2. Approve the fixed asset purchase of hardware and software to support this implementation at a cost not to exceed \$513,873. The items included in this overall cost are detailed in Attachment A.
3. Approve the expenditures from Capital Projects budget line 030-086-3400-5203.
4. Authorize the Chairman to sign the agreement with LRS, Inc. and the

SUBJECT: Purchase of a new mainframe computer system to support property tax assessment and collection
DATE: June 2, 2009

Addendum to the LRS agreement.

SUMMARY:

Tulare County currently owns an IBM mainframe computer that was purchased in 1996. This system hosts the County's property tax system, known to the County as Property Information Management System (PIMS), as well as several other minor systems that support the PIMS functions. The PIMS system is vital to the business of the County, since it is used by both the Assessor and Auditor to assess property taxes and collect them on the County's behalf. As both the hardware and system software are no longer supported by IBM except at substantial cost to the County, Information Technology recommends that both the hardware and system software be replaced at this time to allow the continued support of the property tax system, PIMS.

The Information Technology Department recommends entering into an agreement with Levi, Ray and Shoup, Inc. (LRS) to purchase an IBM Z10/B01 mainframe computer along with component hardware and software as listed in Attachment A. LRS was chosen as a sole source vendor for this project after an informal RFI process. LRS successfully competed for a similar project for the City of Los Angeles through submission of an RFP. LRS proposes to install this system and configure it to the specifications required by Tulare County. They also propose to assist the County in migrating its mainframe environment and its PIMS software from the current mainframe system to the new system.

By replacing the County's current mainframe computer, all hardware and operating system software will be supportable by IBM through their normal support services. The purchase price of the computer system includes three years of prepaid hardware maintenance for the mainframe computer and two years of prepaid maintenance for the disk and tape subsystems. The current cost for software support for IBM and third party system software products is \$454,763. With the update of the hardware and system software to supported versions, this cost will drop to \$390,000.

By upgrading the County's mainframe environment to current technology, the County opens the possibility of partnering with another government entity with a similar system as a disaster recovery partner. The County could develop a partnership with another entity to use their computer systems to run PIMS in the event of a failure in its own equipment or premises. In order to do this, the two environments have to be very similar, however. The County's current environment is too outdated to make such an arrangement with another county.

In addition to supporting the PIMS system into the future, the new mainframe

SUBJECT: Purchase of a new mainframe computer system to support property tax assessment and collection
DATE: June 2, 2009

computer system has the ability to be used by additional systems. The new mainframe can be configured to have sections of it run alternate operating systems in addition to its native IBM operating system. Information Technology will be able to support virtual Linux application servers within the mainframe environment that connect to the County's network without degrading the performance of the environment or the ability to run the PIMS application. These servers will be especially valuable for testing and small applications where the purchase of dedicated hardware would be too costly. In hosting these additional virtual systems, there would be no impact to the mainframe processing that is running simultaneously. Tulare County is already expanding its use of virtual servers and open source systems. The additional capabilities of the mainframe computer system being purchased increases the County's capacity in this area for very little cost or maintenance requirements, as those costs are already covered in the normal operation of the mainframe computer environment.

In entering into the contract with LRS, Inc., several sections of the contract need to be highlighted. Though none of these sections are relevant to the agreement between the County and LRS, Inc, and thus do not pose an actual risk to the County, they need to be recognized before the board as contrary to County contract practices:

Section 1.8 of the agreement with LRS addresses refund of prepaid Enterprise Growth Offering (EGO) costs in the event that LRS ceases to be the County's Business Partner of Record (BPR) with IBM. EGO was a program under which a small IBM client could prepay their software costs at a discount, but they had to be paid a year in advance. The proposal between LRS and the County does not include any EGO, and so this section is not a risk to the County.

Section 2.3.3 of the agreement states that the County will hold LRS harmless from any claim arising from the County's use of Third Party software unless such claim arises from LRS' breach of its obligations regarding the Third Party. In doing this, there is risk implied to the County as LRS will be assisting the County to implement its PIMS software in the new environment, and this software requires the use of several products provided by Third Party software companies. Information Technology does not find this to be a substantial risk to the County, as all such software has been in use in Tulare County for at least 15 years, and no claims have arisen to date.

Section 2.4.1 and 2.5.1 of the agreement contain language that may put the County at risk to the payment of attorney's fees and damages related to development of custom work product from LRS if it would violate a third party patent, trade secret or proprietary right (section 2.4.1), or any development of an application that would create, display or accept information on the World Wide Web, Internet, or private network. LRS will not be developing any such

SUBJECT: Purchase of a new mainframe computer system to support property tax assessment and collection
DATE: June 2, 2009

applications for the County under this contract, so there is no risk to the County from either of these sections of the contract.

FISCAL IMPACT/FINANCING:

The purchase of the hardware and software will be funded through the Capital Projects budget in line 030-086-3400-5203.

LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:

Operational Performance:

The use of the current mainframe computer is a risk to the county because the technology is now unsupported by normal means. The county has extended the life of the system as much as possible through third party support and purchase of spare parts, but to continue to do this risks the County's ability to maintain the PIMS system. Purchasing state-of-the-art technology to replace the existing system will not only extend the life of the PIMS system for at least five years, but will also provide the County with the ability to expand the use of the mainframe system into other areas that benefit the County, such as virtual servers and open system technology.

SUBJECT: Purchase of a new mainframe computer system to support property tax assessment and collection
DATE: June 2, 2009

ALTERNATIVES:

There are two alternatives available to the County in lieu of this request.

The County could choose to do nothing. The existing hardware and software would continue to be used as long as the PIMS system is in use in Tulare County. To do so would increasingly risk the County's ability to support the PIMS application for the assessment and collection of property taxes. Software maintenance costs would remain at \$454,763 until renegotiated by the software vendors. At that time they would be anticipated to increase, if support would continue to be available at all. The cost for parts and service for the hardware would also increase substantially over time. There would be an increased risk to the County that parts or service are not available. IBM Service would be available, Monday through Friday, 8:00 a.m. to 5:00 p.m. only, at a cost of \$300 per hour plus travel and expenses, plus the cost for parts and materials if they can be found. Eventually the County may have to replace some or all of the hardware in order to maintain service even under these terms.

The County could choose to look to an outside entity to host the County's PIMS application. This alternative was researched by Information Technology to determine if it was a reasonable alternative. The County of Fresno did respond to Information Technology's inquiry. Tulare County could run its PIMS application from Fresno County's data center. The cost to do so would actually increase. The County would lose control over their mainframe environment at additional risk to the PIMS application. The County would also not gain the additional benefit of expanded use of virtual servers and open systems that would be available through the excess capacity of the system.

INVOLVEMENT OF OTHER DEPARTMENTS OR AGENCIES:

1. County Counsel reviewed the contract with LRS, Inc. for this request.
2. County's Administrative Office has reviewed the proposal and this report and concurs with the Department's recommendations.
3. Funding for this project will come from the Capital Projects budget, line 030-086-3400-5203.

SUBJECT: Purchase of a new mainframe computer system to support property tax assessment and collection

DATE: June 2, 2009

ADMINISTRATIVE SIGN-OFF:



Name Peg L Yeates

Title Information Technology Department Director

Cc: Auditor/Controller
County Counsel
County Administrative Office (3)

Attachment(s)

Attachment A – Mainframe Hardware, Software and Services Costs

Attachment B – LRS, Inc. Proposal

Attachment C – LRS Agreement

Attachment D – Addendum to LRS Agreement for Tulare County

Attachment E – LRS Statement of Work

BEFORE THE BOARD OF SUPERVISORS COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF Purchase of a new)
Mainframe computer system to support)
Property tax assessment and collection)

RESOLUTION NO. _____
AGREEMENT NO. _____

UPON MOTION OF SUPERVISOR _____, SECONDED BY
SUPERVISOR _____, THE FOLLOWING WAS ADOPTED BY THE
BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD _____
_____, BY THE FOLLOWING VOTE:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST: JEAN M. ROUSSEAU
COUNTY ADMINISTRATIVE OFFICER/
CLERK, BOARD OF SUPERVISORS

BY: _____
Deputy Clerk

* * * * *

1. Approved the agreement with Levi, Ray and Shoup, Inc, (LRS) Inc. for the implementation of a new IBM Mainframe computer system to replace the County's current system, and to provide ongoing hardware support for this system for a period of 3 years for the mainframe computer and two years for the disk and tape subsystems. LRS, Inc. will work with County staff to upgrade the mainframe support software used by the County to supported release levels, and to migrate the County's mainframe computer environment and applications to the new hardware and operating system.
2. Approved the fixed asset purchase of mainframe hardware and software to support this implementation at a cost not to exceed \$513,873. The items included in this overall cost are detailed in Attachment A.

3. Approved the necessary budget adjustment as per the attached AUD308.
4. Authorized the Chairman to sign the agreement with LRS, Inc. and the Addendum to the LRS agreement.

Attachment A: Mainframe Hardware, Software and Services Costs

Hardware, Software and Services Paid to LRS, Inc.

Hardware to be purchased as a fixed asset in 2009		Purchase Price
2098-E10	Z10 B01 Mainframe	149,000.00
	Disk Drives (2.3tb) w/2 yr Maint	55,000.00
	Tape Silo (2/drives) w/2 yr Maint	154,000.00
	Sales tax @ 9%	32,220.00
	Total Mainframe Purchase Price	390,220.00
Services to be paid in FY09		
	Cabling Service	5,000.00
	3 yr Pre-Paid Maint on Mainframe	45,000.00
	One-Time Charge for z/Vm5	7,200.00
	Tax on software purchase	648.00
	Services and Software Total	57,848.00
	Total Included Software/Maint/Services	448,068.00

Ongoing Charges to be paid to LRS in FY10	Monthly Cost	Annual Total
Z/VM5 Support/Maint - paid annually	150.08	1,801.00
IBM Software (included in IT budget already)	12,700.00	152,400.00
LRS SOW Conversion - mthly amt varies	3,333.33	40,000.00
Total LRS Software and Conversion Services	16,183.42	\$194,201.00

Supplies and Services paid to other vendors - 2010 budget

IBM	100 Tape Cartridges	145.00 each	
AC Electric	Wiring and site prep	plus tax	\$15,805.00
Various	Third Party Software (included in IT budget already)		\$10,000.00
			120,000.00

Project cost summary:

Mainframe purchase price	390,220
Installation services, maintenance and one-time software costs	57,848
Conversion services	40,000
Wiring and site prep	10,000
Tape cartridges	15,805
TOTAL COST:	513,873



IBM zSeries Proposal

FOR: Tulare County

May, 2009

LRS Proposal

IBM zSeries Hardware

Hardware Maintenance

IBM Software

Final IBM special software pricing subject to final approval by IBM.

Prices do not include applicable taxes, distribution and setup charges.

LRS NEW Proposed Hardware\ Maintenance

IBM z10 B01 30 MIPS 4 MSU

Z10 B01 **\$149,000**

30 MIPS

8 Escon Channel

6 Ficon Channels

4 OSA-Express 1000 Base-T

8 GB Memory

IFL

3 YR Prepay Hardware Maint **\$45,000**

LRS Installation Services **Included**

Cabling Service **\$5,000**

IBM USED DS 6800 DISK SYSTEM **\$55,000**

16 – 146 GB drives 2.36 TB total capacity

2 Ficon – 2 Ports

2 Yr Warranty

No Rack

IBM Used Tape System **\$154,000**

TS3500 Automated Tape Library 3584

(2) 3592-E05 Tape drives w/encryption

3592 J70 controller w/Ficon

IBM Tapes (QTY 20)

2 YR Prepay Maint

Optica Converters (Escon) QTY 4	\$0
---	------------

IBM LINUX SOFTWARE

Z/VM5 OTC Software	\$7,200
---------------------------	----------------

Z/VM5 S&S Yearly 3 Years	\$5,403
BILLED AT \$1801 YEARLY BY IBM	

<u>Total Cost</u>	<u>\$420,603</u>
--------------------------	-------------------------

LRS Conversion Services (\$150 Hour)	\$40,000 Est.*
Does not include T&E	

*** Services and related T&E will be billed monthly as work is done.**

LRS Migration and Training Services

INCLUDED IN THE LRS IBM CPU HARDWARE COSTS

Services Description

Hardware Services

Install new processor and associated hardware (i.e. HMC)
De-installations existing hardware as required
(Z900 deinstallation separate line item in RFP response)
Test of all Hardware and Verify Operation

Cabling Services (see FINANCIALS for hours and costs)

Assign Cabling Services Project Manager
Design cabling plan
Run / Install fiber cables
Install Optica Parallel Converters as required
(Note: Cabling includes interface cables as well as planning and installation)

Implementation Services

Z/9 Planning & Implementation

- Physical installation planning
- Power and HVAC planning
- Implementation Scheduling
- Conduct System Assurance Reviews
- Prerequisite System Activities
 - a) Verify HW and SW compatibility
 - i. PSP Buckets
 - ii. z990 Migration Kit
 - iii. Required PTF's
 - iv. Microcode and EC levels
 - v. ISV (3rd party SW) assist.
 - b) Migrate HCD to Logical Channel Sub-system
 - c) Run CHIPID Mapping Tool
 - d) Output PCHIDS to HCD
 - e) Production testing verification assistance (pre-cutover)
 - a) IPL test production environment
 - b) Verify all HW & SW functionality
 - c) Conduct pre-cutover meeting
- On-site System cutover assistance
 - a) Provide onsite Technical & PM assist.
- Verify systems operations (post-cutover)
 - a) IPL production environment
 - b) Verify all HW & SW functionality
 - c) Conduct post-cutover meeting

Project Management

- Conduct Project Kickoff Meeting
- Develop Project Charter / baseline schedule
 - a) Create Gantt Chart (MS-Project)
 - b) Develop "Project Initiation Report)
- Finalize all Project Milestones and Tasks
- Coordinate all Phases of Project
 - a) Initiation
 - b) Planning / Design
 - c) Execution & Control
 - d) Close-out
- Communicate with all Shareholders
 - a) Conduct Regular Status Meetings
- Verify completion of all Project Deliverables

Services Time Breakout

LRS Migration Services for NEW processors

100 hours of Project Management provided for NEW processor

80 hours on site migration assistance
IBM IPR and LRS Site Inspection
Ascertain cable Lengths
Determine appropriate cable connections
OSA-QDIO Setup and Configuration
OSA-ICC Import
Assist with z990 Exploitation kit
Assist with 2086DEVICE PSP Bucket
Conduct 2086 Systems Assurance Review

120 hours Implementation Services not on site
HCD conversion, Migration to LCSS,
CHPID Mapping, Cable Labeling
OSA-ICC Setup and Export
OSA QDIO Demonstration

LRS Training at Location

80 hours on site C Operator and Technical Training on
HMC & SE

80 hours Systems Programmer Skills transfer - hands on training
2086
HMC/SE
LCSS/CMT
HCD
OSA
Non-ICC OSA
ICC OSA



CUSTOMER AGREEMENT

This Agreement by and between Levi, Ray & Shoup, Inc. ("LRS" or "we") and the entity signing below ("Customer" or "you") shall become effective as of the date of Customer's signature set forth below ("Effective Date"). Both parties may be referred to as "us."

This Agreement covers business transactions you may enter into with LRS to acquire hardware, software, equipment and services, now or in the future. A Customer's Affiliate also may acquire hardware, software, equipment or services pursuant to these General Terms and Conditions by executing a Statement of Work or Order that references and incorporates the same. For the purposes of this Agreement an Affiliate means any Company controlling, controlled by or under common control with Customer. Control means direct or indirect beneficial ownership of more than fifty percent (50%) of the share capital, stock or other participating interest carrying the right to vote or to distribution of profits of that entity, as the case may be.

This document, including Standard Terms and Conditions V3.3, Statements of Work and other documents signed by us pursuant to this Agreement, constitute the complete agreement regarding these transactions and replace any prior oral or written communications between us.

Any reproduction of this Agreement, including Orders, Statements of Work and other documents signed by one of us pursuant to this Agreement, made by reliable means (e.g. photocopy, facsimile, scanned image) may be delivered, fully or partially executed, to the other party electronically (e.g. facsimile or electronic mail). Any such reliable reproduction of this Agreement or other document shall be considered an original in all respects and any authorized signature thereon shall be deemed genuine irrespective of whether the signature is an original or a reproduction made by reliable means. All hardware, software, equipment and services you order while this Agreement is in effect are subject to its terms.

ACCEPTED BY LRS:

Levi, Ray & Shoup, Inc.
2401 West Monroe Street
Springfield, IL 62704
Facsimile: (217) 787-6893

ACCEPTED BY CUSTOMER:

Tulare County, CA
221 S Mooney Blvd
Visalia, CA 93291
Facsimile:

Signature

Signature

Print name

Print name

Title

Title

Date

Date

Contract Number 1-10TFH9

EXPLANATION OF AGREEMENT

The below Standard Terms and Conditions are divided into three sections.

Section 1.0 applies only to those transactions where you order hardware, equipment, software and/or maintenance subscriptions, none of which are owned or manufactured by LRS (an Order). Section 1.0 also applies to Incidental Services we may perform in connection with an Order under Section 1.0.

Section 2.0 applies only to those transactions where you are to receive billable services from LRS as described in a Statement of Work signed by both of us.

Section 3.0 contains general terms and conditions that apply to all transactions taking place under Sections 1.0 and 2.0.

STANDARD TERMS AND CONDITIONS V.3.3

- 1.0 Terms and Conditions for Products, Maintenance Subscriptions and Incidental Services:**
- 1.1 **Definitions.** "Products" shall mean any non-LRS equipment, non-LRS hardware (including any licensed internal code and any written materials), and/or non-LRS software programs that we may provide to you. "Incidental Services" shall mean the performance of a task by LRS which is incidental to, in conjunction with and in direct support of the Products sold hereunder and which is provided at no additional charge to you (including but not limited to installation). Incidental Services shall not include tasks performed by LRS for which you are billed pursuant to a Statement of Work as described in Section 2.0. "Maintenance Subscriptions" shall mean any non-LRS maintenance subscription or other non-LRS services you may purchase pursuant to this Agreement.
- 1.2 **Placement of Order.** You may place an Order by sending LRS a purchase order, or any other written document issued by you. The Order will describe the specifics of the transaction, namely, price, Product, Maintenance Subscriptions and/or Incidental Services, and quantity. However, any other terms set forth in an Order besides price, Product, Maintenance Subscriptions and/or Incidental Services, and quantity that are in addition to, or in conflict with, this Agreement, will not be binding unless the Order is signed by us. You may request LRS to sign any Order that you have signed or will sign.
- 1.3 **Acceptance of Order.** A Product or Maintenance Subscription becomes subject to this Agreement when we accept Customer's Order. We accept an Order when we do any of the following: 1) send you an invoice for the Product or Maintenance Subscription; 2) sign any Order which you request LRS to sign which is also signed by you; 3) cause the Product to be shipped; 4) provide Incidental Services related to an Order; or 5) cause the Maintenance Subscription to be provided.
- 1.4 **Additional Terms.** The manufacturer of the Product or provider of the Maintenance Subscription may require you to enter into a separate agreement with such manufacturer or provider.
- 1.5 **Delivery.** We will use commercially reasonable efforts to meet Customer delivery requirements for Products and Maintenance Subscriptions you order, and will inform you of their status. Unless otherwise agreed by the parties in writing, transportation charges will be Customer's responsibility and will be specified in LRS' invoice to you.
- 1.6 **Payment Terms.** The amounts due under an Order shall be due and payable within thirty (30) days of receipt of LRS' invoice to you for the same.
- 1.7 **Security Interest in Products.** Customer hereby grants LRS a purchase money security interest in any Product(s) purchased hereunder for the full amount of the purchase price, together with any proceeds therefrom. Customer grants LRS the authority to file UCC Financing Statements with the appropriate bodies without need for Customer's signature on such statement(s).
- 1.8 The parties agree the terms and conditions set forth in this Section apply only to orders for the IBM Enterprise Growth Offering ("EGO"). LRS may only market EGO to Customer as long as LRS is Customer's IBM Business Partner of Record ("BPR") for the applicable hardware. BPR status is determined pursuant to rules established by IBM governing all IBM Business Partners. Provided LRS remains the BPR, LRS agrees to provide EGO at the prices set forth in the applicable Order. However, if LRS ceases being the BPR for the applicable hardware, LRS' obligations regarding the applicable EGO shall cease, LRS shall refund any unused portion of pre-paid EGO, and Customer will be required to purchase EGO through the new BPR. LRS' prices are not binding upon any other entity that may become the BPR.

- 2.0 Terms and Conditions for LRS Services:**
- 2.1 Statement(s) of Work. During the Term of this Agreement, LRS agrees to provide certain services ("LRS Services") as outlined in Statement(s) of Work that may be written from time to time describing the services, time for performance, cost and terms for payment, LRS employees performing work, reimbursed expenses, and other special terms. No obligation to provide or pay for any such LRS Services shall be incurred by either party until a Statement of Work has been executed by both parties. Should the terms and conditions stated in the Statement of Work conflict with the terms and conditions of this Agreement, the terms and conditions of the Statement of Work shall control and prevail for the applicable LRS Services.
- 2.2 Fees and Payment. Fees for all LRS Services hereunder shall be set forth in a Statement(s) of Work and annexed hereto. If the fees are on a time and materials basis, LRS shall maintain contemporaneous daily time records of services performed. All LRS Services rendered hereunder shall be invoiced monthly as work progresses. Payment is due immediately upon receipt of invoice.
- 2.3 Proprietary Rights to Software.
- 2.3.1 Custom Work Product Defined. "Custom Work Product" means the resulting software, if any, (including all functional and technical designs, programs, modules, code, algorithms, flowcharts, data diagrams, documentation and the like) created by LRS after the Effective Date of this Agreement solely on behalf of Customer and in furtherance of a Statement of Work. Custom Work Product does not include: software licensed to Customer by any third party either pursuant to Section 1.0 of this Agreement or otherwise ("Third Party Software"); any software owned by or licensed to LRS (other than Third Party Software) and incorporated or "embedded" into the Custom Work Product ("Embedded Software"); or any Product provided to Customer pursuant to Section 1.0 of this Agreement.
- 2.3.2 Ownership of Custom Work Product. Unless otherwise provided in the applicable Statement of Work, Customer shall own all right, title and interest to any Custom Work Product. LRS expressly acknowledges and agrees that all such Custom Work Product constitutes "work made for hire" under the Federal copyright laws (17 U.S.C. Sec. 101) owned exclusively by Customer and, alternatively, hereby irrevocably assigns all ownership or other rights it might have in Custom Work Product to Customer. LRS shall sign such documentation as may be reasonably requested by Customer to insure that title to the Custom Work Product is vested in Customer. Notwithstanding the foregoing, the parties agree that LRS reserves the right to use and distribute royalty-free for any purpose subsets or modules of the Custom Work Product which by themselves provide generic technical information not unique to Customer's business and not containing Customer Confidential Information provided however that LRS shall not use or distribute any such subset or module in Customer's industry if Customer notifies LRS that such use or distribution of such subset or module will harm Customer's competitive advantage in its industry.
- 2.3.3 Third Party Software. Customer's rights and remedies regarding Customer's use of any Third Party Software shall be governed by a separate and independent agreement between Customer and the licensor of the Third Party Software and not by this Agreement. Customer agrees that LRS has no responsibility to Customer for the Third Party Software except as explicitly set forth in this Agreement or an applicable Statement of Work. Customer agrees to hold LRS harmless from any claim arising from Customer's use or acquisition of Third Party Software unless such claim arises from LRS' breach of its obligations regarding the Third Party Software as set forth in this Agreement or an applicable Statement of Work.
- 2.3.4 License to Embedded Software. Except as otherwise specifically set forth on the Statement of Work: (i) this Agreement conveys no ownership rights to Customer with respect to Embedded Software, and (ii) Customer is granted a paid-up, perpetual, nonexclusive license to use the Embedded Software strictly as an integral part of, and in conjunction with, Customer's use of the Custom Work Product and for no other purpose.
- 2.4 Warranty Against Infringement and Interference With Enjoyment.
- 2.4.1 Warranty/Exclusive Remedy. LRS warrants that the Custom Work Product and the Embedded Software will be delivered free of the rightful claim of any third party by way of infringement or misappropriation of rights arising under the laws of the United States. LRS further warrants that no act or omission of LRS will result in a third party holding a claim against the Custom Work Product or Embedded Software that interferes with Customer's enjoyment of the Custom Work Product. CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR BREACH OF THE FOREGOING WARRANTY IS SET FORTH IN SECTIONS 2.4.2 and 2.4.3.
- 2.4.2 LRS' Duty To Indemnify. If a claim is made by a third party against Customer that the Custom Work Product or Embedded Software infringe or misappropriate rights arising under the laws of the United

- States, or if any other claim is made that if true would cause a breach of a warranty set forth in Section 2.4.1, LRS shall defend against such claim at its own expense and shall indemnify Customer and hold it harmless against any settlement or final judgment including an award of attorneys' fees, that may be awarded by a court of competent jurisdiction against Customer as a result of the foregoing; provided that Customer shall give LRS prompt written notice of such claim and shall at LRS' direction and expense provide LRS with all reasonable cooperation. LRS has no obligation to pay Customer's attorneys' fees, provided LRS has assumed the defense of the claim in a timely fashion. Further, LRS shall have no liability or duty to Customer for any claim pursuant to this Section if such claim is based on Customer's, or third party's addition, modification or customization to or specification for the Custom Work Product.
- 2.4.3 LRS' Right To Correct. If a claim is made by a third party against Customer that the Custom Work Product or Embedded Software infringe or misappropriate rights arising under the laws of the United States, or if any other claim is made that if true would cause a breach of a warranty set forth in Section 2.4.1, or if LRS believes that a likelihood of such a claim exists, LRS shall, in LRS' sole discretion, procure for Customer the right to continue using the Custom Work Product, modify it to make it compliant with the warranties set forth in Section 2.4.1 but continue to meet the Custom Work Product's functionality, or replace it with non-infringing material of like utility that complies with the warranties provided in Section 2.4.1; provided, however, if none of the foregoing is reasonably available to LRS, either party may terminate this Agreement, in which case Customer shall cease using the Custom Work Product and return it to LRS and, if during the first five (5) years from delivery of the Custom Work Product, LRS shall refund to Customer a sum equivalent to one sixtieth (1/60) of the fees actually paid to LRS for the Custom Work Product, multiplied by the number of months remaining in the first five years from delivery of the Custom Work Product.
- 2.4.4 Customer warrants that the portions of any materials or information that may be supplied by Customer and incorporated into the Custom Work Product do not infringe any third party patent, copyright, trade secret or other proprietary right enforceable in the United States. Customer shall indemnify LRS and hold it harmless against any final judgment, including an award of attorneys' fees that may be awarded by a court of competent jurisdiction against LRS as a result of breach of the foregoing; provided that LRS shall give Customer prompt written notice of such claim and shall provide Customer with all reasonable cooperation. Customer has no obligation to pay LRS' attorneys' fees, once Customer has assumed the defense of the infringement claim. Further, Customer shall have no liability or duty to LRS for any claim of infringement pursuant to this Section if such claim is based on text, data, graphics, or any other information supplied by LRS.
- 2.5 Electronic Network Agreements. The parties agree the terms and conditions set forth in this Section 2.5 apply only to any Statement of Work that pertains to the design, development or creation of any application or code that will create a display or accept, process or create a business transaction on the World Wide Web, the Internet or any private electronic network ("Network Application").
- 2.5.1 In providing LRS Services under the Statement of Work, LRS is only providing the Network Application pursuant to the mutual agreement of the parties and as provided in the Statement of Work. The parties agree LRS is not providing any legal advice to Customer on any subject including, but not limited to, copyright, trademark or other intellectual property, libel, or contract enforceability. Customer, not LRS, shall have the sole responsibility for verifying the legal implications and legal sufficiency of the content in the Network Application. Except for a claim under Section 2.4.1 of this Agreement, Customer agrees to indemnify and hold LRS, its employees and agents harmless from any and all third party claims, suits, losses, demands and expenses, including reasonable attorneys fees, damages and liabilities in any way arising out of or in connection with Customer's use or deployment of the Network Application.
- 2.5.2 LRS Not Liable for Caching. The parties may agree to have LRS provide modifications to the Network Application from time to time. However, Customer expressly recognizes that some Internet service providers may continue to cache unmodified versions of a Web site after modifications or improvements are made. If the Network Application is displayed via the Internet, some Internet users may gain access to cached versions of the Network Application that do not contain all current modifications or improvements. Customer expressly agrees that such caching is beyond LRS' control.
- 2.6 Employees. During the term of any Statement of Work and for twelve (12) months thereafter, Customer will not knowingly solicit, offer employment to, or hire any person who performed services pursuant to the Statement of Work who is either an employee of LRS or has terminated his/her employment relationship with LRS less than 180 days prior to such hiring, solicitation or offer of employment.

3.0 General Terms and Conditions:

- 3.1 Term. The term of this Agreement ("Term") shall commence on the latest date above and shall continue in full force and effect until this Agreement is terminated in accordance with the terms and conditions hereof.
- 3.2 Termination. This Agreement shall only be terminated as set forth hereafter.
- 3.2.1 With Cause. Either party shall have the right to terminate this Agreement by written notice to the other party if the other party breaches any material provision hereof and fails within ten (10) days after receipt of notice of breach to correct such default or within such ten (10) day period to commence corrective action reasonably acceptable to the non-breaching party and proceed with due diligence to completion. The notice of breach and termination may be provided in the same writing.
- 3.2.2 Without Cause. Either party shall have the right to terminate this Agreement without cause upon thirty (30) days written notice to the other party.
- 3.2.3 Effect of Termination. Unless otherwise agreed in writing, termination of this Agreement with or without cause includes the termination of all unfinished Statements of Work and the cancellation of all Orders that have not been accepted. Termination, with or without cause, shall have no effect on Customer's obligation to pay for all Orders accepted pursuant to Section 1.0 prior to receipt of written notice of termination or to pay the applicable labor rate (or an equitable portion of any fixed fee) with respect to LRS Services rendered pursuant to Section 2.0 prior to the effective date of termination.
- 3.3 Collection, Late Charges and Taxes. You may not withhold or "setoff" any amounts due hereunder. Should there be legal action to collect payments due under this Agreement, LRS shall be entitled to any costs of collection (including reasonable legal fees) and interest on past due amounts at the rate of one and one-half (1.5) percent per month or fraction thereof until paid. All amounts payable to LRS hereunder shall be exclusive of all applicable taxes based and measured thereon or on the transaction, and you shall be responsible for the payment of all such taxes excluding taxes based upon LRS' income. LRS' invoice shall not include any amount for taxes unless the same are listed apart from the amounts due and we are authorized to collect the same.
- 3.4 Confidential Information.
- 3.4.1 Acknowledgment of Confidentiality. Each party hereby acknowledges that it may be exposed to confidential and proprietary information of the other party including, without limitation, Custom Work Product or Embedded Software provided pursuant to Section 2.0, and other technical information (including functional and technical specifications, designs, drawings, analysis, research, processes, computer programs, methods, ideas, "know how" and the like), business information (sales and marketing research, materials, plans, accounting and financial information, personnel records and the like) and other information designated as confidential expressly or by the circumstances in which it is provided ("Confidential Information"). Confidential Information does not include (i) information already known or independently developed by the recipient; (ii) information in the public domain through no wrongful act of the recipient, or (iii) information received by the recipient from a third party who had no obligation of confidentiality.
- 3.4.2 Covenant Not to Disclose. With respect to the other party's Confidential Information, the recipient hereby agrees that during the Term and at all times thereafter it shall not use, commercialize or disclose such Confidential Information to any third party without the other party's prior written approval; provided, that all such third party recipients shall have first executed a confidentiality agreement in a form acceptable to the owner of such information. Neither party nor any other recipient may alter or remove from any software or associated documentation owned or provided by the other party any proprietary, copyright, trademark or trade secret legend. Each party shall use at least the same degree of care in safeguarding the other party's Confidential Information as it uses in safeguarding its own confidential information, but in no case less than reasonable care. Notwithstanding the above, a party may disclose Confidential Information if and to the extent required by court order or governmental action. Such party shall give prompt notice of such requirement to the other party as to afford them a reasonable opportunity to appear, object, and obtain a protective order or other appropriate relief regarding such disclosure, provided however, such notice of disclosure does not have to be provided if it would violate any applicable statute, regulation or order. Customer grants permission to LRS to identify Customer as an LRS customer in LRS' marketing and promotional materials.
- 3.4.3 The parties acknowledge that violation by one party of the provisions of this Section 3.4 would cause irreparable harm to the other party not adequately compensable by monetary damages. In addition to other relief, it is agreed that injunctive relief shall be available to prevent any actual or threatened violation of such provisions.

3.5 Warranties.

3.5.1 LRS represents and warrants that it has the full right, power and authority to sell, distribute or license the Products and Maintenance Subscriptions defined in Section 1.0. However, LRS is not the owner, manufacturer or provider of the Products or Maintenance Subscriptions and makes no other warranties whatsoever concerning them, including no warranty against interference with Customer's enjoyment of them or against infringement. However, non-LRS suppliers or manufacturers may provide their own warranties to you.

3.5.2 LRS shall provide LRS Services and Incidental Services in a workmanlike manner using reasonable care and skill. **EXCEPT FOR THE WARRANTIES SET FORTH IN SECTIONS 3.5.1 AND THIS SECTION 3.5.2 AND THE WARRANTY REGARDING NON-INFRINGEMENT SET FORTH IN SECTION 2.4, LRS IS PROVIDING PRODUCTS, MAINTENANCE SUBSCRIPTIONS, INCIDENTAL SERVICES (AS DEFINED IN SECTION 1.0) LRS SERVICES, CUSTOM WORK PRODUCT AND EMBEDDED SOFTWARE (AS DEFINED IN SECTION 2.0), IF ANY, HEREUNDER STRICTLY ON AN "AS IS" BASIS, AND LRS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, ACCURACY, FITNESS FOR A PARTICULAR PURPOSE, OR THE RESULT OF ANY SERVICES PROVIDED.**

3.6 Limitation of Liabilities/Consequential Damages. **EXCEPT FOR A CLAIM UNDER SECTION 2.4 OR 3.4, LRS' TOTAL LIABILITY FOR DAMAGES UNDER THIS AGREEMENT, REGARDLESS OF THE FORM OF ACTION OR THEORY OF LIABILITY (INCLUDING CONTRACT, TORT, OR WARRANTY), SHALL BE LIMITED TO FEES ACTUALLY PAID TO LRS UNDER THE RELATED STATEMENT OF WORK OR ORDER. IN NO EVENT SHALL LRS BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, PUNITIVE OR INDIRECT DAMAGES OF ANY KIND (INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOSS OF DATA, LOSS OF USE OR CLAIMS OF THIRD PARTIES) THAT MIGHT ARISE AS A RESULT OF THE PERFORMANCE OR BREACH OF THIS AGREEMENT OR IN ANY WAY ARISES OUT OF OR IN CONNECTION WITH THIS AGREEMENT. NO ACTION ARISING OUT OF THIS AGREEMENT, REGARDLESS OF FORM, MAY BE BROUGHT BY EITHER PARTY MORE THAN TWELVE (12) MONTHS AFTER THE CAUSE OF ACTION HAS ACCRUED.**

3.7 Independent Contractor Status. Each party and its employees are independent contractors in relation to the other party with respect to all matters arising under this Agreement. Nothing herein shall be deemed to establish a partnership, joint venture, association or employment relationship between the parties. Each party shall remain responsible for, and shall indemnify and hold harmless the other party from, the withholding and payment of all Federal, state and local personal income, wage, earnings, occupation, social security, unemployment, sickness and disability insurance taxes, payroll levies or employee benefit requirements (under ERISA, state law or otherwise) now existing or hereafter enacted for its respective employees. Each party shall maintain adequate insurance protection covering its respective activities hereunder, including coverage for statutory workers' compensation, comprehensive general liability for bodily injury and property damage, as well as adequate coverage for vehicles.

3.8 Notices. Except as specifically permitted in this Agreement, all notices and demands required or permitted under this Agreement shall be in writing and may be delivered by registered or certified mail, postage prepaid, by facsimile, or by an overnight express service, e.g. Federal Express, Airborne Express, etc., to one of the persons and addresses or facsimile numbers set forth below or to such other address or fax number and to the attention of such other person as either party may designate to the other in writing. If no Customer representative is identified below, notice to Customer may be to the person and address or facsimile number set forth for Customer on the first page of this Agreement. Any notice or demand mailed or faxed as aforesaid shall be deemed to have been delivered on the date of delivery or refusal, as the case may be, set forth on the return receipt or the facsimile machine print out:

LRS
General Counsel
2401 West Monroe
Springfield, IL 62704
Fax: (217) 787-3286

Customer

3.9 Resolution of Disputes.

3.9.1 This Agreement, all transactions executed hereunder and the legal relations between the parties shall be governed and construed solely in accordance with the laws of the State of Illinois, without giving effect to its choice-of-law provisions. Venue and jurisdiction are exclusive to the state and federal courts situated in Springfield, Illinois. **Both parties hereby waive any right to trial by jury in any action or proceeding related to this Agreement.**

3.9.2 Except as set forth in Section 3.9.4, neither party may file suit or otherwise bring a claim against the other party without first exhausting the dispute resolution procedure set forth in Section 3.9.3. However, Section 3.9.3 is not in any way intended to affect a party's right to terminate this Agreement pursuant to Section 3.2.

3.9.3 It is the intent and desire of the parties that all disputes, claims, and controversies which arise between the parties relating to this Agreement be resolved in an amicable manner within thirty (30) days after either party requests a meeting to effect resolution of a dispute. The executive officers of the parties shall in such period consult in good faith to reach a just and equitable solution to such differences. In the event such a dispute, claim or controversy is not resolved within such thirty (30) day period by the parties, then the parties may take other appropriate action subject to the other terms of this Agreement.

3.9.4 The parties acknowledge that violation by one party of the provisions of Sections 2.3.1, 2.3.2, or 2.3.4 would cause irreparable harm to the other party not adequately compensable by monetary damages. In addition to other relief, it is agreed that injunctive relief shall be available to prevent any actual or threatened violation of such provisions.

3.9.5 The parties agree that should there be any litigation arising out of this Agreement or to enforce any portion of this Agreement the losing party shall pay the prevailing party any reasonable attorneys' fees (including but not limited to allocated costs of in-house counsel) and other costs incurred in said litigation.

3.10 Authority. Each undersigned hereby represents and warrants that he or she has been duly authorized by his or her respective party to enter into and execute this Agreement.

3.11 General and Miscellaneous Clauses. Except as specifically permitted in this Agreement, this Agreement may be modified or amended only by a writing signed by both parties. This Agreement shall be binding upon the parties hereto, their successors, permitted assigns, and legal representatives. Nothing in this Agreement is intended to confer on any person or entity, other than the parties and their authorized successors, any rights or remedies under or by reason of this Agreement. Except where all or substantially all of the assets of a party are sold to, or merged or consolidated with, another company or as otherwise specifically permitted herein, neither this Agreement nor any rights or obligations hereunder may be transferred or assigned without the other party's prior written consent and any attempt to the contrary shall be void. Notwithstanding anything to the contrary stated herein, no assignment allowed hereunder shall be valid until the other party receives a valid assignment signed by both the assignor and assignee transferring all rights and obligations hereunder to the assignee. Neither party shall be liable for delays caused by events beyond its reasonable control. If any provision of this Agreement or the application of such provision to any person, entity or circumstance shall be held invalid, the remainder of this Agreement, or the application of such provision to persons, entities or circumstances, other than those as to which it is held invalid, shall not be affected. Waiver of any provision hereof in one instance shall not preclude enforcement thereof on future occasions. A party's performance after the other party's default shall not be construed as a waiver of that default. Headings are for reference purposes only and have no substantive effect.

**Addendum to the
LRS IT Solutions Customer Agreement**

This document is an Addendum to the LRS IT Solutions Customer Agreement ("Customer Agreement") entered into on even date herewith and bearing contract number 1-10TFH9, between Tulare County, CA ("Customer") and Levi, Ray & Shoup, Inc. ("LRS"), and shall be effective as of the latest date set forth below. In accordance with the Customer Agreement this Addendum identifies the mutually agreed upon modifications to the Customer Agreement.

LRS and Customer hereby agree as follows:

1. All capitalized terms shall have the meaning as set forth in the Customer Agreement or as defined herein and all references to Section numbers are to sections of the Standard Terms and Conditions unless otherwise specified herein.
2. The last sentence of Section 2.2 is modified to read as follows: "Payment is due within thirty (30) days of receipt of invoice."
3. The second sentence of Section 3.3 is modified to read as follows: "Should there be legal action to collect payments due under this Agreement, LRS shall be entitled to any costs of collection and interest on past due amounts as permitted by law until paid."
4. The last sentence of Section 3.6 is deleted.
5. Section 3.9.1 is modified to read as follows: "This Agreement, all transactions executed hereunder and the legal relations between the parties shall be governed and construed solely in accordance with the laws of the State of California, without giving effect to its choice-of-law provisions. Venue and jurisdiction are exclusive to the state and federal courts situated in or for Tulare County, California."
6. Section 3.9.5 is deleted.
7. It is understood by both LRS and Customer that this Addendum addresses only the modifications to the sections of the Customer Agreement identified above. And as such, this Addendum does NOT replace or alter any other portion of the Customer Agreement.
8. Should the terms and conditions of this Addendum conflict with the terms and conditions of the Customer Agreement, the terms and conditions of this Addendum shall control and prevail. In all other respects, the Customer Agreement, as amended herein, remains in full force and effect.

IN WITNESS WHEREOF, each of the parties has executed this Addendum.

Levi, Ray & Shoup, Inc.

Tulare County, CA

By: _____

By: _____

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

Date: _____

Date: _____



STATEMENT OF WORK

LRS Statement of Work Number: 1-1P7JKB

As evidenced by their signatures below, both parties agree that this Statement of Work ("SOW") is a part of and shall be governed by that LRS IT Solutions Customer Agreement with contract number 1-10TFH9 ("Customer Agreement"). Terms in this SOW shall have the same meaning as in the Customer Agreement.

1. Scope of Work:

LRS will provide qualified consultants to provide services related to the tasks listed below on a time and materials basis as determined by the Customer. Each occurrence of services performed under this SOW will be billed at a minimum of 8 hours at the Standard Rate below unless otherwise agreed to in writing by LRS and Customer.

The tasks associated with this SOW are listed in **Attachment A**

2. Customer Requirements:

- Customer commits to provide all resources necessary to successfully complete the engagement in a timely manner. These resources include but are not limited to: meeting time with appropriate personnel, access to server and client systems, appropriate work space that is not shared with other Customer employees or consultants, power supplies, photocopiers, fax machines, PCs, printers, telephones, and meeting rooms.
- Allow LRS to use its company laptop to access Customer local area network connected to the mainframe and the Internet to interface with IBM resources for maintenance and support activities.
- Perform testing on z10.
- Identify all COBOL source code, compile and link with the z/OS 1.10 language environment; then test thoroughly.

3. Time Period:

This Statement of Work (SOW) begins upon Customer signature and date provided below and shall continue until terminated pursuant to the terms of the Customer Agreement or upon thirty (30) days prior written notice by either party to the other party.

4. Terms of Payment:

Resource	Standard Rate
Consultant	\$150 per hour*

* The rate set forth above shall remain in effect for the one year period beginning with the date of Customer's signature below. Thereafter, the rate shall be subject to an annual increase not to exceed seven percent (7%) per year.

If any travel is required outside the assigned consultant's, or consultants', home base of operations during regular business hours (Monday -Friday 8AM - 5PM), LRS will charge round trip mileage and one-way windshield time. Mileage expenses are based upon the current IRS allowable guidelines. In addition, for overnight travel, Customer will be billed for actual airfare, car rental, lodging, all meals, and other reasonable and customary travel costs incurred by the consultant(s). If any additional support or service fees are charged to LRS during the course of this project, the charges will be billed on a cost basis in addition to the hourly rate.

5. Reimbursement for Special Items:

Should the tasks listed in the "1. Scope Of Work" section above require assistance from third-party hardware or software vendor technical support, and should that support be on a "for fee" basis, that fee will be billed to the Customer on a cost basis.



STATEMENT OF WORK

LRS Statement of Work Number: 1-1P7JKB

6. Other Agreements:

All work under this agreement is to be completed during regular business hours, (Monday -Friday 8AM – 5PM) or during "off hours" that are mutually agreeable to both the customer and LRS. If requested, LRS will make an attempt to provide a resource on an "off hour" basis, but in no way guarantees services outside regular business hours.

LRS shall provide Customer with access to the computer file known as Rexx exec ("Program") at no additional cost to Customer and hereby grants Customer a perpetual, non-exclusive, non-transferable, license to use the Program for Customer's internal business purposes.

LRS shall provide Customer with access to message processing facility exits which enable quasi automatic startup and shutdown of the system through use of the system console message processing facilities.

Notwithstanding anything to the contrary in the SOW or the Customer Agreement, the Program remains LRS' property and is not a "work made for hire" under the Federal Copyright Law.

The Program is provided on an **"AS IS"** basis **AND LRS MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

Levi, Ray & Shoup, Inc. (LRS)

Tulare County, CA (Customer)

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____



STATEMENT OF WORK

LRS Statement of Work Number: 1-1P7JKB

Attachment A

LRS will perform the following tasks at the direction of the Customer:

- Assist IBM with the installation of the ESCON to Optical parallel channel converters
- Assist IBM with the cabling of the DS6800 to the z10.
- Install Customer supplied Storage Management Console onto a current technology P.C. with the following attributes:
 - Intel Pentium II with clock speed > 2Ghz
 - 2GB RAM
 - Windows XP SP2
 - Monitor
 - Keyboard
 - Mouse
 - Static Network Address for SMC
 - Static Network Address for DS6800 1st Cluster
 - Static Network Address for DS6800 2nd Cluster
 - Customer IP gateway on same subnet as SMC + DS6800 Clusters
 - Customer Network should be able to access the internet from the LAN for outbound activity
 - Customer Anti-Virus Software
- Install & Configure DS6800
 - Power On DS6800
 - Cable Ethernet Ports
 - Configure Network
 - Obtain DSFA keys and store into DS6800
 - Interface DS6800 to customer network
 - Layout Disk Arrays, Controllers and Logical Disk Volumes
- Install Tape Peripheral and cable to z10
- Install z10
 - Setup HMC Reset, Image and load profiles
 - Setup OSA-ICC configuration
 - Save and Activate OSA-ICC
- Install Custom Product Driver from 359X cartridges
 - Manually load from cartridge
 - Format SYSRES and Catalog Volumes with Cartridge ICKDSF
 - Restore SYSRES and Catalog Volume from applicable 359X cartridges
- Install Server Pac from CPD Driving System
 - Layout z/OS 1.10 Disk configuration
 - Allocate Data Sets
 - Restore
 - Copy Old RACF Database to tape
 - Attempt to use old RACF Database on new system (Cannot guarantee)
 - Perform Post IPL Tasks
 - Upgrade RACF Templates
 - Initially IPL z/OS 1.10
 - Apply check Maintenance
 - Obtain missing requisites
 - Acquire from IBM Service Link
 - Receive current hold data
 - Apply Maintenance
 - Perform z/OS Installation Verification Program's



STATEMENT OF WORK

LRS Statement of Work Number: 1-1P7JKB

- Backup selected system libraries, HSM Files, ICF User Catalogs & Aliases on old system to cartridge
- Restore selected system libraries, HSM Files, ICF User Catalogs & Aliases on new system from cartridge
- Conditionally merge Parmlib members
- Install and Customize CICS TS 3.2
 - Allocate data sets
 - Restore from cartridge
 - Upgrade County CICS VSAM Files as applicable
 - Perform Installation Verification Programs
- Backup County Production Data during normal backup cycle
- Restore Production Data to IBM System z10 for testing purposes
- Setup TCP/IP stack(s) with test addresses along with TN3270 Server within z/OS
- Setup Automated Tape Library
 - Setup SMS Tape Constructs in accordance with county established policies
 - Customize RMM
 - Setup Tape Catalog Data Base
 - Establish Object Access Manager
 - Integrate with County HSM parameters and SMS constructs
- LRS will assist Customer technical staff in getting CA-UFO installed and configured.
- After period of time testing has successfully concluded, production cutover will occur.
- Most Recent Data Backups will be restored to z10 disk volumes
- Establish periodic maintenance procedure obtaining service from Internet and periodically applying maintenance