

# Request for Proposal

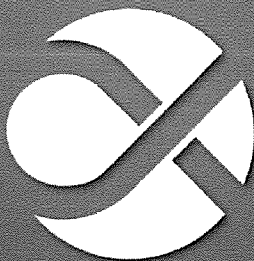
City of Riverside, California

Community Development Department Administration Division

Permit Tracking Software

RFP 1470

September 18, 2014



## COMPUTRONIX®

Distinctive Software. Exceptional Service.

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***NOTICE: The pages of this proposal that are marked CONFIDENTIAL are intended for use by the City of Riverside in considering this RFP response and may not be released to third parties without the prior written authorization of Computronix. Release of such information may compromise trade secret information regarding our company, partnerships, and products, and it will violate the trust of current clients who agree to be references for Computronix.***

# 1 Cover Letter

NOTE: SEE FOLDER FOR SEPARATE COVER LETTER DOCUMENT



## 2 Statement of Understanding and Approach

**Computronix, of Denver, Colorado**, is pleased to provide the City of Riverside, CA, a response to RFP #1470 for Permit Tracking Software. Our solution will enable the City to replace the aging Permits Plus system, improve current business processes, and deploy a proven, powerful workflow engine with browser-based end user applications to integrate, consolidate, and streamline the management of its permitting, licensing, planning, inspection, and land management activities.

At the core of the proposed solution is our pre-configured **POSSE® Land Management and Licensing System ("POSSE LMS")**. POSSE LMS provides land management best practices built on the core POSSE Enterprise Solution framework, completely configurable and compatible with your IT environment and business needs. Our POSSE LMS solution gives the City an efficient and effective way of handling land management activities and provides infinite scalability and flexibility for future needs and system growth.

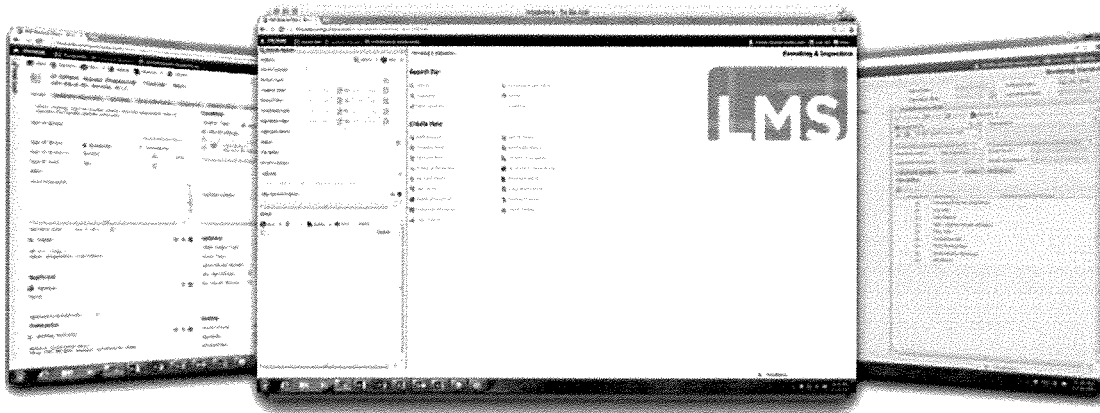
POSSE has been an evolving state-of-the-art and award-winning platform since 1995—a full 19 years of success with state, city, and county clients. With POSSE LMS, Computronix delivers superior data integration and interfacing capabilities to provide maximum leverage of system investment across the enterprise, not just within one department. Computronix believes that the dynamic power of POSSE, along with outstanding engagements and pre-existing, strong, established partnerships with companies such as Avolve Software and Selectron Technologies, will propel the City of Riverside to the top of the class, enabling the City to define the new paradigm in fast, efficient, customer-centric service. We strongly believe that you will not find a better long-term solution for your permit tracking needs.

In this section of our proposal response, Computronix will address the City's needs relating to its Scope of Work:

- Technical Solution Overview
- Project Management Approach
- Training Approach
- Support and Maintenance
- Modification Request Process

## 2.1 Technical Solution Overview

POSSE LMS provides regulatory best practices ideally suited for local government customers. POSSE LMS is a dynamic, configurable Commercial Off-The-Shelf (COTS) solution that maintains the flexibility for agile customization to meet ever-changing business needs. POSSE LMS combines the “best of both worlds” of configuration and COTS features for a faster System roll-out.



POSSE LMS appeals to local government agencies seeking a practical, adaptable, one-stop work management platform for automating and optimizing their regulatory business processes across the enterprise, while serving their organization’s greater vision for Service Oriented Architecture (SOA), interoperability, and end-to-end, inter-department business process management (BPM).

POSSE LMS offers an intuitive layout and design for ease of configuration with a minimum of training. This state-of-the-art application utilizes best-of-breed technologies and provides several native enabling technologies, web services, and open APIs to third-party products. Web, smart client, and mobile interfaces can all be seamlessly integrated with a common database and a consistent set of business rules.

POSSE LMS is based on industry standard technologies, including .Net, ASP.Net, C#, HTML, CSS, JavaScript, Microsoft IIS, COM, Oracle, and Python. POSSE LMS leverages the strengths of each of these solutions to provide optimal configuration and rock-solid run-time environments.

For the City of Riverside, we propose to leverage the following pre-configured POSSE LMS Modules and Add-Ons, all of which are fully integrated into the system:

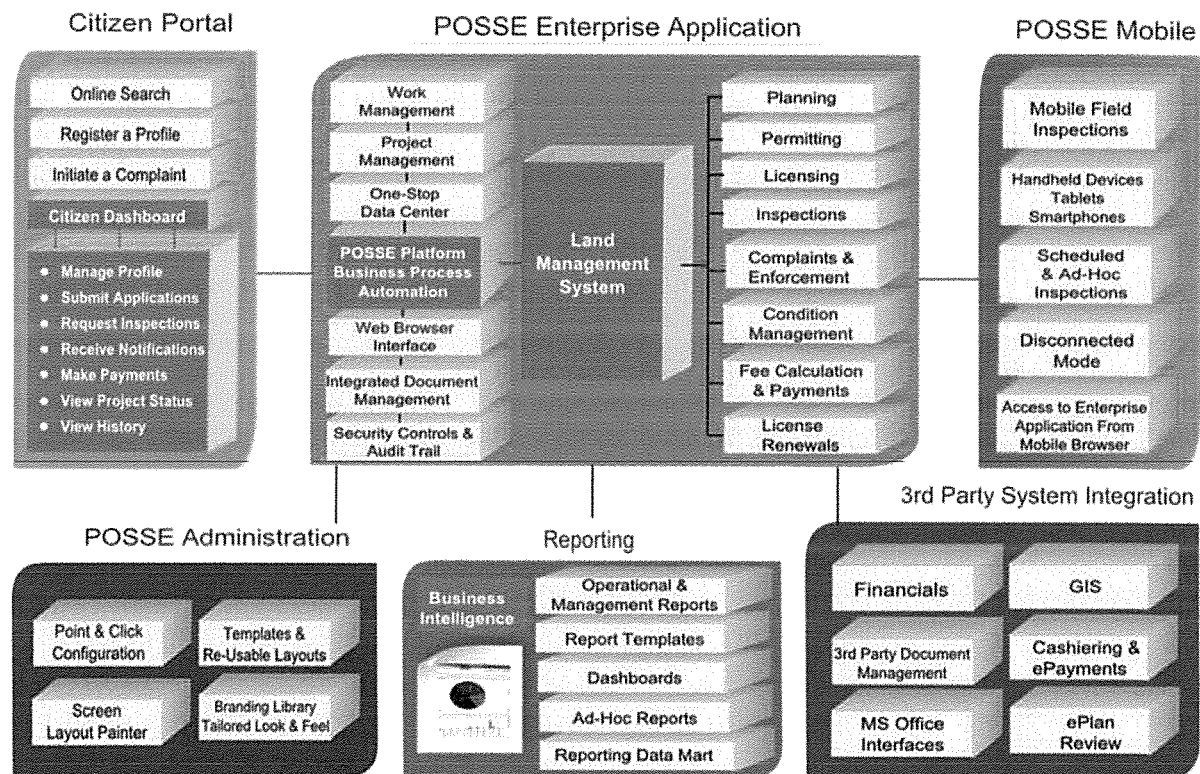
- Citizen Access and Contractor Dashboard Site

### POSSE LMS Features:

- Online Application Submission and e-Payment
- Wireless Mobile Inspections with GIS Route Planning
- Embedded Document Management
- Fee Structures, Calculations, and Payments
- Real-Time Business Intelligence
- Ad Hoc Reporting
- Management Reporting Dashboards
- 100% Configurability
- Point-and-Click System Administration and Configuration
- Strategic Enterprise Work Management Capabilities



- Permitting & Inspections Module (includes Contractor Licensing)
- Planning Module
- Compliance & Enforcement Module
- POSSE Mobile Application - Fully-disconnected with real-time back-office integration
- POSSE Dashboard - Our dynamic real-time management reporting and status monitoring tool
- The POSSE Ad-Hoc Embedded Reporting Tool (Izenda)
- The POSSE GIS Module that comes with a sophisticated out-of-the-box interface with ESRI, the GIS market leader.



With a proven implementation approach the POSSE Work Management Framework and the POSSE LMS pre-configured modules deliver a browser-based, configurable solution incorporating industry best practices for North American cities. Our permitting and licensing system supports office or mobile users with user-friendly presentations in a single, powerful, centrally managed database.

More information about the POSSE LMS interface is included in **Section 5—Customer Interface**, **Section 6—Staff Interface**, and **Section 8—Technical Architecture**.

## 2.2 Project Management Approach

Computronix uses a formalized Software Development Methodology (SDM) to implement POSSE Systems. Our SDM can be summarized by the following processes:



1. Analysis Process
2. Design Process
3. Construction Process
4. Integration Process

Each phase of the SDM has defined workflow, deliverables, and guiding principles which set the stage for successful management and quality control. The Computronix SDM places significant emphasis on stakeholder involvement and participation in the software development process, with numerous checkpoints and presentations to ensure business requirements are fully recognized and satisfied by the delivered solution. Computronix looks forward to additional discussion of the SDM with the City.

In tandem with our proven SDM and our Project Management methodology, Computronix will employ a consistent and proven framework for managing and controlling the project, to ensure project success. This framework includes the following aspects:

1. Computronix will lead activities to ensure that project planning, implementation best practices, quality assurance, and risk management activities are performed during the project to ensure a successful outcome. Computronix will also participate in meetings with management, internal and external end users, and project and IT staff to ensure effective communication and to work through issues in a positive manner. Computronix works with customers using a team approach, where the City staff's needs, expertise, opinions, and time are respected, thereby creating a positive atmosphere for a professional, healthy, and positive project experience.
2. Formalized project controls in the Project Plan include the following components. Several of these were specifically requested by the City and are attached as appendices to this proposal. Other plans will be provided upon project initiation.
  - Scope Management
  - Schedule Management
  - Change Control Procedures
  - Issue Management Plan
  - Risk Management Plan
  - Communication Plan
  - Data Conversion Plan
  - Acceptance Test Plan
  - Training Plan
  - Transition and Deployment Plan
3. Formalized implementation methodologies, including the following:
  - Fit/Gap Analysis methodology
  - Computronix SDM, including progressive, iterative System configuration reviews with City staff to produce Production-ready functionality.
  - Comprehensive Training program to successfully empower designated City staff, based on role-based needs.

4. Quality Management/Quality Controls, including PMI and ISO-compatible Computronix Quality System best practices, augmented by standard City PMO, IT project, and Quality Management Program (QMP) controls.
5. Emphasis on communication and customer relationship. As with any successful relationship, dialogue needs to be two-way and iterative, built upon a foundation of teamwork, trust, fair play, ethical standards, give-and-take, and ultimately, genuine enthusiasm for the task at hand. We will work hard to deliver an outstanding business solution and to build a long-term win-win relationship.

At a high level, our approach to Project Management is generally covered by the following 17-step Computronix quality assurance process.

Action Item	
1	Review/Modify Project Plan with Client
2	Communicate Project Plan
3	Arrange Onsite Services
4	Assign Tasks
5	Monitor Project
6	Prepare and Conduct Status Meetings
7	Issue Status Reports to Client
8	Manage Risk and Quality
9	Monitor Progress on Client Responsibilities
10	Monitor Client Relationship
11	Manage Scope Changes
12	Document Issues
13	Discuss and Resolve Issues with Client
14	Negotiate Project Signoff
15	Communicate Project Completion
16	Collect Project Review Data
17	Conduct Project Review and Follow-up with Client

Assisted and supported by the Vice President of Operations and the City's assigned Account Manager, the Project Manager's activities will include the following:

- Participate in planning meetings
- Assist with the finalizing of the overall Project Plan and Project Schedule
- Ad-hoc meetings and presentations as required or at strategic milestones
- Schedule and lead Computronix resources
- Assume all contract administration responsibilities
- Create and deliver status reports and updates
- Create and maintain project procedures and change control procedures
- Participate in defining acceptance criteria and project signoff criteria

One of the best ways to ensure project success and a high quality of deliverables is to put in place two Project Managers: a Computronix Project Manager and a Client Project Manager. Ultimately the Computronix Project Manager is responsible for the overall success of this project; however the Client Project Manager has a significant supporting role to play. The Computronix Project Manager will provide on-going status updates to the Client Project Manager, as well as provide semi-monthly status reports in writing.

We understand that the City may have its own Program Management standards and goals that must come to bear on this project. Even as the project planning begins, Computronix will work to understand and quickly align with these further City of Riverside requirements.

### **2.2.1 CITY OF RIVERSIDE PROJECT APPROACH**

Computronix proposes to use a phased approach for the City of Riverside project, allowing for adjustments and learning as the project progresses. The project approach hinges on the expectation that POSSE LMS inherently meets the requirements of the Permit Tracking Software System solution as described in the RFP. The first phase will focus on the installation, configuration and implementation of the Permits and Inspections module for Building Tasks, while the second phase will deliver the functionality required for Planning, Code Enforcement, Fire, Public Utilities and Public Works. By splitting the project into two phases, Computronix anticipates creating momentum and focus with an implementation in month 10 and a second implementation in month 16.

Each phase will be further divided into seven stages that will allow all stakeholders to clearly understand project progress:

- Stage 1—Project Planning and Kick-off (Phase 1 only)
- Stage 2—Installation and Initial Training
- Stage 3—Fit/Gap Analysis
- Stage 4—Data Conversion
- Stage 5—Gap Closure
- Stage 6—Use Acceptance Testing
- Stage 7—Implementation

As part of this collaborative, phased project approach, Computronix has included a large percentage of onsite time for the City's needs. We anticipate the percentage of time onsite at the City of Riverside to be approximately 27 percent of the time of the scheduled effort (onsite time of 96 days of a 357-day schedule).

#### **Stage 1—Project Planning and Kick-off**

The Project Planning and Kick-off Stage will focus on updating the Computronix Project Management Plan template to identify the specific processes, procedures, stakeholder analysis, schedule updates, risks, etc., that are necessary to ensure project success. This initial draft of the Project Management Plan becomes the basis for an on-site Project Kick-off meeting in which the project team is engaged in discussion, fine

tuning, and general input. The result of the Project Kick-off meeting is a Project Management Plan that is realistic and has project team buy-in.

**Stage 2—Installation and Initial Training**

Stage 2 begins with the installation of POSSE LMS into the City Train and/or Test environment(s). Following installation, Software Orientation Training on POSSE LMS will be provided in Riverside to the project team members identified as Subject Matter Experts (SMEs) for their business areas. This training will allow the SMEs to become familiar with POSSE LMS, giving the project team a solid basis for the Fit/Gap Analysis Stage.

**Stage 3—Fit/Gap Analysis**

In this Stage, the project team will come to a common understanding of any existing gaps between POSSE LMS and the City requirements deemed to be in-scope for the project. The Fit/Gap Analysis will use the pre-configured POSSE LMS System as the baseline functionality and will involve focus group sessions with the City SMEs, IT specialists and analysts. These sessions will enable Computronix to ensure that the right business process template is utilized for each of the City's in-scope processes, and identify any requirements that are not adequately fulfilled by POSSE LMS. The City-approved Fit/Gap Analysis report will become the basis for the design and configuration of the features, functions, data elements, business rules and workflow modifications that will ensure the City's requirements are met.

**Stage 4—Data Conversion**

Computronix has over 30 years of experience with data conversions and migrations. Our data conversion experts utilize a number of automated tools and techniques that aid in data identification and categorization. Data conversion is a corporate core competency. We will use the same basic conversion methodology that has been used successfully on numerous POSSE projects in the past.

Computronix and the City will share the responsibility for all facets of data conversion, including creation of a Data Conversion Plan, Data Conversion Mapping Document, and the transformation of data from the source data structures into the destination POSSE LMS structure, as defined by the Data Conversion Mapping document. The City will be responsible for data cleansing (as defined at [http://en.wikipedia.org/wiki/Data\\_cleansing](http://en.wikipedia.org/wiki/Data_cleansing)).

Computronix uses its own time-saving POSSE data conversion tool that performs the following functions:

- The tool generates a set of Oracle tables that match the configuration layout/data model in the POSSE configuration. This creates a staging area to load data from other sources.
- Standard Oracle tools and scripts can then be written to convert data into these tables.
- The data conversion tool then converts the data into POSSE.

See **Section 2.6—Data Conversion** for additional details on our data conversion approach.

**Stage 5—Gap Closure**

When the Fit/Gap Analysis has been completed, the items that have been deemed to be in-scope gap items will be designed and configured by Computronix in its development and test environments. Throughout this Stage, Computronix will be in close contact with SMEs and other team members to ensure that the design and configuration is meeting the requirements.

The Computronix Technical Lead and Designer will document the high-level design that will address the gap items and provide a cohesive and comprehensive overview of the system. The High-Level Design documentation will be reviewed with the City project team in order to verify that the System modifications envisioned meet the requirements.

Following approval of the design by the City, configuration, report, and interface development will commence. When configuration and development are complete, Computronix resources will provide demonstrations to the City project team of the System. During the design and configuration timeframe, ad hoc meetings and web conferences will be held as necessary between the technical team and the City SMEs and IT specialists to clarify any outstanding questions or concerns.

#### **Stage 6—User Acceptance Testing**

When Stage 5 is complete, Computronix will migrate the System to the Test and Training environments and update the Site-Specific POSSE LMS Usage Training documentation. This training documentation will form the training manual for City project team members to conduct User Acceptance Testing (UAT). The training will ensure that each business process is adequately covered and may be attended by up to eight City testers. Up to eight resources identified as system administrators will be provided with Administration Training, as well.

Computronix will supply its System Testing Plan and scripts for use by the City as a starting point for the creation of its own UAT Plan and scripts. During the UAT process, the Computronix team will remain committed to the project in order to resolve defects and migrate fixes to the test environment in a timely manner, as per the Issues Management Plan. Following the successful completion of the UAT and acceptance of the System, the System will be migrated to the Training environment once more in preparation for the activities in Stage 7.

#### **Stage 7—Implementation**

During Stage 7 the Production, Test, and Train environments will be updated with the final version of POSSE LMS, in preparation for end user training, the final data conversion, and the go live event.

Because of the significant cost savings that the City will realize and because of the need for future internal training resources within the City, Computronix recommends the “Train-the-Trainer” model for end user training. Under this model, City staff trained in POSSE LMS Usage will provide training to the City’s end users.

Senior Computronix resources will be onsite for two days prior to the final data conversion and go-live event and will remain for five days after go-live to ensure that a smooth transition is achieved. During and after implementation, the Computronix team will be available remotely to ensure that issues are resolved quickly and efficiently.

Following go-live, Computronix will seek information from the City and Computronix project team members, City staff using the System, management, and other stakeholders in order to provide input into the Project Review Report. This report will summarize the activities, deliverables, budget expenditures, scope changes, and other relevant information for the project.

### **2.2.2 ROLES AND RESPONSIBILITIES**

Computronix recommends the following roles and responsibilities for the City of Riverside and Computronix Project Team:

#### **City of Riverside Roles**

##### ***City Project Steering Committee***

- Attends Steering Committee meetings
- Provides overall direction to the project
- Ensures adequate project resourcing
- Support organizational change management
- Deliver corporate communications as required
- Authorize project scope, budget, and resources
- Approves Change Request
- Sign off of Deliverables and Project

##### ***City Project Manager***

- Provide project oversight
- Ensures Project is fulfilling objectives and meeting success criteria
- Ensures City business resources are available to the project when needed, resolves conflicts as necessary
- Ensures City SMEs are adequately trained
- Balances the needs of the project with the SMEs other workload
- Attends Steering Committee Status Meetings
- Provide input into Project Planning
- Deals with issues and risks/responsible for resolutions
- Responsible for stakeholder management
- Reviews/reports project progress/status
- Facilitates sign off on deliverables
- Responsible for business process change and final signoff on business decisions

##### ***City Business Analyst***

- Assist with Project Planning
- Support Initial Assessment, Data Conversion Activities, Testing
- Provide support, mentoring and expertise to project team members
- Answer or find answers to business questions
- Support updates to operating procedures and business processes
- Document standard operating procedures (SOPs)
- Support organizational change management and communication as required

##### ***City Subject Matter Experts (SMEs)***

- Provide knowledge for input into Fit-Gap analysis
- Initial entry of configuration data

- Provide input into Gap design and review gap solutions when configured
- Data Conversion (experts in existing systems)
- User Acceptance Testing
- Attend training
- Support organizational change management and communication as required

*City Infrastructure Technician*

- Install Servers within City infrastructure
- Ensure servers are ready for Oracle, POSSE, and web site installation
- Ongoing Server and infrastructure management and support

*City Trainer*

- Receives Site-Specific System Usage Training
- Updates training materials supplied by Computronix as needed
- Assists in delivering end user training to City staff

**Computronix Roles**

*Computronix Steering Committee Representative: Vice President of Operations*

- Attends Steering Committee meetings
- Helps manage relationship between City and Computronix
- Serves as an advocate for City within Computronix
- Provides overall direction to Computronix team
- Ensures adequate project resourcing

*Computronix Project Manager*

- Provides project oversight, detailed planning, and project execution
- Organizes and mobilizes Computronix resources to fulfill project commitments
- Ensures project is fulfilling objectives and meeting success criteria
- Communicates project status and other relevant project information to Computronix and City stakeholders
- Manages Computronix deliverables and interactions with City
- Deals with issues and risks/responsible for resolution
- Responsible for quality management

*Computronix Business Analyst*

- Assists with project planning
- Supports initial assessment and testing
- Provide support, mentoring and expertise to project team members

*Computronix Technical Lead*

- Responsible for technical aspects of the project
- Provides oversight to Computronix technical resources



- Designs and oversees Administration Module setup
- Designs and oversees gap closure configuration

***Computronix Development Team***

- Configures modifications to POSSE LMS base system for implementation
- Supports integration of City-specific requirements through the existing POSSE LMS system features and functions.
- Identifies and documents gap items that cannot be solved with existing POSSE LMS functionality.

***Computronix CX Trainer***

- Provides POSSE LMS training to City of Riverside staff

**Tasks to be Performed by City Staff**

As outlined in our project schedule, Computronix anticipates these responsibilities for the City of Riverside:

- Physical Environment:
  - Provision Physical Environments (Train/Test/Production)
- Data Conversion:
  - Clean Legacy Data
  - Create/Update Legacy Data Extract Scripts
  - Create/Update Extract Load and Transform Scripts
  - Load the Data Conversion Staging area with ETL scripts
  - Data Conversion Testing
- User Acceptance Testing:
  - Document UAT Test Plans and Scripts
  - Conduct UAT

The following table is an hourly breakdown for task by staff member involved in the project.

Task	PM	BA	TL	Software Developer	Trainer
Discovery Event	60	60	60		
Customizations/Configuration	325	32	80	1621	
Report Development	60	16	24	293	
Integration with City Systems	270	32	80	1312	
Data Conversion	80	16	24	402	
Core User Training	50				257
User Testing	20	16	24	93	
Full User Training	0				529
Go Live Support	32	8	120	40	
Project Planning and Kick-off	148	40	40		2
Software Installation and Deployment in Development, Test and Production Environments	40		236		

Task	PM	BA	TL	Software Developer	Trainer
Analysis, System Requirements Specifications (SRS), and System Design	200	712	323		
<b>TOTAL</b>					<b>7,777</b>

### 2.2.3 SKILLSET REQUIRED FOR SYSTEM ADMINISTRATION

The City should plan for several roles to emerge from its POSSE LMS implementation:

1. **POSSE LMS Trainer**—Computronix will train end users as well as designated City Trainers, who will train new staff and provide refresher courses to current users. In addition to delivering in-class and one-on-one instruction, these individuals may develop additional site-specific online help and documentation, if desired. They should be detail-oriented, able to interact well with students, and able to assist in documenting the system.
2. **POSSE LMS Tier 1 Help Desk**—Computronix will train City IT support staff in POSSE LMS support, in order to provide front-line Tier 1 support to City end users. The City will be responsible to designate a System Manager with overall responsibility to support the System. Tier 1 Help Desk personnel should have a good understanding of how POSSE LMS works and should be adept at troubleshooting common end user issues.
3. **POSSE Hardware/Infrastructure Support**—Computronix will train designated City hardware/infrastructure staff in POSSE application support and resiliency tasks. These tasks will be coordinated with the administration tasks performed by Computronix administration staff. Support staff should be familiar with relational database management and working with hardware.
4. **POSSE LMS Configuration Specialist (optional)**—Once the system has been configured initially and is in Production, the City may choose to follow a “self-enablement” model of enhancing and expanding the use of the system. Computronix can train City staff in POSSE LMS Configuration. Staff should be able to readily absorb POSSE configuration concepts and be able to translate business needs into system components. Note: This role does not have to be filled solely by IT staff. A number of Computronix clients have business users who have learned to configure workflows in POSSE and are skilled in maintaining and expanding the system.

## 2.3 Training

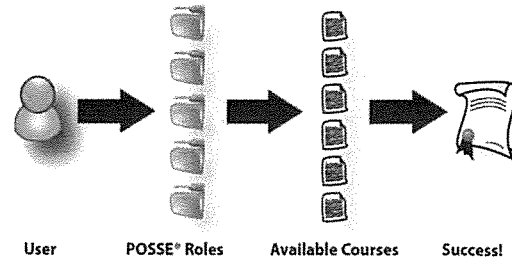
Computronix Education Services provides project-related and ongoing POSSE product training to customers across North America.

Led by an experienced, certified Education Services Manager, Computronix Education Services offers a wide variety of courses and training options developed to enable clients to use, configure, develop, and support their POSSE environments. Self-guided eLearning materials are available for a limited number of courses. If needed, Computronix can provide training facilities at both our offices in Denver, CO and in Edmonton, Alberta. Each location contains a 10-seat training classroom.

### 2.3.1 OVERVIEW OF PROPOSED TRAINING APPROACH

In today's work environment, developing new skills requires the intentional design and implementation of a continuing education program. Without the design and implementation of an effective training program, our work tends to consume us and we fail to take the time to develop those skills that enable us to become more productive in our work.

At the heart of all Computronix Education Services programs is an individual's role in overall system operation. Once you know your role, you can very easily determine the courses you will need in order to succeed.



### 2.3.2 TRAINING DELIVERABLES FOR THE CITY OF RIVERSIDE

All training preparations and deliverables, including the total required number of in-class training days, will be carefully planned in a formal Training Plan in close consultation with the City.

Our POSSE LMS training approach and deliverables will be comprehensive in order to successfully train the large number of various user groups participating in the System implementation through the proposed project phases, and to provide the City with options for system sustainment and expansion/ongoing development using trained in-house City staff. The proposed training deliverables are as follows:

#### 1. POSSE LMS Orientation Training

Prior to the Fit-Gap Analysis exercise, Computronix will provide POSSE LMS orientation training, to prepare City Subject Matter Experts (SMEs) and Project Team Leaders with the tools to participate in Fit/Gap Analysis and Data Conversion. This course will examine the workflow, features and functionality of POSSE LMS, from initiation of applications through to completion.

<b>Course</b>	<b>POSSE LMS Orientation Training</b>
<b>Topics Covered</b>	Walk-through of pre-configured POSSE LMS end user functions.
<b>Roles/Audience</b>	Up to eight (8) designated SMEs and/or other City staff per course.
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 2 days per Phase (32 hours)
<b>Technology Requirements</b>	8 PCs (one per student) with browsers, able to connect to the POSSE LMS environment.

#### 2. City of Riverside Land Management System Core Team Training

In each phase, Computronix trainers will deliver in-depth training to up to eight (8) trainees of how the City's configured Land Management System works and the workflow/life cycle of business functionality within the System. City Trainers, who will subsequently help deliver in-class training courses to City end users (as teacher's assistants), are responsible to make updates to POSSE LMS documentation with any further City-specific information prior to end user training.

This training will also be applicable to SMEs and designated UAT testers who will complete Acceptance Tests in preparation for System production environment startup.

<b>Course</b>	<b>LMS Core Team Training – Phase 1</b>
<b>Topics Covered</b>	Walk-through of configured end user functions (Workflows, Automation, and Reports, interfaces) for the Phase 1 scope (P&I and Business Licensing)
<b>Roles/Audience</b>	Up to eight (8) designated end user trainers, SMEs, UAT testers, and/or other City staff per course.
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 4 days (32 hours)
<b>Technology Requirements</b>	8 PCs (one per student) with browsers, able to connect to the POSSE LMS environment

<b>Course</b>	<b>LMS Core Team Training – Phase 2</b>
<b>Topics Covered</b>	Walk-through of configured end user functions (Workflows, Automation, and Reports) for the Phase 2 scope(Planning, C&E, Fire and Public Works)
<b>Roles/Audience</b>	Up to eight (8) designated end user trainers, SMEs, UAT testers, and/or other City staff per course.
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 4 days (32 hours)
<b>Technology Requirements</b>	8 PCs (one per student) with browsers, able to connect to the POSSE LMS environment

### 3. City of Riverside Land Management System End User Training

In the final stages of each Phase, Computronix will deliver end user training courses to the roughly 160 end users of the system. Computronix proposes classes of 12 (five offerings in Phase 1 and 11 offerings in phase 2) in which the City will supply a Teacher’s Assistant (TA) to help ensure that the larger class size isn’t a detriment to learning. Computronix trainers aided by the TA will deliver in-depth training specifically relevant to the roles and day-to-day jobs of the end user group being trained.

<b>Course</b>	<b>End User Training – Phase 1</b>
<b>Topics Covered</b>	Walk-through of configured end user functions (Workflows, Automation, and Reports, interfaces) specific to each user group
<b>Roles/Audience</b>	Up to twelve (12) end users per offering
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 1 day per offering with 5 offerings (40 hours)
<b>Technology Requirements</b>	12 PCs (one per student) with browsers, able to connect to the POSSE LMS environment

<b>Course</b>	<b>End User Training – Phase 2</b>
<b>Topics Covered</b>	Walk-through of configured end user functions (Workflows, Automation, and Reports, interfaces) specific to each user group
<b>Roles/Audience</b>	Up to twelve (12) end users per offering
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 1 day per offering with 11 offerings (88 hours)
<b>Technology Requirements</b>	12 PCs (one per student) with browsers, able to connect to the POSSE LMS environment

#### 4. POSSE LMS Support and Administrator Training

City Help Desk and/or the City's IT technical support staff will receive in-depth in-class system administration and support training. This group (often a core group of individuals fulfilling multiple roles) will be enabled to provide System maintenance and support, as well as POSSE LMS Administration super-user functions.

<b>Course</b>	<b>Tier 1 System Support/POSSE LMS Administration Training</b>
<b>Topics Covered</b>	POSSE Support Training POSSE LMS Administration, Security and Access Groups, User and Password maintenance, general POSSE LMS trouble- shooting
<b>Roles/Audience</b>	Up to six (6) IT Support Staff and/or designated security (User ID and password) administrators
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 3 days (24 hours)
<b>Technology Requirements</b>	6 PCs (one per student) with browsers, able to connect to the POSSE LMS environment

#### 5. OPTIONAL POSSE Enablement Training

If desired, the City's IT technical support staff (and business "super-users" as designated by the City) will receive training on the POSSE Stage tool for ongoing system enhancement and in depth support. This group (often a core group of individuals fulfill multiple roles) will be enabled to provide System enhancements, maintenance and support, as well as POSSE LMS Administration super-user functions.

<b>Course</b>	<b>Intro to POSSE Configuration Training</b>
<b>Topics Covered</b>	An introduction to the configuration application (Stage) and how it can be used to adjust workflows, create new workflows, create new data fields, etc.
<b>Roles/Audience</b>	Up to six (6) IT Support Staff and/or business super-users.
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 2 days (16 hours)
<b>Technology Requirements</b>	6 PCs (one per student) with browsers, and POSSE

	Stag and Marshal installed. PCs able to connect to the POSSE LMS environment
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<b>Course</b>	<b>Intro to POSSE Internet Configuration Training</b>
<b>Topics Covered</b>	Building on the Intro to Configuration training, the course introduces the trainees to the tools and techniques used to configure the internet portion of POSSE LMS.
<b>Roles/Audience</b>	Up to six (6) IT Support Staff and/or business super-users.
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 3 days (27 hours).
<b>Technology Requirements</b>	6 PCs (one per student) with browsers, and POSSE Stag and Marshal installed. PCs able to connect to the POSSE LMS environment

<b>Course</b>	<b>Advanced POSSE Internet Configuration Training</b>
<b>Topics Covered</b>	Building on the previous two configuration training courses, this course digs into the more complicated features and functions (such as automation, renderings etc.) relevant to the POSSE LMS internet site.
<b>Roles/Audience</b>	Up to six (6) IT Support Staff and/or business super-users.
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 3 days (27 hours)
<b>Technology Requirements</b>	6 PCs (one per student) with browsers, and POSSE Stag and Marshal installed. PCs able to connect to the POSSE LMS environment

<b>Course</b>	<b>Report Writing and Report integration Training</b>
<b>Topics Covered</b>	An in depth course designed to teach trainees how to create, update and remove, operational and management reports from the POSSE LMS system, enabling new data to be displayed on reports or whole new reports created. Also a discussion of the use of the reporting datamart will be included.
<b>Roles/Audience</b>	Up to six (6) IT Support Staff and/or business super-users.
<b>Locations</b>	City of Riverside offices
<b>Costs</b>	Please see Section 10
<b>Number of Hours</b>	Length: 5 days (40 hours)
<b>Technology Requirements</b>	6 PCs (one per student) with browsers, and POSSE Stag and Marshal installed. PCs able to connect to the POSSE LMS environment

### 2.3.3 IN-CLASS TRAINING ASSUMPTIONS AND METHODOLOGY

The lead time and scheduling of all training will correspond with the timing of specific milestones identified in a finalized Project Schedule and Training Plan to be created by the Computronix Project Manager, in consultation with the City.

Our fixed-price cost assumes that in-class training will be delivered at one training location at the City's offices in Riverside as specified by the training class information noted in the tables above. The City will provide a training room and up to 12 training workstations and a screen. The Computronix Trainer will provide a populated Training database instance and his own instructor laptop and projector. Optionally, the Computronix training facility in Denver may be used for some or all courses.

The City's Chief Trainer (could also be fulfilled by City Project Manager) will ensure that all trainees attend designated training sessions. Additional training, make-up training sessions or one-on-one mentoring, if required, will be provided for additional cost. In-class training will be scheduled as eight-hour days with two 15-minute breaks (morning and afternoon) and a one-hour lunch break.

Curriculum and documentation for all training courses will be developed and reviewed in advance by our Computronix Trainers and team. Computronix will provide each student with a printed copy of curriculum and training materials at each session.

For effective transfer of POSSE LMS knowledge and skills, a training methodology that incorporates both conceptual and practical, hands-on learning will be used. Delivery of each course will facilitate learning through the inclusion of each primary learning style (i.e., visual site-specific examples and documentation, auditory descriptions, tactile hands-on use of the product, and learning evaluation).

Periodically during the delivery of each course, students will be tested on their understanding and ability to perform the primary skills required to perform the responsibilities of the roles for which they are being trained. Upon completion of each course, trained staff will also be required to demonstrate knowledge and skills that have been objectively defined as required learning results.



#### **2.3.4 WRITTEN DOCUMENTATION AND HELP FEATURES**

Online help is context-sensitive, indexed, and provides keyword searching for quick and easy access. Help topics include screen illustrations and search capabilities, as well as easy links to the Table of Contents. POSSE Help is supplemented by POSSE Product Documentation provided on the POSSE Installation CD in .pdf format.

The City's POSSE LMS end user applications will support and integrate any further desired City-specific end user training manuals, online help, and/or URL-linked reference content created by the City's project team. Our City-specific Land Management System documentation deliverables will include:

1. Fit-Gap Analysis Report
2. High-Level Components Design
3. City-Specific Land Management System Usage Training materials for each project phase. This documentation will serve as User Guides.
4. POSSE LMS Administration guides and City-Specific training documentation - will serve as System Technical Documentation.
5. POSSE Version 7 Product Documentation (on software Installation CD)

All training documentation will be provided in printed and editable electronic formats.

#### **2.3.5 POSSE UPGRADE TRAINING**

For new product releases, Computronix will notify the City of an upcoming release and provide documentation such as Version Release Notes and/or a Features Update detailing what is new and what has been fixed in the release. Additional information may be available and downloadable to the City's Support Team via the user group website.

If required, remote or on-site in-class upgrade training or ad-hoc one-on-one mentoring for new upgrade features can be provided for additional cost. Upgrade training is sometimes required for new major and point release features.

#### **2.3.6 ONGOING TRAINING**

Computronix envisions City Trainers to be responsible to support end users after implementation and to provide POSSE LMS training to new users. This model provides the timeliest, most cost-effective, and most sustainable training program for the City.

### **2.4 Support and Maintenance**

Computronix anticipates a long and mutually beneficial relationship with the City. Our support doesn't end with the production implementation of POSSE LMS—that is when it truly begins! As such, support and maintenance will commence with the first go-live event of the POSSE LMS project.

Our Denver-based Customer Support Team will be the City's primary contact for all services and issues during the Maintenance and Support period. Services to be provided by Computronix will consist of the following deliverables:

- Designated Account Manager for City, located at our offices in Denver, CO.

- Online help desk support to the City's designated Tier 1 support staff for diagnosing, triaging, and trouble-shooting support requests. Our Customer Support Team will engage POSSE Product Support's Tier 2–Tier 4 Help Desk services, on the City's behalf, as needed, operating 8:00 a.m.–5:00 p.m. Mountain Time, Monday to Friday, excluding defined statutory holidays. Support outside of these hours is available to the City at additional cost.
- Online issues reporting and tracking tool for reporting and tracking reported issues 24 x 7 x 365. The City's Tier 1 Help Desk staff members will each receive an authenticated ID and password to access the issues reporting system.
- Customer escalation processes to the Manager of Products and Sales, the executive Computronix Executive Team, and, ultimately, Computronix owners.
- Our Computronix Product Support infrastructure provides our clients with access to highly trained Computronix professionals who are equipped to handle support requests related to our software. As its primary communication protocol with client Tier 1 Help Desks, Computronix provides a Product Support website (<http://posse.computronix.com>), where clients can log technical support requests and track the status of any requests or issues that they have originated. Issues are handled based on type of support request and urgency, with senior Computronix staff becoming involved to help resolve urgent issues. Our User Group website also provides access to technical materials, as well as software release notes and related documentation. The site offers a wealth of data on real-time bug and issues reporting and tracking, customer support FAQs, news, and updates about upcoming product releases, available maintenance release and patches for download, and a complete archive of presentation materials from previous Computronix Product User Conferences.

Further information about our support and maintenance agreement is included in **Appendix D**, Annual Product Support Agreement for POSSE Clients.

Computronix expects the City's IT department to be responsible for performance monitoring, troubleshooting, and loading of product patches and releases. Computronix can provide remote support at additional cost.

#### **2.4.1 USER SUPPORT**

Computronix proposes a four-tier Help Desk structure to fulfill the system requirements and to ensure the overall System continues to run smoothly:

- **Tier 1 Help Desk**—Computronix will train designated City support staff in system administration and support. We expect your trained support staff to provide front-line Tier 1 support to end users. Computronix does not provide Product Support directly to end business users.
- **Tier 2–Tier 3 Product Support**—As a result of an issue reported by the City's Tier 1 Help Desk, a new incident will be created in our online Product Support Issues Tracking system, recording time, date, caller, issue, and related details. A priority will be assigned to each incident. The incident will be assigned a unique identifier, which will be communicated to the caller, either during the call or electronically. Each incident will be routed to an appropriate Computronix Product Support staff for resolution, based on training, experience, and level of severity. The logging system will automatically track the status of outstanding incidents to ensure that the assigned resources

remain focused and properly prioritized. Status reporting will be maintained with the person who originally logged the incident, either by phone or electronically. Once the issue is resolved, the closing details and outcome will be recorded. Remote access to the City's POSSE databases will allow the Computronix Product Support staff to address most problems quickly using whatever staff skill is most appropriate.

- **Tier 4 Product Support**—The highest tier represents the assistance of Computronix Product Development and/or Product Support teams, which are located in Edmonton. In the rare event that additional assistance is required for issue resolution, the software developers themselves are brought in to assist.

As described in the POSSE Annual Product Support Agreement (see **Appendix D**), support issues are categorized as follows, with corresponding response times:

Severity	Definition	Response Time	Resolution Time
<b>Critical</b>	CLIENT site is down. Major impact to operations of CLIENT site.	< 15 min.	Immediate and ongoing effort, with daily reporting to CLIENT until the correcting release is issued or a work-around is provided.
<b>High</b>	Major impairment of at least one important function at CLIENT site. Operations at CLIENT site are impacted. All important CLIENT functions are working albeit with extra work.	< 1 hour	Proceed with fix as high priority work (with CLIENT informed of identified target date for release as well as regular progress reports) until the new release is issued or a work-around is provided.
<b>Medium</b>	CLIENT Operations not significantly impacted. One or more minor CLIENT functions not working. Usability irritations impacting many staff at CLIENT.	< 4 hours	Proceed with fix as medium priority work, with CLIENT informed of identified target date for release.
<b>Low</b>	Minor usability irritations. Work-around exists.	< 2 working days	Proceed with fix as low priority work.

#### 2.4.2 THIRD-PARTY SUPPORT

Support for third-party partner applications is provided by that partner, working in conjunction with POSSE Support teams.

#### 2.4.3 SYSTEM ENHANCEMENTS

We welcome the input of our clients to improve our products! POSSE enhancement requests may be logged in the POSSE Product Support website (<http://posse.computronix.com>). All enhancement requests are reviewed by the POSSE Product Manager, for possible incorporation into the product in a future release.

As a “departure point” application that will immediately be customized to the City’s needs, enhancements to POSSE LMS requested by the City will be scoped by Computronix for inclusion in a future project.

#### 2.4.4 USER PROTECTION PLAN

Our North American POSSE source code escrow agent is Lincoln-Parry SoftEscrow ([www.softescrow.com](http://www.softescrow.com)), a well-established and reputable international escrow agent, with offices in Boston, MA. Computronix has established a standard Multi-User Three-Party Software Escrow Agreement for the majority of our POSSE clients. Under the existing Escrow Agreement, the City would be named as an additional Beneficiary. Upon request, Computronix will provide the City with a copy of our U.S. escrow agreement for legal review and record-keeping purposes. Escrow updates are provided to Lincoln-Parry twice per year.

Optionally, Lincoln-Parry and Computronix could provide a separate Single-User Three-Party Software Escrow Agreement for the City for an additional cost.

#### 2.4.5 USER GROUPS AND CONFERENCES

Our POSSE User Groups play a pivotal role in the evolution of our POSSE Software Product Roadmap, by providing feedback to the POSSE Product Council and Steering Committee on planned releases and by conceptualizing and proposing new product enhancements or joint-funded site-specific enhancements, which could be beneficial to multiple clients. The City will be welcome to join our User Group!

Computronix hosts an annual user conference (Computronix Client Conference) every September. In 2014, the Conference will be held in Denver, and Computronix welcomes the City to participate. Computronix clients gather to share their experiences and learn how our technology is being used at other client locations. The Conference also provides the ability to connect with senior Computronix technical and business staff.

### 2.5 Modification Request Process and Estimated Cost and Turnaround

Computronix expects changes to occur throughout the natural course of any project, and the POSSE LMS project for the City of Riverside is no exception. Therefore, Computronix employs a well-defined Change Management process to efficiently handle project changes, modifications, and new workflows that the City requires.

Scope Management is primarily the responsibility of the Computronix Project Manager, though both project teams naturally plays a significant role in the management of scope and ultimately the success of the project.

The Change Request process is initiated when Computronix and/or the City determine that a change is required to the **scope**, **costs**, or **schedule** baseline current at the time the change is detected. The following steps are followed to manage the change:

- The Computronix Project Manager documents the change using the agreed-to Change Request form. An estimation of the cost of the proposed change is included in the Change Request form, based on the hourly rate set by Computronix for the POSSE LMS project.

- The City Project Manager, with support from business champions, the Steering Committee, and others, evaluates the Change Request for completeness and validity, then returns the Change Request to the Computronix Project Manager.
- Computronix determines the feasibility of the Change Request, and if feasible, estimates effort and cost and documents the impact to the project if the change were to proceed. The Computronix Project Manager forwards the Change Request to the City Project Manager.
- The City Project Manager reviews the Change Request and if required by the City, presents the Change Request to the Steering Committee for review. If approved, the Change Request is signed and dated.
- If a statement of work or contract amendment is required, the Computronix Project Manager forwards such to the City Project Manager.
- The City Project Manager sends the approved Change Request and other documentation to the Computronix Project Manager, who acknowledges receipt via email. At this point, the project plan documentation is updated accordingly.

The change control mechanism for items to be removed from scope will follow the same mechanism as the addition of new scope.

## 2.6 Data Conversion

Computronix has over 30 years of experience with data conversions and migrations. Our data conversion experts utilize a number of automated tools and techniques that aid in data identification and categorization. Data conversion is a corporate core competency. We will use the same basic conversion methodology that has been used successfully on numerous POSSE projects in the past, including for City of Vancouver in B.C, Canada.

Computronix and the City will share the responsibility for all facets of data conversion, including creation of a Data Conversion Plan, Data Conversion Mapping document, and the transformation of data from the source data structures into the destination POSSE LMS structure as defined by the Data Conversion Mapping document. Much of the data conversion is primarily a City responsibility, including data cleansing (as defined at [http://en.wikipedia.org/wiki/Data\\_cleansing](http://en.wikipedia.org/wiki/Data_cleansing)).

The first step in creating the Data Conversion Plan will be an analysis for all in-scope conversions. A high-level determination will be made as to which data sources and tables will be relevant to the conversion. The findings will be compiled into the Data Conversion Plan, which will be submitted to the City for review and approval. Data Conversion Planning is a Computronix responsibility, but will require significant City resources familiar with the source systems and data.

Upon approval of the Data Conversion Plan, the data conversion will be performed, using the following approach:

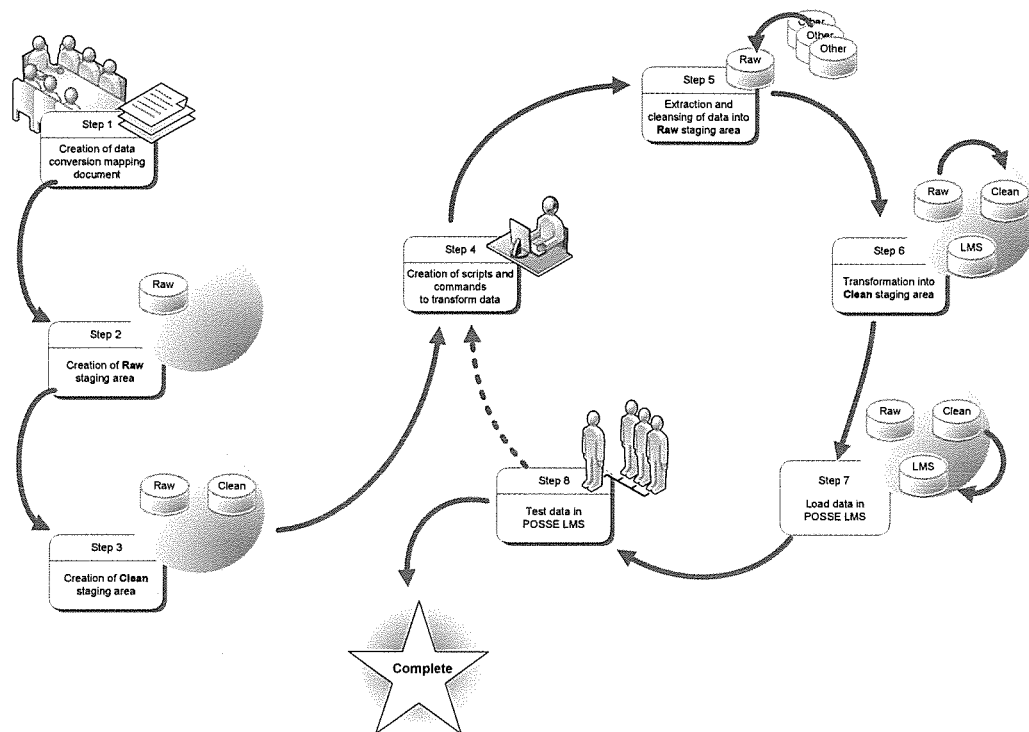
1. *Creation of a Data Conversion Mapping document that specifies the mapping and transformation between source systems and the new system.* Creation of the mapping document is a Computronix responsibility, but will require significant input from City resources familiar with the

source systems and data.

2. *Creation of a Raw Staging Area.* The raw staging area will contain structures designed to contain the data extracted from the source system(s) as defined by the Data Conversion Mapping document. The creation and maintenance of this staging area is a City responsibility.
3. *Creation of a Clean Staging Area.* This clean staging area is a set of tables representing the POSSE LMS system. It is generated by our POSSE Data Conversion tool. The tables in the staging area will have numerous integrity constraints defined that will aid in data cleaning. Upon successful data loading, this staging area will contain cleansed data ready to be loaded into POSSE LMS. The creation and maintenance of this staging area is a Computronix responsibility.
4. *Creation of scripts, commands, and other techniques that transform data stored in the raw staging area into the clean staging area, as documented in the Data Conversion Mapping document.* Creation and maintenance of the transformation scripts, commands, etc. are a City responsibility.
5. *Extraction and cleansing of data from the source systems and the loading of this data into the raw staging area.* This step is the responsibility of the City.
6. *Transformation into Clean Staging Area.* This will be performed by executing the scripts, etc., created in Step 4. Any errors that result from problems with the scripts or data cleanliness will be resolved by the City and the transformation re-run.
7. *Load into POSSE LMS.* Upon successful completion of Step 6, data will be loaded from the Clean Staging Area into POSSE LMS by using the POSSE Data Conversion tool. Any errors that result from problems with the scripts or data cleanliness will be resolved by the City and the transformation re-run.
8. *Test data in POSSE LMS.* The City will test the quality of the converted data within POSSE LMS. Any errors that result from problems with the scripts or data cleanliness will be resolved by the City and the transformation re-run.

Steps 4 through 8 will be repeated until acceptable data quality is reached.

The following graphic illustrates these steps:



#### *Data Conversion Assumptions*

The following assumptions are based on our standard data conversion methodology. Additional services could be provided, if desired, for additional cost.

- Aside from the data conversion analysis taking place within the creation of the Data Conversion Plan and Data Conversion Mapping document, Computronix will make no further attempts to understand, to interpret, or to map data within the City's existing legacy systems or data silos.
- Appropriate City staff, with knowledge of legacy system(s) structure and data, will be available to assist with planning and mapping. These activities will require significant time and attention from the assigned staff.
- City staff will assume full responsibility for deciding what data to extract, as well as what data it will not extract, from existing legacy systems. This includes: all data transformation, data merging, data scrubbing, data parsing, interpretation of legacy data, and any unloading of data from existing systems.
- Computronix will consider all extracted data to be homogeneous, or "clean." Computronix will make no attempts in its mapping or authoring and testing of conversion scripts to correct non-conforming or "dirty" data.
- City staff will perform all data corrections.
- City staff will be responsible for completing any and all other desired data conversions, including conversion from paper-based systems.



#### *Data Conversion Tools*

Computronix uses its own time-saving POSSE data conversion tool that performs the following functions:

- The tool generates a set of Oracle tables that match the Configuration layout/data model in the POSSE configuration. This creates a staging area to load data from other sources.
- Standard Oracle tools and scripts can then be written to convert data into these tables.
- The data conversion tool then converts the data into POSSE.

The data can be manipulated either before or after loading into the clean staging area. The clean staging tables include a number of constraints that ensure data and relationship integrity. The constraints can be disabled during loading and manipulation, but must be enabled before loading into POSSE. Once the data is loaded into the staging tables, and all constraints are satisfied, one call will start the process to load all the data into POSSE's underlying data structure.

## 3 Company Information

### 3.1 Company Overview



Computronix is a recognized market leader in developing innovative, state-of-the-art, flexible systems using Web-enabled, browser-based, wireless, and mobile platforms. Established in 1979, Computronix has 35 years of outstanding experience delivering award-winning solutions to government clients and private industry.

Computronix employs approximately 130 staff members who serve numerous client sites across North America. Our employees are located in Denver, Colorado and Edmonton, Alberta. Customer support and hosting services, if applicable, are always provided within the client's country of operation.

The company stewards to clear goals for annual financial performance, client diversification, and steady growth based on repeat business and word-of-mouth recommendations from our existing client base. Our corporate Balanced Scorecard and Business Plan also include measures for Client Satisfaction, Quality, Continuous Improvement, and Staff Satisfaction.

Computronix is privately owned, and there have been no mergers, acquisitions, restructuring, or sales involving Computronix in its 35-year history. Computronix has never been sued by any party for any reason, and there is no litigation pending against the company. Computronix has never filed for bankruptcy or undergone the appointment of a receiver, trustee, or assignee for the benefit of creditors. The company has never been terminated for cause or breach of contract. We have a 100% delivery success rate.

With a rich history and corporate investment in Information Technology research and development (15 percent in 2013) and a staff oriented to high performance, our corporate mission is to deliver *outstanding solutions* to clients. Computronix seeks prospective North American clients such as the City of Riverside, who have a clear vision of the business transformation they want to achieve.

### 3.2 Contact Information

Below, we have included address and telephone number for the Computronix office located in the Denver metro area.

Computronix (U.S.A.), Inc.	
Address	3900 S. Wadsworth Blvd., Suite 510 Lakewood, CO 80227
Phone Number	(720) 962-6300 Toll Free: (866) 962-6300

All inquiries relating to this proposal may be addressed to:

**Dean Sargent, Business Development Manager**

E-mail: [Dean.Sargent@computronix.com](mailto:Dean.Sargent@computronix.com)

Fax: (888) 712-6657

Corporate website: [www.computronix.com](http://www.computronix.com)

Our Project Team is identified in **Section 7—Qualifications and Experience**. Our Professional Team includes David den Otter (Vice President of Operations), Dean Sargent (Business Development Manager), and Joe Keim (Project Manager). All may be contacted at the U.S. office phone number listed above.

Computronix does not intend to use any subcontractors in the POSSE LMS project.

## 4 Work Schedule

Computronix has developed a comprehensive work schedule for the City of Riverside. We have established milestones for anticipated events with the assumption that the contract is signed January 2, 2015, with expected start and completion dates. Our schedule includes a high-level professional services plan and tasks that Computronix will perform. In Section 2.2, we have addressed the percentage of on-site time and the tasks to be performed by City Staff. Please note that our project schedule is confidential.

The following pages present the City of Riverside project schedule in Gantt format.



















## 5 Customer Interface

POSSE LMS provides flexible and secure access for the public. For general information and searches, POSSE LMS supports “guest” access that requires no authentication and also allows the City to limit the data displayed to the general public.

When authenticated access is needed by external users (e.g., contractor, developer, licensee) POSSE LMS provides a personalized, PIN-secured account motif to initiate, view, track, and seamlessly participate in workflow and manage his or her business activities (e.g., applications, document reviews and revisions, pay single or multiple fees, schedule and monitor inspections, and manage corporate profile and contact information) from a single, powerful, and highly-secured one-stop presentation. Uploading electronic documents such as Microsoft Word files, .pdf files, CAD drawings, digital photos, videos, etc., is also supported.

External agencies and stakeholders who form part of a business process workflow (reviews, approvals, sign-offs, etc.) participate using browser-based To Do Lists. Internet service can include integration with e-mail systems to notify users when they have been assigned work by POSSE LMS. Such automated outbound e-mail notifications from the System can include Web links to allow the user to quickly access specific applications, renewals, and other tasks to which the user must respond.

### Online Portal Features:

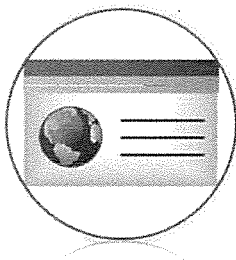
Multiple functionality and flexibility exists including:

- 24/7/365 public access
- Secure access to external users
- Web agnostic interface

Additional key components include:

- Industry Best Practices for scheduling inspections
- Submittal of online documents, including electronic document reviews

### 5.1 Customer Dashboard



POSSE LMS includes a robust public portal to meet the diverse needs of the City's external customers. Customers can create and manage their own user account with the City, and all projects with the City can be associated to their account. When a customer logs in, they are taken to their home page, which is a dashboard of all their interactions with the City.

Welcome Nathan Davidson

Using this Site | Contact Us

**LMS** Home | My Dashboard | Building Permits | Planning | Code Enforcement | Sign Out |

**My Dashboard**

Save Cancel

My Permit Applications My Planning My Licenses My Areas of Interest My Profile

Apply For New Permit

**Active Permit Applications**

#	Description	Status	Requested Date
12-00090	Commercial - Commercial - New - Jim Owner: Jim - Site Address: 1010 FULTON MALL Fresno, 93721-2502	In Review	2012/01/25
12-00091	Building - Rough-In Inspection	Issued	2012/01/25
12-00091-01	Building - Rough-In Inspection	Complete	2012/01/31
12-00093	Residential - Single Family - New - Nathan Davidson Owner: Nathan Davidson - Site Address: 1008 ADLER DR C	In Review	2012/02/16
12-00094	Building - Footing Inspection	Issued	2012/02/16
12-00094-01	Building - Footing Inspection	Scheduled	2012/02/19
12-00095	Residential - Electrical - New Construction - Site Address: 1008 ADLER DR Clovis, 93612-1503	New	2012/02/10
12-00096	Residential - Mechanical - New Construction - Site Address: 1008 ADLER DR Clovis, 93612-1503	New	2012/02/10
12-00097	Residential - Plumbing - New Construction - Site Address: 1008 ADLER DR Clovis, 93612-1503	New	2012/02/16
12-00098		In Review	2012/02/19
12-00099		In Review	2012/02/19
12-00104		In Review	2012/02/19

Above: The "My Dashboard" page for authenticated external users shows all active projects associated with the user.

## 5.2 Ease of Applying for Permits

Using the customer portal, it just takes the click of a button to apply for a permit/project:

Welcome Steven Dyrluk LMSV3Demo Support: Public Contact Us

**LMS** Home | Search | Profile | Sign Out

**Home**

Choose one of the following activities

<a href="#">Apply for a Building Permit</a>	<a href="#">Apply for a Business License</a>	<a href="#">File a Complaint</a>
<a href="#">Apply for a Building Permit Amendment</a>	<a href="#">Amend a Business License</a>	<a href="#">Request an Address Change</a>
<a href="#">Apply for a Planning Approval</a>	<a href="#">Renew a Business License</a>	<a href="#">New Fire Inspections</a>

Above: Authenticated external users can easily apply for permits from the customer portal.

The system guides the customer through the information needed to apply for the permit (or perform other authorized activity) and notifies the correct City staff member of the next step in the permit workflow.

## 5.3 Ease of Communicating with City Staff

With POSSE LMS, information entered online by a customer is visible to internal staff immediately. Tasks can be assigned to customers or internal staff through configurable workflow. External agencies and stakeholders who form part of a business process workflow (reviews, approvals, sign-offs, etc.) participate using browser-based To Do Lists. Internet service can include integration with email systems to notify users when they have been assigned work by POSSE LMS, and such automated outbound email

notifications from the System can include Web links to allow the user to quickly access specific applications, renewals, and other tasks to which the user must respond.

Computronix is pleased to provide our revolutionary approach to Referral procedures. eReferrals extends lightweight review/comment functionality to internal and external agencies and reviewers who may have an interest in applications, without the need for licensing, training, or support for the full POSSE interface. For example, eReferrals can be sent to local utility companies, State agencies, and other State and Federal agencies who may be involved with subdivisions or other land use applications, with either mandatory or optional responses built into the workflow.

## 5.4 Integration with ProjectDox



POSSE LMS provides electronic plan submission, review, and limited mark-up functionality. Computronix has successfully integrated POSSE with Avolve Software's ProjectDox to effectively manage the plan review process. POSSE will manage the City's main workflows and will "hand off" to ProjectDox for the e-Plan review processes that are best suited for ProjectDox. Together, POSSE and ProjectDox form a powerful work management and e-Plan management solution.

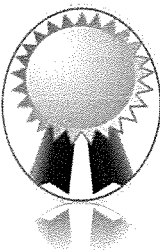
## 5.5 Online Payment Options



Computronix can integrate POSSE LMS with a variety of third-party e-commerce, cashier, AR/GL and financial systems, as well as PCI-compliant e-payment systems for online payment by Internet users. We have successfully interfaced with System Innovators' Cashier for Windows in Broward County, FL.

POSSE LMS can automatically complete simple or complex fee calculations. POSSE supports flat fees, proportional fees, fee ranges, and tiers and progressive fee payments. Fee calculations can be based on details collected on other windows and fields.

## 5.6 City Business License/State Contractor's License



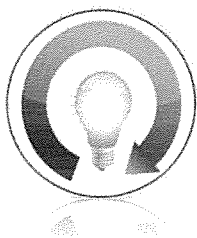
Workflow is core to the POSSE LMS platform for managing business process automation in your regulatory organization. This is especially true as it relates to licensing activities, issuance, renewals, and expirations. POSSE LMS includes a Business Licensing module to allow customers to apply for business licenses online and maintain a valid license through the renewal process. Contractors can enable several individuals with shared access to work with permits and projects in the customer portal. State-level licenses are tracked to ensure that they are valid.

Users are actively guided through business process workflows from initiation to completion. POSSE LMS ensures that each work step is carried out correctly, completely, and consistently, based on your business rules and requirements.



- POSSE LMS tracks the entire lifecycle of a license, from application to renewal and expiration. The System includes email notifications based on a number of business process triggers, such as impending inspections and license expiration dates.
- POSSE LMS provides the real-time status of each step in the license workflow, increasing efficiency and improving service throughout your organization.
- POSSE LMS automatically routes work based on process outcomes (decisions), enforces security, and ensures required data and documents are collected and linked to the workflow.
- Tasks are automatically assigned to each user's personalized To Do List.
- All POSSE users can share the same data with security privileges permitting, which allows for more accurate decision making. Information updates made by one user are immediately available to other users, ensuring a consistent and accurate source of information.

## 5.7 Open Data API for Government Transparency



POSSE's state-of-the-art package of applications provides several native enabling technologies, web services, and open and published APIs to third-party products. Additionally, interfaces for Web, smart client, and mobile applications can be seamlessly integrated with a common database and a consistent set of business rules.

POSSE LMS has built-in APIs to enable the delivery and acceptance of data in any format, enabling seamless real time or batch interfacing to other systems. All interfaces use these APIs, ensuring that POSSE source code is never modified and that

our clients then remain firmly on the product path. These APIs include:

- **Service API**—The POSSE Application Server has a number of exposed API methods that can be called through .NET (e.g., web services) to interact with the POSSE database.
- **JavaScript Add-on API**—POSSE has a number of methods exposed that allow developers to write their own add-ons to the application itself. The add-on can be tightly integrated with the POSSE application through the Add-on API.
- **Python API**—The POSSE product also a full API available for use through Python scripting.
- **Database API**—A variety of methods are available directly in the Oracle database that can be called to interact with POSSE.

Using the rich APIs and web service capabilities that come with the POSSE product, Computronix feels strongly that the City will be able to easily integrate with all of their existing systems. Computronix welcomes the City of Riverside to contact any of our customers to further discuss Computronix expertise and proven track record with interfacing and integrations.

## 5.8 Project Status Updates

POSSE LMS tracks the entire lifecycle of permits and licenses, from application to renewal and expiration and provides real-time status of all projects within the system. The system provides email notifications

based on a number of business process triggers, such as impending inspections and license expiration dates. This allows the City to renew permits and licenses at the appropriate times and in a consistent manner.

Recurring events related to permits and licenses can be configured to automatically create processes and run according to a user-defined schedule. For example, a permit inspection could be automatically initiated 30 days prior to permit expiration. This task can be scheduled to appear in a staff member's To Do List at the appropriate time

## 5.9 Upload of Photos, Videos & Files

POSSE LMS allows customers to upload photos (file types are configurable as desired). Uploading electronic documents such as Microsoft Word files, .pdf files, CAD drawings, etc., is also supported.

## 5.10 Schedule Inspections/Re-inspections with Multiple Departments



POSSE LMS allows customers to schedule inspections for all permits that require them. Many POSSE LMS workflows include inspections of buildings, Code violations, complaint cases, and other entities. Inspections may be routine or scheduled on a periodic basis—both are handled in POSSE LMS. Customers receive notification of the results of the inspections and can request a re-inspection on their Dashboard page on the customer portal.

## 6 Staff Interface

POSSE LMS provides an intuitive, easy-to-use interface that enables City staff to rapidly process permit and licensing activities. In addition to the detailed demonstration of capabilities below, we have included user documentation in Appendix B that walks users through use of the POSSE LMS solution.

### 6.1 Communication

#### 6.1.1 COMMUNICATING WITH APPLICANT/CUSTOMER

POSSE LMS sends emails to applicants/customers as events occur on related workflow. Customers can manage their own email settings in the public portal, with the option to receive email when their action is needed being checked by default. Email messages are sent automatically, and Staff contribute to email content by entering text in appropriate fields in the system.

The screenshot shows the 'Profile' page of the POSSE LMS system. At the top, there is a header bar with the LMS logo, a welcome message 'Welcome Steven Dytiuk', and a support link 'LMSV3Demo Support: Public'. Below the header, the 'Profile' section is active, with tabs for 'My Profile', 'My Emails', 'Outstanding Fees', and 'Payments'. The 'My Emails' tab is selected, showing the user's email address as 'cxlmsdemo+steven.dytiuk@gmail.com' and a checked option to 'Receive email when my action is needed:'. Below this, the 'ACTION COMPLETION EMAILS' section lists various system events with checkboxes to receive email notifications. The 'Building Permit Issued' checkbox is checked.

Receive email when action is complete:	Receive Email?
Abandon Attempt Payment	<input type="checkbox"/>
Activate Registration Ext	<input type="checkbox"/>
Building Inspection Performed	<input type="checkbox"/>
Building Permit Issued	<input checked="" type="checkbox"/>
Certificate Review	<input type="checkbox"/>
Completeness Check (Permits External)	<input type="checkbox"/>
Completeness Check (Planning - External)	<input type="checkbox"/>
Completeness Check - (Core External)	<input type="checkbox"/>
Enter Application	<input type="checkbox"/>
Enter Business License Application	<input type="checkbox"/>
Enter Permit Application	<input type="checkbox"/>
Enter Planning Application	<input type="checkbox"/>
Expire Permit	<input type="checkbox"/>
Final Check	<input type="checkbox"/>
On Issue of your Business License	<input type="checkbox"/>
On Rejection of your Business License	<input type="checkbox"/>
Perform Mechanical Inspection	<input type="checkbox"/>
Perform Plumbing Inspection	<input type="checkbox"/>
Print Inspection Details	<input type="checkbox"/>
Process Manual Renewal	<input type="checkbox"/>
Provide Further Information (BL)	<input type="checkbox"/>
Provide Further Information (CP)	<input type="checkbox"/>
Provide Further Information (PI)	<input type="checkbox"/>
Provide Further Information (PL)	<input type="checkbox"/>
Reminder	<input type="checkbox"/>
Request Inspection	<input type="checkbox"/>
Review Performed	<input type="checkbox"/>

Above: Customizable notification options on the customer portal.

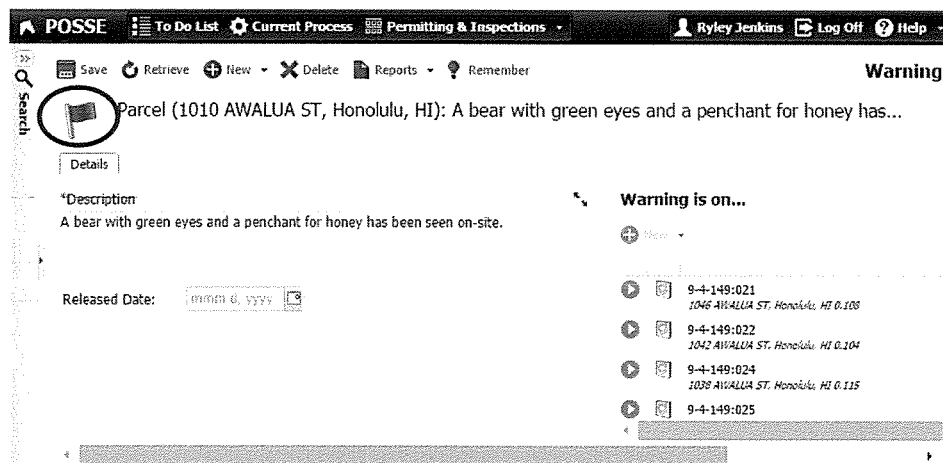
## 6.1.2 COMMUNICATING WITH OTHER DEPARTMENTS/DIVISIONS

There are two scenarios for communicating with other departments/divisions:

1. If the other department is POSSE-enabled, processes can be assigned to staff in the other department and will show up on their To Do Lists. Security can be configured to allow/restrict access as required. All communication can be tracked in POSSE workflow.
2. If the other department is not POSSE-enabled, the system can send emails or generate letters to allow communication. For example, an email can be sent on any event that occurs in the system. A letter, or even a mail-merge set of letters can be generated in the system to provide notifications to stakeholders of a project. POSSE LMS includes an eReferrals component which can be used to locate affected property owners on a map and generate letters for mailing to them and to external agencies. Feedback from the stakeholders can be provided via a POSSE LMS Website.

## 6.1.3 PLACING AN ALERT, HOLD OR STOP ON A PROJECT PENDING AN INSPECTION/PAYMENT/ETC

1. Alerts can be configured on virtually any job, parcel, project, or object. These are called Warnings, and the Warning will be displayed on all related items:



Above: A Warning placed on a Parcel is indicated by a red flag.

2. Conditions can be placed that apply to specific permits or entire projects. These conditions can cause events to occur, such as Inspections, Reminders, and/or Stop processes.

**Condition: (New)**

\*Condition Description  
Landscaping plan must be completed at about 50% completion of the subdivision

Resolved Date:

Explanation of resolution  
Please explain how the condition was resolved.

Print On Permit: ☐

Assign to User:

**Event Actions**

Action	Event	Date	Count	Whom to Remind
Inspection	Count of Permits Issued		5	<input checked="" type="checkbox"/>
Reminder	Permit Issuance			<input checked="" type="checkbox"/>
Stop	Count of COs Issued		5	<input checked="" type="checkbox"/>

OK Cancel

Above: A Condition placed on a project triggers other actions.

- The system requires all fees to be paid at predefined times during the workflow, such as on permit issuance. An error message will be received if fees are outstanding, and the permit will not be issuable.
- Staff can insert processes to create a Hold:

Fulfill Zoning Conditions

- ☒ Hold Permit Completion
- ☒ Hold Permit Issuance
- ☐ Transferral Fee

## 6.2 Fees

### 6.2.1 FEE CALCULATIONS AND SIMPLE FEE UPDATE PROCEDURES

POSSE LMS can automatically complete simple or complex fee calculations. POSSE supports flat fees, proportional fees, fee ranges, and tiers and progressive fee payments. Fee calculations can be based on details collected on other windows and fields.

POSSE LMS supports the calculation, payment, tracking, and changing of site-specific fees and fee structures. The System can be configured for specific City fee formulas and automated fee calculations. POSSE LMS has a configurable Fees tab, which allows the user to review, override, and adjust fees, denote the responsible party, accept cash or check fee payment, print a receipt, and close off the fees. Users can calculate fees for date-specific time periods and even set fees to automatically calculate. Additionally, if

needed or required, the City can track escrows accounts, bonds, deposits, and draw-downs. The System allows for warnings and holds for unpaid fees.

POSSE LMS uses effective-dated Fee Schedules to organize fee calculations and allow organizations to prepare in advance for upcoming fee changes, while allowing existing workflow to continue using schedules in effect earlier. Updates to fee calculations and fee schedules are made using an administration website. Fixed fees can be entered using a number; more complex fee calculations can be entered using SQL functions. The POSSE LMS Common Finance component takes care of applying all applicable fees to POSSE jobs, all the way through to job completion.

Welcome Ryley Jenkins LMSV3Demo Support: Configuration

Main | Business Licensing | Compliance and Enforcement | Permitting and Inspections | Planning | Sign Out

### LMS Fee Schedule 2014 Fee Schedule

May 30, 2014 to Dec 31, 2015

Details Data Sources Categories Save

\*Description: LMS Fee Schedule 2014

\*Effective Start Date: May 30, 2014

\*Effective End Date: Dec 31, 2015

#### FEE DEFINITIONS

Fee Definition

Description	Applies To	Category	Amount	
(PD) Fire Permit Fee	General Permit	Fire Permit	75	✕
Address Change Request Application Fee	Address Change Request	LMS Intake	704	✕
Bond/Escrow Extension Fee	Extend Bond/Escrow	Other	= (FeeAmount) * 1.05	✕
Bond/Escrow Reduction Fee	Reduction Request	Other	= (FeeAmount)	✕
Building Permit Application Fee	Create Application Fee	Other	50	✕
Case File Fee	LMS Case File	Other	= {Fine}	✕
Commercial Permit/Modular	Building Permit	Commercial	= (sum(o_BuildingOccupancy.CommercialOccupancyFee)) * .7	✕
Commercial Permit/New or Addition	Building Permit	Commercial	= greatest( {sum(o_BuildingOccupancy.CommercialOccupancyFee)} * .75, 1)	✕
Commercial Permit/Renovation	Building Permit	Commercial	= greatest( {sum(o_BuildingOccupancy.CommercialOccupancyFee)} * .75, 33)	✕
Commercial Permit/Upfit	Building Permit	Commercial	= greatest( {sum(o_BuildingOccupancy.CommercialOccupancyFee)} - case when {TotalSquareFeet} > 15000 then {TotalSquareFeet} * .09 else {TotalSquareFeet} * .116 end. 33 )	✕

Above: A Fee Schedule is defined and maintained on the POSSE LMS Administration website. Fees can be simple numbers or complex calculations.

## 6.2.2 INTEGRATION OF COLLECTION ACTIVITY BY ACCOUNT NUMBER INTO IFAS-FINANCIAL SYSTEM

Interfaces can be configured in POSSE LMS to financial systems. We expect this to be discussed and configured as part of our implementation project.

### 6.2.3 ABILITY TO ENTER TRUST ACCOUNTS, BONDS, FEES, AND TEMPORAY FEES AND BILL HOURS FOR RE-INSPECTIONS

POSSE LMS provides the option for an inspector to charge a re-inspection fee, should one be required. Fees can be entered onto jobs by staff with appropriate permission to do so. Any additional information such as Trust Accounts, bonds, and bill hours can be configured using our point-and-click configuration tool. We expect this to be discussed during the initial phase of the project.

### 6.2.4 ABILITY TO GENERATE INVOICES THAT ARE REPORTED TO IFAS

POSSE LMS generates invoices for some job types, and invoices can be configured for any job type, as desired.

## 6.3 Functions/Tasks

### 6.3.1 LINK TO ANY OTHER PROJECTS OR CONCERNS REPORTED AT THE LOCATION

With POSSE LMS, related activities can be linked together by project or by parcel. Areas can even be selected on a map and a search performed for activities occurring on the elected parcels.



The screenshot displays the POSSE LMS interface for a specific parcel. At the top, the parcel address is 1144 WANAKA ST, Honolulu, HI 0.115. Below the address, there are tabs for Details, Addressing, Jobs, Projects, Documents, Conditions, Warnings, History, File Notes, and Spatial. A table lists activities associated with the parcel, including Submitted, In Review, Ready For Issue, and Issued permits, along with a Complaint. The table columns are ID, Description, Created Date, Issue Date, and Completed Date.

ID	Description	Created Date	Issue Date	Completed Date
BP-2014-00343	Submitted (Residential - Single-family - New) 1144 WANAKA ST, Honolulu, HI (Steven Dytuk)	Jul 31, 2014		
BP-2014-00334	In Review (Residential - Single-family - New) 1144 WANAKA ST, Honolulu, HI (Jack Breslin DBA: Breslin Builders)	Jul 23, 2014		
BP-2014-00302	Ready For Issue (Residential - Single-family - New) 1144 WANAKA ST, Honolulu, HI (Steven Dytuk)	Jun 20, 2014		
BP-2014-00282	Issued (Residential - Single-family - New) 1144 WANAKA ST, Honolulu, HI (Steven Dytuk)	Jun 16, 2014	Jun 16, 2014	
BP-2014-00245	Ready For Issue (Residential - Single-family - New) 1144 WANAKA ST, Honolulu, HI (Adair Homes)	May 27, 2014		
BP-2014-00173	In Review (Residential - Single-family - New) 1144 WANAKA ST, Honolulu, HI (Jack Breslin DBA: Breslin Builders)	May 16, 2014		
BP-2014-00122	Issued (Residential - New) 1144 WANAKA ST, Honolulu, HI (David Green)	Feb 27, 2014	May 28, 2014	
Complaint CM-2013-000349	Closed - 1144 WANAKA ST, Honolulu, HI Neighbor letting weeds grow too tall	Nov 5, 2013		Nov 5, 2013

Above: POSSE LMS displays all activity associated with a parcel.

Above: POSSE LMS displays a hierarchical view of related permits within a project.

### 6.3.2 ADVANCED NOTIFICATION OF CITY BUSINESS LICENSE AND INSURANCE EXPIRATION

POSSE LMS includes a Batch Notification feature, which finds all business licenses that are about to expire and sends advanced notifications, so that renewal can occur before expiration.

	Process Type	Complete	Assigned To	Outcome
	Print Renewal Batch	✓		Printed
	Send Batch	✓	POSSE system power user	Sent

Above: POSSE LMS prompts users to print and sent renewal batches before the related licenses expire.

### 6.3.3 AUTOMATIC DEADLINE DATES FOR REVIEWS AND RESUBMITTALS

POSSE LMS provides Scheduled Start and Scheduled Complete dates for all processes. These can be set automatically according to business rules. These would be customized as part of our implementation project. Resubmittals can also have deadlines, and the system's response can be configured according to City requirements.



**Perform Review** >>

✓ Complete Claim Delete Reports ▾

Assigned To Description

Ryley Jenkins Perform Planning Review

Scheduled Start: Sep 11, 2014 Actual Start: mmm d, yyyy hh:mm:ss

Scheduled Complete: Sep 16, 2014 Actual Completed: mmm d, yyyy hh:mm:ss

Review Notes Documents Time Entry

### Corrections Required Notes

New ▾

Last Update On	Last Update By	Locked	Note
----------------	----------------	--------	------

Above: Scheduled Start and Complete dates are provided by the system, as dictated by workflow rules.

### 6.3.4 TASK DEADLINES TO INCLUDE DEADLINE, REMINDERS OF DEADLINES

The To Do List in POSSE LMS includes Due Dates. Reminders of deadlines can also be inserted as tasks into jobs.

POSSE Ryley Jenkins Log Off Help

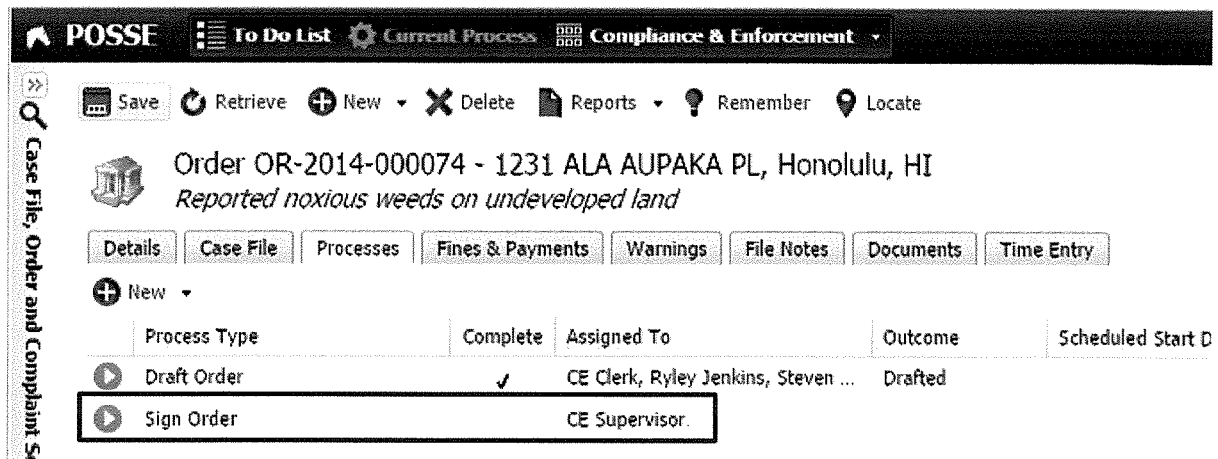
**To Do List**

	Scheduled Date	Due Date	Location	Job Type	Assigned To	Process Type	Job Date	Job Information	Proce
	Jul 31, 2014	Aug 7, 2014	1591 MACHADO ST,...	Plumbing Permit	Ryley Jenkins	Perform Plumbing Inspection	Jul 18, 2014	BP-2014-00331: Issued (Residential - Ad	Seve
	Jul 31, 2014	Aug 5, 2014	1713 MACHADO ST,...	Building Permit	Ryley Jenkins	Perform Building Inspection	Jul 18, 2014	BP-2014-00333: Issued (Commercial - S	Build
	Aug 12, 2014	Aug 18, 2014	1566 MACHADO ST,...	Building Permit	Andrew Langemann, Ang...	Perform Review	Sep 11, 2014	BP-2014-00350: In Review (Residential ...	Perfor
	Sep 1, 2014	Sep 4, 2014	1566 MACHADO ST,...	Building Permit	Andrew Langemann, Ang...	Perform Review	Sep 11, 2014	BP-2014-00350: In Review (Residential ...	Perfor
	Sep 3, 2014	Sep 8, 2014	1566 MACHADO ST,...	Building Permit	Andrew Langemann, Ang...	Perform Review	Sep 11, 2014	BP-2014-00350: In Review (Residential ...	Perfor
	Sep 11, 2014	Sep 16, 2014	1566 MACHADO ST,...	Building Permit	Ryley Jenkins	Perform Review	Sep 11, 2014	BP-2014-00350: In Review (Residential ...	Perfor

Above: Assignment due dates are part of the user's To Do List, so that urgent tasks can be prioritized.

### 6.3.5 SUPERVISOR APPROVAL OF STAFF REVIEW NOTES

POSSE LMS includes a robust security model, which ensures that process types can be restricted to desired groups. There are several places where staff complete a process and provide notes in the system or in an attached document. Their supervisor is then assigned a process to review the notes and can choose to sign the document. The system can be configured to automatically insert the supervisor's electronic signature.



**POSSE** To Do List Current Process Compliance & Enforcement

Save Retrieve New Delete Reports Remember Locate

**Order OR-2014-000074 - 1231 ALA AUPAKA PL, Honolulu, HI**  
*Reported noxious weeds on undeveloped land*

Details Case File Processes Fines & Payments Warnings File Notes Documents Time Entry

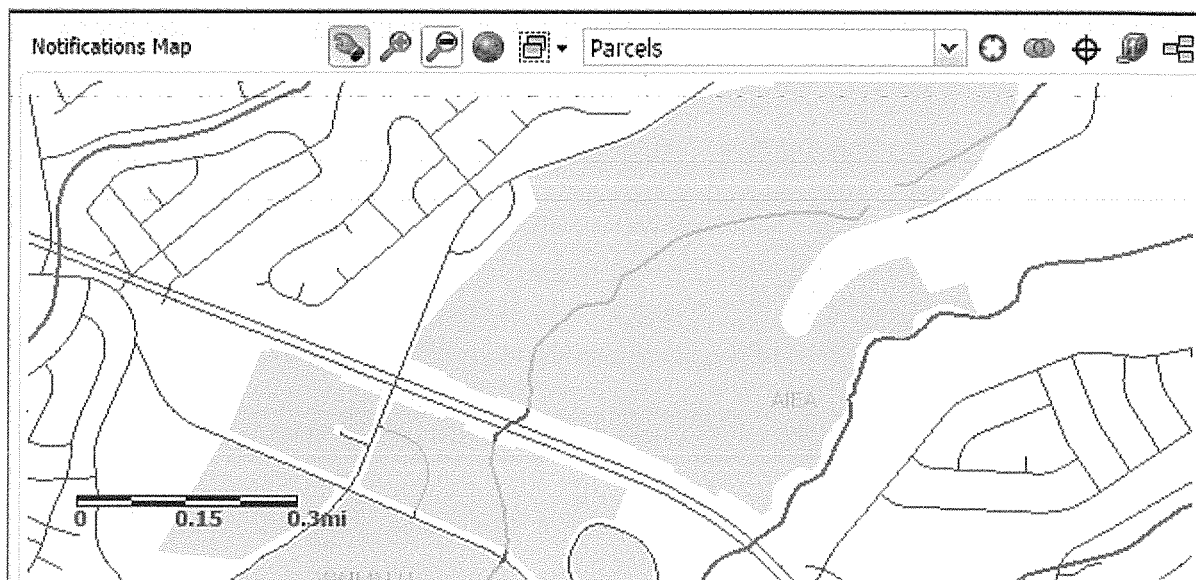
New

Process Type	Complete	Assigned To	Outcome	Scheduled Start D
Draft Order	✓	CE Clerk, Ryley Jenkins, Steven ...	Drafted	
Sign Order		CE Supervisor.		

Above: The supervisor is assigned to review and sign a document that was drafted by their staff.

### 6.3.6 CREATE NOTICES FROM TEMPLATES FOR THE PROPERTY OWNER OR A RANGE OF NEIGHBORING PROPERTY OWNERS

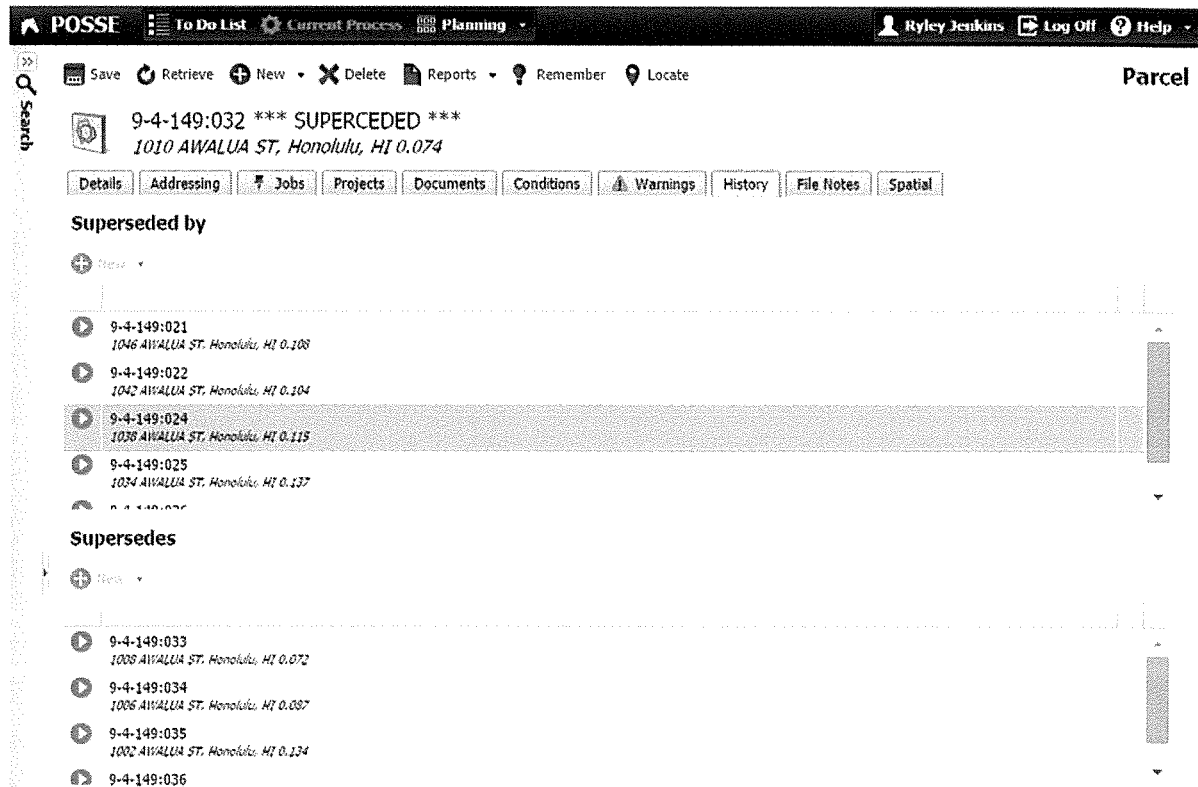
This functionality is one of the most raved-about by POSSE clients! Using a map, staff can highlight neighboring properties. The system processes the owners of the properties to ensure that each owner will only receive one letter. Then, notices are created from template and can be mailed out.



### 6.3.7 THE ABILITY TO RESEARCH PRIOR HISTORY BY ADDRESS, PERMIT NUMBERS, TRACT #'S, PARCEL NUMBERS & A/P/N.

POSSE LMS has advanced search capabilities, allowing users to easily find required information. Because the objects are related, once the user finds one object, they can easily see what it is related to and can navigate to the related object. Parcel history is available, allowing the user to see the history of a parcel:

what the parcel once was, and what has superseded it. Any piece of information that is desired, but not yet tracked in POSSE LMS, can be added too.



Above: The "History" tab shows a complete record of the activities performed on a parcel.

### 6.3.8 ABILITY TO CENTRALIZE PROPERTY INFORMATION UTILIZING GIS SOFTWARE INCLUDING BILITY TO VIEW CITY MAP WITH ELECTRIC INFORMATION (WIRING, POLES, LIGHTS, ETC.)

POSSE LMS interfaces with available GIS information and displays this information on a map that interacts with the application. This ability would extend to electric information.

### 6.3.9 PROVIDE FUNCTIONALITY FOR PROCESSING PROJECTS LOCATED OUTSIDE THE CITY LIMITS

POSSE LMS provides multiple ways to specify locations for projects. A project can be related to a parcel or a non-addressed location located inside or outside City limits.

### 6.3.10 ABILITY TO ENTER PLAN CHECK REVIEW COMMENTS FOR PROJECTS NOT USING EPLAN

Plan Check Review comments can be entered. For Building Permits, Review processes provide a place to enter these comments.

**Perform Review**

☒ Complete
 ☐ Claim
 ☒ Delete
 ☐ Reports

Assigned To
 

Andrew Langemann
 Angela Langemann
 Clark Clerk

Description
 Perform Building Review

Scheduled Start: Aug 12, 2014
 Actual Start: mmm d, yyyy hh:mm:ss

Scheduled Complete: Aug 15, 2014
 Actual Completed: mmm d, yyyy hh:mm:ss

Review Notes
 Documents
 Time Entry

**Corrections Required Notes**

+ New
 

Last Update On	Last Update By	Locked	Note
----------------	----------------	--------	------

**Conditional Approval Notes**

+ New
 

Last Update On	Last Update By	Locked	Note
----------------	----------------	--------	------

Above: Review processes provide a place for users to enter review comments on workflows that are not part of the ProjectDox integration.

### 6.3.11 INTERFACE WITH UTILITIES CIS BANNER SYSTEM AND SPL WORK ORDER MANAGEMENT SYSTEM

Computronix has close to 20 years of experience integrating POSSE into the overall systems architectures of cities across North America.

POSSE LMS has built-in APIs to enable the delivery and acceptance of data in any format, enabling seamless real time or batch interfacing to other systems. All interfaces use these APIs ensuring that POSSE source code is never modified and that our clients then remain firmly on the product path. Computronix

welcomes the City of Riverside to contact any of our customers to further discuss Computronix expertise and proven track record with interfacing and integrations.

Computronix proposes to use the same project process discussed elsewhere, such that each in-scope interface is analyzed, designed, developed, reviewed, and ultimately delivered successfully in conjunction with the other system components that are dependent on the information supplied by the interface (or that supply other systems with data).

Every interface has two sides to it, one of which will be POSSE LMS and the other being a legacy system currently in production at the City. Computronix expects to work closely with the vendor or City staff responsible for the maintenance of the other impacted legacy systems to ensure that the correct information is being transmitted, new interfaces are thoroughly tested, and impacts to other operational systems are minimized. The City should expect that in some cases, the legacy system on the other side of the interface may need to be changed to accept new data, accept data in a different format, or provide new data fields or data fields in a different format. The Fit/Gap analysis of each interface will end with an agreed-upon approach to the completion of each interface.

## **6.4 ePlan**

### **6.4.1 SEAMLESS INTEGRATION WITH PROJECTDOX**

ProjectDox and POSSE have a proven track record together of seamless integration, with integrations in production or being implemented at four client sites (Honolulu, HI; Edmonton, Alberta; Vancouver, BC; and Mecklenburg County, NC).

### **6.4.2 RESUBMISSION OF INFORMATION**

POSSE LMS has workflow in place to reject an application and alert the applicant via email. Resubmission can then occur online.

## **6.5 Inspections**

### **6.5.1 INSPECTION SCHEDULE PARAMETERS AND OPTIONAL SETTINGS**

With POSSE LMS, customers can submit inspection requests online, specifying their contact phone number, requested date and time, and any special instructions. Inspectors can adjust the Scheduled Start parameter of the inspection as needed.

### **6.5.2 IN-FIELD TECHNOLOGY FOR AUTOMATIC INSPECTION RESULTS**

POSSE LMS features a mobile application, for any smartphone or tablet, that allows Inspectors to take all the system information with them in the field. The mobile application features automatic connection detection in the background – allowing inspectors to use the app seamlessly whether they are currently connected or disconnected from network service. Inspections can be completed in the field using the mobile application.

LMS Test - PI

To Do List

PI Inspector,

Date

Distance

Mechanical - Final (Mechanical)

BP-2013-04083-02

1226 KAUMUALII ST, Honolulu, HI

Fri Oct 4

Building - Building Final

BP-2013-01652-07

Thu Oct 10

Mechanical - HVAC Final

BP-2013-03564-04

Wed Oct 16

Building - Building Final

GP-2013-06304-02

Tue Oct 22

Electrical - Solar Panel < 0.5 MW

BP-2013-06249-03

Wed Oct 23

Mechanical - Rough-In

BP-2013-06249-04

Wed Oct 23

Plumbing - Sewer Tap

GP-2013-06304-03

Thu Oct 24

17

To Do List

Search

New

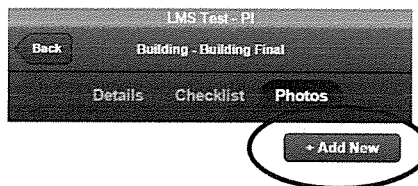
Completed

More

Above: Inspector To Do List on the POSSE LMS Mobile app.

### 6.5.3 UPLOAD OF PHOTOS OR VIDEOS RELATED TO INSPECTIONS

POSSE LMS Mobile allows the upload of photos.



#### 6.5.4 WATERLINE INFRASTRUCTURE INSPECTION TRACKING

POSSE LMS is highly configurable, and the System will be modified during the project to meet this specific type of inspection as required by the RFP.

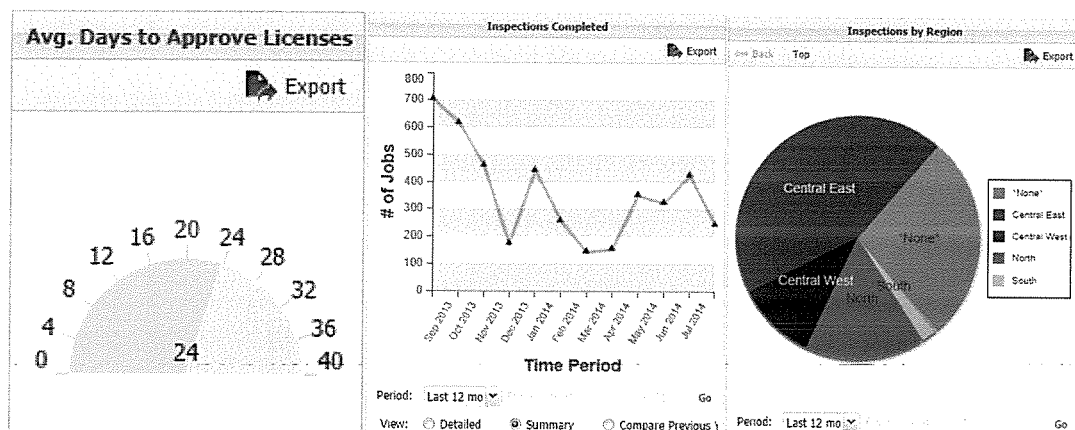
#### 6.5.5 AUTOMATED INTERDEPARTMENTAL OCCUPANCY RELEASE WITH WORKFLOWS AND ALERTS

POSSE LMS is highly configurable, and the System will be modified to meet this workflow as required by the RFP.

### 6.6 Administrative

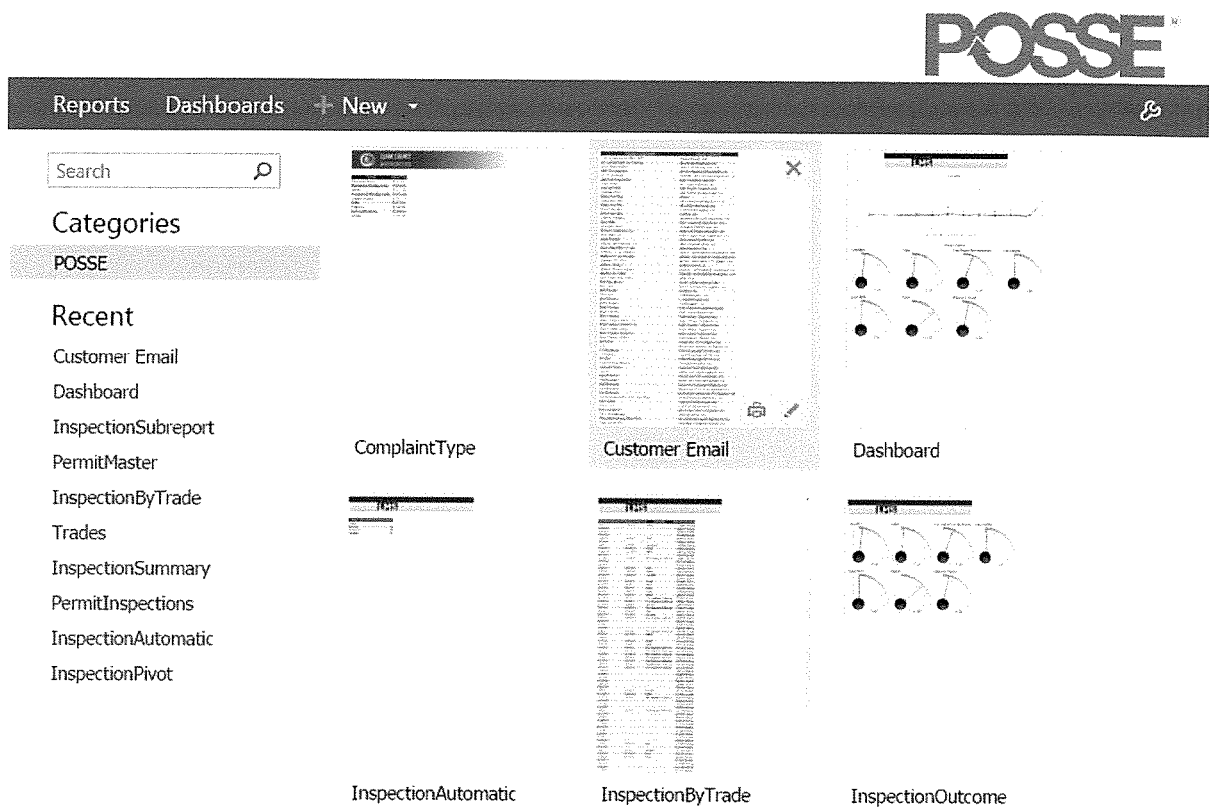
#### 6.6.1 LINE STAFF, SUPERVISOR AND MANAGER DASHBOARD AND REPORTS

POSSE LMS has many types of configurable dashboard charts and reports available. These can be customized and selected for display based on user function. Here are a few samples:



#### 6.6.2 ADMINISTRATIVE MANAGER DASHBOARD, REPORTS, FUNCTIONS

The dashboards described above can be customized to an administrative manager. In addition, we include the Izenda ad-hoc reporting tool that creates dashboards and reports with a user-friendly query tool. These can be saved, bookmarked, and shared with others.



Above: POSSE LMS reporting options.

### 6.6.3 AUDIT TRAIL

POSSE LMS makes use of the base product Audit component. Auditing is turned on for many fields in LMS; turning auditing on or off is easily customizable with the click of a mouse. Auditing tracks all changes to values: the old and new value, the timestamp and who made the change.

### 6.6.4 CUSTOMIZATION OR CREATION OF NEW REPORTS, DASHBOARD CUSTOMIZATIONS, CREATION OF NEW WORKFLOWS

Customization or creation of new reports can be done in any of our reporting tools: Izenda, Word Merge, and RTF Reporter. Dashboard customizations can be made in our POSSE suite. Creation of new workflows is done using POSSE's configuration tool.



## 7 Qualifications and Experience

The Computronix proposal in its entirety displays our long, successful history and technical expertise in implementing effective government solutions for land management systems and licensing applications. In 35 years in business and 19 years with a software product targeted specifically for government agencies, Computronix has developed significant experience in key areas that are also important to the City of Riverside. Our stable and proven technology, client reference sites, numerous satisfied customers, successful implementations, and corporate resumes reflect successful, proven and deep experience in:

1. **Large-scale, web-based database design and implementation**—All of our recent clients have implemented POSSE as a web-based system. For example, the POSSE System for the State of California Department of Alcoholic Beverage Control is a browser-based environment for over 400 users for their licensing and enforcement business processes.
2. **PC/laptop/tablet/handheld devices management and support**—POSSE is supported at all of our client sites on a combination of PCs, laptops, tablets, and other handheld devices. The POSSE LMS System that we are proposing for the City lends itself to being used on these portable devices.
3. **Software design, configuration, integration, user acceptance testing, and support**—As recognized by the Smithsonian Institute award for Innovative Technology, the POSSE Software design continues to be recognized as superior technology. Computronix will utilize our proven formalized Software Development Methodology (SDM) to implement POSSE systems for the City of Riverside.
4. **Help desk operations**—Computronix is known for its exceptional customer support and help desk operations. Our help desk team is staffed with available, professional technicians and developers in the U.S. office who are ready to assist our clients.
5. **Project management experience**—Our Project Management Professionals (PMPs) and Senior Project Managers have been key members of each of our large-government implementations and upgrades. Riverside will benefit from the same project management expertise that has been delivered to previous large-scale implementations.
6. **High-availability systems that are mission critical**—Since its successful installation at the City of Edmonton, POSSE has been officially named as one of four core “pillars” and mission critical systems of the City’s technology. All three divisions of the Douglas County Community Planning and Sustainable Development Department—Building, Planning, and Engineering—use POSSE as the core system in their sole land management activities. The State of California’s need for a reliable web-based licensing and enforcement system has been met by POSSE.
7. **Wireless technology integration and support**—POSSE is easily integrated and supported with wireless technology. For example, building and field inspectors in Dallas use wireless technology integrated with POSSE.
8. **Previous installations**—Computronix is proud of our history of 100% implementation project success, and we welcome (and even recommend) the City to contact any of our U.S. or Canadian

clients, whether profiled in this response or not. Contact information for our clients is available upon request. Honest customer references and feedback from multiple clients are vital when evaluating a vendor.

9. **Successful installations with government information systems**—In our 35-year history, Computronix has not had one contract failure or failed POSSE implementation. Our high percentage of satisfied government clients is a testimony to our successful installations and long-standing relationships with municipal, state, and provincial government information systems clients.
10. **Oracle-based applications and databases**—POSSE software is built on the Oracle platform, and all Computronix government clients using POSSE software are on Oracle-based applications and databases. Computronix is an Oracle Partner, and many of our technical staff are Oracle-certified database administrators.
11. **Managing transitions from legacy systems to new environments**—Our staff have deep experience in maintaining a seamless transition from legacy systems to the POSSE system. Computronix understands the importance of delivering a first-rate solution while ensuring daily activities and production continue on a “business as usual” basis. See **Section 2—Statement of Understanding and Approach** for more information on our data conversion experience and process.
12. **Implementation Process and Peripheral Devices**—Our project approach, methodology, and implementation process, as described in **Section 2—Statement of Understanding and Approach**, will be leveraged to guarantee a successful and efficient installation of POSSE LMS. This state-of-the-art application utilizes best-of-breed technologies and provides several native enabling technologies, web services, and open APIs to third-party products. Web, smart client, and mobile devices can all be seamlessly integrated with a common database and a consistent set of business rules.
13. **Network infrastructure and procurement management**—Upon completion of our infrastructure assessment with the City, our analysts will leverage years of experience and recommend the appropriate network infrastructure to support the production environment. Computronix can assist the City in procuring the appropriate hardware through the City’s established hardware vendors.
14. **Architecture and design services**—Since its inception in 1979, Computronix has provided system architecture and design services for a wide variety of projects and clients. In addition to implementing best practices in pre-configured solutions, Computronix staff (system architects, designers and developers) can provide analysis, design, configurations, performance tuning, consulting and other services as desired by the City.

## 7.1 Our Clients

For over 35 years, Computronix has focused on government services and has implemented multiple systems in jurisdictions throughout the U.S. and Canada. Our POSSE implementations reflect our long,

successful history and technical expertise in providing government solutions for land management systems and licensing applications.

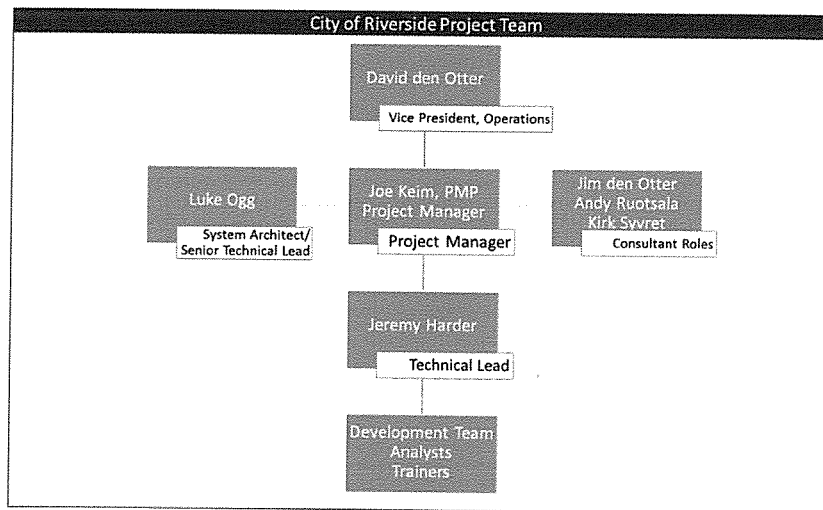
Computronix has provided POSSE software solutions for government since 1995. The following table reflects a sample of our POSSE clients and the number of user seats licensed to each:

U.S. Clients	Type	Users	Population
California Alcoholic Beverage Control Division	State Division	400	38,000,000
Kansas Division of Alcoholic Beverage Control	State Division	45	2,286,000
New Jersey Division of Alcoholic Beverage Control	State Division	50	8,865,000
City of Dallas, TX	City	502	1,223,000
City of Philadelphia, PA	City	325	1,536,000
Broward County, FL (enterprise solution—5 departments)	County	470	1,748,000
Chesterfield County, VA	County	234	320,000
City and County of Honolulu, HI	City and County	377	374,000
Douglas County, CO (3 departments)	County	110	292,000
Hamilton County, IN (enterprise solution)	County	201	282,000
Madera County, NC	County	98	152,000
Mecklenburg County, NC	County	425	944,000
Union County, NC	County	50	205,000

In addition to U.S. Clients, Computronix serves approximately 25 clients in Canada, including our contract award in 2013 from **City of Vancouver, BC** to implement POSSE LMS in multiple divisions and provide all permitting and development activities software for the City.

## 7.2 Project Team

Our proposed Computronix Project Team includes the following key team members. All key members of our proposed project team have significant experience in public sector implementations and have worked together on multiple projects. Resumes are available upon request.



#### **David den Otter—Vice President of Operations**

Dave is the Vice President of Operations for all Computronix operations in North America, and provides oversight for all services work performed by Computronix for our U.S. clients. Dave has more than 20 years of experience in all facets of the information systems business, including 13 years of implementing POSSE in a broad variety of business applications. Dave will provide executive leadership and function as an escalation point in achieving a successful implementation for the City of Riverside.

#### **Joe Keim, PMP—Project Manager**

Joe is a senior project manager with 20 years of experience in managing multimillion dollar programs in the IT and defense industries. Joe is responsible for providing leadership and direction to project team members with respect to preparing project budgets, project schedules and milestones, resource allocations, time and cost estimates, and plans. Joe will be responsible for facilitating interaction with all project stakeholders, and is experienced at change management and streamlining of processes to run projects within cost and with minimal risk. Chris is certified as a Project Management Professional (PMP) by the Project Management Institute (PMI) and holds a Lean Six Sigma Green Belt certification.

#### **Jeremy Harder —Technical Lead**

Jeremy is an experienced technical lead, architect, analyst, and programmer who provides POSSE consulting to Computronix clients. Since 2002, Jeremy has supported POSSE LMS clients through selecting the development environment, for designing physical data structures, processes and user interfaces and for communicating those designs to developers, testers, and integrators. Jeremy has a B.Sc. in Computing Science with a minor in Business from the University of Alberta.

#### **Luke Ogg—POSSE LMS Product Manager, System Architect**

With more than 11 years of service at Computronix, Luke provides technical expertise and leadership for teams developing POSSE solutions and enhancements for our U.S. clients, including Broward County, FL; Mecklenburg County, NC; Union County, NC; City of Dallas, TX; City and County of Honolulu, HI, and Douglas County, CO. Luke will provide overall technical consulting and direction to the project.

**Ron den Otter – Senior Business Analyst**

With 15 years of experience as an Analyst, Ron provides coaching, mentoring, and project support to other Computronix staff involved in analysis work, as well as participating as an analyst in client projects. Ron will gather and document the City's business needs, and will facilitate understanding of both high-level concepts and discrete project details for the project team. Ron will present project requirements and the potential solutions to receive client sign off, and develop system tests to validate that the requirements have been met correctly.

**Nathan Davidson -- Trainer**

Nathan has trained and mentored clients on the POSSE platform since 2001. He works with the POSSE Product Team and the POSSE implementation teams to develop both customized as well as standard training material including: Basic POSSE Configuration, Report Writing, Outrider (web) Configuration, PL/SQL, Data Conversion, POSSE Support, Advanced POSSE Configuration, Marshal, Ranger, Corral, Process Server, and POSSE Toolbox. As needed, he presents training courses to all of our US clients. Nathan's firsthand knowledge of the way POSSE works and how it is used in the "real world" allows him to tailor his courses to the specific needs of each client.

**Caleb Thiessen -- Developer**

Since 2010, Caleb has developed and tested POSSE platform solutions for our United States clients, and has worked on several successful POSSE projects. His advanced skill level with SQL, PL/SQL, and Report Writing give him the depth of experience required to handle the City's needs for development, consultation, and customization around the POSSE LMS solution.

**Jim den Otter— Chief Technology Officer**

Jim is our Chief Technology Officer and one of our two Computronix principals. He will act as Senior Project Consultant and Strategic Advisor to our Project Team. In Jim's 30 years at Computronix, he has overseen numerous U.S. and Canadian POSSE permitting, inspections, and planning implementations, including all of our U.S. projects. He has also provided IT consulting at the U.S. federal level to the National Conference of States on Building Codes and Standards (NCSBCS) Building Codes Streamlining Alliance, advising such stakeholders as the U.S. EPA and the Department of Homeland Security about interoperability architectures.

**Andy Ruotsala—Sr. Consultant**

Andy is founder of the Tidemark Advantage product and employed by Computronix (U.S.A.). With 30+ years in the land management software industry and over 120 implementations, Andy provides seasoned business and technical perspective and will serve as a senior consultant and analyst for the project, ensuring a seamless transition from the City's Permits Plus software to its new POSSE LMS System.

**Ryan Lutz—Systems Analyst**

Since 2002, Ryan has worked with nine Municipal and County Government organizations across the United States in understanding their unique business needs and configuring the POSSE product to provide them outstanding business solutions. His business domain experience from multiple jurisdictions in planning, permitting, inspections, code enforcement, licensing, and engineering enable him to provide valuable input into implementing best practices when implementing POSSE for a new organization, or providing support for existing organizations using POSSE.

## 8 Technical Architecture

### 8.1 Current System Information

Computronix acknowledges the current system information from the RFP and has approached our solution with the current system information in mind.

### 8.2 Technical Architecture

RFP Req. No.	Requirement	Response
<b>2.1</b>	<b>Application version</b>	
2.1.1	Release version of software proposed (items 2.1.1, 2.1.2, and 2.1.3 must be equal)	POSSE 7.1.4
2.1.2	Release version of software to be implemented	POSSE 7.1.4
2.1.3	Release version of software to be demonstrated	POSSE 7.1.4
2.1.4	Release date of items 2.1.1, 2.1.2, and 2.1.3.	July 31, 2014
2.1.5	Newest release version of software in production use with comparable client	POSSE 7.1.2
<b>2.2</b>	<b>Proposed logical system architecture</b>	
2.2.1	Provide system architecture diagram	Please see Appendix C for a diagram of the system architecture.
2.2.2	Describe the system architecture	POSSE LMS is a web-based solution. Two production web servers, secure behind the Web Server DMZ and firewall, support the external user interface. For the staff interface, a production server, standby server, and UTA/Training Database server support the internal network. Load balancing and reverse proxy ensures consistent availability of the system. Please see Appendix C for a diagram of the system architecture.
2.2.3	Is the application providing a web-based/n-tier architecture?	Yes, the POSSE suite is web-based.
2.2.4	What components of the architecture, if any, are client-server?	The following applications are client-server: 1. <i>Sheriff</i> – used for administering the data warehouse 2. <i>Process Server</i> – used for processing scheduled activities 3. <i>Stage</i> – used to configure changes in the POSSE Application
<b>2.3</b>	<b>Proposed physical network and hardware architecture</b>	

RFP Req. No.	Requirement	Response
2.3.1	Network requirements, referencing diagram 2.2.1	<p>a. Firewalls, load balancing and reverse proxy technologies have not been priced nor detailed specifications provided. Usage of these should be in line with the City's standards.</p> <p>b. Computronix recommends that two web servers be load-balanced to manage Internet traffic. A primary and alternate broadband source should exist to provide acceptable performance.</p> <p>c. The City will monitor load balancing, and the load balancer will provide hit-based allocation.</p> <p>d. We assume that City inspectors will use web-based wireless access as their means of connectivity.</p> <p>e. While data volumes provided in the RFP do not indicate the need for more than 1 Gbps bandwidth, redundant teamed NICs are specified. If the City is planning to use an iSCSI-based SAN, we recommend that it uses MPIO or 10 Gbps.</p>
<b>2.4</b>	<b>Server requirements</b>	
2.4.1	Hardware requirements, referencing diagram 2.2.1 (minimum and preferred)	Please see Appendix C for hardware requirements specifications and Section 8.2.1 below.
2.4.2	Software requirements, referencing diagram 2.2.1	Please see Appendix C for server software requirements.
2.4.3	Storage/SAN requirements	Please see Appendix C for storage/SAN requirements.
2.4.3.1	Estimated storage requirements	Please see Appendix C for estimated storage requirements.
2.4.3.2	Estimated storage growth	Please see Appendix C for estimated storage growth.
<b>2.5</b>	<b>Employee workstation requirements</b>	
2.5.1	Hardware requirements (minimum and preferred)	<p>Minimum: Processor: Intel Pentium 4 or later Free Disk Space: 4 GB RAM: 4 GB</p> <p>Preferred: Processor: Intel Pentium i5 or later Free Disk Space: 10 GB RAM: 8 GB</p>
2.5.2	Software requirements	POSSE LMS is a web-based solution; therefore, the only software requirements are a modern web browser.
2.5.3	Does the employee software support all four leading browsers?	Yes, POSSE supports Chrome, Firefox, IE, and Safari.
2.5.4	Does the employee software utilize HTML5?	Yes.
2.5.5	Does the employee software adapt its layout to mobile device screen sizes?	Yes, POSSE's web-based interface dynamically sizes to the mobile device screen size.
2.5.5.1	Does the employee software use Responsive Web Design?	Yes. POSSE's Responsive Web Design adapts to whatever device is being used.
2.5.4	Does the software utilize any browser plugins? (Java, Active X, Flash, etc.)	No. POSSE does not use any browser plugins.

RFP Req. No.	Requirement	Response
<b>2.6</b>	<b>Customer workstation requirements</b>	
2.6.1	Hardware requirements (minimum and preferred)	<u>Minimum</u> Processor: Intel Pentium 4 or later Free Disk Space: 200 MB RAM: 512 MB  <u>Preferred</u> Processor: Intel Pentium 4 or later Free Disk Space: 1 GB RAM: 2 GB
2.6.2	Software requirements	POSSE LMS is a web-based solution; therefore, the only software requirements are a modern web browser.
2.6.3	Does customer software support all four leading browsers?	Yes, POSSE supports Chrome, Firefox, IE, and Safari.
2.6.4	Does the customer software utilize HTML5?	No, POSSE's customer portal does not use HTML5.
2.6.5	Does the customer software adapt its layout to mobile device screen sizes?	Yes, POSSE's web-based interface dynamically sizes to the mobile device screen size.
2.6.5.1	Does the customer software use Responsive Web Design?	Yes. POSSE's Responsive Web Design adapts to whatever device is being used.
2.6.4	Does the software utilize any browser plugins? (Java, Active X, Flash, etc.)	No browser plugins are used.
<b>2.7</b>	<b>Version/format of development software written in (Java, .Net, Python, etc.)</b>	No Java .NET 4.0 Python 2.7 ExtJS 4.2
<b>2.8</b>	<b>Mobile architecture (if any)</b>	
2.8.1	Describe mobile functionality or apps for employees	The POSSE Mobile for LMS app provides touch based inspection entry with configurable views for a wide variety of inspection types. Downloadable documents, e-plans, permits, and licenses are supported. The mobile device's camera, GPS, and mapping are integrated.
2.8.2	Describe mobile functionality of apps for customers	The POSSE Mobile app is targeted at inspectors. Each business-specific inspection app is stored separately on the inspector's device and launched from the device's home screen with the touch of a finger. POSSE Mobile manages background network connections while the inspector works in the field. Inspectors can always access information and work in the field, with POSSE Mobile capturing and storing all their information and connecting with the main database whenever wireless connectivity is available. Inspections results become instantly available to other internal staff users as well as contractors and developers as they automatically upload.
2.8.3	For each app described in 2.8.1 and 2.8.2; does the system support Apple iOS devices?	Yes.
2.8.4	For each app described in 2.8.1 and 2.8.2; does the system support Android devices?	Yes.



RFP Req. No.	Requirement	Response
2.8.5	For each app described in 2.8.1 and 2.8.2; are any other mobile platforms supported?	Windows Phone 8, Windows 8, and Blackberry 10 are supported.
2.8.6	Are mobile apps written as native apps or using a cross-platform framework?	Mobile apps are written using a cross-platform framework, compiled to native apps using Apache Cordova.
2.8.6.1	If a cross-platform framework, then what framework is used?	HTML5 / Sencha Touch and Apache Cordova.
2.8.7	Does the app support two-way wireless and real-time remote synchronization? Describe.	Yes. Data is downloaded and cached on-device for offline access. Updates are stored locally and incrementally synchronized to the server when connectivity is available.
2.8.8	Does the app support "store and forward" if wireless is disconnected? Describe.	Yes. The device's copy of the data is updated and the record is flagged for synchronization. When network connectivity is available the records are synchronized, updating the server's copy of the data and downloading changes that occurred through other clients since the last download. The server handles conflict resolution and merging in the event that multiple clients update the same record.
2.8.9	Does the app support synchronization when plugged in to workstation? Describe.	The app supports wireless synchronization through either cellular or Wi-Fi connection. As such, plugging into a workstation is not necessary.
2.8.10	Is VPN connectivity to city LAN required for apps described in 2.8.1?	The app connects to a web service through HTTPS for network requests. If the City choses to deploy the web service outside the firewall then VPN connectivity is not required.
<b>2.9</b>	<b>Database requirements (hardware and software)</b>	
2.9.1	Estimated database storage requirements	Please see the POSSE LMS – Large System document in Appendix C.
2.9.2	Estimated database storage growth	A POSSE database will typically grow by 10% annually. The specs provided are adequate for a typical 5-year replacement timeline.
<b>2.10</b>	<b>GIS requirements</b>	
2.10.1	How does the software integrate with ESRI ArcGIS data or map services?	Computronix has integrated GIS deeply into the fabric of all its products, having interfaced POSSE to the ESRI ArcGIS Server platform at more than 20 client sites over the past 15 years. Our latest map viewer is capable of displaying anything that ArcGIS Server is able to serve up. The ArcGIS map display is built upon the JavaScript API for ArcGIS Server, which allows interaction between POSSE LMS and the ArcGIS Server environment. Extensions have been developed which can significantly increase the integration between the GIS and POSSE.

RFP Req. No.	Requirement	Response
2.10.2	How does the software export data that can be consumed by ArcGIS software?	The map interface does not require any specialized services or configuration, nor does it require migration of parcel data from the City's current GIS system. POSSE consumes standard ArcGIS Server map services, geocoding services, and geometry services. The integration between GIS and POSSE occurs dynamically
2.10.3	Describe the system's use of GPS coordinates vs parcel information	The system is capable of tracking GPS coordinates and working with GIS parcel information. The address object has Latitude and Longitude attributes, and the address object is related to the permit.
2.10.4	How does the system handle parcel history, including split and combine requests?	Parcel splits are usually handled by an interface to GIS, the assessor's system, other system that is the master database for parcel records. POSSE LMS records the workflow around the split, and the fact that it happens in the source database. POSSE LMS can also maintain and/or display the link between the parent and child records, and can maintain a go-live forward copy of the parcel history.
<b>2.11</b>	<b>Security requirements</b>	
<b>2.11.1</b>	<b>Authentication</b>	
2.11.1.1	Does the software integrate with Active Directory?	Yes. The POSSE LMS web application can be interfaced with AD for authentication.
2.11.1.2	Does the software integrate with LDAP?	Yes. The POSSE application authenticates against an LDAP.
2.11.1.3	Does the software support single sign-on?	Yes. Since POSSE can be integrated with AD or an LDAP-compliant facility, it also supports single-sign on.
2.11.1.3	Does the software support Active Directory Federation Services?	Yes. The product can be integrated with single sign on security.
2.11.1.4	Does the software support SAML?	POSSE can be integrated with SAML.
<b>2.11.2</b>	<b>Passwords</b>	
2.11.2.1	Can password complexity be configured?	Yes, for both internal and external users.
2.11.2.2	Can the software force users to reset their passwords on a regular basis?	No; however, integration with single sign-on would provide this functionality.
2.11.2.3	Can the software force password changes upon next login?	No, but a single sign on solution could force password changes.
<b>2.11.3</b>	<b>Authorization</b>	

RFP Req. No.	Requirement	Response
2.11.3.1	Describe the user roles available in the solution	POSSE supports role-based security to the screen, menu, and field level. Roles include: Planning Configurator User Admin Finance Adjust Fee Finance Batch Print Coordinator Business Licensing Configurator Compliance & Enforcement Configurator Permitting & Inspections Configurator Permitting & Inspections Plans Reviewer Permitting & Inspections Clerk Permitting & Inspections Supervisor Permitting & Inspections Zoning Planning Clerk Planning Supervisor Planning Planner Permitting & Inspections Inspector Finance Management Reporting System Configurator Compliance & Enforcement Clerk Compliance & Enforcement Supervisor Compliance & Enforcement Officer Business Licensing Clerk Business Licensing Inspector Business Licensing Supervisor Authenticated External User
2.11.3.2	Describe how configurable user roles are in the solution	Each user is assigned a set of roles in POSSE LMS. These roles have access groups and permissions that is configured down to the screen, field and as needed the record level. Workflow and assignment is also configured for each role. This security is enforced in the database, the middle-tier app server and the web client.
2.11.3.3	Can roles be configured to allow access by module or divisional need?	Yes. POSSE LMS can be secured so only certain roles can see sensitive information.
2.11.3.4	Can one user receive access to multiple roles?	Yes.
2.11.3.5	Are administrative roles tightly controlled in the solution?	Yes.
<b>2.11.4</b>	<b>Payments</b>	
2.11.4.1	Is the proposed solution PCI compliant?	POSSE LMS interfaces with multiple ePayment providers. All payments are handled by these solutions and sensitive payment information is never handled in POSSE.
2.11.4.2	Describe how the solution encrypts/protects payment data over the network	All payments are handled by third party ePayment solutions and sensitive payment information is never handled in POSSE.

RFP Req. No.	Requirement	Response
2.11.4.3	Describe how the solution protects payment data in the database	Sensitive payment data is never stored in the database. Less sensitive data (like amount paid, GL Account, etc.) are protected using product-level security.
<b>2.11.5</b>	<b>Personally Identifiable Information (PII)</b>	
2.11.5.1	Describe the extent of PII collected and stored for city customers	<p>The information collected by default when registering an account or pulling a permit includes the following information identified as PII in NIST Special Publication 800-122:</p> <ul style="list-style-type: none"> <li>- Name</li> <li>- Mailing Address</li> <li>- Email Address</li> <li>- Phone Number</li> <li>- State Contractor License Information</li> </ul> <p>This set of data can be reduced or expanded as needed to maintain a minimal set of lower risk PII that is needful to conduct business.</p> <p>This data is collected using standard web based SSL encryption and is stored using Oracle's database technology with optional encryption.</p>
2.11.5.2	Describe the extent of PII collected and stored for city employees	<p>The information collected by default when registering an account or pulling a permit includes the following information identified as PII in NIST Special Publication 800-122:</p> <ul style="list-style-type: none"> <li>- Name</li> <li>- Email Address</li> <li>- Phone Number</li> </ul> <p>This set of data can be reduced or expanded as needed to maintain a minimal set of lower risk PII that is needful to conduct business.</p> <p>This data is collected using standard web based SSL encryption and is stored using Oracle's database technology with optional encryption.</p>
2.11.5.3	Describe how the solution stores PII and masks it as needed	This data is collected using standard web based SSL encryption and is stored using Oracle's database technology with optional encryption. This data can be secured on a role or per record bases as needed to prevent access from unauthorized users. This security is enforced in the database, the middle-tier app server and the web client.

RFP Req. No.	Requirement	Response
2.11.6	Describe any additional network or hardware related security features	POSSE LMS has been architected to support many layers of security to protect information including User Group definitions, Roles and Instance-level security, and support for Active Directory and SiteMinder Integrated Authentication. Regarding hardware architecture, use of a firewall is supported and recommended to protect the POSSE Database. Please see Appendix C for a diagram of the architecture and the figure in Section 8.2.2 below.
<b>2.12</b>	<b>Reporting requirements (hardware and software)</b>	
2.12.1	Does the solution provide a denormalized data warehouse schema for reporting?	Yes.
2.12.2	Will you provide the city a detailed data dictionary describing the database tables and fields?	A full Data Dictionary of the POSSE LMS Reporting Warehouse is available and will be delivered with the product.
2.12.3	Describe any ad-hoc reporting tools available in the solution	POSSE uses Izenda reporting for ad-hoc needs. Izenda can be used to create, edit, save, and delete custom reports. Izenda has several different access roles that can be set to allow certain users to create reports. Users can filter data fields, generate reports for specific time periods, type of work, work time, work performance, etc., and automatically send reports to specified parties.
2.12.4	Describe any other reporting features of note	LMS provides Dashboard reporting, third party reporting tools, and built-in reports. Data is available from the either the OLTP system database or a separate reporting database, which is synchronized with the OLTP database on a regular periodic basis (typically nightly). Users can get access to information through many different means, either through the application itself or through reporting tools. The database allows multiple connections and simultaneous transactions. The third-party reporting tool, Izenda, can export results to Excel, Word, PDF, CSV, RTF. The LMS application can export results to Excel. The built- in reporting module generates reports in PDF format.
<b>2.13</b>	<b>Open Data Requirements</b>	
2.13.1	Does the software provide Open Data API's for government transparency?	POSSE's state-of-the-art package of applications provides several native enabling technologies, web services, and open and published APIs to third-party products. Using the rich APIs and web service capabilities that come with the POSSE product, Computronix feels strongly that the City will be able to easily integrate with all of their existing systems.
2.13.2	Do the tools described in 2.12 allow the city to export/publish as web services? If so, describe.	The reporting tools described above do not publish as web services; however, POSSE does have a web service that can be configured as desired using POSSE's configuration tool.

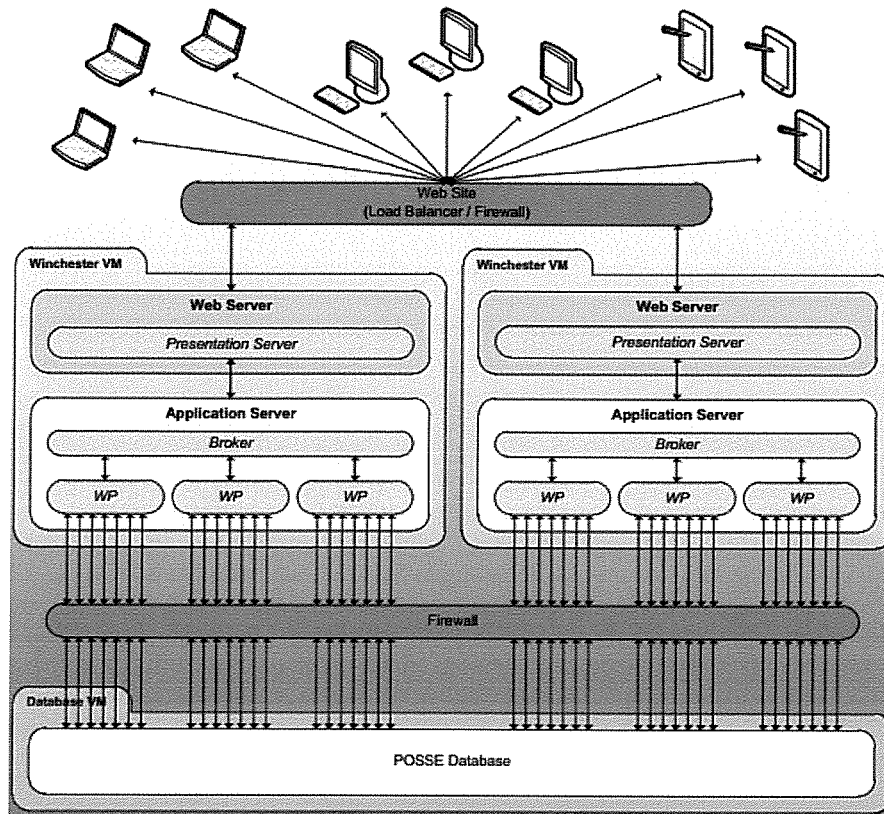
RFP Req. No.	Requirement	Response
2.14	Network requirements (hardware and software)	No special network requirements exist. POSSE uses native HTTP/HTTPS between the browser and the Web Server.
2.15	Backup requirements (hardware and software)	
2.15.1	Provide any hardware and software requirements for backing up your solution	Typical on-site implementations include disk space on the Oracle database server that is used by the native Oracle RMAN utility to back up the database. The site then incorporates the backup of these closed flat files into their normal backup system.
2.15.2	Describe how the proposed solution allows the city to recover from data corruption	Recovery from data corruption is managed by the Oracle RMAN utility which determines the files or files that need to be recovered and then automatically recovers them,
2.16	Licensing requirements including all 3rd party software required	POSSE LMS runs on Oracle 11g and higher. Oracle Standard Edition One, Oracle Standard Edition, or Oracle Enterprise edition are all supported.

### 8.2.1 HARDWARE REQUIREMENTS

Qty	System	Minimum Specification	Recommended Physical Configuration	Recommended Virtual Configuration
1	Production Database Server	<ul style="list-style-type: none"> <li>• Proc: 2 x Quad Core 64-bit</li> <li>• RAM: 48GB</li> <li>• NIC: 2</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 73GB for OS/Programs—RAID 1</li> <li>✧ 300GB for Data files—RAID 10</li> <li>✧ 900GB for Logs/RMAN backups—RAID 1, 5, 6, or 10</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 x Intel E5-2640</li> <li>• RAM: 8 x 8GB</li> <li>• NIC: • 2 x 2 Port Gigabit</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 2 x 146GB 15K SAS for OS/Programs—RAID 1</li> <li>✧ SAN: 4 x 146GB 15K SAS for Oracle data—RAID 10</li> <li>✧ 4 x 300GB 10K SAS for Logs/RMAN backups—RAID 5</li> </ul> </li> <li>• Redundant power supplies</li> <li>• Redundant SAN connections</li> <li>• Windows 2008 R2 Enterprise</li> <li>• Oracle 11G Standard One—2 Processors</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 CPU</li> <li>• RAM: 32GB</li> <li>• NIC: 1</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 150GB for OS/Programs</li> <li>✧ SAN: 300GB for Oracle data—RAID 10</li> <li>✧ SAN: 900GB 10K SAS for Logs/RMAN backups—RAID 5</li> </ul> </li> <li>• Windows 2008 R2 Enterprise</li> <li>• Oracle 11G Standard One—2 Processors</li> </ul>
1	Standby Production Database Server	<ul style="list-style-type: none"> <li>• Proc: 2 x Quad Core 64-bit</li> <li>• RAM: 48GB</li> <li>• NIC: 2</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 73GB for OS/Programs—RAID 1</li> <li>✧ 300GB for Data files—RAID 10</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 x Intel E5-2640</li> <li>• RAM: 8 x 8GB</li> <li>• NIC: • 2 x 2 Port Gigabit</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 2 x 146GB 15K SAS for OS/Programs—RAID 1</li> <li>✧ SAN: 4 x 146GB 15K SAS for Oracle data—RAID 10</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 CPU</li> <li>• RAM: 32GB</li> <li>• NIC: 1</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 150GB for OS/Programs</li> <li>✧ SAN: 300GB for Oracle data—RAID 10</li> </ul> </li> </ul>

Qty	System	Minimum Specification	Recommended Physical Configuration	Recommended Virtual Configuration
		<ul style="list-style-type: none"> <li>✧ 900GB for Logs/RMAN backups—RAID 1, 5, 6, or 10</li> </ul>	<ul style="list-style-type: none"> <li>✧ 4 x 300GB 10K SAS for Logs/RMAN backups—RAID 5</li> <li>• Redundant power supplies</li> <li>• Redundant SAN connections</li> <li>• Windows 2008 R2 Enterprise</li> <li>• Oracle 11G Standard One—2 Processors</li> </ul>	<ul style="list-style-type: none"> <li>✧ SAN: 900GB 10K SAS for Logs/RMAN backups—RAID 5</li> <li>• Windows 2008 R2 Enterprise</li> <li>• Oracle 11G Standard One—2 Processors</li> </ul>
2	Production Web Server	<ul style="list-style-type: none"> <li>• Proc: 1 x Quad Core 64-bit</li> <li>• RAM: 16GB</li> <li>• NIC: 1</li> <li>• Drive: 73GB for OS/Programs—RAID 1</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 1 x Intel E5-1620</li> <li>• RAM: 4 x 4GB</li> <li>• NIC: 2 x 2 Port Gigabit</li> <li>• Drives: 2 x 146GB 15K SAS for OS/Programs—RAID 1</li> <li>• Windows 2008 R2 Web Ed.</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 CPU</li> <li>• RAM: 8GB</li> <li>• NIC: 1</li> <li>• Drive: 73GB for OS/Programs</li> <li>• Windows 2008 R2 Web Ed.</li> </ul>
1	Production Process Server	<ul style="list-style-type: none"> <li>• Proc: 1 x Quad Core 64-bit</li> <li>• RAM: 16GB</li> <li>• NIC: 1</li> <li>• Drive: 73GB for OS/Programs—RAID 1</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 1 x Intel E5-1620</li> <li>• RAM: 4 x 4 GB</li> <li>• NIC: 2 x 2 Port Gigabit</li> <li>• Drives: 2 x 146GB 15K SAS for OS/Programs—RAID 1</li> <li>• Windows 2008 R2 Web Ed.</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 CPU</li> <li>• RAM: 8GB</li> <li>• NIC: 1</li> <li>• Drive: 73GB for OS/Programs</li> <li>• Windows 2008 R2 Web Ed.</li> </ul>
1	Training, Test Web Server	<ul style="list-style-type: none"> <li>• Proc: 1 x Quad Core 64-bit</li> <li>• RAM: 16GB</li> <li>• NIC: 1</li> <li>• Drive: 73GB for OS/Programs—RAID 1</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 1 x Intel E5-1620</li> <li>• RAM: 4 x 4GB</li> <li>• NIC: 2 X 2 Port Gigabit</li> <li>• Drives: 2 x 146GB 15K SAS for OS/Programs—RAID 1</li> <li>• Windows 2008 R2 Web Ed.</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 CPU</li> <li>• RAM: 8GB</li> <li>• NIC: 1</li> <li>• Drive: 73GB for OS/Programs</li> <li>• Windows 2008 R2 Web Ed.</li> </ul>
1	Training, UAT Database Server	<ul style="list-style-type: none"> <li>• Proc: 1 x Quad Core 64-bit</li> <li>• RAM: 64GB</li> <li>• NIC: 2</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 73GB for OS/Programs—RAID 1</li> <li>✧ 600GB for Data files—RAID 1,5,6, or 10</li> <li>✧ 1,200GB for Log/RMAN files—RAID 1, 5, 6, or 10</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 x Intel E5-2640</li> <li>• RAM: 8 x 8GB</li> <li>• NIC: 2 x 2 Port Gigabit</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 2 x 146GB 15K SAS for OS/Programs—RAID 1</li> <li>✧ SAN: 4 x 300GB 15K SAS for Oracle data—RAID 10</li> <li>✧ 5 x 300GB 10K SAS for Logs/RMAN backups—RAID 5</li> </ul> </li> <li>• Redundant power supplies</li> <li>• Redundant SAN connections</li> <li>• Windows 2008 R2 Enterprise</li> <li>• Oracle 11G Standard One—2 Processors</li> </ul>	<ul style="list-style-type: none"> <li>• Proc: 2 CPU</li> <li>• RAM: 32GB</li> <li>• NIC: 1</li> <li>• Drives: <ul style="list-style-type: none"> <li>✧ 150GB for OS/Programs</li> <li>✧ SAN: 300GB for Oracle data—RAID 10</li> <li>✧ SAN: 900GB 10K SAS for Logs/RMAN backups—RAID 5</li> </ul> </li> <li>• Windows 2008 R2 Enterprise</li> <li>• Oracle 11G Standard One—2 Processors</li> </ul>

## 8.2.2 SECURITY ARCHITECTURE





## 8.3 Application Interfaces

RFP Req. No.	Requirement	Response
3.1	<i>Financial Interface Requirements</i> IFAS is the city's financial system and iNovah is our cashiering system. The proposed solution must include a general ledger interface with either of these systems. The proposed solution must store and relate the batch ID with the daily transactions. This is required for reconciliation purposes. The interface(s) must allow for predefined, fixed file formats.	POSSE and iNovah are currently interfaced at the City of Edmonton. POSSE is easily configurable to store all required attributes and relational data to ensure a successful interface.
3.2	<i>Selectron IVR requirements</i> Our current IVR provider is Selectron. The IVR system allows building department customers to request and cancel required permit inspections and to hear the results of their inspections.	POSSE has a great track record of working with Selectron for IVR functionality (such as Broward County and the City of Dallas), and this can be implemented for the City of Riverside as well.
3.3	<i>ProjectDox requirements</i> ProjectDox is our plan check management system. The proposed system must integrate with ProjectDox to allow seamless management of the plan check process during the permit lifecycle. Required department approvals and fees will need to be factored in to the plan check process and permit issuance will be contingent on all required approvals and fees being met.	Computronix and Avolve have worked together for several years to deliver solutions integrating POSSE and ProjectDox seamlessly. POSSE LMS has a robust fee management component and permit issuance is not permitted when fees are outstanding.
3.4	<i>Siebel requirements</i> Siebel is our 311 system. Integration between Siebel and the proposed system will be required to allow 311 to initiate a code enforcement case and to see activity at a given address/location.	An interface between POSSE and Siebel would be delivered during implementation. Interfaces with POSSE can be built using API available through the database or web services.
3.5	<i>SPL requirements</i> SPL is our work order management system. The proposed solution must allow a work order request in SPL to be generated in response to a permit. For example a permit may require that a new electric meter will be installed, staff will need the system to send a work order request to SPL at the appropriate time.	POSSE can send requests to other systems whenever an event occurs. An interface to accomplish this will be developed for Go-Live.

RFP Req. No.	Requirement	Response
3.6	<i>GoEnforce requirements</i> GoEnforce is the Code Enforcement system. The proposed solution should be allow GoEnforce to put a hold or lock on an address that has serious code violations and also inform GoEnforce of permit activity at an address.	POSSE LMS allows warnings to be placed on a parcel, and these warnings are then visible on all activities related to the parcel. An interface can be delivered to allow GoEnforce to enter warnings in POSSE. This functionality could also be extended to hold or lock activities. Additionally, POSSE could make use of GoEnforce's capabilities to inform it of permit activities.
3.7	<i>HdL requirements</i> HdL provides our business licensing system. The proposed solution should interface with HdL to ensure that contractor business licenses are current before being issued a permit or scheduling an inspection.	POSSE can check with other systems before continuing workflow. An interface to allow this with HdL would be developed for Go-Live.
3.8	<i>Firehouse RMS requirements</i> Firehouse provides our Fire Records Management System (RMS). The proposed solution may interface with Fire RMS for the purposes of business fire safety inspections and billing.	An interface with Firehouse RMS can be developed as desired.

## 9 References

Computronix has the highest level of relationship engagements with long-term customers. Each reference below is still currently working with Computronix to support ongoing project work. Our successful POSSE implementations and follow-on work include the following:

### **The City of Dallas, TX**

**Theresa O'Donnell, Assistant City Manager**

1500 Marilla St., Room 4DN  
Dallas, TX 75201

Phone: (214) 670-3390

Email: [theresa.odonnell@dallascityhall.com](mailto:theresa.odonnell@dallascityhall.com)



Computronix continues to provide ongoing services for the City of Dallas, and POSSE is currently being expanded for additional enterprise use. Computronix provided the City of Dallas with a turnkey Land Management solution that began January 2004 and first went live in March 2005 with the Building Inspections group. POSSE provides the foundation for an integrated information system that brings together land development, building permits, and more. The System also integrates closely with the City's ESRI GIS system. POSSE automates many manual procedures used by the Development Services and Housing departments in the acceptance of applications, review, inspection, tracking, and approval of land development and building construction, special collections, and housing assistance projects.

### **Douglas County, CO**

**Terence Quinn, Planning Director**

100 Third St.  
Castle Rock, CO 80104

Phone: (303) 814-4387

Email: [tquinn@douglas.co.us](mailto:tquinn@douglas.co.us)



Just south of Denver Douglas County is one of the fastest growing Counties in the United States, with a current population of 300,000. Douglas County first implemented POSSE in 2003, and currently uses POSSE for the Planning, Engineering, and Building divisions of the Community Planning and Sustainable Development (CPSD) Department. POSSE is integrated with the County's Content Management System (CMS), addressing system, web-based eReferral system, and Integrated Voice Response (IVR) system. Computronix is currently providing 3 full-time equivalents (FTEs) of POSSE expertise in support of the County's numerous additional POSSE projects.

### **The City and County of Honolulu, HI**

**Ken Schmidt, GIS Administrator**

650 S. King Street  
Honolulu, HI 96813

Phone: (808) 768-8057

Email: [kschmidt@honolulu.gov](mailto:kschmidt@honolulu.gov)



The City and County of Honolulu has used POSSE since 1998 for building and development permits, planning, zoning, code enforcement, remote inspections, and complaint tracking. Due to the versatility of the POSSE system to define workflow and alternative methods of communicating information, many new operating approaches were enabled. The implementation of POSSE enabled extensive business process reengineering to include GIS integration, permit conditions, data tracking, integration, research, retrieval, management, and maintenance. In 2012-2013, Computronix partnered with Avolve to integrate the industry-leading ePlan solution, ProjectDox.

## 10 Cost of Services

The following is a revised Costs of Services Proposal for the City of Riverside's RFP 1470 Permit Tracking Software.

**POSSE® Land Management System ("POSSE LMS")** is a modern, leading software system that is built upon the proven POSSE® Work Management Framework, which is used by large government organizations across North America.

Our current, long-standing clients can vouch for our professional competence and proven track record of delivering the most competitive software, services, and licensing package. Our proven POSSE LMS solution is the most user-enabled, fully configurable, out-of-the-box software for permit tracking that exists today. Computronix is committed to bringing the City of Riverside a solution that delivers exceptional value, robust features, and unparalleled reliability and scalability.

**Computronix Cost Proposal is summarized as follows:**

Description	Cost
One-time Software Licensing Costs (reflects a <u>\$32,880 discount</u> )	\$267,120
Professional Services Costs including Travel	\$980,750
Annual Support and Maintenance	\$60,000
<b>Total Costs</b> - Including Licensing, Professional Services, and 1 <sup>st</sup> Year Support and Maintenance	<b>\$1,307,870</b>

Description	Cost	Est. Travel Costs	Primary Consultant Staff, Title*
One time cost/Licensing **POSSE Enterprise License – Includes: POSSE Dashboard Module POSSE GIS Module Unlimited External Public Users	\$125,000	N/A	N/A
Per User Cost (if applicable) 120 Named User Licenses - \$110,000 (0-100: \$950/User; 100-501: 750/User; 500+: \$550/User) 0 Mobile User Licenses - \$0 (\$350/User)	\$110,000	N/A	N/A
Building Permitting Module Permitting & Inspections Module	\$15,000	N/A	N/A
Planning Project Module Planning Module	\$20,000	N/A	N/A

Description		Cost	Est. Travel Costs	Primary Consultant Staff, Title*
	Code Enforcement Module	\$15,000	N/A	N/A
	Compliance & Enforcement Module			
	Fire Prevention Module	\$0. Included in POSSE Enterprise License.	N/A	N/A
	Business License Module (BL)	\$0. Contractor – BL Module included in POSSE LMS System.	N/A	N/A
	Public Works Module	\$0. Included in POSSE Enterprise License.	N/A	N/A
	POSSE Mobile Application – Fully disconnected and back-office integrated Mobile Application.	Not included, possible future application	N/A	N/A
	POSSE Ad-Hoc Reporting (Izenda)	\$15,000	N/A	N/A
	One-Time Software Discount	-\$32,880	N/A	N/A
	Sub-total One-Time Licensing Costs with Discount: <b>\$267,120</b>	-	N/A	N/A
	Annual Maintenance Fees 20% of Non-discounted One-Time Licensing Cost (\$300,000)	\$60,000	N/A	N/A
	Discovery Event	Included in Analysis, SRS and System Design Costs and Travel		Ron den Otter, Senior Business Analyst
	Customizations/Configuration – includes System Configuration for External Web Users and Site-Specific Internal System Requirements	\$302,500	\$18,450	Jeremy Harder, Senior Technical Lead Caleb Thiessen, Developer
	Report Development Warehouse Implementation – includes Custom Reports and Reporting, 2 Management Reports and 8 Operational Reports	\$58,200	N/A	Jeremy Harder, Senior Technical Lead
	Integration with City Systems*		\$3,150	Jeremy Harder, Senior T.L.
	ProjectDox	\$19,800		<b>City-implemented Interfaces:</b> <b>Computronix can offer optional mentoring or assistance as required by City staff.</b>
	Siebel	City Implementation or Future Interface		
	Oracle UWAM/SPL	City Implementation or Future Interface		
	GoEnforce	City Implementation or Future Interface		
	HdL	\$26,800		
	IFAS/iNovah	\$26,800		
	Selectron IVR system	City Implementation or Future Interface		

Description		Cost	Est. Travel Costs	Primary Consultant Staff, Title*
	ESRI ArcGIS	\$16,500		
	Firehouse	City Implementation or Future Interface		
	Master Address Database	City Implementation or Future Interface		
	Tokay	City Implementation or Future Interface		
	Enquesta	City Implementation or Future Interface		
Data Conversion from Permits Plus		\$77,900	\$3,150	Ryan Lutz, Developer
Core User Training – Orientation Training, Site-Specific Configuration Training, and Administration Site Training - \$63,600 Core “Train the Trainer” Courses - \$9,800		\$73,400	\$6,700	Nathan Davidson, Trainer
User Testing		\$23,300	N/A	Nathan Davidson, Trainer
Go Live support – On Site		\$30,400	\$6,200	Jeremy Harder, Senior T.L.
estimated travel		Included in the “Est. Travel Costs” column		
Other: <u>See Below</u>				
Project Planning and Kick-off		\$40,700	\$2,200	Joe Keim, PMP
Software Installation and Deployment in Development, Test and Production Environments (includes Discovery Event)		\$41,300	N/A	Jeremy Harder, Senior T.L.
Analysis, System Requirements Specifications (SRS), and System Design		\$178,300	\$25,000	Jeremy Harder, Senior T.L. Ron den Otter, Senior B.A.
	Optional Custom Reports: • Low Complexity – \$1,800 • Medium Complexity – \$3,600 • High Complexity - \$6,000	TBD	TBD	Caleb Thiessen, Developer
Hardware – Computronix assumes that the City will purchase or use its existing hardware. Computronix is a Dell reseller, and a quote is available upon request.				
<b>TOTAL COST FOR ALL OPTIONS</b>		<b>\$1,243,020</b>	<b>\$64,850</b>	

\*Computronix offers a blended professional services hourly rate of \$150/hr for all staff.

This cost proposal does NOT include the following options, modules, or scope offered in the RFP response:

- POSSE Mobile Application and applicable User Licenses.
- Interfaces as noted above as either “City Implemented or Future”.
- End User Training Services (Added Train the Trainer courses)
- POSSE Configuration Tool (Stage) Training

## Pricing Assumptions

Computronix makes the following assumptions in providing costs to the City of Riverside:

- POSSE License fees are for one (1) production database server. An unlimited number of development, testing, and training instances of the database are permitted at no additional cost.
- POSSE Named User licenses apply to all staff internal to an organization.
- Prices quoted are valid for 6 months (180 days) from date of RFP close.

Computronix looks forward to the opportunity to work with the City of Riverside to implement its Permit Tracking Software System, and presenting a demonstration of POSSE LMS to the City of Riverside's evaluation team.