

Pretreatment Information Management System Version 10 Upgrade

June 2009

Provided to:

City of Columbus

1250 Fairwood Avenue

Columbus, OH 43206

Prepared by:

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June 8, 2009

Mr. Jeffrey L. Bertacchi
Pretreatment Program Manager
City of Columbus, Ohio
1250 Fairwood Avenue
Columbus, OH 43206

Dear Mr. Bertacchi:

Inflection Point Solutions, LLC (IPS) is pleased to provide this upgrade proposal to the City of Columbus, Ohio as part of our ongoing support and maintenance agreement governing the Pretreatment Information Management System (PIMS).

Since inheriting the PIMS software code when abandoned by the originating vendor, IPS has strived to consolidate the nine (9) disparate code lines into a more commercially viable solution while simultaneously providing support services. We know this transitional period was not quick, and was not always easy on Columbus or IPS, but we believe our collective patience has been rewarded with the release of Version 10. With this product line, IPS now has a more uniform code base and the alleviation of corresponding support issues.

As demonstrated within this document, Columbus will obtain all PIMS Version 10 upgrade licensing at no additional cost; minimal fees are required for services to install and configure the core application to the custom requirements of the existing system.

We understand Columbus has recently issued a Request for Proposal for a potential PIMS replacement and we fully comprehend the reasons behind such action. We hope this proposal will be viewed as a true first opportunity to engage IPS's delivery services with a product our organization has developed and can stand behind with full confidence.

We appreciate the opportunity to submit this document. Should you have any questions, please do not hesitate to contact me at 262-930-1506.

Best regards,

Inflection Point Solutions, LLC

A handwritten signature in black ink that reads "Samuel W. Catoe". The signature is written in a cursive, flowing style.

Samuel W. Catoe
Vice President

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Document Description

This document is intended to outline the scope of activities associated with the deployment of the Pretreatment Information Management System (PIMS) Version 10 Upgrade for the City of Columbus (Columbus).

Background

Columbus purchased the PIMS system from Black & Veatch and has been using the system for a number of years. Inflection Point Solutions (IPS) became responsible for the support and maintenance of this application when PIMS was acquired from Black & Veatch approximately four (4) years ago. As part of the maintenance agreement, IPS is deploying the PIMS upgrade to those clients who want to migrate to the latest version.

Engagement Scope

IPS has constructed a project approach to accomplish the upgrade of Columbus’s implementation of PIMS. This approach is a series of smaller iterations to allow the users to completely test and utilize the new features systematically over the course of the project.

IPS will execute the following tasks to complete the upgrade of Columbus’s implementation of PIMS:

Main Tasks	Sub-Tasks
Task 1 - Project Management	1.1 – Project Kickoff Meeting 1.2 – Project Management
Task 2 -Version 10 Upgrade	2.1 - Core Upgrade <ul style="list-style-type: none"> • User Interface Upgrade • Document Generation Engine • Notification Engine • Compliance Engines • Data Conversion 2.2 - Upgrade Existing Customizations <ul style="list-style-type: none"> • User Interface Customizations <ul style="list-style-type: none"> ○ Existing • Document Generation Customizations <ul style="list-style-type: none"> ○ 2-3 Documents • Notification Customizations <ul style="list-style-type: none"> ○ 1 Notification Defined • Compliance Engines Customizations <ul style="list-style-type: none"> ○ Existing 2.3 - Go Live <ul style="list-style-type: none"> • Training <ul style="list-style-type: none"> ○ Core Team ○ Other Users • Go Live Support
Task 3 - LIMS Interface	3.1 – Requirements Clarification 3.2 – LIMS Interface Build 3.3 – Acceptance Testing 3.4 – Go Live

Functional Requirements Elaboration

Because this project includes the development or configuration of new features, as well as converting Columbus's existing customizations to Version 10 of the PIMS platform, there is the need to capture and document the functional requirements of these items.

Onsite sessions needed to expand on existing requirements will be scheduled by IPS soon after project kickoff. The deliverable documents, which are the output of these sessions, will be key to solidifying the ultimate timeline needed to complete this project.

User Acceptance Plan

User acceptance testing is the final step before IPS hands off the completed work to Columbus. The User Acceptance Plan, developed with the Columbus stakeholders, will be executed at the end of all development iterations. Successful completion of a user acceptance plan is an understanding between IPS and Columbus, which will lead to sign off on the completed work outlined in the user acceptance plan.

Since a User Acceptance Plan is so important, IPS requires that a plan is in place at the beginning of each main task, before development begins. In addition to defining when the project is complete, the User Acceptance Plan will also:

- Ensure that all business requirements have been successfully identified.
- Set a baseline for Change Requests.
- Help Columbus define what criteria are necessary for acceptance.

Once initially created and signed off, any changes to the User Acceptance Plan may require overall Project Plan changes; therefore, they must be submitted through, and are subject to, the change control process.

Task Descriptions & Deliverables

Task 1.1 – Project Kickoff Meeting

The goal of the project kickoff meeting is to review the scope of services, schedule, and project approach and to prepare for the PIMS upgrade project. This task helps ensure all participants are in agreement and understand their role within and throughout the project. This meeting with the Project Team will define the lines of communication and protocol for the execution of project tasks and their elements. IPS views these activities as the foundation for successful project management and execution.

Task 1.2 – Project Management

This task represents all the work to be done in the ongoing Project Management efforts. It is important to have a strong, consistent management process for a successful project. As part of these efforts, the following items will be delivered to Columbus.

IPS Deliverable	Description
Detailed Project Schedule	MS Project Schedule.
Scope Management Plan	The Plan will reference Requirements documents and existing customizations within current PIMS application.
Communications Plan	Team Organization Chart & Contacts. The Plan will outline key project participants, include all contact information and, moreover, define the horizontal lines of communication across all levels of the project.
Risk and Scope Management Plan	Project Tracking and Control. The Plan will illustrate how Project Management will be executed and how issues will be reported, prioritized and escalated, if necessary.

On-going communication is crucial and will be supplemented by formal weekly progress conference calls to discuss:

- Current action items
- Pending issues (Columbus or IPS activities under investigation)
- Planned activity for the next reporting period
- Critical items
- Review of prioritization
- Schedule and budget

All of the above will have designations of professionals for responsibility and scheduled timing.

Task 2 – Version 10 Upgrade

This task is split into two (2) areas of focus with more specific tasks under each area. When complete, this task will have upgraded Columbus’s current implementation of PIMS to Version 10 of the PIMS application. This includes both the core application upgrade and the specific Columbus customizations that are needed.

The two areas of focus and the related sub tasks for this are:

- Version 10 Core Upgrade
 - The core upgrade includes those items that are delivered as part of the PIMS application. These include framework changes or technology changes that provide an updated technology platform and solidify the PIMS architecture. These include:
 - User Interface Upgrade – An upgrade to the overall look and feel to the user and the framework that these screens are built on.
 - Document Generation – The core upgrade includes the installation of the document generation engine which allows the PIMS user to produce documents by leveraging a document template and an xml document to select

and merge the data from the data base into the template. This upgrade includes the creation of two (2) – three (3) templates.

- Notifications – The core upgrade includes the installation of the engine that allows the creation of event driven notifications that can be produced and e-mailed and/or displayed on a PIMS user’s homepage. This upgrade includes the creation of one (1) notification.
- Compliance Engines – The core upgrade includes technology improvements to both the discharge compliance engine and the reporting compliance engine.
- Data Conversion – As part of the core upgrade, the necessary data conversions to the updated data schema will take place.
- Deliverables for Core Upgrade Task:

IPS Deliverable	Descriptions
Functional Requirements Document (FRD)	Document detailing new version 10 features
User Acceptance Plan	Document detailing the definition of acceptance for this task, and the plan to get to a state of user acceptance.

- Version 10 Upgrade Customizations

- The version 10 customizations are those items that are specific to Columbus and must be reconfigured or customized on the version 10 platform. These items include:
 - User Interface Customizations – These are specific Columbus customizations to the user interface of PIMS.
 - Document Generation – This includes the creation of the templates and logic to generate documents as needed by Columbus. The effort estimated here is based on creation of two (2) – three (3) templates of your choosing.
 - Notifications – This custom work includes the creation of one (1) notification and the link of them to the correct event to have them triggered when the event fires.
 - Compliance Engines – The customization includes the required custom functionality that Columbus leverages in their compliance engines.
 - Deliverables for each of the customization areas:

IPS Deliverable	Descriptions
Functional Requirements Document (FRD)	Document detailing requirements for components
User Acceptance Plan	Document detailing the definition of acceptance for this task, and the plan to get to a state of user acceptance.

- Go Live
 - This task includes the final delivery of the version 10 PIMS platform with Columbus's customizations implemented. This also includes training of the new enhancements, training materials and the required updates to the Columbus's PIMS.

Task 3 – LIMS Interface

This task represents all the work to be completed to maintain the LIMS interface to the Columbus's specifications. To accomplish this task, IPS has divided this up into a few focused smaller tasks as was seen in the previous task. The functional requirements will be detailed as the first step of this process. This will give IPS and Columbus the basis from which to build and test the interface.

The requirements detail will be followed by the build and testing of the LIMS interface, based upon the agreed upon requirements. The final piece of this task will be to put the interface into production.

Assumptions

The following assumptions were made in preparing this document. If any of the assumptions are incorrect or need further qualification, modifications to this proposal, including the cost and timeframe, may be required.

- Columbus will provide a main point of contact for information regarding project requirements. This person will provide necessary information and documentation. This same person, or their designee, will also be responsible for final decisions regarding functional specification.
- Columbus and the IPS Project Manager will establish and manage the approval process of all deliverables.
- Delivered items will be assumed to be accepted within five (5) business days of delivery unless Columbus and IPS agree to extend the acceptance period within those five (5) business days.
- Columbus project participants will be available for meetings and will provide timely responses, within two (2) business days, to issues and reviews as agreed within the Project Plan.
- Subject matter experts on Columbus functional and technical areas of this application and related systems will be available for interviews and will provide responses to issues and reviews in accordance with the developed Project Plan.
- A Change Control Group will be established to review any changes in scope directly affecting this project proposal. This Group will consist of designated project stakeholders from Columbus and IPS. These individuals will be identified in the Project Plan.
- Access to adequate work space, telephone access, appropriate hardware and software access including network, internet, e-mail, etc will be provided by Columbus while IPS is on-site. The required tools request will be delivered when proposal is signed.
- The work will be conducted at both the IPS and Columbus facilities.

Schedule and Costs

IPS anticipates this project will take approximately two (2) - three (3) months to complete, depending on the availability of key Columbus personnel. This assumes a team of two (2) part-time technical resources, a part-time Project Manager, and a part-time business analyst. A draft MS Project Plan is included as Appendix A as a projected timeline for completing the upgrade. A final Work Plan will be developed as part of Task 1.2 as Columbus and IPS personnel are able to finalize requirements, coordinate resources, on-site meetings, and project review frequency.

Costs

IPS will undertake the *PIMS Upgrade Project* on a lump sum project basis of \$63,000. The cost for each task under the Payment Schedule should be construed to include all work necessary for the completion of the deliverable as well as any supporting sub-tasks and activities.

The cost proposal developed for this Task Order by IPS is as follows:

Main Tasks	Line Item	Cost Range
Task 1 - Project Management	1.1 – Project Kickoff Meeting 1.2 – Project Management	\$18,900
Task 2 -Version 10 Upgrade	2.1 - Core Upgrade <ul style="list-style-type: none"> • User Interface Upgrade • Document Generation Engine • Notification Engine • Compliance Engines • Data Conversion 2.2 - Upgrade Customizations <ul style="list-style-type: none"> • User Interface Customizations <ul style="list-style-type: none"> ○ Existing ○ New • Document Generation Customizations <ul style="list-style-type: none"> ○ 21 Templates • Notification Customizations <ul style="list-style-type: none"> ○ Requirements Definition • Compliance Engines Customizations <ul style="list-style-type: none"> ○ Existing ○ New 2.3 - Go Live <ul style="list-style-type: none"> • Training <ul style="list-style-type: none"> ○ Core Team ○ Other Users 	N/C \$31,500 \$12,600

Main Tasks	Line Item	Cost Range
	Go Live Support	
Task 3 - LIMS Interface	3.1 – Requirements Clarification 3.2 – LIMS Interface Build 3.3 – Acceptance Testing 3.4 – Go Live	N/C
Additional Maintenance & Support	Year 1	Included
TOTAL PROJECT		\$63,000

Payment Schedule

To correlate the above costs to the current work plan, IPS will invoice Columbus based on the deliverables completed prior to the close of the month. The following provides the cost versus deliverable schedule:

Main Tasks	Sub-Tasks	Percent of Total Project Cost
Task 1 Project Initiation and Management	1.0 – Contract sign-off/notice to proceed 1.1 – Project Kickoff Meeting 1.2 – Project Management	30%
Task 2 -Version 10 Upgrade	2.1 - Core Upgrade 2.2 - Upgrade Customizations <ul style="list-style-type: none"> • Customization Build & Delivery • Acceptance Testing 2.3 - Go Live <ul style="list-style-type: none"> • Training • Go Live Support 	No Charge 25% 25% 20%
Task 3 - LIMS Interface	3.1 – Requirements Clarification 3.2 – LIMS Interface Build 3.3 – Acceptance Testing 3.4 – Go Live	No Charge
TOTAL		\$63,000

Appendix A

Draft Project Plan

Task Name	Deliverable	Work	Duration	Start	Finish	Predecessors	Resource Names
1 PIMS Upgrade Project		700 hrs	65.63 days	Tue 9/1/09	Tue 12/1/09		
2 Project Management		152 hrs	65.63 days	Tue 9/1/09	Tue 12/1/09		PM[20%]
3 Project Kickoff Meeting		5 hrs	0.85 days	Tue 9/1/09	Tue 9/1/09		
4 Project Management and Scope Management Plan		42 hrs	25 days	Tue 9/1/09	Tue 12/1/09	3	
5 Version 10		460 hrs	47 days	Mon 9/14/09	Tue 11/17/09		
6 Core Upgrade	RFD, User Acceptance Plan	412 hrs	48 days	Mon 9/14/09	Fri 11/6/09		
7 User interface upgrade		120 hrs	120 hrs	Mon 9/14/09	Fri 10/2/09		Developer 1
8 Document Generation Engine		24 hrs	3 days	Mon 9/14/09	Wed 9/16/09		
9 Engine install and PMS configuration		24 hrs	24 hrs	Mon 9/14/09	Wed 9/16/09		Developer 2
10 Notification Engine		24 hrs	3 days	Thu 9/17/09	Mon 9/21/09		
11 Engine install and PMS Configuration		24 hrs	24 hrs	Thu 9/17/09	Mon 9/21/09		Developer 2
12 Compliance Engines		140 hrs	19.5 days	Mon 9/28/09	Fri 10/23/09		
13 Build Sprint 1 (Analysis & Construction)		60 hrs	60 hrs	Mon 9/28/09	Wed 10/7/09		Developer 1
14 Testing Sprint 1		20 hrs	20 hrs	Wed 10/7/09	Fri 10/9/09	13	Developer 1
15 Build Sprint 2 (construction)		40 hrs	40 hrs	Wed 10/14/09	Tue 10/20/09	14	Developer 1
16 Testing Sprint 2		20 hrs	20 hrs	Wed 10/21/09	Fri 10/23/09	15	Developer 1
17 Data Conversion		104 hrs	30 days	Mon 9/28/09	Fri 11/6/09		
18 Date mapping		24 hrs	24 hrs	Mon 9/28/09	Wed 9/30/09		BA
19 Conversion Build		40 hrs	40 hrs	Mon 10/26/09	Fri 10/30/09	16	Developer 2
20 Testing		40 hrs	40 hrs	Mon 11/2/09	Fri 11/6/09	16	BA
21 Go Live		48 hrs	48 hrs	Mon 11/8/09	Tue 11/17/09	6	Developer 1, Developer 2
22 LIMS Interface		68 hrs	43 days	Mon 9/14/09	Wed 11/11/09		
23 Requirements Clarification	RFD, User Acceptance Plan	8 hrs	8 hrs	Mon 9/14/09	Mon 9/14/09		BA
24 LIMS Interface Build		40 hrs	40 hrs	Mon 10/5/09	Fri 10/9/09	23	Developer 2
25 Testing		32 hrs	32 hrs	Mon 10/26/09	Thu 10/29/09	24	Developer 2
26 Go Live		8 hrs	8 hrs	Wed 11/11/09	Wed 11/11/09	25	Developer 2