This report defines the business process for initiating project setup in Construction Management Information System (CMIS), system and hardware configuration, requesting and granting user access, user training, user assistance and help requests, quality assurance and project closeout.

The CMIS is to be used by Water System Improvement Program (WSIP) Project Construction Management (CM) teams, Contractors and staff to process project approvals and documents. Projects are organized by construction contract. Although in most cases there is a single construction contract for a WSIP project, several projects have more than one construction contract. The CMIS uses the contract name as the “project” identifier. Summary information is available at the Program and Regional level. The WSIP CMIS Administrator is responsible to add projects, establish the key contacts, administer CMIS User accounts and security access, coordinate with the Information Technology Services (ITS) Department for Contract Manager licenses administration and file server maintenance, and oversee user training and assistance.

**Business Process**

**Project Setup**

The Regional Construction Manager (RCM) is responsible to request the set-up of a new project prior to the training of the Project CM team and Contractor personnel. The RCM submits a Project Set-up Request Form (Exhibit 2) via email to the WSIP CMIS Administrator. The Project Set-up Request Form provides the information required to create a project CMIS:

- Contract number
- Contract name
- Region
- Full contract value from the Schedule of Bid Prices
- A short but complete description of the scope of work
- Project CM name (Key Contact for the City)
- Office Engineer name (Submittal Coordinator)
- Project Engineer (default Submittal Reviewer)
- Contractor Company Name and name of the Key Contact,

The WSIP CMIS Administrator creates the project in CMIS under the appropriate region folder. The WSIP CMIS Administrator coordinates with ITS to create the Attachments Directory on the CMIS File Server. The Attachments Directory includes the following sub-folders under the Project folder, which is named according to the Project ID:

- Applications for Payment
- Change Management
- Change Order
- Change Order Requests
- Claims
- Companies/Contacts
- Contracts
- Correspondence Received
- Correspondence Sent
- Daily Env Inspection
- Daily Inspection Reports
- Drawing Sets
- Drawings
- Environmental NCN
- Issues
- Letter
- Minutes
- Negotiation
- Proposed Change Orders
- Punch Lists
- QA Noncompliance Notices
- Requests for Information
- Requests for Substitution
- Submittal Packages
- Submittals
- Transmittals
- VECP

CMIS functions operate around the Contract document and use company contacts to facilitate document processing. Immediately following introductory training, the Field Contracts Administrator (FCA) is responsible to initiate the Contract in CMIS, enter the Schedule of Bid Prices and obtain the approval of the Project CM. Following training and during the course of the project, the Administrative Document Control Specialist (ADCS) adds companies and contacts to the CMIS Companies/Contacts module as needed to process documentation, ensures that the appropriate key contacts are identified for each company and coordinates with the WSIP CMIS Administrator for additional CMIS User accounts.

**User Access**

At the inception of the project and prior to training, the Project CM is responsible to submit Access Request Forms to request User Accounts for each member of the Project CM team and Contractor organization who will require access to CMIS to perform their assigned duties. Project personnel who need access to the CMIS must be identified for each of the functional roles required by the WSIP Construction Management (CM) Plan and the CMIS Business Processes. If a project team member will fill more than one
functional role, the Project CM must indicate which functional roles a single team member will perform. These functional roles are:

- Project CM
- Field Contracts Administrator (FCA)
- Office Engineer (OE)
- Administrative/Document Control Specialist (ADCS)
- Project Engineer (PE)
- Lead Inspector
- Quality Assurance (QA) Inspector
- Environmental Inspector
- Specialty Monitor
- Contractor Key Contact (one person only)

Access Request Forms provide the personnel information required to create User Accounts and to apply the correct Security Template according to the role of each User.

The Project CM identifies to the WSIP CMIS Administrator the members of the Project CM team who will perform the duties of the Project CMIS Coordinator and backup. These team members are typically the ADCS and OE, since these persons are the most active users of CMIS. After project inception, all requests for User Access should be made by the Project CMIS Coordinator to coordinate with the entry of Contacts in CMIS.

The Regional Construction Manager (RCM) is responsible to monitor the persons nominated at the regional level to ensure that sufficient but not excessive regional representation is maintained, and to nominate regional personnel to monitor, contribute or collaborate in document processing.

**Site Setup, System and Hardware Configuration**

CMIS is a customization of Primavera Contract Manager, an internet-based collaborative multi-user, multi-project contract and documentation control application designed to provide a centralized way to process, store, organize and track project information. CMIS operates on a dedicated application and data server within the SFPUC network environment, protected by a firewall from unauthorized access. It is accessible from client (User) internet browsers, requiring no software to be installed. CMIS is generally intended to be accessed from the project work location or SFPUC offices. Project CM teams typically work in job site trailers with T1 communication lines or in SFPUC offices, which allows direct access to the CMIS server and data. Contractors typically work in job site trailers with DSL or other communications and some Project CM team personnel may obtain permission to work from remote locations. These circumstances require access to CMIS via Citrix Gateway. The Citrix Gateway and CMIS each require separate login accounts.
The Project CM must coordinate the establishment of dedicated power and telecommunication resources to the job site. Generally, the Contractor is required by contract to provide the physical facilities and power. SFPUC Information Technology Services (ITS) provides telecommunications to SFPUC facilities. This requires approximately six weeks to coordinate with telecommunications providers for the area and municipal agencies. The Project CM should work with SFPUC Construction Management Bureau (CMB) to coordinate telecommunications resources. The Contractor must arrange telecommunications for Contractor job site facilities.

Adequate work area and computers are necessary for project documentation management, storage and CMIS operations, to include desks, laydown work surfaces and filing cabinets or shelving.

User Hardware configuration requirements:

- Personal Computer (desktop/laptop)
- Pentium 300
- 128 MB RAM
- 100 MB disk space
- Windows Vista, 32-bit, Java Runtime Engine (JRE) 1.6 or Windows XP Professional, 32-bit, JRE 1.5.0.10
- Internet Explorer 6 Service Pack 2 or higher or Internet Explorer 7
- ActiveX Settings
  - Download signed ActiveX controls: Enable
  - Download unsigned ActiveX controls: Prompt
  - Initialize and script ActiveX controls not marked as safe: Enable
  - Run ActiveX controls and plug-ins: Enable
  - Script ActiveX controls marked safe for scripting: Enable

Contractors are encouraged to bring laptop computers to the initial training to ensure the hardware intended for use with CMIS is correctly figured prior to project inception. Contractors are responsible to ensure that they have computers that can perform the functions required for the use of CMIS.

**User Training**

After Contract award and prior to Notice to Proceed, training will be conducted for each member of the Project CM team and Contractor organization who will require access to CMIS to perform their assigned duties. Training provides an overview of CMIS functions and detailed instruction on role-specific procedures, functions and use of CMIS. The ADCS and OE should participate in all training in order to develop a complete understanding of CMIS for future requests for assistance within the project; other personnel should participate in training in the CMIS modules appropriate to their roles. A User Manual provides step-by-step operations for each user in each CMIS module.
The Project CM should request training for personnel who join the Project CM team or Contractor after the training has been conducted. These persons may attend scheduled training session for other projects or attend regular refresher classes conducted monthly by the WSIP CMIS Administrator/staff.

**User Assistance/Help Requests**

All SFPUC and CM consultant personnel will be given SFPUC network and email access and accounts. Any connectivity, telecommunications or network access issues will be addressed to the SFPUC ITS Help Desk: (415) 551-4357 (HELP). Citrix accounts for SFPUC and CM consultant staff must be requested by the Project CM to the SFPUC Regional Construction Manager (RCM) with justification for remote work. The RCM will coordinate the account request through CMB Engineering Administration to ITS.

Contractors are responsible for providing their own information technology (IT) support for hardware, internal network and telecommunications issues. Requests for help regarding use of Citrix to connect to CMIS will be directed to the WSIP CMIS Administrator who will coordinate resolution to communications problems with the Contractor and ITS.

Following training and for a one-month start-up period, the WSIP CMIS Administrator will provide direct assistance to Project CM team members and Contractor personnel to process CMIS-related documents and actions, and will be immediately available to respond to requests for assistance via personal contact, telephone and email. At the conclusion of the start-up period, Project CM team members direct requests for assistance to the Project CMIS Coordinator who shall attempt to resolve the issue internally. The Project CMIS Coordinator uses the Help Project in CMIS to maintain a log of requests for assistance and, when necessary, uses the Ball in Court function to forward requests for help or reports design to the WSIP CMIS Administrator. The Help Project is available to all users to search for answers to previously asked questions and is the basis for a Frequently Asked Questions document that is periodically updated and available at the CMIS Control Center.

**Quality Assurance**

Every user of CMIS is responsible for the accuracy, sufficiency and timeliness of the data in CMIS. The Project CM is responsible to oversee quality assurance activities in the project data in CMIS and may delegate the day-to-day quality assurance activities to the Project CMIS Coordinator. These activities include monitoring document processing and reviewing data entry for accuracy and sufficiency.

The WSIP CMIS Administrator is responsible for quality training and training materials, timely assistance and resolution of technical issues in CMIS. The WSIP CMIS Administrator will perform periodic reviews of project data to determine the efficacy of the training compliance with the CMIS Business Processes and provides information regarding these reviews to the Project CM and WSIP Deputy Director of Construction.

The Program Construction Manager is responsible for periodic quality assurance reviews of the Project data to ensure that data entry is being performed accurately,
completely and timely. The PCM is responsible to report to the regional management and WSIP Deputy Director for Construction regarding quality assurance.

**Project Closeout**

The City Regional Construction Manager informs the WSIP CMIS Administrator in writing that the project is complete. The WSIP CMIS Administrator removes all edit access to the project form all Project CM and Contractor personnel and coordinates with ITS to copy the CMIS Project data and attachment files to an archive. The WSIP CMIS Administrator moves the CMIS Project folder to a “Closed Projects” folder. The Project remains in View Only access for SFPUC personnel and the individual designated to oversee warranty issues for the two-year warranty period.

At the completion of the warranty period, the Project is deleted from the “Closed Projects” folder, and remains in archive for the requisite period (TBD).
2/25/2009

Date

Project Name (36 characters)  Contract No.

Region  

Contract Value

Description of the Scope of Work:

Project Construction Management Team

Name

Project CM

Office Engineer

Project Engineer

Contractor

Project Manager  Company

Use the CMIS Access Request Form to identify and request access for all Project CM team and Contractor personnel.
San Francisco Public Utilities Commission  
Water System Improvement Program  
Construction Management Information System  
User Access Form

Date

User Information

<table>
<thead>
<tr>
<th>Last Name</th>
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Company

E-Mail Address

Office Location

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<table>
<thead>
<tr>
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<th>Cell Phone</th>
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Project Functional Role/Title (List multiple roles if required)

Additional Comments

Requested by

Date

FOR INTERNAL USE ONLY

Approved By (CMIS Administrator)

Date

SFPUC User ID

CMIS User ID

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## Revision Control Log

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<td>September 21, 2011</td>
<td>• Formatting refreshed: document footers and page numbers refreshed and updated SFPUC Logo on various attachments</td>
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<td></td>
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<td>• References and/or Links noted to WSIP Website have been updated</td>
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<td>• Revision Control Log Added</td>
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