

SAN FRANCISCO PUBLIC UTILITIES COMMISSION INFRASTRUCTURE CONSTRUCTION MANAGEMENT PROCEDURES	
SECTION: SFPUC INFRASTRUCTURE CONSTRUCTION MANAGEMENT	APPROVED: 
PROCEDURE NO: 015	DATE: 6/7/2019
TITLE: CITY FURNISHED MATERIALS AND EQUIPMENT	REVISION: 1

1.0 Policy

This SFPUC Infrastructure CM Procedure applies to all City furnished materials and equipment for the transfer, handling, use, and ownership transfer documentation to the Contractor for installation, testing and startup of the contract project.

This SFPUC Infrastructure CM Procedure applies to all personnel working on the SFPUC Infrastructure projects during construction to the extent that their work is affected by this CM Procedure and does not conflict with specific SFPUC policies or the Contract under which the Work is executed.

SFPUC Infrastructure CM Procedure establishes the requirements for the contract administration, performance inspection, handling, and Project Controls services for City furnished materials and equipment.

2.0 Description

This CM Procedure establishes the guidelines to prepare, review, update and control City furnished materials and equipment for the transfer, handling, use, and ownership transfer documentation to the Contractor for installation, testing and startup of the project.

3.0 Definitions

3.1 City Furnished Materials and Equipment

City Furnished Materials and Equipment are materials and equipment that are pre-purchased and furnished by the City to the Contractor to incorporate into the work. Critical long-lead time delivery items such as large diameter pipes, specialty pipes and fittings, large diameter valves with motorized actuators and mechanical and electrical specialty equipment and instruments may be ordered in advance to meet specific project construction schedule milestones.

This CM Procedure applies to City furnished pre-purchased items. However, the City may elect to provide select, approved items from surplus or salvaged City inventories to the Contractor.

3.1.1 Pre-purchased items are primarily new materials and equipment furnished by the City for specific services.

3.1.2 Inventory items are surplus unused materials and equipment approved by the City for similar service uses.

3.1.3 Salvaged items are previously used materials and equipment inspected and approved by the City for similar service uses.

3.2 Construction Management Information System (CMIS)

The CMIS is an on-line management tool for the processing of contract documents based on established SFPUC Infrastructure CM Business Processes. It serves as a tool for effective storage and retrieval of various documents generated during a construction project.

3.3 Daily Inspection Report

The Daily Inspection Report is a construction field report completed by the Construction Inspector(s) no later than the beginning of the next workday or shift. The report provides the daily record of observations of the Contractor's work activities, conformance to the Contract requirements and significant construction related events occurring at the work site.

3.4 Materials and Equipment Transfer Acceptance Form

The Contractor Materials and Equipment Transfer Acceptance Form is used by the CM team and the Contractor to document the condition of materials and equipment and transfer the responsibility for these items to the Contractor for installation and operational testing, refer to Attachment 015-2.

3.4.1 This Form shall be used to document the condition and transfer of materials, equipment, spare parts and specific operations and maintenance (O&M) manuals from the City to the Contractor.

3.5 Supplier Quality Surveillance (SQS) Plan

The SQS Plan is a component of Quality Management which is performed at the supplier, manufacturer or fabrication facility for each specific item

identified by the SFPUC. The SQS Plan is prepared by the City, Contractor or SQS Manager and approved for implementation by the Construction Management Bureau (CMB) Manager, refer to SFPUC Infrastructure CM Procedure No. 032, SQS Plan and Surveillance Process for details.

3.5.1 The SQS Plan is developed prior to materials and equipment pre-purchase by the City. The SQS Inspectors will perform quality assurance at the supplier, manufacturer or fabrication facility.

3.5.2 The SQS Plan may include select quality assurance of Contractor provided materials and equipment for Contract Work. The SQS Inspectors will perform quality assurance at the supplier, manufacturer or fabrication facility. The CM team is responsible for performing quality assurance at the work site.

3.5.3 All the SQS Plans prepared for City furnished or Contractor provided materials and equipment are approved by the CMB Manager.

4.0 Responsibilities

4.1 Resident Engineer (RE)

The RE is the main point of contact for all construction management issues. The RE has overall responsibility for post-delivery materials and equipment inspections and acceptance transfer of City furnished items to the Contractor at the work site.

4.1.1 After City furnished materials and equipment fabrication and delivery schedules are established by the vendor, the critical milestone dates are added to the Construction Management Schedule for monitoring by the RE.

4.2 Project Engineer (PE)

The PE is responsible for technical specification development and selection and procurement activities of City furnished pre-purchased materials and equipment from the design specification through their release for shipment at the supplier, manufacturer or fabrication facility.

4.2.1 The PE is responsible for resolution of any corrective action issues at the supplier, manufacturer or fabrication facility as the result of inspection.

4.2.2 The PE or designated design engineer might accompany the SQS Inspector to witness specific equipment performance tests at the supplier, manufacturer or fabrication facility.

4.3 Project Manager (PM)

The PM is responsible for identifying and scheduling resources for inspection and witness testing of City furnished pre-purchased materials and equipment.

The PM may be designated by the CMB Manager as the SQS Manager contact for coordination of activities.

4.4 Supplier Quality Surveillance (SQS) Manager

4.4.1 The SQS Manager is responsible for preparing the draft SQS Plan and monitoring the activities and reports provided by the SQS Inspectors, refer to SFPUC Infrastructure CM Procedure No. 032 for details.

4.4.2 The SQS Manager will also be responsible for planning, dispatching and managing the SQS Inspectors.

4.5 Construction Inspectors

The Construction Inspectors assure that the construction or equipment fabrication work is performed and completed in accordance with the Contract Documents, conduct periodic observation and inspection of work, monitor the Contractor's quality progress, and coordinate field sampling and verification testing for quality.

4.6 Office Engineer (OE)

The OE supports the RE and performs the contract administrative tasks for the transfer of City furnished materials and equipment to the Contractor.

4.7 Contractor

The Contractor is the recipient of City furnished materials and equipment and is responsible for their handling, storage, installation and testing at the work site.

4.8 Materials and Equipment Supplier(s)

The Materials and Equipment Supplier(s) fabricate or assemble the designated item based on the City awarded Purchase Order(s). Specific Supplier requirements include:

- Preparation and submittal of an approved Quality Control Plan
- Fabrication to Contract Document Specifications
- Compliance to approved Quality Plans
- Performance Tests in accordance with Contract Specifications
- Packaging and shipment to the designated location

5.0 Implementation

5.1 Materials and Equipment Pre-Delivery Activities

The City is responsible for City furnished pre-purchased materials and equipment from technical specification development, request for quote, contract award, inspection, test witnessing, delivery expediting through transfer to the Contractor, refer to Attachments 015-1 and 015-2.

- 5.1.1 Contract administration for City furnished pre-purchased materials and equipment is the responsibility of the PM with assistance from the PE.
 - 5.1.1.1 The PM with input from the PE is responsible for materials and equipment procurement, fabrication and delivery schedule requirements.
 - 5.1.1.2 The PM ensures the scheduling of these items is included in the master schedule.
 - 5.1.1.3 The PE defines the materials and equipment in-factory inspection, witness testing, storage, delivery and transfer to Contractor requirements which are integrated into the contract construction specifications.
- 5.1.2 Quality Control inspection activities for City furnished pre-purchased materials and equipment are the responsibility of the PM and, with assistance, of the PE.
 - 5.1.2.1 The PE defines Quality Control requirements for Suppliers providing City furnished materials and equipment in each Purchase Order (PO). The PE also defines site storage and acceptance inspection and verification acceptance processes.
 - 5.1.2.2 The PM is responsible for developing requirements for the Quality Control Plan from each vendor for each Purchase Order.
 - 5.1.2.3 The SQS Manager is responsible for the management and coordination of the SQS Inspectors at the supplier, manufacturer or fabrication facility.
- 5.1.3 Project Controls activities for City furnished materials and equipment are the responsibility of the PM.
 - 5.1.3.1 The PM and scheduling support staff from the Project Controls Support Group (PCSG) are responsible for developing schedules for pre-purchased of materials and equipment furnished by City. A Work Breakdown Structure (WBS) shall be created for each vendor item for tracking and reporting.
 - 5.1.3.2 The RE is responsible for adding City furnished materials and equipment fabrication and delivery schedules into the CM Schedule.
 - 5.1.3.3 The SQS Manager monitors the activities of the Inspectors at the supplier, manufacturer or fabrication facility.

5.2 Materials and Equipment Post-Delivery Activities

- 5.2.1 Post-delivery Contract administration activities for City furnished pre-purchased materials and equipment are the responsibility of the CM team at the work site, refer to Attachment 015-2.
 - 5.2.1.1 The RE manages the overall materials and equipment delivery, acceptance inspection and Acceptance Transfer to the Contractor.
 - 5.2.1.3 The OE prepares and submits materials and equipment Acceptance Transfer Forms to the Contractor. Upon receipt of signed forms, the information is entered into the project files and in CMIS by the OE.
- 5.2.2 Post-delivery inspection activities for City furnished pre-purchased materials and equipment are the responsibility of the CM team.
 - 5.2.2.1 The RE is responsible for City furnished pre-purchased materials and equipment receiving, inspection upon delivery, and acceptance of items by the Contractor.
 - 5.2.2.2 The CM team supports the RE from inspection services through Acceptance Transfer Form approval.
 - 5.2.2.2.1 The CM team is responsible for receiving and inspecting City furnished materials and equipment upon arrival at the work site. Construction Inspectors are responsible for the quality control process by authenticating that all materials and equipment are undamaged and in accordance with approved submittals, design drawings and specifications. The Receiving Reports are filed by the OE.
 - 5.2.2.2.2 If the materials or equipment cannot be installed immediately, the Contractor shall unload and protect these items as required by the Manufacturer's instructions.
 - 5.2.2.2.3 If major equipment is delivered early, then the Contractor shall provide long-term storage acceptable to the RE.
 - 5.2.2.2.4 Transfer of Ownership occurs whenever an item is transferred from one responsible party to another; it must be documented and processed in accordance with Attachment 015-2.
 - 5.2.2.2.5 The OE will save the transfer process information in the project files and in the CMIS to maintain all records of inspection and turnover.

5.2.3 Post-delivery Project Controls activities for City furnished pre-purchased materials and equipment are the responsibility of the CM team.

5.2.3.1 The RE monitors City furnished materials and equipment schedules and incorporates the status into the Monthly Construction Progress Report as well as assists the PM with delivery, inspection, witness testing and acceptance transfer.

6.0 Other Procedural Requirements

None

7.0 References

7.1 Technical Specifications

Section 01 33 00 Submittal Procedures
Section 01 60 00 Product Requirements
Section 01 64 00 Owner-Furnished Products
Section 01 78 39 Project Record Documents
Section 01 78 23 Operations and Maintenance Data
Section 01 78 36 Warranties

7.2 SFPUC Infrastructure CM Procedures

No. 012 Construction Schedule Management
No. 028 Construction Quality Management
No. 032 SQS Plan and Surveillance Process

7.3 Others

None

8.0 Attachments

015 - 1 City Furnished Materials and Equipment Roles and Responsibilities Matrix
015 - 2 Materials and Equipment Ownership Transfer Form
015 - 3 Documents Distribution List for CMP No. 015
015 - 4 Revision Control Log

Attachment 015 - 1 City Furnished Materials and Equipment Roles and Responsibilities Matrix

	ACTIVITY	PMB and EMB			CMB and PCM	PCM CONSULTANT*		SUPPLIER	CONTRACTOR
		RE/PMB	Senior PM	PE/ EMB	RE/PCM	SQS Manager	QS Inspector(s)	QC Inspector - SHOP	QC Inspector - FIELD
	NOTES	PMB and EMB are responsible for Materials & Equipment specification, selection, SQS Plan implementation, delivery and acceptance from Supplier. P/PCM Consultant services will be indicated on a project by project basis			Responsible for all coordinates of all site activities	*If P/PCM Consultant services are not requested, SFPUC will provide SQS Plan services for those projects. Deputy Director Pre-Construction will assign the SQS Manager for each PO.		Responsible for equipment performance and acceptance	Installs equipment and assists Supplier
1	Materials & Equipment Technical Specification Requirements development and implementation	Reviews specifications	Reviews specifications	Leads specification development for Purchase Order	Reviews specifications, reviews Contractor's Quality Plan			Acknowledges PO Milestone Schedule and technical requirements	QC Program includes items handling, inspection, and protective maintenance
2	Materials & Equipment Schedules for Procurement, Fabrication and Delivery	Reviews and approves Schedule Milestones	Incorporates Milestones into project Master Schedule	Prepares Milestones Schedule	Reviews Schedules	Reviews Schedules to schedule P/PCM Inspection activities and resources	Reviews progress as part of source inspections	Meets Supplier Milestone Schedule	Prepares to assist with unloading and transfer at job site
3	Supplier Quality Surveillance Plan (SQS) development and implementation	Reviews SQS Plan (Approval by Deputy Director Pre-Construction)	Reviews Supplier Quality Surveillance (SQS) Plan	Reviews SQS Plan		Prepares draft SQS Plan, Manages SQS activities assigned to P/PCM	Performs SQS activities, prepares reports	Provides Materials and Equipment for surveillance and testing	
4	Quality Control – Shop implementation by Supplier		Arranges for SFPUC resources for SQS Plan inspections	Defines Supplier QC requirements, supports Senior PM				Performs Supplier Quality Control	
5	Materials & Equipment Loading, Transportation, and Delivery Unloading Field Inspection		Monitors and reports deliverables status	Responsible for coordination, schedule and execution of deliverables	Assists RE and PE coordinates with Contractor for unloading			Provides all services except unloading at site	Provides unloading of materials and equipment at site
6	Materials and Equipment Responsibility Transfer			Responsible for Equipment transfer and documentation	Leads CM oversight, assists PE			Transfers Materials and Equipment ownership to City	Accepts installation responsibilities from PE
7	Materials and Equipment on-site handling, storage, protective maintenance and installation			Provides support to RE	Coordinates work with Contractor			Completes SQS Plan Documentation	Receives and installs Materials and Equipment
8	Systems and Equipment Testing and Startup, training, and Supplier support			Startup support, as needed	Startup participant, coordinates with Contractor			Leads the equipment testing and startup	Assist Supplier for equipment testing and startup
9	Records Documentation, O&M Manual, Spare Parts, Test Reports, Certification of Installation, and Warranties		Receives information from PE for Project Close-out	Responsible for all Supplier deliverables	Assists PE			Provides info to PE through RE	Provides info to PE through RE
References:		Technical Specifications 01 45 00 – Quality Control, 01 64 00 - Owner –Furnished Products, 01 78 23 – Operations and Maintenance Data, and 01 78 36 Warranties.							

**Attachment 015 - 2
Materials and Equipment Ownership Transfer Form**

ID	Item	Information
a	Date	
b	Project Name	
c	Project Location	
d	Contract Number	
e	Contract Organization	
f	Item Location	

ID	Item	Item Transfer To
g	Transfer To	
h	Contract Representative Name	
i	Contractor Representative Signature	
j	Contractor Representative Title	
k	Signature Date	

ID	Item	Item Transfer From
l	Transfer From	
m	City Representative name	
n	City Representative Signature	
o	City Representative Title	
p	Signature Date	

No.	Description – Manufacture, Model, Type, Dimensions, etc.	Qty	Serial No.	ID No.	Condition Code

Condition Code	Condition of Item
A	New Item acceptable for Project use
B	New with minor cosmetic damage, see remarks
C	Repair Required – Minor, see remarks
D	Repair Required – Moderate, see remarks
F	Unacceptable for Project use, see remarks

No.	Remarks for Above

Distribution Copies: Contractor Representative, City Representative (RE), RCM /Document Control

Notes:

- (1) This form is applicable for each type of equipment with multiple quantities and components.
- (2) Contractor and City Representatives will review condition of transfer item, provide item description, item condition and sign the form.
- (3) Contractor shall have sole responsibility of item condition upon documented transfer of acceptance.



Attachment 015 - 3
Documents Distribution List for CMP No. 015

The following personnel listed (by project position or responsibility) for documents distribution is general for specific CM Procedures. It is the responsibility of the ADCS to confirm and as necessary revise this list as appropriate for specific project needs. The OE shall approve these distribution changes.

The guideline for hard copy document distribution is as follows:

1. Individual, without CMIS access, who attended a specific meeting;
2. Individual, without CMIS access, who was mentioned or designated for action in a specific project meeting;
3. Individual, without CMIS access, who has management oversight responsibilities to ensure the implementation or completion of project action.

SPECIAL REPORTS:

- Quality Assurance Reports
- Quality Control Reports

DISTRIBUTION:

Project Field Personnel – Information Only, Not Distribution

- RE, Lead Construction Inspector, ADCS

Construction Management Bureau

- Construction Manager

Program Management Bureau

- Project Manager

Engineering Management Bureau

- Project Engineer

Bureau of Environmental Management

- None

Others

- None

**Attachment 015 - 4
Revision Control Log**

Revision No.	Revision Date	What changed?
Rev 1	6/7/19	<ul style="list-style-type: none">• Minor format changes;• Attachments revised;• Revision Control Log updated.
Rev 0	11/14/16	Signed