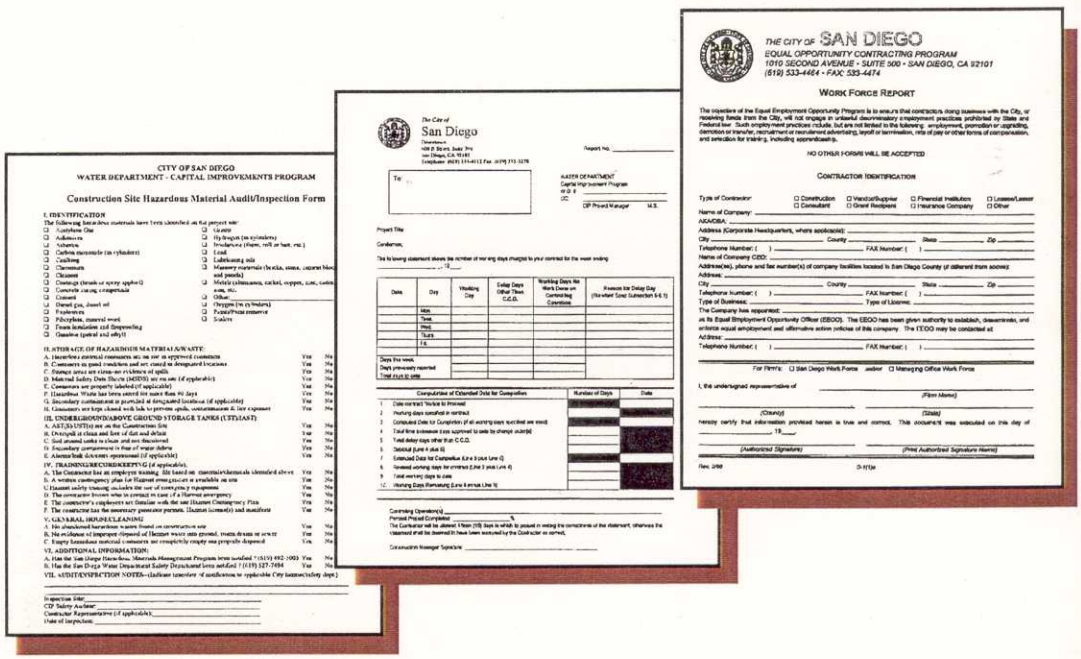
Book

6

Guidelines and Standards

Construction Management Guidelines



City of San Diego Water Department
Capital Improvements Program

PREFACE

This Guidelines and Standards Book contains information to assist planners and engineers with the design and construction of water facilities. The City's intent is to ensure uniformity of design concepts, formats, methodologies, procedures, construction materials, types of equipment and quality of work products. These standards have been produced and adopted to encourage exceptional quality while using current technology for all Water Department facilities.

These Guidelines and Standards are not a substitute for good engineering. Sound judgement must be exercised in all applications to create quality and cost efficient facilities.

Water Department management encourages the creation of relationships between project stakeholders that promotes engineering excellence and timely completion of projects. City staff and consultants are encouraged to take the time at the beginning of all projects to identify common goals, common interests, lines of communication, and a commitment to cooperative problem solving.

LARRY GARDNER
Water Department Director

BOOK LISTING

Book 1	General Design Guidelines
Book 2	Facility Design Guidelines
Book 3	Standard and Guide Details
Book 4	Standard and Guide Specifications
Book 5	CADD Standards
Book 6	Construction Management Guidelines
Book 7	Recycled Water System Guidelines

Water CIP Guidelines and Standards

Issue No.

BOOK 6

CONSTRUCTION MANAGEMENT GUIDELINES

Revision Table

Chapter	Initial Issue	Revised Dates				
1	April 1999	November 2003				
2	April 1999	November 2003				
3	April 1999	November 2003				
4	April 1999	November 2003				
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6	April 1999	November 2003				
7	April 1999	November 2003				
8	April 1999	November 2003				
Appendix A	May 2003					
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Book 6

Construction Management Guidelines

Chapter 1
Introduction

City of San Diego Water Department
Capital Improvements Program

Chapter 1
INTRODUCTION

This chapter provides City of San Diego's water system background information and introduces the City Water Department Capital Improvements Program (CIP). It relates construction management activities to the overall Water Capital Improvements Program. Chapter 2 of this book describes the organizational elements involved in the construction process for the Water CIP.

1.1 Background

The City of San Diego serves over 1.2 million people populating over 400 square miles of developed land. In addition to its 3 existing water treatment plants, San Diego currently maintains and operates over 3,500 miles of water transmission and distribution lines, 46 water pumping stations, over 90 pressure zones, and over 200 million gallons of potable water storage capacity in 33 standpipes, elevated tanks, and concrete and steel reservoirs.

Lacking significant local water resources, San Diego County must import over 85% of its water from other areas, specifically northern California and the Colorado River. The San Diego County Water Authority, composed of various San Diego County water agencies, receives its water from the Metropolitan Water District of Southern California and conveys it to San Diego County.

In addition to supplying over 250,000 metered service connections within its own incorporated boundaries, the City of San Diego conveys and sells potable water to the city of Del Mar, the Santa Fe and San Dieguito Irrigation Districts, and the California American Water Company, which, in turn, serves the cities of Coronado and Imperial Beach and portions of south San Diego.

As with existing water infrastructure in many American cities, some of San Diego's water system components – pipelines, pumping stations, storage facilities, and treatment plants – have deteriorated and need corrective action. Moreover, Federal Safe Drinking Water Act and State of California health regulations mandate certain standards of water quality in treatment and delivery systems. To ensure continued system reliability and delivery of safe drinking water to its citizens, certain repairs, upgrades and expansions are needed.

1.2 Water Capital Improvements Program (CIP)

The City Water Department initiated a Water CIP to finance and implement the needed repairs or improvements. The Water CIP is a nine-year program (Fiscal Years 1998-2006) to repair and replace aging and deteriorated water infrastructure components, upgrade the water treatment plants to meet Safe Drinking Water Act requirements, and expand treatment capacity to meet the needs of current and future residential, commercial and industrial customers.

1.3 Purpose

These Construction Management (CM) Guidelines are a part of the Water Department Capital Improvements Program Guidelines and Standards (Water CIP Guidelines), and they apply to all the facilities outlined in Section 1.1 above. The CM Guidelines are to be used by all

Construction Management Firms selected by the Water CIP Program Management Division (PMD) of the Water Department to perform construction management.

The primary purpose of the Water CIP Guidelines and Standards is to ensure uniformity of design concepts, formats, methodologies, procedures, construction materials, types of equipment, and quality of work products to be produced under the Water CIP. With several hundred types of materials, equipment, systems and subsystems available to a program of this magnitude, these guidelines will also simplify the logistics associated with the storage of spare parts required for startup, maintenance, and repairs. The CM Guidelines provide procedures and define responsibilities for construction management tasks, set standards for inspection, and establish uniform documentation and reporting procedures during the construction phase. In addition, operator training will be better coordinated and standardized.

Recognizing the need to maintain creativity, innovation, and ingenuity, Consultant CONSTRUCTION MANAGERS are expected to adapt these CM Guidelines in providing construction management services for the facilities for which they are responsible. This responsibility is in no way diluted or absolved by these Guidelines.

The Water CIP Guidelines provide a framework for the construction management of a wide range of project complexity included in the Water CIP and may not be applicable to less complex projects. For less complex projects, the administrative and procedural sections of the Guidelines should be varied to meet the needs of the project. Variations or departures from these guidelines will be determined on a project-by-project basis during scope negotiations between the CM Consultant and the CIP Program Manager, based on the experience of the CIP staff and individual project requirements.

1.4 Scope and Coverage

The Water CIP Guidelines have been organized and issued as seven books. This Book 6, **Construction Management Guidelines,** outlines construction management procedures. Other books in the Water CIP Guidelines are:

- Book 1, **General Design Guidelines,** provides direction on design issues, administrative procedures and facility implementation that are common to all CIP projects.

- Book 2, **Facility Design Guidelines,** provides guidelines for estimating water demands and service criteria, pipeline transmission and distribution design, pressure control facility design, storage facility design, and pumping station design. Book 2 also includes typical facility layouts or general arrangements.

- Book 3, **Standard and Guide Details,** presents guide details for use in developing construction documents and discusses the use of other available standard City details.

- Book 4, **Standard and Guide Specifications,** provides a guide technical construction specification for use by designers in developing construction documents.

- Book 5, **CADD Standards,** documents CADD requirements, outlines file transfer protocols, provides standard drawing formats and provides drafting standards.

- Book 7, **Recycled Water System Guidelines**, provides guidance on the planning, designing and construction of recycled water use projects.

Each book is contained in a separate binder with a detailed table of contents. The users of these Guidelines should study the table of contents of each book to obtain a broad understanding of the subjects covered.

1.5 CIP Program Terms

A list and description of abbreviations used throughout the Water CIP Guidelines is included in Attachment 1-1 at the end of this chapter.

1.6 Interface Between Construction Management Consultants

The City is expected to select several Consultant Construction Management firms for the construction management of water system improvements. The CONSTRUCTION MANAGERS selected for contractor oversight of such facilities must coordinate work closely with one another to ensure that necessary operational links are accommodated in their respective contracts. However, the CIP Program Manager maintains overall responsibility for such coordination, and ensures that construction schedules for CIP facilities are coordinated so that linked facilities become operational at the same time.

1.7 Permits and Inspections

Most Water CIP projects, depending on their characteristics and location, require planning, encroachment, environmental and/or construction permits from regulatory and private agencies prior to construction. Key permitting agencies include:

- U.S. Army Corps of Engineers
- California Department of Industrial Relations (OSHA)
- California Department of Transportation (Caltrans)
- Regional Water Quality Control Board
- San Diego County Department of Environmental Health Services
- California Department of Fish and Game
- California Coastal Commission
- California Department of Safety of Dams

In addition, compliance with the plan check and permitting processes of the Development Services Department (DSD) of the City of San Diego is required. The Inspection Services Division of DSD inspects the Contractor's work compliance with the Uniform Building Code (UBC) and City standards.

During the design phase, Design Consultants are responsible for identifying all required permits. Permits required of the Contractor are identified in the Contract Documents package. The project CONSTRUCTION MANAGER is familiar with such permits and monitors the Contractor's compliance with permit conditions to include the completion of required inspections and subsequent approvals before proceeding with the work.

1.8 Procedure to Deviate from Guidelines

From time to time, the CONSTRUCTION MANAGER may desire to deviate from the Water CIP CM Guidelines. In such cases, the CONSTRUCTION MANAGER immediately brings this matter to the attention of the CIP Project Manager or the Construction Management Liaison Group responsible for construction management.

The CONSTRUCTION MANAGER requests deviation(s) from the Water CIP CM Guidelines using the format presented in Figure 1-1. Proposed deviations are then discussed with the CIP Project Manager and the Construction Management Liaison (CML) Group within one week of when the CONSTRUCTION MANAGER recognizes the need for such a deviation, and confirmed in writing within no more than two weeks thereafter. Each request must be accompanied by full documentation and justification for the deviation.

Project-specific deviations proposed by the CONSTRUCTION MANAGER are directed to the CIP Project Manager or the Construction Management Liaison (CML) Group as appropriate. If the deviation request is not accepted, the CIP Project Manager (or CML Group) notifies the CONSTRUCTION MANAGER in writing. If the deviation request is accepted as presented, or in some modified form, the CIP Program Manager (or CML Group) executes the form shown in Figure 1-1, listing any conditions applicable with its acceptance. No deviation(s) are permitted without written authorization from the CIP Deputy Director.

1.9 Application of Guidelines to Small Projects

For relatively small projects, certain aspects of these guidelines (e.g., procedural, quality assurance, cost estimating and scheduling, etc.) may not fully apply. When such a project is identified, the assigned CIP Project Manager makes recommendations on project scope (technical, procedural, etc.) and schedule to the CIP Program Manager. The CIP Program Manager then decides the exact scope of the project, including QA/QC and other procedures required, which becomes the basis of a Request for Proposal to prospective Design Consultants or in-house implementation, as the case may be.

1.10 Maintenance and Distribution of Water CIP Guidelines

For procedures involving maintenance and distribution of these Guidelines, see paragraph 21.9 of Chapter 21, Book 1. These procedures include the following:

- Control of annual revisions
- Revision distribution
- Controlled distribution
- Maintenance of Water CIP Guidelines and Standards inventory

Figure 1-1
Deviation from Program Guidelines and Standards

---

1. Request No.: _____ 2. Date: _____

3. Project Title: _____ 4. City Contract No.:_____

5. Construction Manager:_____

6. Consultant Management Firm Name:_____

7. Affected Documents:
(Provide full description of the Guideline and/or the Predesign element from which deviation or change is requested. Include affected specification section and/or subsection, equipment number, drawing number, etc., to enable the CIP Program Manager to fully and easily understand the element from which deviation is proposed.)

8. Proposed Change:
(Provide a detailed description of proposed change. Attach sketches, specification or other applicable material which fully describes the scope of your proposal.)

9. Reason for Request:
(Provide complete documentation and justification for this request. Include cost-effectiveness analysis if applicable, and any other supporting data and analysis which will facilitate evaluation.)

10. Date by Which Approval is Requested (please explain why):

11. Impact of Proposal on Construction Schedule & Cost
(Explain as necessary)

12. Remarks:
(Include any other information and/or concerns not covered above.)

SUBMITTED:

_____
(Construction Manager)

APPROVED:

_____
CIP Deputy Director

_____
Date

REVIEWED:

_____
(CIP Construction Management Liaison or
CIP Project Manger)

Attachment 1-1
Abbreviations

The following abbreviations and acronyms are used in this manual:

AWWA	American Water Works Association
BID	Building Inspection Division
BMP	Best Management Practices
CCO	Contract Change Order
CEQA	California Environmental Quality Act
CIP	Capital Improvements Program
CIP PMD	Capital Improvements Program - Program Management Division
CM	Construction Management/Manager
CML	Construction Management Liaison group
CPM	Critical Path Method
CSAC	California State Association of Counties
CSMP	Contractor Safety Management Program
DCN	Document Control Number
DSD	Development Services Department
E&CPD	Engineering and Capital Projects Department
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EOC	Office of Equal Opportunity Contracting
EOCP	Equal Opportunity Contracting Program
EPS	Environmental Permits Section
ESD	Environmental Services Department
MOPO	Maintenance of Plant Operations
MBE/WBE	Minority Owned Business/Women Owned Business
NEPA	National Environmental Policy Act
NPDES	National Pollution Discharge Eliminations System
NTP	Notice to Proceed
NOC	Notice of Completion
O&M	Operations and Maintenance
OCIP	Owner-Controlled Insurance Program
OSHA	Occupational Safety and Health Administration
PM	Project Manager
RE	Resident Engineer (for pipelines in the public right-of-way)
RFC	Request for Change
RFI	Request for Information
RFP	Request for Proposal
RMS	Records Management System
RMU	Records Management Unit
RON	Record of Negotiations
ROW	Right of Way
SWPPP	Storm Water Pollution Prevention Plan
TIA	Time Impact Analysis
VPD	Vehicles Per Day
WPF&PD	Water Policy, Finance and Planning Division

Book 6

Construction Management Guidelines

Chapter 2
Organization

City of San Diego Water Department
Capital Improvements Program

Chapter 2
CITY ORGANIZATION

This chapter describes the organizational elements involved in the construction process and discusses in general the roles and responsibilities of each entity. Chapters 3 through 8 of this book, Construction Management Guidelines, describe specific responsibilities for implementing various management tasks and processes.

2.1 City of San Diego

The City of San Diego is a municipal corporation operating in accordance with a charter approved by the voters. Charter provisions empower the various units of government and establish the fundamental authority and limitations for creating and administering the Water Department CIP. The charter also provides for an annual planning and budgeting cycle for appropriating and encumbering the funds necessary to carry out the work.

Figure 2-1, City Organization Chart, shows the lines of authority and communication between the units of San Diego City government involved in the construction of the capital improvements for the program. A brief synopsis of each element's primary function with respect to the construction effort is provided below. Only those Departments most closely associated with the construction management function are described.

The **Mayor and City Council** are elected by the voters and constitute the legislative body of the City of San Diego. The Council approves the City Water Department CIP, the budget to support it, and the rates paid by users of the water utility. The Council also approves most contracts to consultants and contractors.

The **City Attorney**, also an elected office, is the attorney and chief legal advisor for the City and all its departments. The City Attorney approves the form of all contracts entered into by the Water CIP, and advises and represents the Water CIP in any disputes which may arise.

The **City Auditor and Comptroller**, appointed by the Council, is the chief fiscal officer of the City. The City Auditor is involved in the Water CIP budget process, establishes and maintains the appropriation accounts, certifies procurement actions, and warrants disbursements by the City Treasurer.

The **City Manager** is the chief administrative officer of the City of San Diego. Appointed by the Council, the City Manager prepares the annual budget estimate and advises and makes recommendations to the Council regarding the substantive issues of the Capital Improvements Program. In addition to the Water CIP, the City Manager supervises the administration of the following departments that interact with the program for construction activity:

- The **Financial Management Department** reviews and incorporates the Water CIP budget into the overall City budget process and arranges for bonded indebtedness required to carry out the program.

Figure 2-1
City of San Diego Organization Chart

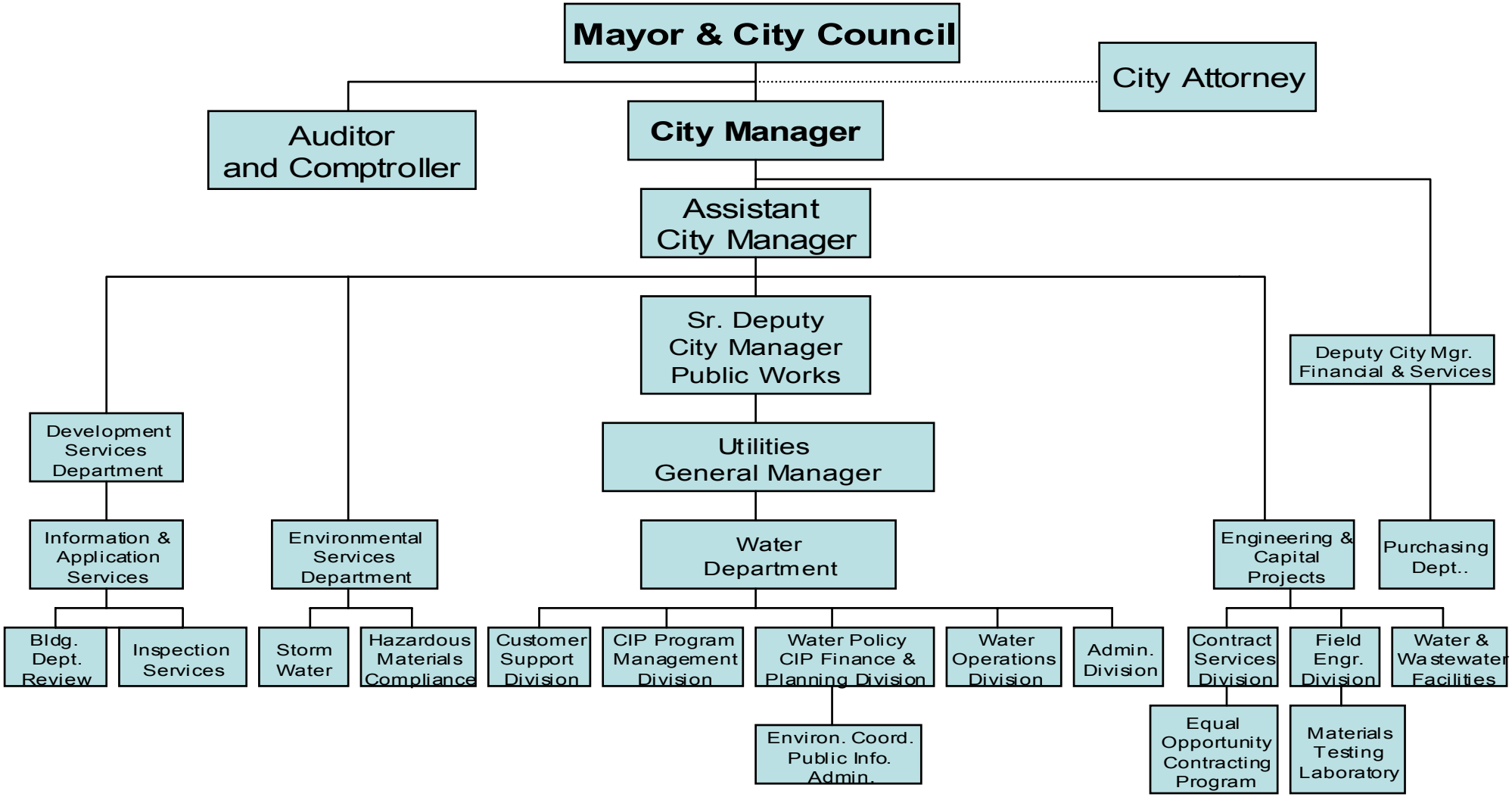
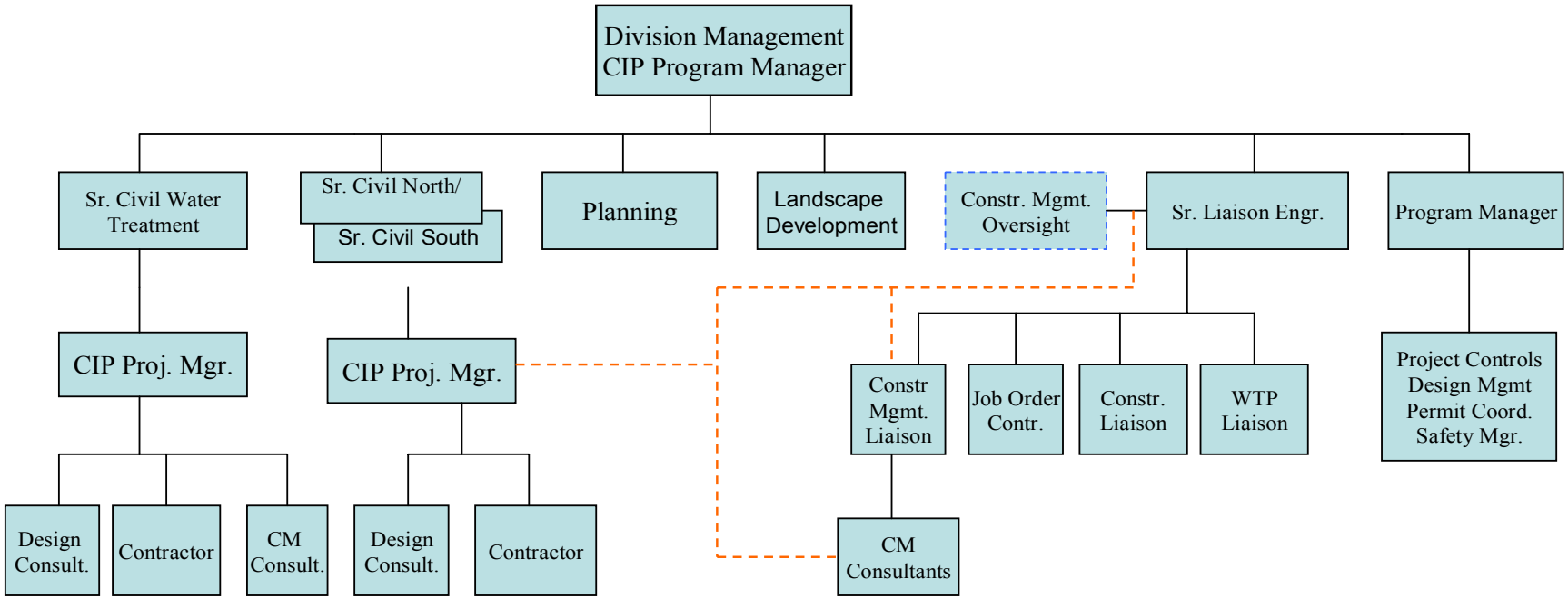


Figure 2-2
Program Management Division Organization Chart



- The **Purchasing Department** advertises and receives construction contract bids for the Water CIP.

- The **Equal Opportunity Contracting Program (EOCP) Division** of the Contract Services Division of E&CPD monitors for discrimination on City contracts. EOCP also monitors contractor adherence to fair payment practices.

- The **Environmental Services Department** (ESD) reviews construction activity for compliance with hazardous materials management regulations.

- The **Contract Services Division** of the E&CPD provides contracting services up through award phase of construction contracts.

- The **Water and Wastewater Facilities Division** of the E&CPD designs and manages distribution pipeline replacement in the public right-of-way.

- The **Field Engineering Division** of the E&CPD provides construction management services for Water CIP pipeline projects in the public right-of-way. The Field Engineering Division has a Materials Testing Laboratory which provides selected materials testing and plant inspection services. These services are available for all Water CIP construction projects.

- The **Development Services Department** (DSD), Permit Services Division, provides “one stop” building/construction permit services under “Process 2000" to customers including the Water CIP. The Department also provides oversight and conformance monitoring of construction activities for commitments made during the CEQA process and ensures compliance with environmental regulations. The Inspection Services Division of the DSD also enforces building codes by performing inspections to determine compliance with the Uniform Building Code and other City permit conditions.

One **Senior Deputy City Manager** supervises the administration of the Water Department and its Water CIP, the Metropolitan Wastewater Department (MWWD), the Engineering and Capital Projects Department (E&CPD), and the Environmental Services Department (ESD). Another **Deputy City Manager** supervises the Financial Management Department, the Purchasing Department, the Planning Department, and the Development Services Department.

The **Utilities General Manager** reports to the Senior Deputy City Manager. This position provides staff support to the Public Utilities Advisory Commission for the City of San Diego and is appointed by the City Manager. Responsibilities include supervision of the administration of the Water Department and Metropolitan Wastewater Department. In addition, the Utilities General Manager also advises and makes recommendations to the Council regarding substantive issues of the Capital Improvements Program.

The **City Water Department** is organized into five divisions: the Water CIP Program Management Division; Water Policy, Finance and Planning Division; the Water Operations Division, Customer Support Division; and the Administration Division.

The Water CIP Program Management Division (PMD) oversees the planning, design, and construction of all Water Department Capital Improvements Program facilities. The division organization is shown in Figure 2-2. The Water CIP Program Management Division is overseen by a Deputy Director. The division also has expertise in project controls, permits, safety, environmental mitigation and compliance, procurement, and contract administration.

The Water CIP Program Management Division Deputy Director is responsible for the planning, design, cost estimating, scheduling, construction and closeout of all projects in the Water CIP. The Water CIP Division Management Deputy Director controls the construction reviews during project design, including the development of construction estimating, cost, scheduling, contractor performance measurements, project safety, contractor invoice review, site security, startup and testing of the facilities, and contract closeout.

The Water CIP Program Management Division is organized by functional type or geographic location as follows: a Water Treatment Plants project management group, a North projects management group, and a South projects management group. Each project management group is managed by a Senior Civil Engineer. **CIP Project Managers** within each group report to their respective Senior Civil Engineer.

The Project Manager's primary responsibility is to manage the design, construction and closeout of one or more Water CIP construction projects. Each CIP Project Manager ensures that the engineering, environmental review, permitting, land acquisition, architecture and landscape design, and cost controls culminate in the successful completion of assigned project(s). Project Managers draw on resources of other Water CIP Program Management Division staff sections to ensure that water treatment plants, pipelines, water storage and pumping facilities are built on schedule and within budget.

The design and construction management requirements for each contract are met through outside consultants, with the CIP Project Manager serving as supervisor. One exception is that pipeline projects in the public right-of-way are construction-managed by the Field Engineering Division of E&CPD.

The Water Policy, CIP Finance and Planning Division (WPF&PD) provides centralized budget and program support to the Water CIP. The division prepares and administers the annual budget, monitors revenues and expenditures, analyzes project cost and cash flows, performs contract administration and coordinates the payment of all contractual invoices. The division also has expertise in public information.

The Environmental and Permits Section (EPS) of the **WPF&PD** is responsible for the interfacing with Development Services Department (DSD) staff to ensure CEQA compliance for CIP projects, including Mitigation Monitoring and Reporting. EPS also oversees compliance with environmental permits, and has a database to track the progress of compliance. EPS contracts with CIP environmental consultants to assist with CEQA and permit responsibilities. Frequent coordination with CIP Project Managers and CONSTRUCTION MANAGERS is required to ensure field compliance during construction.

The Administration Division is responsible for contracts administration, materials management, and compliance with the City's Equal Opportunity Contracting Program (EOCP). Under its contracts administration function, the Administration Section coordinates contracting

for consultant services, construction and pre-purchased materials and equipment. The Administration Section coordinates with the Contracts Services Division of E&CPD and the Purchasing Department. The Administration Section oversees materials management including monitoring, expediting, receiving, warehousing, maintenance during storage, issuing during storage, and inventory control of City-purchased equipment. Construction contract development, solicitation, negotiation, and award are the primary responsibility of the Contracts Services Division. Contract Manager activities include construction contract administration and closeout.

2.2 Construction Manager

The CONSTRUCTION MANAGER is selected from one of several CM Consultant firms contracted to the Water CIP Program Management Division.

Construction management services are provided for the preconstruction, construction, startup and turnover and closeout phases of each project.

During the preconstruction phase, constructability reviews, value engineering support, and other inputs to the design and public bidding processes are provided as called for in the CM Consultant contractual agreement with the CIP Program Management Division.

During construction, services include construction contract administration; EOCP compliance monitoring; change order and claims management; labor standards support; safety and security monitoring; inspection for general, mechanical, electrical, instrumentation and control, and specialty installations; soils and materials testing; surveying; environmental mitigation monitoring; startup and operation planning and support; and equipment and systems testing and checkout.

Post-construction services include construction contract closeout, startup, shakedown and operational demonstration, and warranty coordination.

Construction management services for Water CIP pipeline projects in the public right-of-way are performed by the Field Engineering Division of the E&CPD.

2.3 Design Consultants

Design Consultants are selected for each individual project. Generally, each design professional takes the design process from the predesign report through final design, services during construction, startup, and, if required by permitting agencies, certification of operation to design parameters. The Design Consultants services supporting construction are presented in Book 1, General Design Guidelines, and are summarized as follows:

A. Bid Phase - Chapter 18

- Participate in pre-bid conference and site tour
- Assist CIP Construction Manager in preparation of bid package
- Assist CIP Project Manager in bid review and evaluation
- Assist in preparing technical responses to inquiries from bidders

B. Construction Phase - Chapter 19

- Participate in Pre-construction conference
- Process RFIs
- Review Contractor submittals
- Provide engineering support for planned shutdowns for tie-ins
- Review or equal, substitute, or VE items
- Assist in field evaluation of construction
- Attend selected construction progress meetings

C. Operation and Maintenance Manuals - Chapter 8

- Prepare O&M Manuals including information provided by the Contractor (if required by the Design Consultant's scope of work)

D. Startup and Closeout - Chapter 20

- Provide system integration and testing support
- Assist Construction Manager in preparation of punch list and final inspection procedures
- Provide project closeout support, including warranty administration, organizing and conducting operator training, checkout and certifications.
- Prepare as-built drawings

Some Design Consultant services may be limited depending on the magnitude of the design project and as called for in the Design Consultant's contractual agreement with the Water CIP Program Management Division.

2.4 Construction Contractors

Construction contractors perform all physical construction for the CIP facilities. Pre-purchased equipment is also anticipated for certain facilities, and, where the term "contractor" is used in these Guidelines it applies to vendors where appropriate. Construction contracts and purchase orders are held by the City of San Diego and coordinated and administered by the CONSTRUCTION MANAGER.

Book 6

Construction Management Guidelines

Chapter 3
Construction Management Guidelines and Procedures – Preconstruction

City of San Diego Water Department
Capital Improvements Program

Chapter 3
CONSTRUCTION MANAGEMENT GUIDELINES AND PROCEDURES — PRECONSTRUCTION PHASE

3.1 Introduction

The general roles and responsibilities of each organizational entity involved in construction contracting and management are described in Chapter 2 of this Book 6. This chapter and the succeeding five chapters are devoted to the relationships and communications between the organizational entities associated with the specific tasks that must be performed to meet program objectives during the construction phase.

The order of presentation is generally chronological from bidding through early approvals construction operations, changes and claims to closeout and post-construction activities. The construction management tasks or processes are organized into six phases and presented as follows:

- Chapter 3 - Preconstruction Phase
- Chapter 4 - Early Construction Phase Requirements
- Chapter 5 - Construction Operations
- Chapter 6 - Startup and Testing
- Chapter 7 - Changes and Claims
- Chapter 8 - Completion, Closeout and Post-Construction

Each task or process is developed in narrative form. The narratives state the objective followed by a definition and procedures involved in completing the task. Agendas, memoranda, outlines or forms are provided for certain tasks as appropriate.

Under normal conditions the Construction Manager is not involved in the project during the Pre-Construction Phase. If the Tasks in Chapter 3 are to be performed during the Pre-Construction Phase the CIP Project Manager will take the lead, or execute a special task order with the CM consultant firm for the services of a Construction Manager.

Appendix A, Supplemental Information, contains additional details on procedures for quality assurance, contractor performance measurement and job closeout.

Appendix B contains the Contractor Evaluation Form.

Appendix C contains a list of key staff phone numbers.

3.2 Preconstruction Phase

The preconstruction tasks in this chapter require action by the CONSTRUCTION MANAGER or are otherwise enhanced by his participation prior to the start of construction. The tasks include:

- Community Relations
- Materials Management - Owner Procured Equipment
- Document Controls/Files Index
- Constructability Review Procedure
- Contractor's Manual
- Environmental Monitoring Plan
- Pre-bid Conference/Site Tours
- Addenda
- Bidder Questions
- Bid Analysis
- Submittal List Preparation
- Notice of Apparent Low Bidder/Pre-Award Cost-Loaded Schedule/Phased Funding Schedule
- Contract Compliance
- Authorization to Award
- Notice of Award/Contract Award/Notice to Proceed
- Role of Risk Manager During Pre-bid

General Tasks/Preconstruction Phase

Task 3-1 – Community Relations

A. Objective

To be responsive to community outreach needs and work closely with the City's Public Information Team and to convey timely and accurate information during the construction phases of each project.

B. Definition

The community relations plan promotes communication between the CIP and affected community groups about the planned construction activities, their scope, duration and impacts. The CONSTRUCTION MANAGER anticipates public concerns and works with the concerns raised by the public.

C. Procedure

1. The CIP Program Manager works with the CIP public information representative for the project to develop a draft community relations plan which includes general guidelines about the methods, procedures, and timing of community outreach activities to be undertaken by the CIP. If the CONSTRUCTION MANAGER is available during the Pre-bid stage of the project, he provides assistance.

2. After approval of this plan by the CIP Senior Civil Engineer and the CIP Public Information Officer, the CONSTRUCTION MANAGER (if available during the Pre-bid stage) assists the CIP Project Manager to include specific provisions in the Contract Documents that direct the construction contractor to perform activities in accordance with the plan in the contract documents for each project.

3. The CIP Project Manager develops the project-specific community relations plan in coordination with the CIP Public Information representative in the CIP Water Policy, Finance and Planning Division.

4. The CONSTRUCTION MANAGER (or Contractor), in coordination with the Public Information section, informs communities about specific road closures or narrowing and alternative transportation routes. The CONSTRUCTION MANAGER (or Contractor) assists citizens, businesses, and schools to avoid the adverse impacts of construction

5. The CONSTRUCTION MANAGER strives to minimize disturbances caused by the construction and coordinates public contact with the CIP Public Information representative.

6. An example of guidelines for communicating with the media and in responding to public inquiries is provided in Attachment 3-1-1.

Attachment 3-1-1
Community Relations Guidelines
(Example)

Alvarado Water Treatment Plant
Improvement Project
Communication Guidelines

This communications procedure will help serve as a guide for the construction management team in dealing with media and public inquiries received onsite regarding the Alvarado Treatment Plant Improvement Project.

Media Spokesperson(s)

Water Department policy directs that only the City of San Diego Water Department's designated spokespersons speak with the media for message consistency. Those individuals include the Director and Deputy Directors and Public Information Officers. Coordination with any of these individuals can be handled by the project's Public Information Officer. Water Department staff and construction team staff should be authorized to speak with representatives of the media in advance by the appropriate Deputy Directors.

Public Inquiries

Public inquiries (other than media contact) regarding the project, should be addressed by onsite staff, as outlined here. The site office for the project will be provided with a number of informational publications for public distribution as they are developed. These materials should address the most commonly asked questions regarding construction. These publications include:

- Project Fact Sheet
- Water Department Overview Brochure

More collateral pieces will be developed for distribution as the project progresses, or as needed.

A meeting to discus potential public outreach efforts, and develop a project public information plan will take place before construction begins.

Project Issues Addressable by Onsite Staff:

Project Complaints - The onsite City representative or CONSTRUCTION MANAGER should respond to the complaint onsite, then should coordinate with the Public Information Officer for the project for follow-up and record-keeping purposes. A log recording public contact should be kept onsite as well.

Purpose of the upgrade and improvement project - The onsite City representative and CONSTRUCTION MANAGER should respond to more detailed questions regarding the reason for constructing the new and improved portion of the plant.

Attachment 3-1-1
Community Relations Guidelines
(*Continued)*

Construction Schedule - The CONSTRUCTION MANAGER should answer questions pertaining to the construction schedule.

Safety - The CONSTRUCTION MANAGER should answer questions regarding the safety and cleanliness of the construction at the plant.

When communicating with the public, onsite construction staff are asked to be courteous and to use good judgement. Try to obtain the name, phone number, and organization affiliation, if applicable, of the person making the inquiry. If onsite staff is unsure how to handle any public inquiry, please do not hesitate to refer the individual or organization to the Public Information Officer for the project.

Project Issues to defer to Public Information:

The following issues should be deferred to the Public Information Officer at the Water Department:

Topics currently being covered by the media - any Water Department issues receiving attention in the media (e.g., an award, an investigation, a lawsuit, major staffing changes) should be referred to the Public Information Officer for the project.

Strikes or pickets - in the event of a strike or pickets, onsite staff should notify the Public Information Officer for the project or Wendy Hovland-Henry, 533-4669. All inquiries pertaining to such issues should also be referred to the Public Information Officer for the project.

Construction -Related Crises - crises such as hazardous spills or other accidents, injuries or fatalities should be reported to the Public Information Officer or Wendy Hovland-Henry, 533-4669 as well as to all other appropriate project personnel, officials and agencies immediately and regardless of the time of day or night. Inquiries pertaining to any other crises on other Water Department projects should also be referred to the project Public Information Officer. An emergency contact list for the project will be created prior to the start of construction.

General Tasks/Preconstruction Phase

Task 3-2 – Materials Management/Owner-Procured Equipment

A. Objective

To ensure that all installed owner-furnished equipment and material is available when needed to provide for cost savings and standardization through equipment and bulk material pre-purchases.

B. Definition

Materials management includes the pre-purchase of selected materials identified by the Design Consultant and approved by the CIP Program Management Division, and the receipt, inspection, and delivery of such City-purchased materials to the construction Contractor for installation as detailed in Section 01047 of Division 1 of the Contract Documents.

C. Procedures

1. The Design Consultant with the assistance of the CONSTRUCTION MANAGER recommends equipment and material for Owner pre-purchase based upon compatibility or potential schedule impact, and provides technical specification for each procurement.

2. The CONSTRUCTION MANAGER analyzes the proposed pre-purchase list, evaluates the savings in cost and the impact on schedule and makes recommendations to the Design Consultant. The Design Consultant routes the proposed pre-purchase list to the CIP Project Manager who forwards it to the CIP Deputy Director.

3. The CIP Deputy Director approves the contracting strategy, including the project Owner pre-purchase plan, and routes the plan to the Design Consultant.

4. With assistance from the CONSTRUCTION MANAGER, the Design Consultant expedites the preparation of the procurement documents and solicitation of vendor quotations to meet the delivery dates established in the plan. The Design Consultant routes the procurement documents and vendor quotations to the CIP Project Manager for action.

5. The City Purchasing Department awards material procurement contracts in accordance with purchasing procedures and routes a copy of the contracts to the Design Consultant.

6. The Design Consultant reviews and approves shop drawings and modifies the design to reflect the impact on the balance of the design caused by implementing the approved pre-purchase plan.

7. The CIP Project Manager and the Construction Management Liaison Group must make arrangements to receive, inspect, and store the Owner-Procured equipment or material at the site if the Owner-Procured equipment arrives prior to the Notice to Proceed. After Notice to Proceed and in accordance with Section 01047 of Division 1 of the Contract Documents, the Contractor receives, inspects and stores the Owner-Procured Equipment.

Note: The Design Consultant's responsibilities for Owner-Procured Equipment are defined in Book 1, General Design Guidelines, Chapter 16.

General Tasks/Preconstruction Phase

Task 3-3 – Document Control/Files Index

A. Objective

To establish the CONSTRUCTION MANAGER's Records Management and Document Control responsibility, and to follow established Water CIP Records Management electronic indexing and file category standards as set forth in Attachments 3-3-1, 3-3-2 and 3-3-3. Document Standards have been developed for document consistency and to minimize the need for "guesswork" when processing the documents.

B. Definition

The Water CIP Records Management System (RMS) is the repository for hard-copy and electronic files of all project documents, including but not limited to correspondence, reports, non-Mylar drawings, specifications, calculations, meeting minutes, contracts, daily construction progress reports, change orders, clarifications, issues, field orders, deviations, RFIs and similar items. The Water CIP RMS contains all documentation necessary (documents as defined in the construction contract between the City and Contractor) to reconstitute and reconstruct events leading to the development and completion of a Water CIP project.

C. Procedures

1. The City of San Diego is the owner of all documents generated by the Design Consultant, the CONSTRUCTION MANAGER and the Contractor and all other entities in contractual agreement with the City for the design and construction of Water CIP projects.

2. The Water CIP RMS requires that all documents contain Document Control Number (DCN) and barcode, be logged, recorded and filed with the Records Management Unit (RMU) pursuant to the standards as set forth in this document. The Water CIP Records Management Unit is charged with Water CIP document control and Records Management activities. The RMU is the ultimate repository for all Water CIP documents, except Mylar drawings (Book 1, Section 21.3). The RMU will scan, index, file, store, and place a barcode and tracking control number on each document including maps/drawings. Project photos will be submitted in electronic format and categorized according to established standards as set forth below: Photo prints shall be submitted and categorized according to established standards.

    a. The CONSTRUCTION MANAGER shall be encouraged to use the RMU system to index all photos. Otherwise, all digital photos and images shall be recorded on a CD-R and be able to be used in a standard readable CD-ROM drive using only J-PEG or TIFF format and submitted to RMU.

b. The CONSTRUCTION MANAGER will regularly input and/or submit project and construction digitized photos using a CD-ROM.

c. Index all photos identifying (the information needs to be in a non-proprietary format):

1) Sub-project and Project number
2) City Project Name
3) Identify "Document Type" as a map, drawing or photo
4) Identify "Image Category" using the following:
   - Map: ID directions, location, public utilities or waterlines
   - Photo: ID either aerial, completed, construction events, planning, or safety
5) Identify the direction as N, S, E, W, NE, SE, NW, or SW (if possible)
6) Provide a subject not exceeding 80 characters
7) Provide a brief description of the map or photo not exceeding 80 characters
8) The DM Desktop table for Photos/Maps is available for indexing use by the CONSTRUCTION MANAGER or designee. A station is located on the 10th floor, 600 B Street. Contact the CIP Records Management Unit to schedule a time.

3. The following list provides examples of <u>some</u> of the type of documents covered by standards established by Water CIP Records Management and Document Control Procedures:

a. Design documents
b. Addenda
c. As-awarded documents
d. Shop drawings for materials, components, equipment and systems
e. Responses to Requests for Information (RFI), design clarifications, shop drawing submittals, and substitution requests
f. Change Orders/Field Orders
g. Operation and Maintenance Manuals
h. CIP Facility O & M Manuals and parts lists assembled by the Contractor
i. Record As-Built drawings
j. Records document construction activities such as concrete logs, weight slips, soil and concrete lab analysis, field reports, QA/QC documents, progress meeting minutes, progress payment requests, field orders, inspection reports, project photos and videos, and the like.

4. The CONSTRUCTION MANAGER shall create a project file system following the Water CIP three file Standard Categories (Attachments 3-3-

1, 3-3-2 and 3-3-3) to which all documents/ files/ photos/ maps and drawings will adhere. All outgoing documents shall have a "cc" to CIP RMU designating the specific file folder (section) and File Category the document is to be filed the document is to be filed. Example: CIP RMU N 3.4 Meeting Notes. (The N indicates that the NWTP File Category is being used and 3.4 is the Meeting Notes folder). With this information everyone will know that the document was sent to RMU for scanning and filing.

The DCN and barcode in most cases will be placed on the top right hand corner of the document. Every document must contain the following:

- A DCN and barcode label provided by RMS
- Document date
- City Project Name
- CIP and Sub-CIP Project Name
- Clear Subject title or description (Document Title)
- Issued Revision and Issue Date (if applicable)
- RMS to receive its own copy of any and all documents.
- "cc" - A copy sent to RMU noting where to file the document.

5. The CONSTRUCTION MANAGER shall be responsible for all original documents, photos, drawings, and maps and records that will eventually be turned over to the RMU for storage.

   The files shall be turned over to Water CIP Records Management Unit (RMU) in the following manner:

   a. In standard one (1) cubic foot Records Storage file boxes, each approximately 16"D x 12.5"W x 10.5"H in size and able to hold a minimum of 35 pounds.

   b. Each box shall have the complete Project Name, Water CIP number and sub-number identified on the outside of the box. When there are numerous boxes, the number of boxes (e.g. 1 of 6, etc.) being consistent with the location of the information on the outside of the boxes and within the designated space on the outside of the box. Only the front side of the box is to be marked.

   c. Include a typed or computer generated (not hand-written) index list. A sample form is found on the N: drive under CIP\Administration\RecordsManagement. The list identifies Project Name, CIP and Sub-CIP numbers, File Category, Box Number and the status of the project. The list identifies file folder names - not each document in that folder.

      The file names reflect a category within one of the three filing category lists (Department, NWTP or WTP). Do not mix file

category documents. All department documents items go into one box, all NWTP in another, etc. The index list reflects only the file folders in that one box and once completed placed as the first item in the box.

d. Arrange file folders so the contents of the file will remain in as vertical a position as possible and in order of the established Water CIP file system (Attachment A). Do not over pack the boxes.

e. Documents within the folder shall be in date order with the most current first.

f. All disks, samples, microfilm, etc., shall be in the aforementioned standard box sizes and identified accordingly.

Attachment 3-3-1
RMS Category Codes
NON-PROJECT SPECIFIC / GENERAL
(30244 - Department)

01 CITY COUNCIL (presentations, correspondence, meeting notes, etc.)
- 1.1 Main Council (San Diego Council Members)
- 1.2 Rules Committee
- 1.3 Natural Resources & Culture (NR&C) Committee
- 1.4 Docket and Future Water Dept. Council Actions
- 1.5 Land Use & Housing Committee

02 WATER DEPARTMENT
- 2.0 Water Department - General (presentations, correspondence, meeting notes, etc.)
- 2.1 Water Department Organization Chart
- 2.2 Policies
- 2.3 Water Executive Team (WET)
- 2.4 Litigation
- 2.5 Strategic Business Plan (Confidential)
- 2.6 Public Utilities Advisory Council (PUAC)

03 OTHER GOVERNMENT AGENCIES COORDINATION & ASSOCIATIONS
- 3.1 Other Government Agencies & Industry Associations (presentations, correspondence, meeting notes, etc.)
- 3.2 Regulations, Codes, Standards, etc.
- 3.3 Compliance (other Cities and DHS compliance orders)
- 3.4 Contracts / Agreements (Agreements, MOU's, etc.)

04 PUBLIC INFORMATION - GENERAL
- 4.0 Dept. – Public Information and Outreach - General
- 4.1 News Clips
- 4.2 Special Events

05 PLANNING & PROJECT DEVELOPMENT
- 5.0 Planning & Project Development - General
- 5.1 Developer/Consultant Water Studies
- 5.2 Water Modeling Studies (Water Modeling)
- 5.3 10% Design Reports / Planning Studies
- 5.4 Reservoirs
- 5.5 Pump Stations
- 5.6 Pipelines
- 5.7 Other Facilities
- 5.8 Value Engineering
- 5.9 New Developments

06 WATER PLANNING

6.0 Water Planning – General
6.1 Desalination
6.2 Ground Water
6.3 Reclaimed / Recycled Water
6.4 Repurification
6.5 Research (DRIP (Desalinization Research Innovative Partnership) / BIOCOM (research company) / BOR (Bureau of Reclamation) and does research on membrane bioreactor and reverse osmosis.
6.6 Marine Transfer
6.7 Water Transfer
6.8 Long Range Planning

07 ENVIRONMENTAL & PERMITS COORDINATION (STATE OF CALIFORNIA/CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

7.0 Environmental & Permits Coordination - General
7.1 Environmental Documents and Review
7.2 Discretionary Permits
7.3 Environmental Monitoring
7.4 Storm Water Documents

08 FINANCE

8.0 Finance - General
8.1 Bond Counsel
8.2 Feasibility Engineering
8.3 Official Statement
8.4 Rate Cases
8.5 State Revolving Loan Fund
8.6 Underwriters
8.7 Grant Agreements
8.8 WUD (Water Utility Department Bond Letters)

09 BUDGET

9.0 Budget - General
9.1 1472, 1544, PA 700, Contract Change Orders
9.2 Annual Allocations
9.3 Projects Budget
9.4 Operations Budget
9.5 MIS Budget
9.6 Water Department Budget

10 ADMINISTRATION (Running of the Office)

10.0 Administration - General
10.1 Policies, Procedures, Guidelines, etc.
10.2 Organization Chart
10.3 Facilities - 600 B Street
10.4 Contract / Procurement
10.5 Management Information Systems (MIS)
10.6 Records Management
10.7 Security
10.8 Training
10.9 Transportation
Personnel (Confidential and therefore not Included)

11 CONTRACTS / PROCUREMENT

11.0 Contracts / Procurement - General
11.1 Bid Documents (Request for Qualifications 'RFQ', Request for Proposals 'RFP')
11.2 Selection Process (Statement of Qualifications, Proposals, Analyses / Results, etc.)
11.3 NR&C (Natural Resources & Culture) Committee Input
11.4 1472, 1544 and PA 700
11.5 Contract Documents (Consultant Agreements, Notice to Proceed, Agreement Amendments, Task Orders, Scopes, Schedules, Specifications, Invoices, Insurance Certificates, etc.)
11.6 Consultant Performance Evaluations

12 PROGRAM AND PROJECT MANAGEMENT

12.0 Program & Project Management – General (Sr. Staff mtg., etc)
12.1 Status Reports - Monthly and Quarterly
12.2 Meeting Notes and Minutes
12.3 Cost Reports
12.4 Roadmap
12.5 Schedules (Program-wide)
12.6 OCIP (Owner Controlled Insurance Program)
12.7 EOCP (Equal Opportunity Compliance Program)
12.8 Safety
12.9 Corrosion
12.10 Stand-Alone Projects (Job Orders, Task Orders, No CIP# assignment)
12.11 Construction Management
12.12 Claims Avoidance
12.13 Rate Case
12.14 Change Control
12.15 PUAC Reports (Public Utilities Advisory Committee)
12.16 Cost Estimates
12.17 Project Summary Sheets
12.18 Risk Management (Non- OCIP)
12.19 CIP Project Prioritization
12.20 Security Measures
12.21 Standards & Guidelines
12.22 General Policies and Procedures

13 LANDSCAPE DEVELOPMENT AND PUBLIC ART

13.0 Landscape Development and Public Art - General
13.1 Project Design and Development
13.2 Project Maintenance

14 WATER POLICY / IMPORTED WATER

14.0 Water Policy / Imported Water - General
14.1 City 10
14.2 San Diego County Water Authority (CWA)
14.3 Metropolitan Water District of Southern California (MWD)
14.4 Other Governmental & Water Agencies as it relates to imported water (**USBR** – United States Bureau of Reclamation / **DWR** – California Department of Water Resources / **EPA** – Environmental Protection Agency, **CALFED**)
14.5 Legislation (Federal / State / Local)
14.6 Department Policy Meetings

List of Possible Other Government Agencies

Cal-American Water District
Center City Development Corporation (CCDC)
City of Del Mar
California Department of Health and Services (DHS)
City Development Services Department
Federal Government/National
Financial Management
MWWD (Metropolitan Waste Water Department)
Otay Water District
San Diego County Water Authority (CWA)
San Diego Data Processing Corporation (SDDPC)

Attachment 3-3-2
RMS Category Codes
NWTP (NON-WATER TREATMENT PROJECT)

00 ADMINISTRATION

0.0 Administration – General (Project Change Requests, etc.)
0.1 Project Definition
0.2 Budget Information
0.3 Schedules/P3 Reports
0.4 1472, 1544, PA-700
0.5 Public Information (mailings, public announcements, door hangers, etc.)
0.6 EOCP Documentation
0.7 OCIP Risk Management

01 PLANNING & PROJECT DEVELOPMENT

1.0 Planning & Project Development - General
1.1 Developer / Consultant Water Studies
1.2 Water Modeling Studies (Water Modeling)
1.3 10% Design Reports / Planning Studies
1.4 Reservoirs
1.5 Pump Stations
1.6 Pipelines
1.7 Other Facilities
1.8 Value Engineering
1.9 New Developments

02 CONTRACTS / PROCUREMENT

2.0 Contracts / Procurement – General
2.1 Bid Documents (Request for Qualifications 'RFQ', Request for Proposals 'RFP')
2.2 Selection Process (Statement of Qualifications, Proposals, Analyses / Results, etc.)
2.3 NR&C (Natural Resources & Culture) Committee Input
2.4 1472, 1544, PA 700
2.5 Contract Documents (Consultant Agreements, Notice to Proceed, Agreement Amendments, Task Orders, Scopes, Schedules, Specifications, Invoices, Insurance Certificates, etc.)
2.6 Consultant Performance Evaluations

Participation Agreements

2.5 Participation Agreements – General
2.8 Bid Documents
2.9 NR&C (Natural Resources & Culture) Committee Input
2.10 1472, 1544, PA 700
2.11 Contract Documents (Participation Agreements, Notice to Proceed, Agreement Amendments, Scopes, Schedules, Specifications, Environmental Impact Report (EIR), Invoices, Insurance Certificates, etc.)
2.12 Geotechnical

Design Build Agreements

2.13 Design Build Agreements - General
2.14 Bid Documents (Request for Qualifications 'RFQ', Request for Proposals 'RFP')
2.15 Selection Process (Statement of Qualifications, Proposals, Analyses / Results, etc.)
2.16 NR&C (Natural Resources & Culture) Committee Input
2.17 1472, 1544, PA 700
2.18 Contract Documents (Design Build Agreements, Notice to Proceed, Agreement Amendments, Scopes, Schedules, Specifications, Invoices, Insurance Certificates, etc.)
2.19 Contractor Performance Evaluation

General Requirement Contract (GRC) formally known as Job Order Contract (JOC)

2.20 General Requirements Contracts – General
2.21 Bid Documents (Request for Bids)
2.22 Selection Process (Bids, Analyses / Results, etc.)
2.23 NR&C (Natural Resources & Culture) Committee Input
2.24 1472, 1544, PA 700
2.25 Contract Documents (General Requirement Contracts, Notice to Proceed, GRC Amendments, Task Orders, Scopes, Schedules, Specifications, Invoices, Insurance Certificates, etc.)
2.26 Contractor Performance Evaluation

03 DESIGN

3.0 Design - General
3.1 Water Operations Coordination
3.2 Public Utilities Coordination (SDGE, Pacific Bell, etc.)
3.3 Design Notes/Issues (Reports, Photos, Calcs, Flow Analysis, etc.)
3.4 Meeting Notes (including Technical Review Committee)
3.5 Plan Check
3.6 Property Issues (including surveys)
3.7 Traffic
3.8 Cost Estimate (including Take Offs)
3.9 Design Submittals (30%, 75%, 90%)
3.10 Final Contract Documents (100%)

04 LAND ACQUISITION

4.0 Land Acquisition - General

05 ENVIRONMENTAL / PERMIT

5.0 Environmental / Permit - General
5.1 Environmental Documents and Review (Biological, Archeological, Geotechnical)
5.2 Discretionary Permits (including permit expiration notices)
5.3 Environmental Monitoring
5.4 Storm Water Documents

06 CONSTRUCTION ADMIN (Construction Liaison Coordination & Issues)

6.0 Construction Admin – General

07 CONSTRUCTION (Construction Management – usually site issues)

- 7.0 Construction - General
- 7.1 Payment Applications / Construction Invoices
- 7.2 Construction Schedules and Progress updates
- 7.3 Meeting Notes and Minutes
- 7.4 Inspectors' Reports (Compression Reports, Daily Reports, Field Reports, Job Site Memos, Certificate of Compliance, etc.)
- 7.5 Safety
- 7.6 Submittals / Logs
- 7.7 Change Orders
- 7.8 Field Orders
- 7.9 Request For Information (RFIs) / Deviation / Proposals / Logs
- 7.10 Claims
- 7.11 Punch Lists
- 7.12 Final Plans (As built)
- 7.13 Final Acceptance and Notice Of Completion
- 7.14 Labor Compliance & EOCP (Form 251, Employee ID, Job List)
- 7.15 Concrete
- 7.16 Biological and/or Paleo- / Archeo- (Ancient, prehistoric fossils)
- 7.17 OCIP

08 FURNISHINGS / EQUIPMENT

- 8.0 Furnishings/Equipment - General

09 CLOSE OUT

- 9.0 Close Out - General

10 LANDSCAPE DEVELOPMENT AND PUBLIC ART

- 10.0 Landscape Development and Public Art - General
- 10.1 Project Design and Development
- 10.2 Project Maintenance

Attachment 3-3-3
RMS Category Codes
WTP (Water Treatment Plant) Project

00 ADMINISTRATION

- 0.0 Administration – General
- 0.1 Project Definition (Scope of work)
- 0.2 Budget Information
- 0.3 Schedules/P3 Reports
- 0.4 1472, 1544, PA-700
- 0.5 Public Information
- 0.6 Equal Opportunity Contracting (EOC Documentation)
- 0.7 Parsons (Consultant)
- 0.8 As-Needed Services
- 0.9 Project Change Request
- 0.10 OCIP

01 PLANNING

- 1.0 Planning – General
- 1.1 Project Study Reports & Studies
- 1.2 Preliminary Definitions
- 1.3 Value Engineering

02 DESIGN CONSULTANT SERVICES

- 2.0 Design Consultant Services - General
- 2.1 Design Consultant Selection
- 2.2 Agreement
- 2.3 Invoices
- 2.4 Proposals
- 2.5 Negotiations

03 DESIGN

- 3.0 Design - General
- 3.1 Water Operations Coordination
- 3.2 Public Utilities Coordination
- 3.3 Design Notes / Issues
- 3.4 Meeting Notes
- 3.5 Plan Check
- 3.6 Property Issues
- 3.7 Traffic
- 3.8 Cost Estimate
- 3.9 Design Submittals (Calculations)
- 3.10 Final Contract Documents (Including draft documents)
- 3.11 Addenda
- 3.12 Security
- 3.13 Constructability Review
- 3.14 Geotechnical Report

04 LAND ACQUISITION / EASEMENTS

4.0 Land Acquisition / Easements – General
4.1 Land Acquisition
4.2 Easement Issues

05 ENVIRONMENTAL / DISCRETIONARY PERMITS

5.0 Environmental / Discretionary - General
5.1 Environmental Documents and Review
5.2 Discretionary Permits
5.3 Environmental Monitoring
5.4 Storm Water Documents

06 CONSTRUCTION MANAGEMENT (CM) CONSULTANT SERVICES

6.0 CM Consultant Services - General
6.1 CM Consultant Selection
6.2 Agreement
6.3 Invoices
6.4 Proposals
6.5 Negotiations

07 CONSTRUCTION CONTRACTOR SELECTION

7.0 Construction Selection – General
7.1 Bid Package
7.2 Bid Results
7.3 Award Documents
7.4 Construction Contract

08 CONSTRUCTION

8.0 Construction - General
8.1 Payment Applications / Construction Invoices
8.2 Construction Schedules and Progress updates
8.3 Meeting Notes and Minutes
8.4 Resident Engineer / Inspector Daily Reports
8.5 Contractor Daily Reports
8.6 Special Inspection
8.7 Building / Fire Dept. Inspection
8.8 Building / Fire Dept. Permits
8.9 Other Permits
8.10 Survey Reports
8.11 Pipe Reports
8.12 Concrete Reports
8.13 Soils / Compaction Reports
8.14 Asphalt / Paving
8.15 Welding
8.16 Aggregate and Gravel Materials
8.17 Misc. Metals
8.18 Hydraulic Testing

08 CONSTRUCTION (Continued)

8.19 Tunneling
8.20 Safety
8.21 Coordination with Operations
8.22 Coordination with Others
8.23 Submittals
8.24 O&M Manuals
8.25 Change Orders (CO)
8.26 Field Orders (FO)
8.27 Field Directives (FD)
8.28 Request for Information (RFI)
8.29 Request for Proposals (RFP)
8.30 Change Order Requests (COR)
8.31 Construction Photos (also see photo / map table)
8.32 Claims
8.33 Notices
8.34 Shutdown Request / Notification
8.35 Punch Lists
8.36 Insurance
8.37 As-Builts (also see engineering drawing table)
8.38 Start-up
8.39 Job Order Contractor (JOC) or General Requirement Contract (GRC)
8.40 Design Clarification (DC)

09 FURNISHINGS / EQUIPMENT

9.0 Furnishings / Equipment – General
9.1 Warranty
9.2 Owner Furnished Equipment
9.3 Control Systems

10 CLOSE OUT

10.0 Close Out – General
10.1 Substantial Completion
10.2 Final Acceptance and Notice of Completion
10.3 Release of Retention

11 LANDSCAPE DEVELOPMENT and PUBLIC ART

11.0 Landscape Development and Public Art - General
11.1 Project Design and Development
11.2 Project Maintenance

12 CONTRACTS / PROCUREMENT (Design Consultant Services, etc.) Consultant Performance

12.0 Design Consultant Services – General
12.1 Bid Documents (Request for Qualifications 'RFQ', Request for Proposals 'RFP')
12.2 Selection Process (Statement of Qualifications, Proposals, Analyses / Results, etc.)
12.3 NR&C (Natural Resources & Culture) Committee Input

12.4 1472, 1544, PA 700
12.5 Contract Documents (Design Consultant Agreements, Notice to Proceed, Agreement Amendments, Task Orders, Scopes, Schedules, Specifications, Invoices, Insurance Certificates Evaluation

Construction Management (CM) Consultant Services

12.7 Construction Management Consultant Services – General
12.8 Bid Documents (Request for Qualifications 'RFQ', Request for Proposals 'RFP')
12.9 Selection Process (Statement of Qualifications, Proposals, Analyses / Results, etc.)
12.10 NR&C (Natural Resources & Culture) Committee Input
12.11 1472, 1544, PA 700
12.12 Contract Documents (CM Consultant Agreements, Notice to Proceed, Agreement Amendments, Task Orders, Scopes, Schedules, Specifications, Invoices, Insurance Certificates, etc.)
12.13 Consultant Performance Evaluations

Project Specific/Preconstruction Phase

Task 3-4 – Constructability Review Procedure (75% and 90% Design Level)

A. Objective

To provide a framework and process for an organized review of the Contract Documents by a Construction Management multi-disciplinary team, with the object of reducing conflicting design information to promote rational bidding and to decrease the extent of construction changes. Constructability reviews will be performed at the 75% and 90% design levels.

B. Definitions

A review process at the 75% level to assess the bid-ability and the constructability of the Contract Documents. This review will also be back-checked at the 90% level.

C. Procedures

1. Constructability Review by the CONSTRUCTION MANAGER is normally NOT included in the Construction Management Consultant's Scope of Work. A special Task Order is needed if CM Consultant services are required to perform these reviews.

2. The CIP Project Manager will provide two (2) sets of Contract Documents to the Construction Manager noting practical time allowance.

3. The CONSTRUCTION MANAGER Constructability Review will consist of five (5) main areas of evaluation.

   (a) Site Visit
   (b) Review of the Technical Specifications and Contract Drawings
   (c) Review of the Bid Documents and Bid Proposal Form
   (d) Review of the Schedule
   (e) Construction Management Services estimated cost at 90%

   Item (b) may not be complete and item (c) may not be available at the 75% level review .

D. Scope of the Constructability Review

1. Site Visit. The Site Visit will entail inspecting the Project site to observe the physical construction challenges that are present. This may include natural obstructions that cannot be relocated such as select trees and vegetation. The location of fences and other components that are not scheduled to be modified, access to the site, Contractor laydown areas for equipment, storage and

construction trailers should be reviewed for accurate presentation on the project drawings.

2. Review of the Contract Technical Specifications and Drawings. The review will require a thorough examination of the technical specifications and drawings to determine if, for example, specified materials and techniques are locally available, specified equipment tolerances are obtainable, access is provided to make proper connections, and conflicts between architectural, mechanical, electrical and structural elements have been avoided.

3. Review of the Bid Documents. The CONSTRUCTION MANAGER will review the Instruction to Bidders and the Bid Proposal Form (Bid Schedule) together with the technical specifications to determine that they are clear, accurate and complete so that a knowledgeable contractor can successfully estimate the cost and construct the project. The Bid Schedule will be examined to verify that all the Work detailed in the specifications and drawings have corresponding Bid Items listed on the Bid Schedule to assure the Contractor's bid is all inclusive. Where Bid Items are called out on a Unit Price basis, the number of units will be checked for accuracy.

4. Review of the Schedule. A review of the Schedule as prepared by the Design Consultant will consist of an evaluation of the number of working days allowed for the construction of the project. The number of days should be reasonable, practical and allow for seasonal weather delays. The review will also evaluate the contract milestones to ensure they are achievable as well as complete. Any restrictions, schedule constraints or sequencing of the contract work will be evaluated in terms of being reasonable.

5. CM Facilities and Field Office. The CONSTRUCTION MANAGER will review the Division 1 of the technical specifications for the CM facilities and field office to assure they are complete and adequate to administer all aspects of the Work. These requirements should be specified in Division 1, Section 01500 or 01511, or in Section 8-2 of Part 1 Special Provisions - General of the Contract Documents. A bid item should be found in the Contractor's Bid Proposal, Bid Schedule, to assure the Contractor procures and installs the CM field office.

6. Construction Management Services estimated cost at the 90% review. As a final item of the Constructability Review, the CONSTRUCTION MANAGER will prepare a draft Task Order to provide construction management services for the duration of the construction contract.

E. Constructability Review Time and Cost

1. The Constructability Review will be performed in two (2) weeks in consideration of the design time to incorporate the necessary changes into the design documents.

2. The items submitted to the CIP Project Manager will consist of one set of marked up specifications and drawings, the reviewers' work sheets in the format as determined by the CIP Program Design Manager, and any separate sheets of notes. The worksheets for reporting of comments will be provided by discipline and reviewer through the Design Comments Database for use by the Design Consultant.

3. An orientation meeting or debriefing meeting with the Design Consultant may be necessary depending on the size or complexity of the project under review.

Project Specific Tasks/Preconstruction Phase

Task 3-5 – Contractor's Manual

A. Objective

To describe how the Contractor and the City of San Diego and its representatives interact and carry out the administration of the construction contract. This procedure is applicable only to complex projects and/or those projects with two or more prime Contractors.

B. Definition

The Contractor's Manual is procedural in nature, describing the interaction of the Contractor(s) and the City of San Diego and its representatives, and offering project information regarding the project. It has no contractual standing but reflects the administrative and procedural requirements included in the general and special conditions of the contract.

C. Procedures

1. When directed by the CIP Project Manager, the CONSTRUCTION MANAGER prepares a Contractor's Manual that prescribes and defines the general information required by the City of San Diego and its representatives that is useful to each contractor, such as communications, use of site, telephone services, utilities, working hours, site security, surveys and control, safety, use of radios, flooding, contract administration, and the use of standardized forms and procedures. This manual also contains a project personnel directory and an electronic copy (diskette) of all forms the Contractor is expected to use. A copy of the Contractor's Manual should be issued to the Contractor(s) at the Pre-construction Conference, or no later than the first weekly progress meeting.

2. The CONSTRUCTION MANAGER distributes the Contractor's Manual to the construction contractor(s) and Design Consultants involved, the CIP Project Manager, and the CIP Deputy Director.

Project Specific Tasks/Preconstruction Phase

Task 3-6 – Environmental Monitoring Procedures

A. Objective

To provide a means to coordinate the appropriate and timely implementation of various CEQA/NEPA mitigation measures and environmental permit conditions and requirements at project sites.

B. Definition

Environmental Monitoring Procedures establish a basis for bridging the gap between environmental protection measures contained in CEQA and project-specific permit documents and successful compliance during construction. The Contractor's requirements are as detailed in Sections 01060 and 01560 of Division 1.

C. Procedures

1. The Environmental and Permits Section (EPS) Associate Planner, in coordination with the Senior Planner, reviews all environmental and permit documentation and prepares a comprehensive list of regulatory action items for each permit/approval as well as design features from the CEQA document . A skeleton action item list can be found on the CIP Permits Database. The list is then provided to the Contractor via the CONSTRUCTION MANAGER. As conditions are met, the Contractor completes the Action Items, Start Date and End Date columns of the list. Upon completion of the list, the Contractor returns it to the Associate Planner via the CONSTRUCTION MANAGER for review and to update the Permits Database.

2. During design, the CIP Project Manager, in consultation with the Associate Planner, directs the Design Engineer to include notes on the plans per any such Mitigation Monitoring and Reporting Program (MMRP) conditions; to copy the MMRP verbatim in separate sheet(s) behind the index sheet; to include the most recent versions of the CIP standard specifications addressing environmental requirements (e.g., Sections 01060, 01560, 02270, etc); and to include all pertinent environmental and permit documents as attachments to the specification (e.g., CEQA documents, SDP, SWPPP/WPCP, regulatory agency permits, etc.).

3. The Associate Planner oversees compliance with any pre-construction MMRP conditions including pre-approval of qualified environmental consultants, ESL fencing and sensitive species surveys, Environmental Analysis Section (EAS) reviews, and/or WPCP/SWPPP. The CIP Project Manager coordinates with the Associate Planner to ensure that staff from the Mitigation Monitoring and Coordination (MMC) Section, and qualified

environmental consultants participate in the pre-construction meeting. The City's environmental monitoring consultants prepare a MMC Consultant Site Visit Record during each site visit, and send these records to the CM and EPS Associate Planner at the end of each month. The Associate Planner forwards these logs to MMC, who forwards them to the Environmental Review Manager of EAS.

4. The CONSTRUCTION MANAGER reviews the Contract Documents to determine that they contain clear direction to the contractors regarding environmental/permit requirements.

5. Prior to commencement of construction, the Contractor prepares a Water Pollution Control Plan (WPCP) using the CIP template. The WPCP is submitted to the CONSTRUCTION MANAGER, Project Manager, and EPS Associate Planner for review. Contractor will make necessary revisions to the satisfaction of the CONSTRUCTION MANAGER, Project Manager and Associate Planner. A copy of the completed document is provided to the CIP Project Manager Associate Planner and a copy is maintained at the construction site. For projects involving a disturbance area of five acres or greater, the CIP Project Manager contractually directs the Design Consultant to prepare a 90 percent Storm Water Pollution Prevention Plan (SWPPP) to ensure compliance with the General Storm Water Permit for Construction. The 90 percent SWPPP is incorporated into the contract bid documents as an attachment to Division 01, Section 01060. The Contractor finalizes the prepared 90% SWPPP to 100 percent SWPPP and submits it to the CONSTRUCTION MANAGER and Associate Planner for review and revision. A copy of the 100 percent SWPPP is sent to the CIP Project Manager and Associate Planner and a copy is maintained at the construction site. The Contractor complies with the General Permit conditions and all SWPPP requirements.

6. The CONSTRUCTION MANAGER monitors Contractor compliance with these pre-construction Environmental Monitoring Procedures.

Project Specific Tasks/Preconstruction Phase

Task 3-7 – Pre-Bid Conference/Site Tours

A. Objective

To inform prospective bidders on a construction contract of the contractual requirements, objectives, and general scope of work.

B. Definition

The Pre-Bid Conference is held at approximately 15 working days prior to the bid opening. The conference is a formal meeting attended by representatives of the City of San Diego, the Capital Improvements Program PM, the CONSTRUCTION MANAGER, the Design Consultant, and prospective bidders.

C. Procedures

1. For each construction contract, the City of San Diego conducts the Pre-Bid Conference at the time specified in the advertisement for bids. The conference is scheduled sufficiently in advance of the bid opening to allow for preparation of any needed addenda in response to bidders' questions. The time and place of the Pre-Bid Conference is included in the advertisement in the bid documents. An agenda outline for the Pre-Bid Conference is provided in Attachment 3-7-1.

2. With assistance from the CONSTRUCTION MANAGER, the CIP Project Manager conducts the Pre-Bid Conference. The CIP Project Manager controls response to bidder questions.

3. Representatives of the City of San Diego, other Water Department Divisions, EOCP, and the Design Consultant attend the Pre-Bid Conference.

4. As directed by the CIP Project Manager, the CONSTRUCTION MANAGER records questions relating to the Technical Specifications and drawings and issue minutes to all attendees. The CONSTRUCTION MANAGER maintains the attendee sign-up list. The meeting is tape recorded and minutes are prepared by the CONSTRUCTION MANAGER.

5. If appropriate, the CIP Project Manager assisted by the CONSTRUCTION MANAGER conducts a site tour following the Pre-Bid Conference. The CONSTRUCTION MANAGER may conduct site tours for prospective bidders on another date if publicly advertised. The CONSTRUCTION MANAGER keeps a record of all persons who tour the site and firms they represent.

Attachment 3-7-1
Pre-Bid Conference Agenda Outline

Title: Pre-Bid Conference Agenda Outline

CITY OF SAN DIEGO
WATER DEPARTMENT

Project Title:
Bid Number:
PRE-BID CONFERENCE
Date/Time:

CITY OF SAN DIEGO
WATER DEPARTMENT
CIP PROGRAM MANAGEMENT DIVISION
SEVENTH FLOOR CONFERENCE ROOM
600 AB@ STREET
SAN DIEGO, CALIFORNIA

AGENDA

Introduction	Name, Title
Contract Documents	Name, Title
EOCP	Name, Title
Contractor Safety Management	Name, Title
OCIP	Name, Title
Project Scope and Schedule	Name, Title
Role of the Construction Manager Site Coordination Issues	Name, Title
Site Tour	Name, Title
Questions and Answers	Name, Title

Project Specific Tasks/Preconstruction Phase

Task 3-8 – Addenda

A. Objective

To transmit any changes made to the bid documents or responses to bidders' questions directly to all existing plan holders.

B. Definition

Changes to the bidding documents that are required as a result of modifications or deficiencies discovered during the bidding period. Any change made to the bidding documents following preparation of the Form 1472 (Request for Council Action) for Authorization to Advertise must be made by addendum.

C. Procedures

1. The CIP Project Manager's designated representative receives bidder inquiries regarding the bidding documents.

2. At the direction of the CIP Project Manager, the Design Consultant prepares the technical portion of each addendum, making changes to the drawings and/or Division 2 through 16 of the technical specifications as required.

3. The CONSTRUCTION MANAGER assists the CIP Project Manager in preparing the addendum and making changes to Division 1 specifications as required.

4. The CIP Project Manager prepares any recommended changes to Part 1 Special Provisions - General with the assistance of the CONSTRUCTION MANAGER and the Design Consultant and coordinates such changes with the Contract Services Division of the Engineering and Capital Projects Department (E&CPD).

5. The issuance of addenda follows the standard format and procedures established by the CIP. The Contract Services Division issues all addenda to all plan holders. In some instances, the CIP Program Management Division may issue addenda with the approval of the Contract Services Division.

6. No addenda is issued less than 14 days before the bid opening date, except in special situations as authorized by the City Contract Services Division.

7. Copies of each addendum are provided to the CONSTRUCTION MANAGER, the CIP Project Manager, and the CIP Deputy Director by Contract Services Division.

Project Specific Tasks/Preconstruction Phase

Task 3-9 – Bidder Questions

A. Objective

To allow prospective bidders to ask and receive responses to questions concerning the Contract Documents.

B. Definition

Questions or concerns prospective bidders have in the preparation of their bids.

C. Procedures

1. As covered in the Instructions to Bidders and the Pre-Bid Conference, bidders refer all questions to the CIP Project Manager's designated representative or ask questions in the Pre-Bid Conference. The CIP Project Manager will coordinate bidder questions pertaining to contract administration with the CIP Contracts Group.

2. The CONSTRUCTION MANAGER, and the Design Consultant assist the CIP Project Manager in formulating responses. These responses are included in an addendum which is prepared by the Contract Services Branch and the CIP Contracts Branch to all prospective bidders if the response corrects an error or makes a useful change in the contractual documents.

3. A Pre-Bid Inquiry form is provided in Attachment 3-9-1 to record bidder questions and enter a response.

Attachment 3-9-1
Pre-Bid Inquiry Form

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Pre-Bid Inquiry Record

Contract: _____ Title _____ Project

Person Contacted: _____ Title _____ Project

When Contacted _____ Date _____ Time

Contact Method: ☐ Phone Call ☐ Fax ☐ Letter ☐ Visit

Bidder Info:

_____ Name _____ Title

_____ Company _____ City/State

_____ Phone No. _____ Fax No.

Questions/Comment:

Reply

Information Source:
Date Answer Was Provided:

Follow-up Required:

Project Specific Tasks/Preconstruction Phase

Task 3-10 – Bid Analysis

A. Objective

To evaluate bids from all interested parties on a proposed contract.

B. Definition

The bid analysis takes place following the bid opening, where each bid is formally opened and read at a specified time and place.

C. Procedures

1. Bid openings are held as specified in the bidding documents in the office of the City's Engineering and Capital Projects Department, Administrative Division, or other specified public meeting room. Bids are publicly opened and read by the Administration Division. Upon request, copies of the bids are provided to the Project Manager by the Administration.

2. The Administration Division takes the lead in evaluation of the bids based on:

   a. Responsive: Does the bidder meet all the requirements of the bid documents?

   b. Responsible: Are the bidder's calculations correct, and does the bidder hold a valid contractor's license for the work to be performed?

   c. Qualifications: The City has a Phase I Pre-Qualification process to determine eligible bidders financial capacity and experiences to perform the work. When requested by the Water Department for a specific project, the bidder can be required to submit a Phase II Pre-Qualification questionnaire to determine its technical ability to perform the work.

   d. Apparent Low Bidder: Selection of the Apparent Low Bidder is based on the lowest bid received from a responsive, responsible, and qualified bidder. The Contract Services Division compiles a bid tabulation sheet which provides a comparison of the bids received. A copy is provided to the CIP Project Manager

   e. SCOP: Once the Apparent Low Bidder is determined, the bid is reviewed to ensure that the Subcontracting Outreach Program (SCOP) percentage totals have been met. If "yes", continue the process award to lowest bidder. If "no", the lowest bid is rejected, and the next lowest bid is evaluated.

Based upon project specific requirements, other considerations may include:

- Unusually Low Bid: It is the CIP Project Manager's prerogative to evaluate the lowest bid to determine if it is unusually low (15% or more lower than the next low bidder). If "yes", then the next low bidder will be requested by the Contract Administration Division to confirm its price. The Project Manager may also compare the lowest bid to the Design Consultant's cost estimate. If the lowest bid is 25% lower than the Design Consultant's estimate, the estimate should be reexamined in order to determine the reason for the disparity. In the foregoing instances, the CIP Project Manager may request a bid confirmation from the Apparent Low Bidder.

- Qualifications: Does the Apparent Low Bidder have the experience, organization, technical qualifications and skill to perform the Work?

- Equipment and Materials: Does the bidder have a schedule for the delivery of specified equipment and materials that is compatible with the Contract schedule?

- Schedule: If requested by the CIP Project Manager, the Administration Division will request the lowest bidder to rectify any non-compliance with the contract schedule or the completion date. On Phased Funded projects the Apparent Low Bidder is required by Contract to submit a cost-loaded schedule prior to award. The CIP Project Manager negotiates an acceptable cost-loaded schedule.

- Past Performance: Upon request, existing City Contractor Performance Evaluation information will be provided to the CIP Project Manager by the Administration Division.

- Bid Protests: All bid protests, if any, are resolved prior to award of the Contract.

- Award of the Contract: The Administrative Division delivers to the CIP Project Manager an authorization to issue a Notice to Proceed. The CIP Project Manager (or Construction Management Liaison) prepares the Notice to Proceed letter and transmits it to the Apparent Low Bidder. Usually this is done at the Pre-Construction Conference, but it may be delayed up to the time specified in the Contract Documents.

Project Specific Tasks/Preconstruction Phase

Task 3-11 – Submittal List Preparation

A. Objective

To ensure that all required submittals from the Contractor are identified for monitoring and tracking.

B. Definition

The submittal list identifies the items that either the Contract Documents or the CONSTRUCTION MANAGER require the Contractor to submit for review or approval, including shop drawings, samples, schedules, quality control and safety plans, warranties, etc. Section 01300 of Division 1 of the Contract Documents covers Contractor submittal requirements.

C. Procedures

1. Prior to the preconstruction conference, the CIP Project Manager asks the Design Consultant to prepare a complete list of all items requiring submittal in the Contract Documents (if this assignment is in the Design Consultant's scope of work). The CIP Project Manager delivers the list to the CONSTRUCTION MANAGER.

2. The CONSTRUCTION MANAGER adds items to the list requiring submittal for information, monitoring, and construction management purpose.

3. The combined submittal list is presented to the Contractor at the Pre-Construction Conference for review. The Contractor usually prepares its own list of submittals and may add items the Contractor believes require approval or review as a prerequisite to ordering materials or proceeding with specific work activities.

4. The CIP Project Manager reviews the submittal list and confirms those items requiring review as part of the submittal process.

Project Specific Tasks/Preconstruction Phase

Task 3-12 – Notice of Apparent Low Bidder/Pre-Award Cost Loaded Schedule/Phase Funding Schedule

A. Objective

To facilitate cash management objectives in the financing of construction contracts.

B. Definition

Phase compensation and payment, if required for a specific project, is described in the Supplementary General Conditions of the Bidding and Contract Documents. Division 1, Section 01309 covers the Pre-award Cost Loaded Schedule, and the Phase Funding is included in Sections 6-1 and 9-3 of Part 1 Special Provisions - General, and in Section 01309 of Division 1.

C. Procedures

1. The CIP Project Manager determines in advance if phase funding is required. As a general guideline, large projects require phase funding. If it is required, the CIP Project Manager incorporates necessary provisions in Division 1 of the Contract Documents during the Bid Preparation Phase.

2. The E&CP Contracts Services Division prepares and forwards the Notice of Apparent Low Bidder to the Contractor within three days of bid opening, sending copies to the CIP Program Management Division, the Design Consultant, and the CONSTRUCTION MANAGER.

3. When the Notice of Apparent Low Bidder is received by the low bidder, the CIP Project Management Team in coordination with Contract Services Branch contacts the low bid contractor, arranging a meeting if necessary, to review the requirements for the Pre-award Cost loaded schedule and establish the timetable for delivery within the 21-day period established in the bidding and Contract Documents and in the Notice of Apparent Low Bidder.

4. The low bid Contractor prepares the Pre-award Cost Loaded Schedule and submits it to the CONSTRUCTION MANAGER per Sections 01309 and 01310 of Division 1 of the Contract Documents.

5. The CONSTRUCTION MANAGER and the CIP Project Manager review the schedule in conference with the low bid contractor. If the schedule is accepted, the CONSTRUCTION MANAGER proposes the phase funding and prepares a chart indicating the exact dates and amounts for each funding phase, the work in place projections (early start and late finish), the phase funding projections used in planning or previously forecast, and other pertinent information. The summary schedule/hammock

activities shown on the Contractor's Pre-award Schedule must be identified and coded to a specific funding base. The Chart is delivered to the CIP Project Controls Branch.

6. The CIP Project Controls reviews the CONSTRUCTION MANAGER's chart. The chart is to contain all information required to initiate the formal documents required for routing through the City's approval channels. Any questions or concerns are communicated to the CIP Project Manager and a consensus determination of the contract's phase funding is obtained within three calendar days. Once all questions and concerns are resolved, the CIP Senior Program Management Analyst forwards documentation to the City's Financial Management Department for review.

7. As instructed by the CIP Project Manager, CIP Financial and Program Management prepares the contract forms for the phase funding schedule and forwards them to the Contractor for signature.

8. The Contractor signs the phase funding schedule form and returns it to CIP Financial and Program Management.

9. CIP Financial and Program Management transmits the phase funding schedule to the CIP Project Manager.

10. The CIP Project Manager reviews and signs the phase funding schedule and transmits it to the CIP Senior Program Management Analyst.

11. The CIP Senior Program Management Analyst reviews the phase funding schedule and forwards it to the City's Purchasing Department for inclusion in the construction contract.

12. In the event the Contractor and the CIP Financial and Program Management cannot agree on an acceptable Pre-award Cost Loaded Schedule or phase funding schedule, CIP Financial and Program Management alerts the CIP Senior Program Management Analyst and the CIP Project Manager. These instances are handled on a case-by-case basis.

13. The CONSTRUCTION MANAGER establishes and maintains a tracking system to monitor the phase funding schedule for subsequent authorizations required, and for any adjustments proved desirable in light of actual progress on the construction contract.

Project Specific Tasks/Preconstruction Phase

Task 3-13 – Contract Compliance (EOCP)

A. Objective

To ensure that the Contractor awarded the project complies with the City of San Diego Equal Opportunity Contracting Program (EOCP) requirements, funding agency(ies) requirements, and the State of California Public Contract Code.

B. Definition

Ongoing review to ensure the Contractor complies with the contract requirements of the City EOCP, funding agency(ies), and the Public Contract Code.

C. Procedure

1. The EOCP Contract Compliance Officer attending the Preconstruction Conference discusses the Contractor's responsibilities to provide all required reports related to the program. Contractor's EOCP reports are due to the CONSTRUCTION MANAGER by the 5th day of the month for the preceding month.

2. The Contractor should be aware that untimely, inaccurate, or incomplete reports could delay progress payments.

3. The following contractor-generated reports are due at the start of the project:

   a. Number of People in My Current Workforce (Attachment 3-13-1)
   b. Federal/Non-Federal Work Report (Attachment 3-13-2)
   c. Work Force Report (Attachment 3-13-3)

4. Task 5-13 describes monthly reporting requirements.

5. Other EOCP requirements:

   - Posting of EO Posters in public view
   - Approval of Subcontractor substitutions prior to substitution(s) occurring. (Task 5-13)

Attachment 3-13-1
Number of People on My Current Workforce

Company Name: _____ Initial Report is Dated: _____
Address: _____ Today's Date: _____
_____ Page: _____ of _____
W.O. #: _____ Bid #: _____ Employer's ID #: _____

This report covers the following reporting period: from _____ to _____
MM/DD/YY MM/DD/YY

Instructions: Attach to first CC-257 submitted. Submit an updated notice only when new employees are hired to work in San Diego County.

Name, Address/City/State/ Zip and Social Security #	Male/ Female (M/F)	Craft	** Job Level	* LA		*AA		*FI		*NA		*AP		*CA	
				perm	temp	perm	temp	perm	temp	perm	temp	perm	temp	perm	temp
TOTALS (on last page only															

** Job Level Abbreviations: S = Supervisor; F = Foreman; J = Journeyman; A = Apprentice; T = Trainee; Other = Specify
* Ethnicity Abbreviations: LA = Latino, Hispanic, Mexican-American, Chicano, Puerto Rican; AA = African-American; FI = Filipino; NA = Native American, American Indian; AP = Asian, Pacific Islander; CA = Caucasian and others not listed.

Attachment 3-13-2
Contractors List of Federal and Non-Federal Work in San Diego County

W.O. # / Bid #:: _____ Page _____ of _____

Contractor's List of Federal and Non-Federal Work in San Diego County

Covered Area Is: **San Diego County** Contractor's Name: _____

Date: _____ Address: _____

_____

I. Federally-Assisted Contracts

Name of Federal Agency Funding Project	Project Name and Location *	Contract Project Number	Dollar Amount	Construction Start Date	Project Completion Date

II. Non-Federally Contracts

Contract With	Project Name and Location *	Construction Start Date	Percent Complete	Projected Completion Date	Comments

*Location must include city and street address.

Instructions: Attach to first CC-257 submitted. Submit an updated list only if work is complete or new contracts have been awarded during the span of this project.

Attachment 3-13-3
Work Force Report

THE CITY OF SAN DIEGO
EQUAL OPPORTUNITY CONTRACTING PROGRAM
1010 SECOND AVENUE • SUITE 500 • SAN DIEGO, CA 92101
(619) 533-4464 • FAX: 533-4474

WORK FORCE REPORT

The objective of the Equal Employment Opportunity Program is to ensure that contractors doing business with the City, or receiving funds from the City, will not engage in unlawful discriminatory employment practices prohibited by State and Federal law. Such employment practices include, but are not limited to the following: employment, promotion or upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeship.

NO OTHER FORMS WILL BE ACCEPTED

CONTRACTOR IDENTIFICATION

Type of Contractor: ☐ Construction ☐ Vendor/Supplier ☐ Financial Institution ☐ Lessee/Lessor ☐ Consultant ☐ Grant Recipient ☐ Insurance Company ☐ Other

Name of Company: _____

AKA/DBA: _____

Address (Corporate Headquarters, where applicable): _____

City _____ County _____ State _____ Zip _____

Telephone Number: ( ) _____ FAX Number: ( ) _____

Name of Company CEO: _____

Address(es), phone and fax number(s) of company facilities located in San Diego County (if different from above):

Address: _____

City _____ County _____ State _____ Zip _____

Telephone Number: ( ) _____ FAX Number: ( ) _____

Type of Business: _____ Type of License: _____

The Company has appointed: _____

as its Equal Employment Opportunity Officer (EEOO). The EEOO has been given authority to establish, disseminate, and enforce equal employment and affirmative action policies of this company. The EEOO may be contacted at:

Address: _____

Telephone Number: ( ) _____ FAX Number: ( ) _____

For Firm's: ☐ San Diego Work Force and/or ☐ Managing Office Work Force

I, the undersigned representative of _____
(Firm Name)

_____, _____
(County) *(State)*

hereby certify that information provided herein is true and correct. This document was executed on this day of _____, 19____.

_____ _____
(Authorized Signature) *(Print Authorized Signature Name)*

Rev. 2/98 *D-1(1)a*

Attachment 3-13-3
Work Force Report
continued

WORK FORCE REPORT - Page 2

NAME OF FIRM:_____DATE:_____

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force.

Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

(1) African-American, Black
(2) Latino, Hispanic, Mexican-American, Puerto Rican
(3) Asian, Pacific Islander
(4) American Indian, Eskimo
(5) Filipino
(6) Caucasian
(7) Other Ethnicities; not falling into other groups

OCCUPATIONAL CATEGORY	(1) African-American		(2) Latino		(3) Asian		(4) American Indian		(5) Filipino		(6) Caucasian		(7) Other Ethnicities	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Executive, Administrative, Managerial														
Professional Specialty														
Engineers/Architects														
Technicians and Related Support														
Sales														
Administrative Support/Clerical														
Services														
Precision Production, Craft and Repair														
Machine Operators, Assemblers, Inspectors														
Transportation and Material Moving														
Handlers, Equipment Cleaners, Helpers and Nonconstruction Laborers*														

*Construction labors and other field employees are not to be included on this page

TOTALS EACH COLUMN														

GRAND TOTAL ALL EMPLOYEES	

INDICATE BY GENDER AND ETHNICITY THE NUMBER OF ABOVE EMPLOYEES WHO ARE DISABLED:

DISABLED														

NON-PROFIT ORGANIZATIONS ONLY:

BOARD OF DIRECTORS														
VOLUNTEERS														
ARTISTS														

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Attachment 3-13-3
Work Force Report
continued

WORK FORCE REPORT (Construction) - Page 3

NAME OF FIRM:_____DATE:_____

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force.

Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

(1) African-American, Black
(2) Latino, Hispanic, Mexican-American, Puerto Rican
(3) Asian, Pacific Islander
(4) American Indian, Eskimo
(5) Filipino
(6) Caucasian
(7) Other Ethnicities; not falling into other groups

OCCUPATIONAL CATEGORY	(1) African-American		(2) Latino		(3) Asian		(4) American Indian		(5) Filipino		(6) Caucasian		(7) Other Ethnicities	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Carpenter														
Drywall Installers														
Electrician														
Elevator Installers														
Finishers, Concrete or Terrazzo														
Glaziers														
Helpers, Construction Trade														
Ironworkers, Structural Metal Workers														
Laborers														
Millwrights														
Masons, Bricklayers														
Tilesetters														
Operators														
Painters														
Pipefitter, Plumbers														
Plasterers														
Roofers														
Security, Protective Services														
Sheet Metal, Duct Installers														
Welders, Cutters														
TOTALS EACH COLUMN														

GRAND TOTAL ALL EMPLOYEES

INDICATE BY GENDER AND ETHNICITY THE NUMBER OF ABOVE EMPLOYEES WHO ARE DISABLED:

DISABLED														

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Project Specific Tasks/Preconstruction Phase

Task 3-14 – Authorization to Award

A. Objective

To obtain approval of the City Council to authorize the City Manager to award a construction contract.

B. Definition

The resolution by City Council with supporting documents.

C. Procedures

1. Form 1472 is initiated by the City Contract Services Division after clearing authorization from the CIP Program Manager. The completed Form 1472 must be approved by the City Council prior to advertising for bids.

2. Form 1472 is signed by the Water Department Director.

3. The Auditor certifies that sufficient funds are available to make the award.

4. The City Attorney prepares a draft Council Resolution

5. EOCP evaluates for compliance with program requirements.

6. The City Docket Clerk arranges for space on the Council Docket.

7. The City Council votes to approve the Form 1472 dollar amount and authorizes the City Manager to award a contract.

8. The City Council's actions are recorded in a Resolution which is authenticated by the Mayor and the City Clerk.

9. After bids are received, and if the Apparent Low Bid is equal to or less than the Form 1472 dollar amount, the CIP Program Management Division prepares a PA-700 form that requests the City Manager's approval to award a contract.

10. If the Apparent Low Bid is greater than the Form 1472 dollar amount, a new Form 1472 must be prepared and sent to the City Council for approval.

Project Specific Tasks/Preconstruction Phase

Task 3-15 – Notice of Award/Contract Award/Notice to Proceed

A. Objective

To notify bidder that its proposal has been accepted by the City and that additional documents necessary for implementation of a contract should be submitted.

B. Definition

Notice to a bidder that its proposal has been accepted by the City, the process of executing the Contract Documents, and notification to the Contractor to begin work.

C. Procedures

1. Upon authorization by the City Manager, the CIP Program Management Division sends a Notice of Award to the Contractor stating the City's intent to award the contract and requiring that the Contractor submit the following data:

   - Executed contract
   - Executed contract bonds
   - Certificates of insurance
   - Executed affidavit for delinquent personal property tax
   - Current California Workers' Compensation Insurance Fund certificate
   - Federal Tax Identification Number
   - Affirmative Action Plan
   - Other submittals as specified in the Contract Documents

2. Within 10 days of the Notice of Award, the Contractor must provide in triplicate the documents requested in Step 1 above.

3. Information submitted by the Contractor is reviewed by the CIP Project Manager and CIP Contracts Manager and forwarded to the City's Finance Office.

4. The City Auditor certifies that the contract amount is available in accordance with the authorizing legislation.

5. The Deputy City Manager approves the contract.

6. The contract is approved for form and legality by the City Attorney and signed by the Water Department Director. The Contract Services branch of EOCP notifies the CIP Project Manager when he/she can issue the Notice to Proceed.

7. The CIP Program Management Division issues Notice to Proceed at or after the Preconstruction Conference.

8. A sample Notice of Award is provided in Attachment 3-15-1. Although the sample notice is signed by the CIP Project Manager, the notice letter is usually signed by Construction Management Liaison.

Attachment 3-15-1
Sample - Notice of Award

THE CITY OF SAN DIEGO

October 29, 1998

SCW Contracting Corporation
4118 Highway 76
Fallbrook, CA 92028

Bid No.: K99006
W.O. No.: 180461
Subject: CONSTRUCTION OF WATER LINE AND BUILDING IMPROVEMENTS BAYVIEW PUMP STATION

The City Council has authorized the City Manager to execute a contract with your company for the Construction of Water Line and Building Improvements Bayview Pump Station.

Please consider this letter as your Notice to Proceed with the work effective October 29, 1998. As previously stated, Corrao-Brady Group is the City's designated representative during construction and your point of contact as discussed in the preconstruction meeting.

The contract requires completion of this work within 145 working days.

Sincerely,

MICHAEL J. MARKS
Project Manager

MM:mll

cc: Marsi A. Steirer, Program Manager, Capital Improvements Program, Water Dept.
Nick Kanetis, Chief engineer, Capital Improvements Program, Water Dept.
Steven Wallace, Sr. Civil Engineer, Capital Improvements Program, Water Dept.
Joyce Clark, Account Clerk, Capital Improvements Program, Water Dept.
Linda Hammerschmith, Principal Accountant, Auditors, MS 6A
Rachael Herrera, Auditors Accounts Payable, Auditors, MS 7C
Dan Black, Corrao-Brady Group

H:\Data\Bayview Pump Plnt\C2SCW-NTP.wpd

DIVERSITY

Capital Improvements Program • Water Department
600 B Street, Suite 700, MS 907 • San Diego, CA 92101-4506
Tel (619) 533-4242 Fax (619) 533-5278

Project Specific Tasks/Preconstruction Phase

Task 3-16 – Role of CIP Risk Manager During Pre-Bid

A. Objective

To define the CIP coverage for the Contractor explaining the various types of insurance and reviewing insurance requirements.

B. Definition

The CIP provides selected coverages and limits that vary with each contract. Refer to Section 7-3 of Part 1 Special Provisions - General for project specific coverage limits.

Deductibles are assessed to the Contractor, vary as to the size of the contract, and are defined in the contract. The Contractor is obligated to remove all costs for insurances provided by the CIP from its bid price.

C. Procedure

The Bid Documents are amended to reflect the existence of the CIP coverage and outline the obligations of the Contractor in preparing its bids. An oral presentation summarizing these contract requirements are presented by the CIP Risk Manager at the Pre-Bid Conference (Task 4-2).

Book 6

Construction Management Guidelines

Chapter 4
Early Construction Phase Requirements

City of San Diego Water Department
Capital Improvements Program

Chapter 4
EARLY CONSTRUCTION PHASE REQUIREMENTS

4.1 Introduction

This chapter defines construction management responsibilities and processes that must be addressed at the beginning of construction. The tasks include:

- Pre-Preconstruction Conference
- Preconstruction Conference
- Preliminary Construction Schedule
- Contractor's Construction Schedule
- Cost and Resource Loading
- Submittals
- Subcontractor Substitution
- Deferred Approval
- Partnering
- Permits
- Substitutions (EOCP)
- Contractor Safety Management
- Insurance Certificate Review and Monitoring
- Hazardous Materials and Waste Mitigation

Project Specific Tasks/Early Requirements and Approvals

Task 4-1 – Pre-Preconstruction Conference

A. Objective

To share project information and discuss the project with Consultant Construction Manager, Water CIP Construction Management Liaison, the Engineering and Capital Projects Department, Field Engineering Division and other City Divisions to familiarize the Construction Manager (CM)/Resident Engineer (RE) with specific design history and concerns of those involved or impacted by the project.

B. Definition

The Pre-Preconstruction Meeting is a meeting between Water CIP Project Management, the Consultant CM or Field Engineering RE and other City Division. It is scheduled by the CIP Project Manager or Project Engineer (PE) prior to the Preconstruction Meeting. Projects in the public right of way will receive construction oversight by a Resident Engineer from Field Engineering Division. All other Water CIP projects will be field managed by a consultant Construction Manager.

C. Procedures

1. Attendance: At a minimum, the Construction Manager (CM)/Resident Engineer (RE) and the CIP Project Manager (PM) / Project Engineer will be present. Construction Management Liaison will attend if the project involves a Consultant CM. Also, supervisors and section heads should be strongly advised to attend the meeting. The CIP Project Manager, with the assistance of the Project Engineer, will decide who should be invited to the meeting, i.e., Water Department Operations representative, consultant design engineer, survey staff, environmental staff, etc.

2. A memorandum announcing the Pre-Preconstruction Conference is prepared and dispatched to invitees by the CIP Project Manager.

3. The CIP Project Manager and/or Project Engineer should be prepared to conduct the meeting and discuss the following:

    a. Introductions

    b. Project Description

    c. Project History

    d. Community outreach (concerns from residents, businesses, Council District(s), Water CIP program management, other agencies)

    e. Environmental conditions and restrictions

f. Unusual elements of the project (tunneling, night work, coordination with other agencies, etc.)

g. Landscape development and public art

h. Permit requirements

i. Utility coordination/relocation

j. Any changes to plans or specifications, additional work, potential problems

k. Bidder's Log (contractor's concerns resulting from the bidding process and resolution of same), number of community representatives who were involved in relocation decisions; survey/monument preservation.

l. Expectations from different meeting participants (roles/responsibilities; processing submittals, RFIs, shop drawings, attendance/scheduling of weekly meeting, etc.)

m. CM/RE familiarization with the Water CIP Standards and Guidelines, Book 6 Construction Management.

n. Review safety and insurance requirements.

4. The Construction Manager/Resident Engineer shall do the following:

a. Review construction documents and conduct a field visit to the job site prior to the Pre-Construction meeting. If constructability reviews were conducted per Task 3-4, the CM/RE should resolve and finalize any issues that remain from the constructability issues.

b. Discuss conflicts found and possible solutions.

c. Clarify intent on issues that are vague.

d. Discuss issues that need to be covered at the Preconstruction meeting, including agenda items.

Project Specific Tasks/Early Requirements and Approvals

Task 4-2 – Preconstruction Conference

A. Objective

To inform each Contractor of proper communication channels, points of contact, procedures for correspondence and submittal, City of San Diego requirements for Equal Opportunity Contracting and labor standards compliance, general site requirements and how to implement specific contract requirements. The Notice to Proceed date shall also be determined during this Conference.

B. Definition

Section 01200 - Project Meetings of the technical specifications Division 1 requires a Preconstruction Conference. The Pre-Construction Conference is generally scheduled by the CIP Program Management Division following receipt of the preliminary (ATI) Authorization to Issue NTP from the City of San Diego Contract Services Administrator. It is the first official meeting between the Contractor and the City of San Diego after the Notice of Award.

C. Procedures

The CIP Program Management Division schedules the Pre-Construction Conference and advises the CONSTRUCTION MANAGER of the date, time, place and any other specific instructions. When the work involves the relocation of public utilities, a minimum of two weeks notice to public utility companies is required. The CIP Project Manager will draft a Pre-Construction Conference letter once the City of San Diego CIP Contracts Services Branch informs the Project Manager that the Contract has been awarded. The CIP Project Manager dispatches a letter to the Contractor similar to the one shown in Attachment 4-2-1. The CONSTRUCTION MANAGER prepares an agenda similar to the one shown in Attachment 4-2-2.

1. The CIP Project Manager will coordinate with the Construction Management Liaison and Contractor to determine a date, time and location for the Preconstruction Conference and identify Conference attendees.

2. See Attachment 4-2-2 for a Sample Agenda of the CIP Agenda Outline for Preconstruction Conferences. The CONSTRUCTION MANAGER notifies the attendees, develops and distributes an agenda, and makes all remaining arrangements for the conference.

3. The Construction Management Liaison shall send a letter confirming the conference, with an Agenda attached, to the Contractor with a copy of all other meeting participants and invitees. This letter will be dispatched approximately ten (10) working days in advance of the Preconstruction Conference. Seven (7) copies of half-sized contract drawings are to be forwarded to the Construction Management Liaison for the Contractor and attach drawings to the letter of Preconstruction Conference announcement. In addition, seven (7) full size drawing sets, fifteen half size drawing sets and ten (10) sets of specifications will be made available at the Preconstruction Conference for the Contractor.

4. As a minimum, Preconstruction Conference attendees should include:

   - City of San Diego Water CIP Project Manager
   - City of San Diego Water CIP CONSTRUCTION MANAGER
   - City of San Diego CIP Project Management Liaison
   - City of San Diego Water CIP Construction Management Liaison
   - City of San Diego Water CIP Sr. Civil Engineer for Program Management (North, South, or Plants)
   - City of San Diego Water CIP Safety
   - City of San Diego Water CIP Public Relations
   - City of San Diego Water CIP OCIP Risk Management Representative
   - City of San Diego Traffic Engineering
   - City of San Diego CIP Landscape Development Coordinator
   - City of San Diego Development Services Department (Building Inspection, as appropriate)
   - City of San Diego Water Operations
   - City of San Diego Field Engineering - Surveys, Lab
   - City of San Diego Environmental Services
   - City of San Diego EOCP Officer
   - Utilities:
     - SDG&E
     - Pacific Bell
     - Cable Companies
     - Other Government Agencies

5. Proceedings: The CIP Project Manager opens the conference with appropriate remarks to help develop a teamwork approach to the project, and introduces the participants who will speak as their particular areas of concern are addressed. The CONSTRUCTION MANAGER then chairs the remainder of the Pre-Construction Conference following an introduction by Construction Management Liaison. Topics to be covered by the CONSTRUCTION MANAGER should be as follows:

   - Introductory Remarks
   - Contract Compliance including EOCP and Risk Management OCIP

- Status of Insurance and Bonds
- Project Team Organization
- Identify and Issue Notice to Proceed
- Escrow Agreement Option for Retention
- Communications
- Public Convenience
- Quality Control
- Cost Control
- Cost Loaded Construction Schedule
- Survey, Inspection and Testing
- Time of Compensation and Liquidated Damages
- Health, Safety and Security
- Traffic Control
- Landscape Development
- Maintaining Record Drawings
- Administrative Procedures - RFI, Submittals, Document Control
- Processing Applications for Payment
- Change Orders, Field Orders and Field Decisions
- Affidavit of Legal Disposal
- Contractor Performance Evaluation
- Contractors Questions
- Summary and Conclusion

The CIP Program Manager's Project Engineer will obtain and provide for the designated Construction Manager seven (7) full size drawing sets, fifteen half-size drawing sets and ten (10) sets of specifications will be made available at the Pre-Construction Conference for the Contractor.

6. The CONSTRUCTION MANAGER records and distributes minutes of the Preconstruction Conference to all attendees. This document distribution shall occur no later then 5-working days following date of Pre-Construction Conference.

7. Any items discussed during the Pre-Construction Conference that cannot or are not resolved during the course of the conference will be identified in the Preconstruction Conference meeting minutes. It shall be the CONSTRUCTION MANAGER'S responsibility to address unresolved issues in a timely manner.

8. The actual Preconstruction Conference should be recorded on cassette tape and minutes prepared by the CONSTRUCTION MANAGER following completion of the meeting for distribution to the attendees. The CIP Project Manager should review and approve the Meeting Minutes prior to distribution.

9. During the course of the Preconstruction Conference, determination with the Contractor is made on the date of the Notice to Proceed. The authorization to issue the NTP must be transmitted from Contract

Services Division to the CIP Project Manager prior to the date of the Pre-Construction Conference. The date of the Notice to Proceed is the first chargeable working day of the contract. The Notice to Proceed letter is prepared by the Construction Management Liaison on City of San Diego letterhead stationary and transmitted to the Contractor with copies as follows:

- City Council Members
- City Auditor
- CIP Project Manager
- CIP Construction Management Liaison

The transmittal of the NTP may be delayed up to the number of days specified in the Contract Documents.

See Attachment 4-2-3 for Sample Notice to Proceed Letter.

10. During the Preconstruction Conference, the Contractor will be informed of its option to enter into an escrow agreement for security deposits in lieu of retention. The procedure for processing an escrow agreement is as follows:

    - Contractor or Escrow Agent submits four (4) copies of Escrow Agreement with original signatures to the Construction Manager. The CM will forward these four copies to the CIP Project Manager who will process the agreement through the CIP Program Management Division, which will obtain City approvals.

    - After the Escrow Agreement is approved, the Contractor has two options:

        - The Contractor can deposit funds into CD's, or in lieu of CD's, the City can pay retention that is deducted from progress payment invoices into an escrow account set up by the Escrow Agent.

        - See Attachment 4-2-4, Escrow Agreement for Security Deposit in Lieu of Retention.

Attachment 4-2-1
Preconstruction Conference Notice Letter

THE CITY OF SAN DIEGO

September 8, 1998

SCW Contracting Corporation
4118 Highway 76
Fallbrook, CA 92028

Subject: **CONSTRUCTION OF WATER LINE AND BUILDING IMPROVEMENTS BAYVIEW PUMP STATION**
Bid No.: **K99006**
W.O. No.: **180461**

A preconstruction meeting on the subject contract has been scheduled for October 22, 1998, in the large conference room, at 9:00 a.m. on the 8th floor at 600 "B" Street, San Diego, CA 92101. Corrao-Brady Group Consultants has been designated by the City as the construction managers on this project and will be facilitating the preconstruction meeting.

Please notify your subcontractors and suppliers of this meeting. It is strongly recommended that they attend the meeting, especially if they have not been involved in a City construction contract in the past.

Please bring to the meeting your Construction Schedule as defined in section 6-1.1.2 of the contract documents.

Sincerely,

MICHAEL J. MARKS
Project Manager

mll

Capital Improvements Program • Water Department
600 B Street, Suite 700, MS 907 • San Diego, CA 92101-4506
Tel (619) 533-4242 Fax (619) 533-5278

Attachment 4-2-1
Preconstruction Conference Notice Letter

(date)
(Contractor)
Page 2

Cc: V. Bianes, Deputy Director, Water, Dept., CIP Program Management Division
M. Steirer, Deputy Director, Water Dept., Water Policy, CIP Finance & Planning Div.
M. Stone, Deputy Director, Water Operations Division
D. Zoumoras, Deputy Director, Engr. & Capt. Projects Dept, Field Engineering Division
L. Jennings, Construction Operation Mgr., Water Dept., Water Operations Div. (w/plans)
G. Stalker, Operation Manager, Water Dept, Water Operations Div. (w/plans)
J. Fisher, Engineering Operation Mgr., Water Dept., Water Operations Division
G.F. Weien, Program Manager, Water Dept., CIP Program Management Division
Survey Records, Engr. & Capt., Projects Dept., Field Engineering Division (w/plans)

Additional Distribution List:

G. Hogue, Senior Civil Engineer, Water Dept., CIP Program Management Division
……., Senior Civil Engineer, Water Dept., CIP Program Management Division
……., Project Manager, Water Dept., CIP Program Management Division
……., Project Engineer, Water Dept., CIP Program Management Division
……., Project Engineer, Water Dept., CIP Program Management Division
K. Greco, Landscape Development Coordinator, Water Dept. CIP Program Management Division
J. Navarro, Senior Civil Engineer, Engr. & Capt. Projects Dept., Field Engineering Div. (w/plans0
M. Obst, Survey Section, Engr. & Capt. Projects Dept., Field Engineering Div. (w/plans)
R. Burdette, Construction Liaison, Water Dept., CIP Program Management Division
J. Kleinfelter, Safety Manager, Water Dept., CIP Program Management Division

H. Prol, Risk Management Water Dept., CIP Program Management Division
W. Henry, Public Information Officer, Water Dept., CIP Program Management Division
N. Nugent, Supervisor, Eng. & Capt. Projects Dept., Contract Services Division
Maria Guerrero, EOCP, Engr. & Capt. Projects Dept., Contract Series Division
E. Fernandez, Associate Corrosion Engineer, Water Dept., Water Operations Division
M. Glasser, Associate Chemist, Water Dept., Water Quality Laboratory (w/plans)
L. Sandoval, Senior Traffic Engineer, Eng. & Capt. Projects Department
M. White, Water Distribution Operations Supervisor, Water Dept., Water Operations Div.
T. Varga, Senior Civil Engineer, Water Dept., Water Engineering Program Division
Walter Cooke, Water Production Supt., Water Dept., Water Operations Division
R. Welborn, Principal Water Utility Supervisor, Water Dept., Water Operations Div. (w/plans)
……., Associate Engineer-Civil, Water Dept., Water Operations Division
……., SDG&E, 701-A 33RD Street, #1100, San Diego, CA 92101
……., Pacific Bell, 4220 Arizona St., Room 100, San Diego, CA 92104
B. Corey, Pacific Bell, 3750 Home Avenue, Room 108, San Diego, CA 92105
(CIP Construction Management Firm)
CIP Design Firm)

2.0 Preconstruction Conference & Issuance Rev.0

March 21, 2001

Attachment 4-2-2
Agenda Outline – Preconstruction Conference

CITY OF SAN DIEGO
CIP PROGRAM MANAGEMENT DIVISION
PRECONSTRUCTION MEETING

AGENDA

1. **Introduction of Contract Personnel**
2. **Schedule of Work**
   - NTP Date
   - Contractor's Schedule
3. **Progress Billings and Schedule Values**
4. **EOCP**
5. **Safety**
   - Cal-OSHA Safety Training
6. **Utilities**
   - SDG&E, Cox, Pac Bell, City Survey, Etc.
7. **Construction Management**
   - Role of the Resident Engineer (RE)
   - Communication
   - Shop Drawing Submittals
   - RFI's
   - Construction Photographs
   - As-Built Record Documents
   - Contractor Performance
8. **Trailer and Staging Areas**
9. **Traffic Control**
   - Access into the Site
   - Haul Roads (Caution along Coral Reef)
10. **City Forces**
11. **Public Relations**
12. **Landscape Development**
13. **Construction Work**
    - Sequence of Construction prior to shutting down reservoir
    - Owner Furnished Materials
    - Upcoming Change Order Work
    - Environmental Monitoring and Dust Control
    - Contaminated Material
    - Working Days, Saturday Work, Working Hours
    - Contractors Work Plans to be submitted
14. **Open Discussion**

Attachment 4-2-3
Notice to Proceed Letter

THE CITY OF SAN DIEGO

Sample

(Date)

(Contractor Name & Address)

SUBJECT: **NOTICE TO PROCEED LETTER FOR .....**

BID NO.: K.....
W.O. NO.:

Dear .....,

The City Council has authorized the City Manager to execute a contract with your company for the Replacement of Bayview Reservoir.

Please consider this letter as your Notice to Proceed with the work effective....., 2001.
As previously stated, O'Brien Kreitzberg Construction Management firm is the City's designated representative during construction and your point of contact as discussed in the Pre-Construction meeting.

The contract requires completion of this work within ..... working days.

Sincerely,

cc: ....., Council Member, Council District, MS-10A
V. Bianes, Deputy Director, Water Dept., CIP Program Management Division
M. Steirer, Deputy Director, Water Dept., Water Policy, CIP Finance & Planning Div.
....., Sr. Civil Engineer, Water Dept., CIP Program Management Division
G. Hogue, Sr. Liaison Engineer, Water Dept., CIP Program Management Division
..... Sr. Liaison Engineer, Water Dept., CIP Program Management Division
Wendy Hovland-Henry, Public Information Officer, Water Dept., Water Policy, CIP Finance & Planning Division
Linda Hammerschmitch, Principal Accountant, Auditors, MS-6A
Rachel Herrera, Accounts Payable, Auditors, MS-7C
J. Dautel, URS/O'Brien Kreitzberg

2.0 Preconstruction Conference & Issuance Rev. 0
March 21, 2001

Attachment 4-2-4
Escrow in Lieu of Retention

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between The City of San Diego/Water Department, Capital Improvements Program, whose address is 600 B Street, Suite 700, San Diego, CA 92101 hereinafter called Owner,_____(a)_____. whose address is_____(b),hereinafter called Contractor, _(c)_____ whose address is ___(d)_____, hereinafter called Escrow Agent.

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for _____(e)_____in the amount of $_(f)_____dated _(g)_____(hereinafter referred to as the Contract). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent, who must be a member of the Federal Deposit Insurance Corporation, federally insured pursuant to California Government Code Section 53648, and chartered to transact business in California. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and the Contractor. Securities shall be held in the name of_____(c)_____, and shall designate the Contractor as the beneficial owner. The Contractor hereby grants a security interest in the escrow account and its contents to Owner as security for Contractor's obligations under the Contract.

The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above. Such securities shall be in the form of direct obligations of the United States of America (including obligations issued or held in book entry form on the books of the Department of the Treasury of the United States or any Federal Reserve Bank), or obligations where the timely payment of the principal and interest are fully guaranteed by the United States, or tax exempt obligations which are rated in the highest category of a nationally recognized bond rating agency.

When the Owner makes payment of retention earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this Contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.

The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

Contractor shall have the right to withdraw all or any part of the principal in the escrow account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

The Owner shall have a right to draw upon the securities in the Escrow Account in the event of default by the Contractor to the extent of the Owner=s damages. Upon seven days= written notification to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner. A copy of the written notification will be delivered simultaneously to the Contractor.

Upon receipt of written notification from the Owner certifying that a notice of completion has been filed, the time period within which stop notices may be filed has expired, and the Contractor has complied with all requirements and procedures applicable to the Contract, the Escrow Agent shall release to the Contractor all securities and interest on deposit less escrow fees and charges of the escrow account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this Escrow Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agents release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures, are included in the signature block to this Agreement.

(11) Contractor agrees to deposit with the Escrow Agent such documents as, in the opinion of the Escrow Agent, are necessary to enable the Escrow Agent to sell deposited securities or to redeem certificates of deposit.

(12) The Contractor represents and warrants that all securities deposited in lieu of retention shall be lien free when tendered to the Escrow Agent and shall remain lien free during their retention by the Escrow Agent.

(13) Escrow Agent agrees to hold securities or certificates of deposit, as Trustee for Owner, as security for payment of monies which would otherwise be held by Owner pursuant to the Contract provisions, and that the rights of the Owner to said securities or certificates of deposit are superior to any lien (or claim of lien) including, but not limited to, the right to sell securities or redeem certificates of deposit which the Escrow Agent claims or may in the future claim against said deposit.

(14) Escrow Agent agrees to keep detailed records in accordance with generally accepted accounting principles.

(15) Escrow Agent agrees to invest funds in the escrow account in the following securities only: United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the full faith and credit of the United States are pledged for the payment of principal and interest; obligations issued by banks for cooperatives, federal land banks, federal intermediate credit banks, federal home loan banks, the Federal Home Loan Bank Board, the Tennessee Valley Authority, or in obligations, participations, or other instruments of, or issued by, or fully guaranteed as to principal and interest by, the Federal National Mortgage Association; or in guaranteed portions of Small Business Administration notes; or in obligations, participations, or other instruments of, or issued by, a federal agency or a United States government-sponsored enterprise.

(16) Escrow Agent agrees to collateralize any deposits in excess of One Hundred Thousand Dollars ($100,000) or the amount insured pursuant to federal law in compliance with Government Code Section 53652.

(17) Escrow Agent agrees to review the market value of securities deposited in escrow under this Escrow Agreement as of the close of business on the first business day of each month, or more often as conditions of the securities market warrant, but in no case less than once per month. Escrow Agent shall promptly notify the Contractor to post additional securities and promptly notify the Owner whenever the market value of the deposited securities is less than the retention value required under the terms of the Contract. The Contractor agrees to deposit additional securities into the escrow account to meet the market value of the retention withheld under the Contract within 10 days of receipt of notification from the Escrow Agent.

(18) Escrow Agent agrees that while it is the Escrow Agent, it is and will be a member of the Federal Deposit Insurance Corporation and federally insured, and that it has the authority to enter into and perform its obligations under this Escrow Agreement.

(19) Each part and paragraph of this Escrow Agreement shall be deemed and construed to be separate and divisible, and in the event that any part, paragraph, subpart or subparagraph shall be held to be invalid or unenforceable, the remaining parts or paragraphs shall continue to be in full force and effect.

(20) This Escrow Agreement shall be governed by and in accordance with California law.

(21) At the time the escrow account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Escrow Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers, effective as of the date executed by the last party to sign it.

Owner	Contractor
Larry Gardner, Water Department Director Name	_____ Name
600 B Street, Suite 700, San Diego, CA 92101 Address	_____ Address
By _____ Vic Bianes, Deputy Director	By _____
	_____ Print Name
_____ Date	_____ Date

Escrow Agent

_____
Signature

_____
Print Name

_____
Title

I HEREBY APPROVE the form and legality of the foregoing AGREEMENT this _____ day of , 200__.

CASEY GWINN, City Attorney

By _____
Deputy City Attorney

Rev . 2/03

Project Specific Tasks/Early Requirements and Approvals

Task 4-3 – Preliminary Construction Schedule

A. Objective

To establish a schedule for the Contractor to follow until such time as the complete construction schedule can be submitted by the Contractor and approved by the CONSTRUCTION MANAGER.

B. Definition

The Preliminary Cost Loaded Construction Schedule as presented in Sections 01309 and 01310 of Division 1 of the Contract Documents is a detailed scheduled covering the first 60 calendar days of work to be performed starting with the Notice to Proceed. The Preliminary Cost Loaded Construction schedule is resource and cost loaded so that it can be the basis for initial progress payment(s).

C. Procedures

1. As required by Sections 01300, 01309, and 01310 of Division 1, the Contractor submits a Preliminary Cost Loaded Construction Schedule to the CONSTRUCTION MANAGER covering the first 60 days of work to be performed. Submittal shall be within 14 days of the date of commencement as set forth in the Notice to Proceed.

2. The CONSTRUCTION MANAGER and CIP Project Manager review the Preliminary Cost Loaded Construction Schedule and provide written comments as appropriate.

3. The Contractor revises the schedule according to the comments received from the CONSTRUCTION MANAGER or CIP Project Manager and submits the revised schedule to the CONSTRUCTION MANAGER. The returned schedule is considered the accepted Preliminary Cost Loaded Construction Schedule.

Project Specific Tasks/Early Requirements and Approvals

Task 4-4 – Contractor's Construction Schedule

A. Objective

To ensure adequate planning, scheduling and execution of construction activities so that work is prosecuted in an orderly and expeditious manner.

B. Definition

The Contractor's construction schedule is a critical path method (CPM) network in precedence diagram format and time-scaled. It identifies the contract time, contract milestones, the critical path(s), and all activities necessary to accomplish the contract requirements (see Sections 01309 and 01310 of Division 1 of the Contract Documents).

C. Procedures

1. The Contractor develops the cost-loaded construction schedule submittal which is due within 30 days of the date of commencement stated in the Notice to Proceed. This submittal reflects the entire scope of the contract work awarded. The Contractor's detailed schedule should reflect which activities are part of each summary activity and the dollar amount of the detail should sum to the dollar amount agreed to for phase funding (see Task 3-13) if applicable.

2. The CONSTRUCTION MANAGER and CIP Project Manager review the Contractor's construction schedule submittal and provide written comments as appropriate.

3. The Contractor revises the schedule according to the comments received from the CONSTRUCTION MANAGER and Project Manager and submits the revised schedule to the CONSTRUCITON MANAGER. The returned schedule is considered the accepted Contractor's construction schedule.

4. The Contractor's updates do not change the approved logic but reflect status against the approved schedule.

5. When the Contractor wishes to revise the schedule, this revision is submitted to the CONSTRUCTION MANAGER. Revisions must have CIP Project Manager approval.

6. For the Contractor's actual schedule performance and number of working days charged to the project, the City uses Form ED-117 to notify the Contractor of the contract status on a weekly basis. The CONSTRUCTION MANAGER completes form ED-117 shown in Attachment 4-4-1 and gives it to the Contractor each week. An information copy is provided to the CIP Project Manager. (See Task 5-5).

Attachment 4-4-1
Computation of Contract Working Days (Form ED-117)

The City of
San Diego
Downtown
600 B Street, Suite 700
San Diego, CA 92101
Telephone: (619) 533-4112 Fax: (619) 533-5278

Report No. _____

To:

WATER DEPARTMENT
Capital Improvement Program
W.O. # _____
CC: _____
CIP Project Manager M.S.

Project Title:

Gentlemen:

The following statement shows the number of working days charged to your contract for the week ending _____, 19___:

Date	Day	Working Day	Delay Days Other Than C.C.O.	Working Days No Work Done on Controlling Operation	Reason for Delay Day (Standard Spec Subsection 6-6.1)
	Mon.				
	Tues.				
	Wed.				
	Thurs.				
	Fri.				
Days this week					
Days previously reported					
Total days to date					

	Computation of Extended Date for Completion	Number of Days	Date
1.	Date contract "Notice to Proceed		
2.	Working days specified in contract		
3.	Computed Date for Completion (if all working days specified are used)		
4.	Total time extension days approved to date by change order(s)		
5.	Total delay days other than C.C.O.		
6.	Subtotal (Line 4 plus 5)		
7.	Extended Date for Completion (Line 3 plus Line 6)		
8.	Revised working days for contract (Line 2 plus Line 4)		
9.	Total working days to date		
10.	Working Days Remaining (Line 8 minus Line 9)		

Controlling Operation(s) _____
Percent Project Completed: _____%
The Contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise the statement shall be deemed to have been accepted by the Contractor as correct.

Construction Manager Signature: _____

Project Specific Tasks/Early Requirements and Approvals

Task 4-5 – Cost and Resource Loading

A. Objective

To provide a manageable basis for properly compensating the Contractor for construction activities performed.

B. Definition

Develop a schedule-oriented baseline to determine the value and payment for all costs and services incurred on a contract. Payment is based on earned value which is derived from the status of the Contractor's cost and resource-loaded construction schedule.

C. Procedures

1. The Contractor allocates the total contract cost to CPM activities in accordance with Section 01310 of Division 1 of the Contract Documents. The CONSTRUCTION MANAGER and the CIP Project Manager should determine in advance what resources are to be loaded, such as cost, manpower by skill, major equipment, etc., and incorporate the requirements into Section 01310 prior to bid. The Contractor also submits a Pre-Award Cost-Loaded Construction Schedule per Section 01309.

2. The CONSTRUCTION MANAGER analyzes the cost and resource-loaded schedules using the cost estimates and schedules developed during the preconstruction period as a basis for comparison.

3. The Contractor provides a revised schedule each month accompanied by a written narrative describing the reason for each revision.

4. The CONSTRUCTION MANAGER reviews and approves each monthly schedule revision and recommends payment based on earned values in accordance with the cost and resource-loaded construction schedule.

Project Specific Tasks/Early Requirements and Approvals

Task 4-6 – Submittals

A. Objective

To standardize the process by which documents submitted by the Contractor for review are received, logged, distributed to the necessary reviewing parties involved in the construction Contract.

B. Definition

A submittal is any document submitted by the Contractor in accordance with Division 1, Section 01300 of the Contract Documents that requires review and acceptance by one or more parties (City of San Diego Departments) involved in the construction Contract.

See Task 3-12, Submittal List Preparation, for a preliminary submittal list prepared by the CONSTRUCTION MANAGER and Design Consultant during the preconstruction phase to assist in the constructability review of the specifications.

The submittal process is the manner in which a document is routed and reviewed by various parties and is returned to the Contractor following that review. After review of the submittal, one of the following actions will be assigned to the document:

1. No Exceptions Taken
2. Make Corrections Noted
3. Revise and Resubmit, OR
4. Rejected

The Contractor must then take the required action in order to have an acceptable submittal.

C. Procedures

1. The Project Team will make available a Submittal List to the Contractor, which itemizes the expected submittals as required by the Contract documents. (See Task 3-12 for the submittal list prepared by the Design Consultant and the Construction Manager.) The Submittal List is a guideline and will not necessarily be a complete reflection of the submittals required to fulfill the obligations of the Contract. The Contractor in turn will provide a Submittal Schedule as required by Section 01300 to the CONSTRUCTION MANAGER within 14 days of the Notice to Proceed date identifying when Contractor will deliver specific submittals for review.

    a. Contractor will submit ten (10) copies, plus the number of additional copies it wishes returned to the CONSTRUCTION MANAGER for review. The CONSTRUCTION MANAGER, by way of the Document Controller, will date stamp the submittal to control the document for further processing (logging, scanning, etc.).

b. The submittal is then passed to the CONSTRUCTION MANAGER for a cursory review of completeness and determination of the responsible review participants.

c. If the submittal is complete, it is returned to the Document Controller for distribution.

d. The submittal is then distributed via most appropriate means available, based on urgency of the review, the day of the week, the number of parties participating in the review, etc. The distributions options are: by routine mail, overnight delivery, City courier, or delivery by one of the staff.

e. Distribution of the submittal, for those requiring review by the Design Consultant is as follows.:

1. Two (2) copies to the CONSTRUCTION MANAGER (1 for the file and 1 for review).

2. Six (6) copies to the Design Consultant (Design Consultant forwards to any specialty review as necessary).

3. Two (2) copies to the CIP Project Manager (1 copy to the CIP Liaison and 1 Copy to Water Operations if required).

f. All review comments are made by the various parties and are forwarded to the CONSTRUCTION MANAGER for review prior to passing along to the Design Consultant of Record to incorporate into the final record copy. It is preferred that all reviewers summarize their comments in a “Memo” in addition to marking up the submittal, as may be required for clarity. The “Memo” can be transmitted via E-mail, or FAX to the appropriate party, with hard copy to follow along with the submittal.

g. The Design Consultant will E-mail the CIP Project Manager and the CONSTRUCTION MANAGER prior to returning the submittal in order to give them an opportunity to provide comments prior to release of the submittal by the Design Consultant.. The Design Consultant will have no longer than 24 hours following his E-mail to release the submittal to the CONSTRUCTION MANAGER for return to the Contractor. The Design Consultant’s Engineer of Record stamps the six (6) copies of the submittal with the appropriate action: *No Exception Taken, Make Corrections Noted, Revise and Resubmit, OR Rejected* and distributes as follows:

1. Two (2) copies for Design Consultant and Subconsultant files.

2. Four (4) copies returned to the CONSTRUCTION MANAGER.

h. The Document Controller distributes the four (4) returned submittal copies as follows:

1. One (1) copy to the Contractor (per Section 01300 of the Contract documents), plus any additional copies submitted.

2. One (1) copy to the CIP Project Manager

3. Two (2) copies for the Construction Manager:
- One (1) copy for the files
- One (1) copy for the Construction Manager

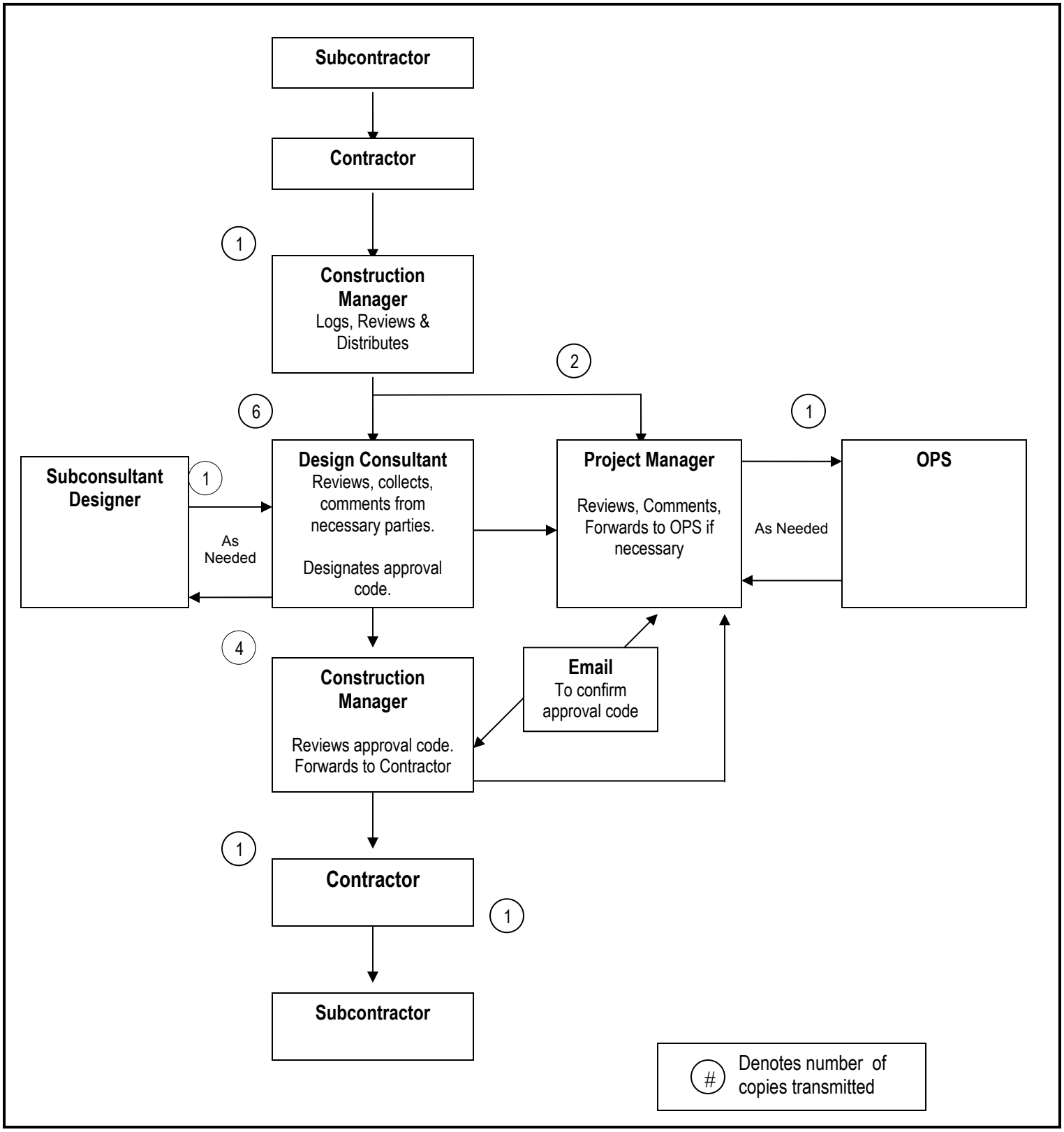
i. The CONSTRUCTION MANAGER maintains 1 copy in the file for a permanent record. Any remaining copies will be for field use by the Construction Manager and Inspector staffs.

Submittals not requiring approval acceptance by the Design Consultant's Engineer of Record will be accepted by the CONSTRUCTION MANAGER and a copy will be forwarded to the Design Consultant for his file as information.

j. The City pays the review cost of the original submittal and one (1) resubmittal. Contractor pays cost of further transmittals.

The attached Submittal Process Chart, Attachment 4-6-1, is provided for clarification.

Attachment 4-6-1
Submittal Process (Flow Chart)
Design Consultant Review Required



Project Specific Tasks/Early Requirements and Approvals

Task 4-7 – Subcontractor Substitution

A. Objective

To provide a method to allow the Contractor to request authority to substitute for a subcontractor listed in the bid.

B. Definition

The California Subletting and Subcontracting Fair Practices Act requires that subcontractors receiving in excess of ½ of one percent of the total bid amount be listed in the Contractor's bid and it prohibits the substitution of subcontractors, except as authorized.

C. Procedures

a. If a listed subcontractor refuses to sign a contract, becomes bankrupt or insolvent, fails or refuses to perform the subcontract, fails or refuses to meet bonding requirements, is not licensed, performs faulty work that substantially delays the progress of the work, or is listed in the bid by an inadvertent clerical error, the prime contractor may request a substitution from the CONSTRUCTION MANAGER.

b. The CONSTRUCTION MANAGER forwards the Contractor's request to the CIP Project Manager.

c. The Contract Administrator office of the City of San Diego gives notice in writing, by certified or registered mail, to the listed subcontractor of the prime contractor's request to substitute and the reasons for the request.

d. The listed subcontractor has 5 working days to submit written objections.

e. If written objections are filed, the City gives 5 days' notice that the City will conduct a hearing. The City Administrator, in conjunction with EOCP, determines if a substitution is justified and informs the Contractor and CIP Program Management Division, who informs the CONSTRUCTION MANAGER.

f. The CONSTRUCTION MANAGER determines that the decision of the City's Contract Administrator is implemented.

g. See Tasks 4-11 and 5-13 for subcontractor substitution as they apply to EOCP requirements.

General Tasks/Preconstruction Phase

Task 4-8 – Deferred Approval

A. Objective

To obtain a permit from the Development Services Department for items deferred during the initial plan check.

B. Definition

Portions of the design pertaining to equipment and material are detailed in the Contractor's submittals and therefore are not normally available when the Design Consultant submits the design to the Permit Services Division of the Development Services Department for the plan check to obtain building permits. These portions are noted on the approved plan set as deferred approvals.

C. Procedures

1. The Design Consultant provides the CONSTRUCTION MANAGER with a list of deferred approvals when noted by the Permit Services Division on the perforated set of drawings.

2. The CONSTRUCTION MANAGER notifies the Contractor at the preconstruction conference which submittals are deferred approval items and asks the Contractor to expedite these submittals because of the length of the review time needed by the Design Consultant and the Permit Services Division.

3. The Contractor provides these submittals to the CONSTRUCTION Manager as an early priority.

4. The CONSTRUCTION MANAGER forwards the submittals (8 copies of each submittal) to the Design Consultant.

5. The Design Consultant reviews and, if acceptable, returns the submittals approved.

6. The CONSTRUCTION MANAGER then forwards the submittals to the Permit Services Division for approval in order to meet the conditions of the building permit. Any additional information or calculation required is promptly provided by the Contractor.

7. The Permit Services Division reviews the deferred approval items and the Design Consultant's review comments and, upon acceptance, returns the submittal to the CONSTRUCTION MANAGER.

8. The CONSTRUCTION MANAGER returns the submittals to the Contractor and notes that approval has been obtained for the deferred approval.

Project Specific Tasks/Early Requirements and Approvals

Task 4-9 – Partnering

A. Objective

To develop a set of common goals that focus the efforts of project team members toward successful completion of each Water CIP project.

B. Definition

Partnering is an alternative management process that seeks to produce organizational change to resolve the traditional problems on construction projects by substituting a positive and mutually beneficial process focused on problem solving with a commitment to open communication and shared goals.

C. Procedures

1. The CONSTRUCTION MANAGER solicits proposals from at least three facilitators, selects one, and obtains concurrence from the CIP Program Management Division, the Contractor and Design Consultant. See Section 2-16 in Part 1 Special Provisions – General for Owner and Contractor partnering requirements.

2. The CIP Program Management Division nominates appropriate members from the division to attend the partnering sessions and coordinates participation from other Water Department divisions and other City departments.

3. The Contractor nominates project management personnel and corporate representation to attend and coordinates participation from subcontractors.

4. The Design Consultant nominates project engineers and corporate representation to attend and coordinates participation by major subconsultants when appropriate.

5. The CONSTRUCTION MANAGER nominates appropriate site and management personnel to attend and makes arrangements for the location, coordinates and publishes the schedule and provides for necessary support.

6. The facilitators conduct pre-partnering interviews, conduct the partnering session and provide written results of the training, including the agreed upon partnering charter.

7. The project team implements the problem solving methods developed during the initial sessions and gives broad support to the goals set forth in the partnering charter.

8. The CONSTRUCTION MANAGER schedules follow-up meetings whether facilitated or not when the project team believes that such a follow-up session will help resolve difficulties. Typically, a facilitated refresher session is scheduled quarterly.

9. The CIP Program Management Division has approved the use of partnering on all major capital improvement projects. (greater than $1,000,000) and has inserted an allowance item in each construction contract to pay for a facilitator and an offsite location.

10. Contract Document require Contractor to pay half the cost of partnering.

Project Specific Tasks/Early Requirements and Approvals

Task 4-10 – Permits

A. Objective

To ensure that all permits and regulatory approvals needed for planning, construction and operation of CIP facilities are obtained in a timely manner.

B. Definition

Depending on the project, regulatory approvals may be required from a variety of federal, state and local agencies. Construction permits must be received from various state and local agencies prior to initiation of construction. Section 01060 of Division 1 of the Contract Documents covers permit requirements that are the responsibility of the Contractor.

C. Procedures

1. The CIP Permit Coordinator consults with the CIP Project Manager and the Design Consultant to identify permit and other regulatory approval requirements.

2. The Design Consultant and/or the City's As-Needed Environmental Consultant prepare the necessary technical materials to support regulatory approval applications.

3. The CIP Project Manager, in consultation with the CIP Permit Coordinator, submits the permit applications to the regulatory agencies.

4. The CIP Permit Coordinator is an advocate for the CIP Program Management Division permit acquisition and maintains a schedule of permit activity for all projects. The CIP Permit Coordinator maintains copies of all permits issued.

5. In accordance with the Part 1 Special Provisions – General of the General Contract Documents, construction permits are obtained by the Contractor.

6. The CONSTRUCTION MANAGER monitors implementation of the permit conditions and includes appropriate steps in the inspection process.

Project Specific Tasks/Early Requirements and Approvals

Task 4-11 – Substitution (EOCP)

A. Objective

To request authority to substitute for a DBE/DVBE supplier, subcontractor or joint venture partner listed in the bid.

B. Definition

The City of San Diego's Bid Documents require that substitution (subcontractor changes) be approved in writing by the City before making a change. If changes are made without prior written approval, the prime contractor is subject to the sanctions stipulated in the Subletting and Subcontracting Fair Practices Act.

C. Procedures

1. If the listed subcontractor fails or refuses to execute a written contract based on the terms and conditions of the contract documents, becomes bankrupt or insolvent, fails or refuses to perform the subcontracted work or furnish the listed materials, performs work not in substantial accordance with plans and specifications, or is substantially delaying or disrupting the progress of the work, the Contractor may request a substitution by writing to the CONSTRUCTION MANAGER.

2. The CONSTRUCTION MANAGER immediately forwards the Contractor's request via the CIP Project Manager, to the Equal Opportunity Program Office for resolution.

3. The Equal Opportunity Contracting Program Office conducts an investigation and determines if a substitution is justified.

4. The CONSTRUCTION MANAGER reports that the decision of the Equal Opportunity Program Office has been implemented.

Contract Specific Tasks/Early Requirements and Approvals

Task 4-12 – Contractor Safety Management

A. Objective

To improve safety performance on CIP Construction Projects. To construct each project with ZERO accidents, totally free from incidents. To provide guidance on the Emergency Notification Procedure in the event of an accident or serious injury.

B. Definition

Contractor Safety Management is a program directed at making and maintaining safety as a top priority during the construction of CIP Projects. The program consists of CIP personnel, construction management personnel and the Contractor's personnel working together to attain zero injury and zero defects on each project. A team of dedicated safety specialists is included as part of the CIP Program Management Division. It assists CIP Project Managers in developing training and safety materials, providing safety training and monitoring safety at the construction project sites. It includes an Emergency Notification Procedure in the event of an accident or serious injury.

C. Procedures

1. The CIP Program Management Division implements the CIP Contractor Safety Management Program (CSMP). A copy of the CSMP is included in the contract document package as Attachment A per Section 71045.1 Special Provisions – General. The CIP Project Manager ensures that the requirements of this program are fulfilled.

2. Members of the CIP Project Management team and the CIP Construction Safety Manager attend the pre-bid meeting and review applicable safety, health and insurance requirements with the prospective bidders

3. Following award of the construction contract that interfaces with an operating facility, the CIP Project Management Team representative, the CONSTRUCTION MANAGER and the Contractor participate in a in a documented premobilization safety review (Attachment 4-12-1).

4. Contractor Responsibilities

   - Attend the pre-construction conference.

   - Submit a Contractor Site Safety Plan and IPP in accordance with Division 1 of the contract documents.

   - Staff the project with a Safety Professional who is a qualified safety professional or a competent person as defined by OSHA.

   - Conduct formal documented safety inspections commensurate

with construction activities that are in accordance with Cal/OSHA 3203(A), (B) and (C). See attachments 4-12, 4-12-3, and 4-12-3 for samples and safety forms

- Conduct at a minimum, weekly safety and health meetings relevant to the specific work at the construction site.

- Investigate all accidents, incidents and near misses involving the Contractor's or subcontractor's employees or equipment.

- Submit to the CIP Construction Safety Manager a monthly statistical report that includes the topics outlined in paragraph 7.9 of the CSMP.

- Contractor's key project site supervisors attend an OSHA 10-hour safety training course within 10 working days of mobilization.

- Other requirements as specified in Section 7 of the CSMP.

5. The CIP Project Management Team, the CONSTRUCTION MANAGER and the CIP Construction Safety Manager monitor the Contractor and its subcontractor(s) implementation and application of their respective safety programs.

6. The Notice of Contractor Violation of Safety & Health Regulations (Attachment 4-12-5) is used any time a violation of policy or procedure is noted.

7. The Contractor and its subcontractors are subject to periodic onsite safety performance reviews and safety inspections (Attachment 4-12-6).

8. The procedure implemented to review the quality of the Contractor's Safety and Health Program utilizes the sample form at Attachments 4-12-7. This procedure is described in Section 12 of the CSMP.

9. Emergency Notification Procedure: Attachment 4-12-8 provides a graphic display of the emergency notification procedure.

Attachment 4-12-1

City of San Diego
Water Department - Capital Improvements Program
Pre-Mobilization Safety Meeting

The following safety requirements and procedures have been reviewed and discussed on the following date_____with the following company_____:

	Yes	No
Will this work be performed on or near a covered process? If yes, name of process:_____	_____	_____
Has the proper operating covered process supervisor been notified?	_____	_____
Known potential fire hazards	_____	_____
Known potential explosion hazards	_____	_____
Known potential toxic releases	_____	_____
Trenching	_____	_____
Lockout/Tagout	_____	_____
Confined Space Entry	_____	_____
Hot Work Permits	_____	_____
Crane Safety	_____	_____
Personal Protective Equipment (such as hard hats, steel toe shoes, safety glasses with side shields, and respirators)	_____	_____
Emergency Planning and Response Plan	_____	_____
Fall Protection	_____	_____
Entrance, Presence and Exit of Contractor Employees	_____	_____
Back-up Alarms on equipment/trucks	_____	_____

Unique hazards presented by contractor's work:_____

Other hazards discussed:_____

The following MSDS's were covered:_____

An on-site field orientation was conducted on the following date _____ by _____ (City/ Engineer Representative).

_____ Contractor Representative

_____ City Representative

Attachment 4-12-2
Monthly Safety Report

CITY OF SAN DIEGO - WATER DEPARTMENT

CAPITAL IMPROVEMENTS PROGRAM - MONTHLY SAFETY REPORT

PROJECT SITE LOCATION:	PROJECT NAME:	PROJECT MANAGER:	JOB NO.:
FOR MONTH OF:	PREPARED BY:	PHONE:	FAX:

PROJECT START DATE:

		MANHOURS	RECORDABLE CASES* (1)	INCIDENCE RATE (1A)	LWD CASES (2)	INCIDENCE RATE (2A)	DAW CASES (3)	INCIDENCE RATE (3A)	# DAW DAYS (4)	INCIDENCE RATE (4A)	# RDD DAYS (5)	INCIDENCE RATE (5A)	RECORDABLE CASES WITHOUT LWD (6)
CONTRACTOR/CM													
	MONTH												
	YTD												
	PROJ.TO DATE												
SUBCONTRACTORS													
	MONTH												
	YTD												
	PROJ.TO DATE												
	MONTH												
	YTD												
	PROJ.TO DATE												
	MONTH												
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	MONTH												
	YTD												
	PROJ.TO DATE												
	MONTH												
	YTD												
	PROJ.TO DATE												
	MONTH												
	YTD												
	PROJ.TO DATE												
TOTAL	MONTH												

LWD (Lost Workday) Case = Case with DAW (Day Away From Work) or RDD (Restricted Duty Workday) or combination of DAW and RDD

Attachment 4-12-3
Monthly Incidents Report

City of San Diego - Water Department
Capital Improvements Department - Monthly Incidents

Project Site Location:		Project Name:		Project Number:		Job No.:	
For Month of:		Prepared By:		Phone:		Fax:	
Project Start Date:							

Recordable Incident Review:	
Property Damage:	
Security Breaches:	
Environmental:	

FOR ASSISTANCE IN COMPLETING THIS FORM CONTACT	
Jeff Kleinfelter	858-653-96424, ext. 310
CIP PROGRAM FAX	619-533-5278

Attachment 4-12-4

Recordable Incident Detail Report

JOB NUMBER
PROJECT
LOCATION
PROJECT START DATE

MONTH OF THIS REPORT _____

COMPANY/CATEGORY _____

CATEGORY	TOTAL RECORDABLE CASES			RECORDABLE CASES W/ NO LOST WORKDAYS (CASES W/ NO DAYS AWAY FROM WORK, AND NO RESTRICTED DUTY DAYS)			RECORDABLE CASES WITH LOST WORKDAYS			NUMBER OF DAYS AWAY FROM WORK			NUMBER OF RESTRICTED DUTY WORKDAYS		
	MO.	YTD	PROJ.-TO-DATE	MO.	YTD	PROJ.-TO-DATE	MO.	YTD	PROJ.-TO-DATE	MO.	YTD	PROJ.-TO-DATE	MO.	YTD	PROJ.-TO-DATE
FALL FROM ELEVATION															
FALL INTO/THROUGH															
FALL (SLIP/TRIP) SAME ELEVATION															
MANUAL HANDLING/OVEREXERTION															
STRUCK BY/AGAINST															
OBJECT/SUBSTANCE IN EYE															
CAUGHT IN/UNDER/BETWEEN															
STEPPED ON/IN															
EXPOSURE TO/CONTACT WITH															
VEHICLE ACCIDENT															
ASSAULT/BATTERY															
BIT/STUNG BY															
FIRE/EXPLOSION															
ELECTRICAL CONTACT															
REPETITIVE MOTION															
EMOTIONAL STRESS															
NOT OTHERWISE CLASSIFIED															
TOTALS															

4--Recordable Incident Detail Report RC(PCI)

Attachment 4-12-5
Notice of Contractor Violation of Safety Regulations

City of San Diego
Water Department - Capital Improvements Program
Notice of Contractor Violation of Safety Regulations

Date: _____

Contractor Name: _____

Address: _____

_____

_____

Attention: _____

This letter officially notifies you that you have been found to be in violation of the following Safety Regulations:

_____ on (date) _____,

by _____.

Confined Space Entry _____ Lockout/Blockout _____ Hot Work _____ Personal Protective Equipment ___

Knowledge of the environment _____ Awareness of warning alarms _____ Evacuation routes _____

Assembly locations _____ Fall Protection _____ Scaffolding _____ Back-up Alarms _____ Trenching ____

Safework Practices _____ Security Practices _____ Environmental/Hazardous Material Storage _____

Other:_____

_____

_____

_____

This/These violation(s) occurred at the following location(s):

_____

_____

at the following time(s)_____and

date(s)_____

The name of the employee(s) was/were _____ under the

supervision of_____.

Page 1 of 2

Attachment 4-12-5
Continued

Notice of Contractor Violation of Safety Regulations

Under conditions of this enforcement procedure check all items that apply:

_____ 1. You are being notified of this violation and should take corrective action to prevent a recurrence. The corrective action shall be documented to the City/Engineer representative immediately.

_____ 2. You must submit a plan for compliance to your City/Engineer representative and the Construction Safety Manager within two days of receipt of this letter. The compliance plan must include the means and/or methods of compliance and the date that the requirements for compliance will be completed. Once compliance has been achieved, a follow up letter must be sent to the City/Engineer representative and Construction Safety Manager. Failure to comply will result in disciplinary action against your Company.

_____ 3. You are required to review the stated procedure(s) with your City/Engineer representative. Work may not commence on the site until the review is complete and the Contractor responds formally that the procedure is understood and will comply.

_____ 4. You are required to review the stated procedure(s) with your City/Engineer representative. Work may not commence on the site until the review is complete and you must confirm formally the disciplinary action to be taken against the supervisor and employee(s).

_____ 5. All work on the site will stop until the City/Engineer representative reviews all the facts with the Contractor and determines if the contract between the parties will be terminated.

Sincerely,

_____

City Representative

cc: Issuing City/Engineer Representative
Job File
Construction Safety & Health Department
Responsible Project Manager

Page 2 of 2

Attachment 4-12-6
City of San Diego
Water Department – Capital Improvements Program
Contractor Safety Performance Review

Contractor Safety Performance Review

Has the contractor trained all contract employees to safely perform the work contracted? Yes_____ No_____

If yes, how was the training conducted?_____

Has the contractor informed all contract employees of known potential fire, explosion, or toxic hazards related to the job? Yes_____ No_____

If yes, how was this information relayed to the contract employee?_____

Has the contractor informed all contract employees of the applicable provisions of the emergency action plan for the assigned work area? Yes_____ No_____

If yes, how was this information relayed to the contract employee?

_____

_____

Has the contractor documented that all contract employees have received and understood the training to safely perform the work at City CIP Project site? Yes_____ No_____

Does the contractor have a record for each contract employees showing:

Employee identity? Yes_____ No_____ Date of training? Yes_____ No_____

Means used to verify that training was understood? Yes_____ No_____

Has the contractor informed the contract employee of the following safe work practices?

	Yes	No
Lockout/Blockout	_____	_____
Confined Space Entry	_____	_____
Hot Work Procedures	_____	_____
Control over entrance, presence, and exit from work area	_____	_____

Does the contractor maintain an injury and illness log for all the contract employees? Yes_____ No_____

Page 1 of 2

Attachment 4-12-6
Continued

Does the contractor have on file a current OSHA Form 200_? Yes_____ No_____

Does the contractor send the updated monthly reports to the Construction Safety and Health Department? Yes_____ No_____

Do the contractor's employees demonstrate a working knowledge of Safe work practices? Yes_____ No_____

Environmental hazards? Yes_____ No_____ Evacuation and Assembly routes? Yes_____ No_____

Personal protective equipment? Yes_____ No_____ Written Fall Protection Program? Yes_____ No_____

Does the contractor maintain a file of weekly inspections and safety meetings? Yes_____ No_____

Does the contractor have records of certification for:

	Yes	No
Electricians	_____	_____
Welders	_____	_____

Employees interviewed:

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Contractor Safety Performance Review Forms are to be completed by auditors and forwarded to the Construction Safety and Health Department for filing.

Auditor:_____

Contractor Representative:_____

Date:_____

Page 2 of 2

Attachment 4-12-7
City of San Diego
Water Department - Capital Improvements Program
Contractor Safety Program Review

Contractor Safety Program Review

The following form shall be completed by the contractor and submitted to the City of San Diego Construction Safety Department for review and evaluation prior to the contractor performing work on City of San Diego property.

Name of Contracting Company: _____

Date: _____
City/Engineer Contact Person: _____

1. List your firm's Interstate Experience modification rate for the three most recent years:

20 _____ _____

20 _____ _____

20 _____ _____

2. List your firm's Total Case Incident Rate (TCIR) and Lost Workday Case Incident Rate (LWCIR) for the three most recent years:

	TCIR			LWCIR	
20	_____	_____	20	_____	_____
20	_____	_____	20	_____	_____
20	_____	_____	20	_____	_____

3. List all fatalities:

_____

_____

_____

_____

Page 1 of 5

Attachment 4-12-7
Continued

List your type of work:

_____ Excavation

_____ Building

_____ Heavy Construction

_____ Plumbing, heating and air conditioning

_____ Mechanical

_____ Electrical

_____ Insulation

_____ Other (List):

_____

5. Are accident reports. OSHA 200 log and report summaries sent to the following? How often?

	Yes	No	Monthly	Quarterly	Annually
Field Superintendent	_____	_____	_____	_____	_____
Vice President of Construction	_____	_____	_____	_____	_____
President of Firm	_____	_____	_____	_____	_____

6. Do you hold site safety meetings for field supervision? Yes _____ No _____ How often?

_____ Weekly

_____ Biweekly

_____ Monthly

_____ Less often, as needed _____

7. Do you conduct project safety inspections: Yes _____ No _____

By whom? (Name, Title) _____

How often? _____

Page 2 of 5

Attachment 4-12-7
Continued

8.

	Yes	No	Monthly	Annually
Accidents totaled for the entire company	_____	_____	_____	_____
Accidents totaled by project	_____	_____	_____	_____

9. How are the costs of individual accidents kept? How often are they reported?

	Yes	No	Monthly	Annually
Costs totaled for entire company	_____	_____	_____	_____
Costs totaled by project	_____	_____	_____	_____

10. List key personnel planned for this project. Please list names, include the person who will be responsible for implementation of the safety/health program.

_____

_____

_____

_____

11. Do you have a written safety program? Yes _____ No _____

If yes, please include with your Safety Program Review submission packet.

Page 3 of 5

Attachment 4-12-7
Continued

12. Do you have an orientation program for new hires? Yes _____ No _____
If yes, does it include the following?

	Yes	No	N/A
Head Protection	_____	_____	_____
Eye Protection	_____	_____	_____
Hearing Protection	_____	_____	_____
Respiratory Protection	_____	_____	_____
Fall Protection	_____	_____	_____
Scaffolding	_____	_____	_____
Perimeter Guarding	_____	_____	_____
Housekeeping	_____	_____	_____
Fire Protection	_____	_____	_____
First Aid Facilities	_____	_____	_____
Emergency Procedures	_____	_____	_____
Hazard Communication	_____	_____	_____
Trenching and Excavation	_____	_____	_____
Signs, Barricades, Flagging	_____	_____	_____
Electrical Safety	_____	_____	_____
Rigging and Crane Safety	_____	_____	_____
Confined Spaces	_____	_____	_____
Line Breaking	_____	_____	_____
Lockout/Tagout	_____	_____	_____
Hot Work	_____	_____	_____

Page 4 of 5

Attachment 4-12-7
Continued

13. Do you have a program for newly hired or promoted foremen? Yes_____ No _____
If yes, does it include instruction on the following?

	Yes	No
Safe Work Practices	_____	_____
Safety Supervision	_____	_____
Toolbox Meetings	_____	_____
Emergency Procedures	_____	_____
First Aid Certification	_____	_____
Accident Investigation	_____	_____
Fire Protection/Prevention	_____	_____
New Worker Orientation	_____	_____
Fall Protection Requirements	_____	_____

1. Do you hold craft toolbox safety meetings? Yes _____ No _____ How often?

_____ Weekly

_____ Biweekly

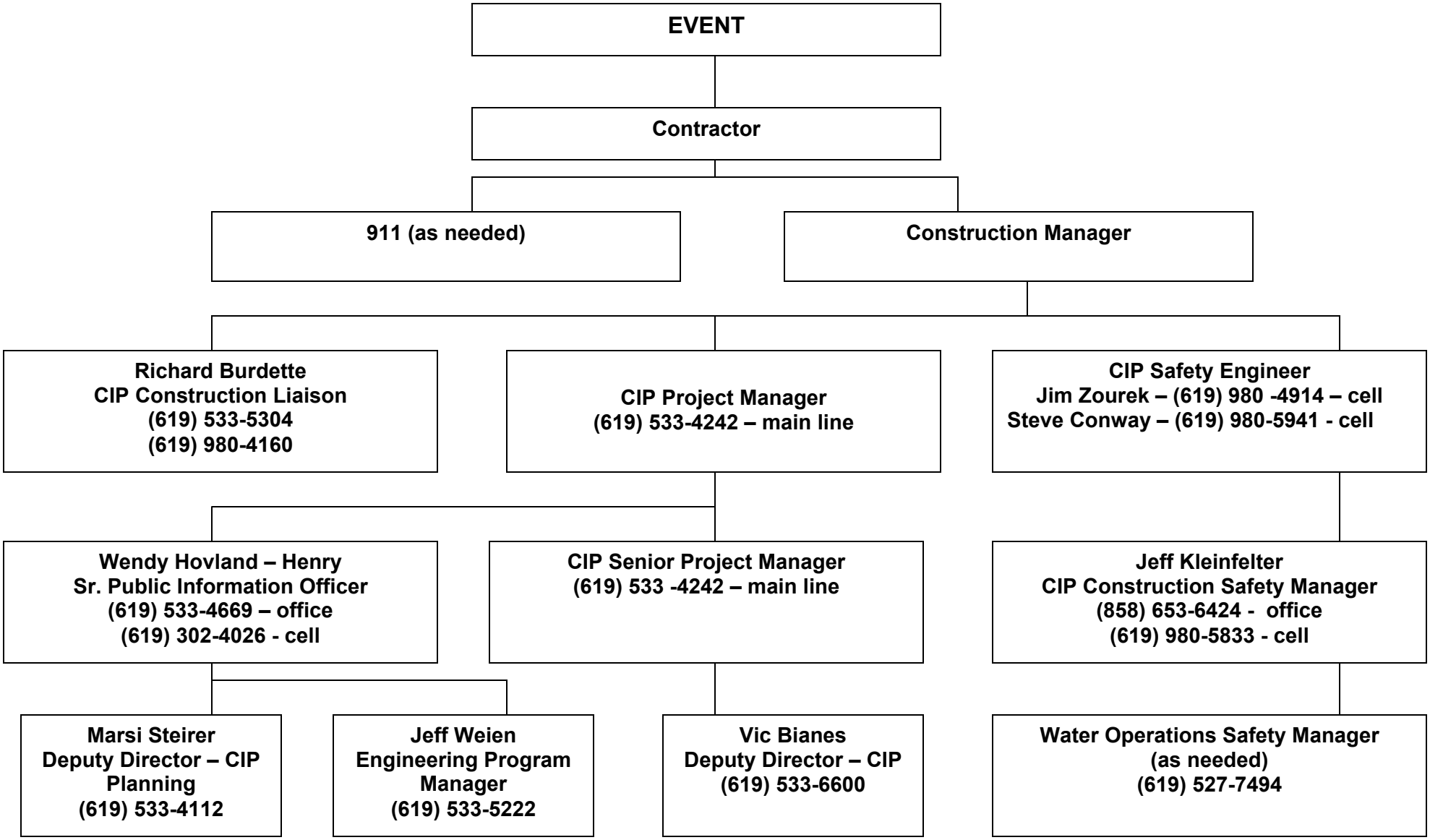
_____ Monthly

_____ Less often, as needed _____

2. Please submit the following:
   1. Written Safety & Health Manual.
   2. Copy of 3 previous years OSHA 200 Summary Sheet.
   3. Copy of your 3 previous years Experience Modification rate on your Insurance Carrier Letterhead.
   4. Copy of your most previous Cal/OSHA IIPP.

Page 5 of 5

Attachment 4-12-8
Emergency Notification Procedure



Early Construction Phase Requirements

Task 4-13 – Insurance Certificate Review and Monitoring

A. Objective

To review contractor and subcontractor certificates to assure they are in compliance with the contract.

B. Definition

The CIP Risk Management will review each certificate and maintain a compliance and renewal database. When renewal certificates are required, CIP Risk Management will contact the insurance carrier for an updated certificate.

C. Procedure

1. The Contractor will submit their current insurance certificate to the City's Contracts Administration Division, who will, in turn, forward a copy to the CIP Risk Management.

2. The CIP Risk Management will log the certificate and request, from the Construction Management, copies of the subcontractor's insurance certificates. Once received, the CIP Risk Management will check the certificates for compliance with the contract and monitor the renewals.

3. If at anytime the certificates are not in compliance with contract, the CIP Risk Management will contact the insurance carrier and submit a list of items that are not in compliance (Attachment 4-13-1).

Attachment 4-13-1
Insurance Certificate Checklist

City of San Diego Water Department

INSURANCE CERTIFICATE CHECKLIST

PROJECT:

INSURANCE COMPANY/ Rating

INSURED:

AM Best Rating

ITEM	RECEIVED	NEED	LIMITS	NOTES	OK?
General Liability	☐	☐		Claims Made ☐ Occurrence ☐	
GL - Expiration Date	☐	☐			
GL - General Aggregate	☐	☐			
GL - Each Occurrence	☐	☐			
Auto - Any Auto box should be checked	☐	☐		Any Auto? Yes ☐ No ☐	
Auto - Expiration Date	☐	☐		Date:	
Auto - CSL	☐	☐			
Excess/Umbrella	☐	☐		Date:	
Worker's Comp	☐	☐		Date:	
Description Includes Project Name?	☐	☐			
Description Includes City as Add'l Named Insured?	☐	☐			
Add'l Named Insured CG 20 10 attached?	☐	☐			
Cancellation wording modified to show 30 days notice required?	☐			The following wording **MUST** be included!: "Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will mail 30 days written notice to the certificate holder named to the left."	

Checked by: Date checked:

General Tasks/Preconstruction Phase

Task 4-14 – Hazardous Materials and Waste Mitigation

A. Objective

To establish an efficient process and specific procedures for responding to the discovery of hazardous waste during construction.

B. Definition

The process through which the discovery of hazardous material is addressed and resolved within the Water CIP Program Management Division and all regulatory agencies having jurisdiction. The Contractor's responsibilities for hazardous materials management and waste disposal are specified in Section 01120 of Division 1 of the Contract Documents.

C. Procedures

1. The CONSTRUCTION MANAGER prepares a Hazardous Waste Mitigation Plan establishing points of contact within the appropriate regulatory agencies and a process for interaction with and coordination among agencies, establishes notification and reporting requirements, and ensures that all response actions are implemented in a uniform and well-defined manner in order to preserve the City's rights to recover necessary response costs from potentially responsible parties The CONSTRUCTION MANAGER routes the Hazardous Materials Waste Plan to the CIP Project Manager.

2. The CIP Project Manager reviews the Hazardous Materials Mitigation Plan and coordinates its review with appropriate CIP staff and other City departments. The CIP Project Manager refers any comments on the Plan to the CONSTRUCTION MANAGER for editing and finalization.

3. After approval, the CIP Project Manager and the CONSTRUCTION MANAGER modify the construction Contract Documents to direct the construction contractors, and may also contract with a licensed remediation contractor to be available on an on-call basis.

4. The CONSTRUCTION MANAGER directs the implementation of procedures established in the Hazardous Waste Mitigation Plan when hazardous materials are encountered in the construction process.

   The CONSTRUCTION MANAGER, as directed by the CIP Project Manager and/or the Environmental Services Department, oversees, administers, and inspects the work of any hazardous waste remediation contractors retained by the City for work on Water CIP projects.

Book 6

Construction Management Guidelines

Chapter 5
Construction Operations

City of San Diego Water Department
Capital Improvements Program

Chapter 5
CONSTRUCTION OPERATIONS

5.1 Introduction

This chapter identifies the CONSTRUCTION MANAGEMENT tasks and processes associated with the Contractor's performance of the contract scope of work. It includes the following tasks:

- Inspection, Testing and Surveying Services
- Inspection by the City of San Diego Development Services Department
- E&CP Inspection in Public Right-of-Way
- Contractor's Daily Report
- Daily Construction Report and Statement of Working Days
- Contractor's Progress Meetings
- Monthly Progress Report
- Requests for Information
- Shop Drawing Submittals
- Substitution Requests
- Record Document Updates
- Construction Deficiency Reports
- Monthly Invoicing and Employment Reports (EOCP)
- Stop Work Order/Notice of Resumption of the Work
- Traffic Control
- Environmental Inspections
- Construction Photographs
- Progress and Final Payment/Release of Claims/Affidavit of Disposal
- Shutdown Requests
- Emergency Notification Procedure, Repair and Evaluation of Main Break
- Ongoing Plant Coordination
- Process Startup Plan
- Startup Management Plan

Project Specific Tasks/Construction Phase

Task 5-1 – Inspection, Testing, and Surveying Services

A. Objective

To monitor the Contractor's construction activities, surveying and materials testing programs and to ensure that the Contractor's performance is in compliance with the Contract Documents.

B. Definition

Inspections and materials testing, as detailed in the Section 01400 of the Division 1 of the Contract Documents, are the processes the CONSTRUCTION MANAGER uses to monitor the Contractor's work for compliance with the Contract Documents. If not required in the Contract Documents, independent inspections, materials testing and land surveys are conducted by the Owner or by the Construction Management Consulting Firm to ensure compliance with the Contract Documents. If needed by the CONSTRUCTION MANAGER, the Owner′s material testing capability, and surveying services may be used when available. If needed Owner services are not available, they are provided by the Construction Management Consulting Firm subject to approval by the CIP Project Manager.

C. Procedures

1. The CONSTRUCTION MANAGER reviews the Technical Specifications and referenced specifications and codes and prepares an Inspection, Testing and Survey (Quality Assurance) Plan for the contract work.

2. The CONSTRUCTION MANAGER reviews the plan with the CIP Project Manager.

3. The CONSTRUCTION MANAGER evaluates the quality control characteristics, methods, acceptance, criteria, frequency and level of effort proposed by the Contractor. The CONSTRUCTION MANAGER inspects, tests and surveys the work performed by the Contractor, subcontractors and material suppliers in accordance with the frequency, intensity, criteria, etc., contained in the approved plan. The CONSTRUCTION MANAGER establishes separate test procedures and may establish an onsite laboratory, if necessary. The CONSTRUCTION MANAGER schedules an independent land surveyor as required to verify the location of the Contractor’s work.

4. The contract drawings prepared by the Design Consultant normally contain sufficient survey, control and reference points to allow the Contractor to place its own construction survey stakes. In select situations, the drawings and the Design Consultant survey data may not be sufficient for the Contractor to get started. In these cases, the CONSTRUCTION MANAGER arranges for initial construction staking to be executed by the contractor or Field Engineer survey section. If Field Engineering Survey is utilized, additional funds must be authorized to

pay for this service. In other cases the Contract Documents require the Contractor to perform all surveying.

5. The CONSTRUCTION MANAGER, if the CIP Project Manager approves, programs and uses the services of the Owner's Materials Testing Laboratory, the Owner's Survey Section and the Owner's landscape and irrigation inspection services to meet specialized inspection requirements, materials testing and land surveying needs. Landscape and irrigation inspection services are performed in accordance with the schedule provided by the Landscape Development Coordinator. Contractor will have to retain the services of a certified agricultural soils testing laboratory. The City does not provide agricultural soils testing services. Procedures for scheduling work with the Owner's Materials Testing Laboratory are found in Attachment 5-1-1.

6. The Contractor gives the CONSTRUCTION MANAGER timely notice of readiness of the Work for all required inspections, tests, or approvals, and cooperates with inspection and testing personnel to facilitate required inspections or tests.

Attachment 5-1-1
Scheduling Work with Materials Testing Laboratory

CITY OF SAN DIEGO - MATERIALS TESTING LABORATORY
9491 AERO DRIVE
SAN DIEGO, CA 92123

Telephone: (858)627-3279 Fax: (858)627-3292

The function of the City's Materials Testing Laboratory is to perform the various testing that is required on City construction projects in accordance with the job (project) specifications, City standards and Greenbook requirements.

It is the Contractor's responsibility to call and schedule all work. Do not rely on the Technicians to schedule your jobs!

SCHEDULING WORK WITH THE MATERIALS TESTING LABORATORY:
(These requirements will be strictly enforced)

- **48-hours notification is REQUIRED BEFORE the start of any work. The time is especially critical when starting fill work or when soils or other sampling is required.**
- **24-hours notification is REQUIRED when scheduling work for the following day, and calls to the Laboratory MUST be made before noon (12:00 pm) of the previous work day.**
- **Requests for work by the Test Lab <u>must</u> be identified by the following:**
  - **City Work Order number**
  - **Project Name**
  - **Job location (nearest cross streets)**
  - **The Thomas Brothers Map page and coordinates**
  - **The work requested (including the materials supplier when applicable)**
  - **The quantity of material (as needed)**
  - **The time requested for the test (as needed)**
  - **The name of the Resident Engineer**

*R-VALUE testing for pavement design requires minimum seven (7) days for sampling and completion of testing.
*All local Ready-Mix concrete Plants are approved, but please make sure that the plant dispatcher is informed that the concrete being ordered is for a **City of San Diego project**.

PIPE PLANT INSPECTIONS

All RCP, steel cylinder-lined pipe and other specialty pipe to be used on storm drain, sewer or water projects (for the City of San Diego) are inspected at the source of manufacture by the City of San Diego Laboratory Personnel.

*48-hours notification is required prior to manufacturing at local plants (Southern California) only to ensure proper scheduling of Laboratory Personnel.

*7-DAYS (168 hours) notification is required for plants **outside** of the Southern California area to ensure scheduling of Laboratory Personnel.

Project Specific Tasks/Construction Phase

Task 5-2 – Inspection by City of San Diego Development Services Department

A. Objective

To coordinate the inspections for building code compliance conducted by the City of San Diego's Development Services Department, Inspection Services Division.

B. Definition

The Building Inspection Services Division of the Development Services Department inspects for building code compliance in structural, electrical, and plumbing work involving gas lines, potable water systems, drain and waste lines and floor and roof drains, mechanical systems involving environmental air ducts, heating and air-conditioning systems, exhaust fans and air moving units as identified by the building permit. (See Sections 01060 and 01400 of Division 1 of the Contract Documents).

C. Procedures

1. The Design Consultant submits the project plans and supporting documents to the Development Services Department for plan check approval.

2. Generally, the Contractor obtains the permits for the entire project.

3. The City-approved Contract drawings and inspection cards must be maintained onsite and be accessible to City inspectors. The CONSTRUCTION MANAGER must establish procedures with the Contractor to ensure that all the required inspections are completed and approved before proceeding with the work.

4. The CONSTRUCTION MANAGER is responsible for providing the special inspections required by code in accordance with the instructions of the Development Services Department. Special inspections must be performed by City of San Diego certified special inspectors.

5. The CONSTRUCTION MANAGER must coordinate offsite fabrications subject to code requirements for special inspection in accordance with Development Services Department procedures. The City forms for application to perform offsite fabrication are included as Attachments 5-2-1 and 5-2-2.

6. The CONSTRUCTION MANAGER ensures that special inspection reporting is done in accordance with Development Services Department procedures. The CONSTRUCTION MANAGER files the Owner's Final Report for Special Inspection, Structural Observation and Construction Materials Testing (see Attachment 5-2-3) as the City's agent.

Attachment 5-2-1
Application for Offsite Fabrication

THE CITY OF SAN DIEGO

Application to Perform Off-Site Fabrication

(Must be filed one business day prior to scheduled fabrication commencement date)

Date _____ Scheduled Fabrication Commencement Date _____

Fabrication Co. Name _____ Tel No. (____)_____

Fabrication Shop Address _____ Fax No. (____)_____

City _____ State _____ Zip Code _____

Building Permit No(s). _____ Plan File No. _____

Job Site Address _____

Description of components to be fabricated _____

_____

Fabricator is Certified by (Submit copy of certificate, refer to BNI. 17-6): ❑ ICBO ❑ AISC ❑ City of Los Angeles
❑ ACI ❑ PCI ❑ PTI ❑ Other _____ Certificate No. _____ Exp. Date _____

Special Inspector Assigned (By Building Owner) _____ Certificate No. _____
(Not required for a fabricator registered and approved by the City of San Diego, unless otherwise noted on the approved permitted plans and specifications.)

Fabricator drawings reviewed and accepted by designer of record? ❑ Yes ❑ No

Note: The fabricator is required to have fabrication drawings which have been reviewed and accepted by the designer of record. Special inspector must verify such acceptance prior to commencing inspection duties.

AGREEMENT
We hereby agree to have continuous special inspection, sampling and testing as specified on the approved permitted plans and specifications. We will further agree that the work will be performed in the manner prescribed by the Uniform Building Code and the Uniform Building Code Standards as presently adopted by the City of San Diego and any other regulations.
We understand that the property owner or the engineer/architect of record acting as the property owner's agent is solely responsible for employment of one or more special inspectors who shall provide inspections for fabrication of the components described herein. We also agree to provide unlimited access to the fabrication areas, the material storage and mixing areas, other related areas, the approved shop drawings and other documents for the purpose of inspection, sampling and testing by the special inspectors, construction materials testing laboratory of Development Services Department personnel during normal working hours. We further agree to provide an identifying mark on each fabricated member or component shipped to the construction site. A certificate of compliance and a shipping list shall accompany each shipment and a copy shall be sent to the Inspection Services Division and the architect or engineer of record when the components are shipped.

This agreement is limited to fabrication of the components or members described above to be used in the structures identified by the permit numbers shown and is not transferrable to any other fabrication work or other construction sites.

Name (print) _____

Title: _____ Date: _____

Any person signing this application as an agent of the fabrication company declares under penalty of perjury to be an authorized agent of record of this fabrication company having the authority to execute this document.

Signature: _____

FOR OFFICE USE ONLY

❑ Approved ❑ Denied
❑ Correct and resubmit

Comments: _____

_____

_____

Name (print) _____

Signature _____ Date _____

Inspection Services
Development Services • 9601 Ridgehaven Court, Suite 220, Ms 1102-B • San Diego, CA 92123
Tel (619) 492-5070 Fax (619) 492-5098

Attachment 5-2-2
Certificate of Compliance for Offsite Fabrication
(Erection of Components)

THE CITY OF SAN DIEGO

Certificate of Compliance for Off-Site Fabrication

(Must be filed with this office and approved prior to erection of fabricated components)

Fabrication Co. Name _____ Tel No. (____)_____

Fabrication Shop Address _____ Fax No. (____)_____

City _____ State _____ Zip Code _____

Building Permit No(s). _____ Plan File No. _____
(For projects with multiple permit numbes but with the same plan file number, you may list all permit numbers and addresses on a separate sheet)

Job Site Address _____

Description of components fabricated _____

_____

Fabricator is Certified by (refer to UNL 17-6): ❑ ICBO ❑ AISC ❑ City of Los Angeles
❑ ACI ❑ PCI ❑ PTI ❑ Other _____ Certificate No. _____ Exp. Date _____

Special Inspector Assigned (By Building Owner) _____ Certificate No. _____
(Not required for a fabricator registered and approved by the City of San Diego, unless otherwise noted on the approved permitted plans and specifications.)

Fabricator drawings reviewed and accepted by designer of record? ❑ Yes ❑ No

Structural framing plans, details and calculations reviewed and approved by
the City of San Diego Building Official? ❑ Yes ❑ No

Fabrication commencement date _____ Fabrication completion date _____

We hereby certify that the components described and listed herein comply with the approved permitted plans, specifications and workmanship provisions of the Uniform Building Code, San Diego, San Diego Building Code and other applicable regulations. We further certify that each fabricated member or component has been inspected and meets all the requirements of the Uniform Building Code, San Diego Building Code and other applicable regulations. We further certify that each fabricated member or component listed herein shipped to the project job site with an identifying mark or tag. We understand this certificate shall be submitted to the Inspection Services Division and the architect/engineer of record prior to erection of the fabricated members and components.

Note: This certificate is limited to fabrication of the components or members described above to be used in the structures identified by the permit numbers shown and is not transferrable to any other fabrication work or other construction sites.

Name (print) _____ Title _____

Any person signing this application as an agent of the fabrication company declares under penalty of perjury to be an authorized agent of record of the fabrication company having the authority to execute this document.

Executed on this _____ day of _____ / _____
Month Year

Signature: _____

Inspection Services
Development Services • 9601 Ridgehaven Court, Suite 220, Ms 1102-B • San Diego, CA 92123
Tel (619) 492-5070 Fax (619) 492-5098

Attachment 5-2-3
Final Report for Special Inspection

Property Owner's Final Report for Special Inspection, Structural Observation and Construction Materials Testing

Date: _____/_____/_____

To: Building Official
City of San Diego
Development Services Department
Inspection Services Division
9601 Ridgehaven Court, Suite 220
San Diego, CA 92123

Subject: Satisfactory Completion of Work Requiring Special Inspection, Structural Observation and Construction Materials Testing

Permit No. _____ Plan File No. _____
(For projects with multiple permit numbers but with the same plan file number, you may list all permit numbers on a separate sheet.)

Project Address: _____ San Diego, California

Name (print or type):
_____
(First) (M.I.) (Last)

I am the (please check one):

☐ Property Owner ☐ Property Owner's Agent of Record
☐ Architect of Record ☐ Engineer of Record

State of California Registration Number: _____ Expiration Date: _____

I declare under penalty of perjury that, to the best of my knowledge, all the work requiring special inspection, structural observation, material sampling and testing, or off-site fabrication of building components for the structure/s constructed under the subject permit is in conformance with the approved plans, the inspection and observation program and other construction documents, and the applicable workmanship provisions of the Uniform Building Code.

Executed on this _____ day of _____/_____
Month Year

Signature: _____

Project Specific Tasks/Construction Phase

Task 5-3 – E&CP Inspection in Public Right of Way

A. Objective

To establish the inspection services to be performed by the Field Engineering Division of the Engineering and Capital Projects Department of the City of San Diego.

B. Definition

The CIP Program Management Division and Field Engineering Division prepare a joint memorandum which defines the scope of inspection services to be provided by the Field Engineering Division and those to be provided by the CIP Program Management Division. This memorandum serves as a guideline for all CIP work done in the public right-of-way (ROW).

If the inspection services are provided by Field Engineering Division, the construction management will likely be performed by a Resident Engineer (RE).

C. Procedures

1. The CONSTRUCTION MANAGER/Resident Engineer performs inspections allocated to the CIP Program Management Division in the joint memorandum.

2. The CONSTRUCTION MANAGER/Resident Engineer provides timely notification to the Field Engineering Division to perform those inspections set forth in the joint memorandum.

3. The CONSTRUCTION MANAGER/Resident Engineer of each CIP project in the public ROW maintains files of Field Engineering Division Inspectors' inspection notes and reports.

4. The CONSTRUCTION MANAGER/Resident Engineer of each public ROW project enters these reports into the CIP's document control system as part of the permanent record of the job.

Construction Specific Tasks/Construction Operations

Task 5-4 – Contractor's Daily Report

A. Objective

To provide a written record of the activities and observations of the Contractor during construction.

B. Definition

In accordance with Section 01050 of Division 1 of the Contract Documents, the Contractor's Daily Report is the Contractor's written report of work activities, manpower, equipment utilization, schedule, submittals, and potential constraints or problems.

C. Procedures

1. Using a standard report form (Attachment 5-4-1) furnished by the CONSTRUCTION MANAGER, the Contractor records daily work activities, utilization of manpower and equipment, site visits, and current or potential problems. The report includes the status of activities planned to be worked in accordance with the Contractor's approved schedule. The Contractor transmits this report of the previous day's activities to the CONSTRUCTION MANAGER daily.

2. The CONSTRUCTION MANAGER reviews the Contractor's daily report for completeness and accuracy and indexes and stores it for future reference. The report is filed as an attachment to the Construction Manager's Daily Report.

Attachment 5-4-1
Contractor's Daily Construction Report

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Contractor's Daily Construction Report

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

Weather Condition: Temperature a.m.: _____ p.m. _____
Conditions a.m.: _____ p.m. _____
Precipitation a.m.: _____ p.m. _____

Lost Time This Report: _____

Progress on Construction Activities Scheduled This Date:
_____
_____
_____

Other Activities Occurring This Date:
_____
_____
_____

Contractor			**Subcontractor**		
Manpower (List Trades)	**No.**	**Work Hours**	**Firm/Discipline**	**No.**	**Work Hours**
TOTALS					

Attachment 5-4-1
Contractor's Daily Construction Report
continued

Contractor's Daily Construction Report
Page 2 of 2

Major Process Equipment/Materials Received On-Site This Date: _____
_____
_____

Construction Equipment Usage:

(List Each Equipment Item)	No.	Hours	Remarks

Special Problems Encountered and Solutions, If Resolved: _____
_____
_____
_____
_____

General Comments: _____
_____
_____

By: _____ Date: _____
Contractor's Signature

cc:

Contract Specific Tasks/Construction Operations

Task 5-5 – Construction Manager's Daily Construction Report and Statement of Working Days

A. Objective

To describe the requirements for the Daily Construction Report and the Statement of Working Days as prepared by the CONSTRUCTION MANAGER.

B. Definition

The CONSTRUCTION MANAGER prepares a daily construction report for each construction contract documenting activities and site conditions. The Construction Manager's Daily Construction Report is a form (Attachment 5-5-1) that describes all the construction activities taking place on the construction site during a specific day. The report will be used to document the equipment, materials and labor force on the site, location and type of work performed and claims investigation if necessary. It is prepared by each inspector responsible for a particular site. The CONSTRUCTION MANAGER also prepares a Daily Construction Report that includes any direction to or discussions with the Contractor. The CONSTRUCTION MANAGER is responsible for the completeness and proper documentation of each Construction Manager's Daily Construction Report including distribution and filing.

The City uses Form ED-117 to notify the Contractor of the status of contract days on a weekly basis. The CONSTRUCTION MANAGER completes the Form ED-117 shown in Attachment 5-5-2 and gives it to the Contractor.

C. Procedures

The CONSTRUCTION MANAGER collects these reports and supplements them with independent documentation of the daily status of the work, work performed that day and problems encountered. The CONSTRUCTION MANAGER's Daily Construction Report uses the format shown in Attachment 5-5-1.

1. The CONSTRUCTION MANAGER/Inspector will fill out all the appropriate information on the top section of the Construction Manager's Daily Construction Report. This information includes the project name, date, workday number, report number, CIP number and the work order number. The Construction Manager/Inspector's name shall be included as well as the location of the work being performed.

2. The report number is the number of contract days accumulated from the beginning of the Contract. This number is sequential from the first day of the Contract and is reflected in the Report Number on the weekly Statement of Working Days (Attachment 5-5-2).

3. The Weather section of the Construction Manager's Daily Construction Report form shall include a brief description of the conditions, temperature, wind and precipitation and any other relevant information plus describe any lost time due to weather conditions. A statement as to

whether a weather delay should be granted in accordance with Contract conditions may be appropriate.

4. Describe the work being preformed along with the work area where the Contractor's activities are focused. This should include actual work performed, quantities installed, utility work being performed, safety issues including any safety violations, manpower counts, equipment counts (as well as equipment that is either idle or broken), quality control tests that were taken, on site lab inspection, change order work, delay issues, and unsatisfactory (non-conforming) work.

5. A Schedule activity line item shall tie the work being performed in the field to the Contractor's Baseline Schedule, as required by Section 01310 of Division 1 of the Contract Documents. This will avoid confusion when trying to reconcile the item percent complete where work was performed and it will provide a means of tracking progress for Progress Payment Requests submitted by the Contractor.

6. The boxes on the right side of the Construction Manager's Daily Construction Report are used to keep track of equipment and labor on the job site each work day, including any subcontractor work. All available/pertinent information should be provided in the event that it is necessary to research the Construction Manager's Daily Construction Report at a later date for claims, adjustments, or disputes. Such information is critical to assessing the accuracy of Contractor claims and requests for change. Additional sheets can be added to adequately describe the work and activities on the site on any given work day.

7. The Inspector signs the Construction Manager's Daily Construction Report in the space provided at the bottom of the form and forwards it to the CONSTRUCTION MANAGER for review and concurrence. The CONSTRUCTION MANAGER's review is indicated granted by initialing the bottom of the Construction Manager's Daily Construction Report. A report written and signed by the CONSTRUCTION MANAGER should be reviewed for completeness and accuracy by an equal team member.

8. It should be noted that Section 01050 of Division 1 of the Contract Documents requires the Contractor to prepare and submit a Daily Construction Report.

9. Copies of the Construction Manager's Daily Construction Reports shall be forwarded to the CIP Project Manager on a weekly basis, attached to the Weekly Statement of Working Days. The Construction Manager's Daily Construction Reports will depict sufficient information for determination of Contract time and progress (work completed).

10. The CONSTRUCTION MANAGER should use the attached sample form ED 117 Statement of Working Days (Attachment 5-5-2). This form is to be completed on a weekly basis by the CONSTRUCTION MANAGER and furnished to the Contractor. A copy shall be forwarded with the Construction Manager's Daily Construction Reports for that weekly period to the CIP Project Manager.

Attachment 5-5-1
Construction Manager's Daily Construction Report

CITY OF SAN DIEGO
WATER DEPARTMENT
Capital Improvements Program

CONSTRUCTION MANAGER'S DAILY CONSTRUCTION REPORT

Project Name:_____ Contractor:_____ Weekly Report No.:_____

Date:_____ Day of Week: M T W Th F S S CIP No.:_____ W.O No.:_____
(circle one)

Sheet No.:_____ Work Hours: _____ Location / Drawing No. _____

Weather Condition:_____ Temperature:_____ Wind:_____
(sun, clear, overcast, rain) (a.m., p.m.) (still, moderate, high)

Lost Time Due to Weather This Report:_____

Note work performed this day: *Detail quantities, delays, changes, orders or instructions, unsatisfactory work, manpower and equipment, tests, safety problems, visitors, hours worked, material received, disputes or claims, utility coordination, and subcontractors working.*

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
Schedule Activities:
_____
_____

EQUIPMENT		
No.	Description	Hours

LABOR		
No.	Description	Hours

To the best of my knowledge the work is in conformance with the approved plans and specifications.

Prepared By: _____ Date: _____ Reviewed By:_____

Attachment 5-5-2
Statement of Working Days (Form ED-117)

The City of
San Diego
Downtown
630 B Street, Suite 700
San Diego, CA 92101
Telephone: (619) 533-4112 Fax: (619) 533-5278

Report No. _____

To:

WATER DEPARTMENT
Capital Improvement Program
W.O. # _____
CC: _____
CIP Project Manager M.S.

Project Title:

Gentlemen:

The following statement shows the number of working days charged to your contract for the week ending _____, 19____:

Date	Day	Working Day	Delay Days Other Than C.C.O.	Working Days No Work Done on Controlling Operation	Reason for Delay Day (Standard Spec Subsection 6-8.1)
	Mon.				
	Tues.				
	Wed.				
	Thurs.				
	Fri.				
Days this week					
Days previously reported					
Total days to date					

	Computation of Extended Date for Completion	Number of Days	Date
1.	Date contract Notice to Proceed		
2.	Working days specified in contract		
3.	Computed Date for Completion (if all working days specified are used)		
4.	Total time extension days approved to date by change order(s)		
5.	Total delay days other than C.C.O.		
6.	Subtotal (Line 4 plus 5)		
7.	Extended Date for Completion (Line 3 plus Line 6)		
8.	Revised working days for contract (Line 2 plus Line 4)		
9.	Total working days to date		
10.	Working Days Remaining (Line 8 minus Line 9)		

Controlling Operation(s) _____
Percent Project Completed: _____ %
The Contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise the statement shall be deemed to have been accepted by the Contractor as correct.

Contract Specific Tasks/Construction Operations

Task 5-6 – Contractor Progress Meetings

A. Objective

To regularly review and monitor the status of the project with the Contractor and the CIP Program Management Staff. This meeting will also give the Contractor the opportunity to discuss current concerns and issues with the CONSTRUCTION MANAGER.

B. Definition

In accordance with Section 01200 of Division 1 of the Contract Documents, Contractor progress meetings are held weekly, providing a forum for discussion between the CONSTRUCTION MANAGER, Owner and the Contractor to review the progress of the work and eliminate problems. In some projects, Section 01200 is written to require periodic Contractor Progress Meetings on a bi-weekly basis.

C. Procedures

1. The CONSTRUCTION MANAGER meets as mutually determined, weekly or biweekly, at the construction site with the Contractor to update the status of the work. The CIP Project Manager attends these meetings as necessary. The Design Consultant, if approved by the CIP Project Manager, attends at the request of the CONSTRUCTION MANAGER. The meetings are chaired by the CONSTRUCTION MANAGER, who prepares and distributes meeting minutes no later than 48 hours after the meeting. A sample outline of bi-weekly progress meeting minutes appears in Attachment 5-6-1.

2. Topics of discussion can include:

   - Review of previous meeting minutes
   - Work performed since the last meeting
   - Look ahead schedule showing work to be done in the next 30 to 60 days
   - Actual or potential problem areas
   - Safety issues
   - Construction discrepancy issues
   - Equipment/material deliver issues
   - Status of submittals, RFIs, RFCs and RFPs
   - Status of change orders
   - Unresolved and new issues
   - Any revision to the progress schedule logic
   - Action items, responsible parties and deadlines
   - Next meeting time and place

Attachment 5-6-1
Progress Meeting (Outline)

City of San Diego
Water Department
Capital Improvements Program

Distribution

Project Title:_____ Date:_____ Location:_____
CIP#_____WO #_____ Time Started:____ Time Ended:_____
Attendees:_____

A. Schedule of the Work

1- Start date (Notice to Proceed): _____
2- Original Contract Completion Date: _____
3- Contract Working days: _____
4- Elapsed Contract Time: _____
5- Contract Work Completed: _____

B. Work in Progress (Two-week period)

C. Old Business

D. New Business

E. RFIs
Attach Log

F. Requests for Proposals (RFPs) and Cost Proposals

G. Contract Change Orders

H. Submittals
Attach Log

I. Nonconformance Notices Issued

J. Safety Issues

K. Disputed Items

L. Next Progress Meeting

Please report any corrections within five days of receipt of these meeting minutes.

_____
Construction Manager

General Tasks/CM Operations

Task 5-7- Monthly Progress Report

A. Objective

To report the progress of construction on the CIP Project(s) assigned to the CONSTRUCTION MANAGER.

B. Definition

The monthly progress report includes a brief discussion of progress and management concerns, and includes a measurement of performance against goals, including cost, schedule, quality, DBE/DVBE participation, safety and all other objectives established by CIP Program Management.

C. Procedures

1. The CONSTRUCTION MANAGER summarizes the previous month's events and progress in an illustrative manner, supplemented by descriptive narrative as required for clarity. An outline of the monthly progress report appears in Attachment 5-7-1.

2. The monthly progress report for the previous month is prepared and distributed by the 10th day of the month to the CIP Project Manager.

3. The CIP Project Manager distributes the report to other CIP Division sections and other City departments as required.

Attachment 5-7-1
Monthly Progress Report (Outline)

Overall Project Status
- % complete
- Progress on various elements
- Starting of new elements

Schedule (Owner's)

Progress Summary of Major Elements of Construction

Contractor's Schedule

Upcoming Work

Contract Time

Impact of Weather

City Form: Contract Days Chargeable

Progress Payments

Labor Utilization

Cost Curves

Change Orders/ Claims
- Table of Change Orders

Submittals and RFIs

Safety

DBE/DVBE Status of Participation

Problem Areas

Status of Construction Management Services

Contract Specific Tasks/Construction Operations

Task 5-8 – Request for Information

A. Objective

To provide a standard procedure for Contractor use when seeking clarifications or interpretations of the Contract Documents from the CONSTRUCTION MANAGER.

B. Definition

The Request for Information (RFI) Procedure is a procedure that is used to clarify potentially ambiguous information found in the Contract documents that is identified and submitted by the Contractor, and the related subsequent response that is prepared by the Design Consultant, the Construction Manager or others.

The Request for Information (RFI) is a standard form furnished by the CONSTRUCTION MANAGER to the Contractor for use when making written requests for information to the CONSTRUCTION MANAGER.

C. Procedure

Administering the Request for Information (RFI) process is the responsibility of the CONSTRUCTION MANAGER assigned to the project. The Contractor is responsible for initially submitting an RFI upon discovery of a problem or question. However, the CONSTRUCTION MANAGER or CIP Project Manager may at times issue RFIs. These will be tracked as a CM-RFI separate log to avoid confusion and disruption of the document numbering system. Generally the responsibility for answering RFIs of a technical design nature lies with the Design Consultant. An RFI should not be used in lieu of a Substitution Request or a Cost Reduction Proposal.

1. The Contractor uses the RFI form (Attachment 5-8-1) to request information, directions, or clarifications resulting from situations like the following:

   - Conflicts, errors, ambiguities, or discrepancies within the Contract Documents.
   - Conflicts between the Contract Documents and any provision of law code or regulation applicable to the performance or work.
   - Conflicts between the Contract Documents and any standard specification or instruction or any supplier.

   Upon receipt of an RFI from the Contractor the CONSTRUCTION MANAGER assigns a sequence number to it.

2. The CONSTRUCTION MANAGER is the responsible party for coordinating the necessary response to the Contractor's RFI. Upon answering the RFI, the CONSTRUCTION MANAGER will forward a copy

of the RFI response to the CIP Project Manager and the Design Consultant so they will have a record of the response.

3. When clarification is required by the CIP Project Manager he/she will determine the responsible party for responding to the RFI, and the answered document will be forwarded the CONSTRUCTION MANAGER for distribution to the Contractor. As noted above a copy of the RFI response will be forwarded to the Design Consultant for its records.

4. When input for the RFI response is of a technical/engineering nature, the Design Consultant of record determines the responsible party for providing the input, and a draft response is forwarded to the CONSTRUCTION MANAGER by that party. If any discussions are necessary between the Design Consultant and the CIP Project Manager, these conversations may be held directly, not through the CONSTRUCTION MANAGER. Upon review and acceptance of the RFI response the CONSTRUCTION MANAGER finalizes the RFI response and sends it to the Contractor. Copy of the RFI response is forwarded to the CIP Project Manager for his/her records.

5 As stated above, the CONSTRUCTION MANAGER will review the RFI response prior to release of the document to the Contractor. This serves as a check to insure the clarification is answered completely, and its status is entered in the RFI log.

6. The CONSTRUCTION MANAGER forwards the RFI response to the Document Controller to log the document and distribute it.

7. The CONSTRUCTION MANAGER maintains a log for tracking the status of RFIs and ensures reasonably prompt responses to the Contractor. The goal is to respond to an RFI within 7 calendar days, however the turn-around time for an RFI will be specified in the Design Consultant's Service Agreement with the City. If the Contractor needs an answer in a shorter period of time the Contractor shall clearly identify the date and cost impact on the RFI. The RFI may be expedited in order to attempt to meet the requested response date.

8. The RFI Process is depicted on a flow chart in Attachment 5-8-2.

Attachment 5-8-1
Request for Information (Form)

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Request for Information (RFI)

Date: _____
To: _____
_____
Attn: _____
From: _____
_____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____
Drawing Ref: _____
Spec. Ref: _____
Needed Response By: _____

Question/Problem

By: _____ Date: _____
Originator's Signature

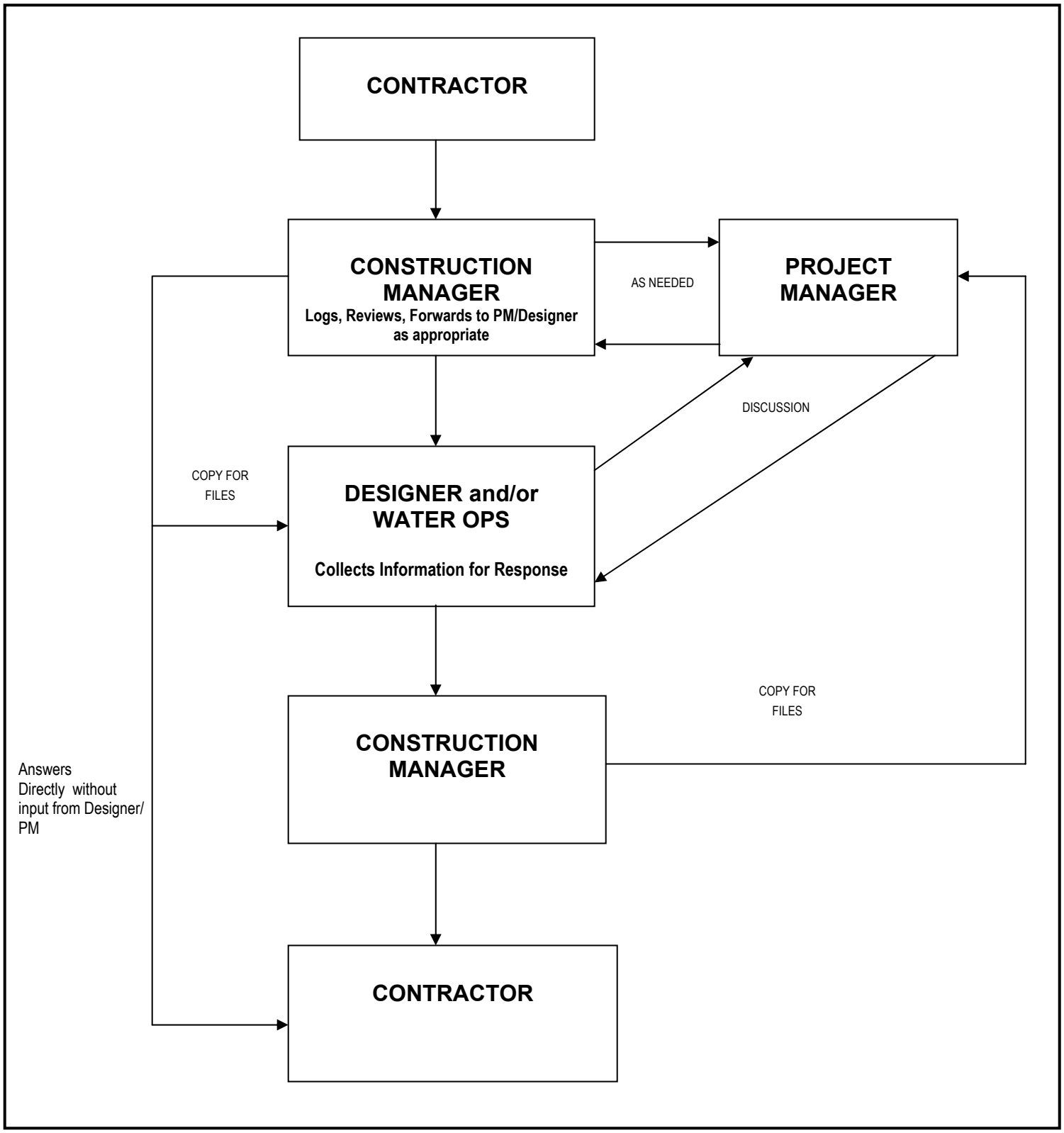
Reply/Solution

By: _____ Date: _____
Design Consultant's Signature

This document is informational only. The above reply is intended as a clarification only and does not constitute a basis for change in contract price or time. If you do not concur, do not proceed and notify the Construction Manager immediately.

Forwarded by: _____ Date: _____
Construction Manager's Signature

Attachment 5-8-2
RFI Process Flow Chart



Contract Specific Tasks/Construction Operations

Task 5-9 – Shop Drawing Submittals

A. Objective

To provide a standardized procedure for handling and processing Contractors' submittals of shop drawings.

B. Definition

Submittals under this task are shop drawings as identified in Section 01300 of Division 1 of the Contract Documents. See Task 4-6 in Chapter 4 for general responsibilities of the CONSTRUCTION MANAGER relating to submittals.

C. Procedures

1. The Contractor initiates the submittal process by transmitting the proper number of copies of each submittal, as specified in Section 01300, to the CONSTRUCTION MANAGER with a completed standard transmittal form (Attachment 5-9-1).

2. The CONSTRUCTION MANAGER checks the submittal to determine its completeness and compliance with the submittal procedures and, if proper, the submittal will be logged on the Contractor Submittal Log (Attachment 5-9-2) and forwarded to the Design Consultant for review.

3. The CIP Project Manager directs the CONSTRUCTION MANAGER as to the distribution of copies of the submittals to other Water CIP and Water Operations staff elements. The Water Operations Division Telemetry and Instrumentation is included in the distribution of Contractor submittals pertaining to controls. By prior agreement, Water Operations is given a limited number of days to respond. If it does not respond within the specified time, Water Operations is considered to have concurred in the Contractor submittal.

4. The Design Consultant reviews each technical submittal for compliance with the requirements of the Contract Documents and returns it to the CONSTRUCTION MANAGER noting whether the submittal is (a) no exceptions taken, (b) make corrections as noted, or (c) rejected requiring resubmittal.

5. It is recommended that for complex submittals, prior to rejecting an incomplete submittal, the Design Consultant issues a Submittal/Substitution Hold Notice which will alert the Contractor to supply the missing data within 7 days. (See Task 5-10 and Attachment 5-10-2)

6. Approved submittals are returned through the CONSTRUCTION MANAGER to the Contractor.

7. Rejected submittals are returned to the Contractor for correction and resubmitted to the CONSTRUCTION MANAGER for additional review. Resubmittals retain the original submittal number but are modified by the letter "a" for a first resubmittal,"b" for the second resubmittal, etc., and are processed in the same manner as original submittals.

8. The CONSTRUCTION MANAGER maintains a submittal log that is updated weekly and reviewed with the Contractor during on site progress meetings. The CONSTRUCTION MANAGER also keeps the CIP Project Manager and the Design Consultant informed of the status of outstanding submittals.

9. Under the terms of the contract, the Contractor may be charged for the cost of additional reviews beyond the original and one resubmittal.

10. The CONSTRUCTION MANAGER returns each submittal and/or resubmittal to the Contractor within 30 calendar days of receipt from the Contractor unless the Contractor is advised within 7 calendar days of the submittal date that additional time may be required for review.

Attachment 5-9-1
Contractor's Shop Drawing/Submittal Transmittal Form

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Contractor's Shop Drawing/Submittal Transmittal

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

Specification Section _____	THIS IS ☐ an original submittal ☐ resubmittal of submittal no. _____
Submittal Prepared By _____ Phone_____	

Drawing No.	Description	Date	No. of Copies	Type

We verify that the material or equipment contained in this submittal meets all the requirements specified or shown, except for the following deviation:

Remarks: _____
_____
_____

By: _____ Forwarded By: _____ Date: _____
Contractor's Signature: _____ Construction Manager's Signature _____

Date: _____ To: _____ From: _____

☐ **No Exceptions Taken** ☐ **Make Corrections as Noted** ☐ **Revise and Resubmit**

Remarks: _____
_____
_____
_____

By: _____ Forwarded By: _____ Date: _____
Design Consultant's Signature Construction Manager's Signature

Attachment 5-9-2
Contractor Submittal Log

Contractor Submittal Log Form
Project No. _____ **W.O. No. _____**

Ref Spec. Section	Submittal No.	Contractor/ Subcontractor	Description	Date Rec. From Contr.	Date Sent To Designer	Date Rec. From Designer	Action					
							No Except. Taken	Make Corr. As Noted	Revise & Resubmit	Rejected	Date Returned to Contrs.	Remarks

Construction Specific Tasks/Construction Operations

Task 5-10 – Substitution Requests

A. Objective

To provide a uniform procedure for the submittal and evaluation of substitutions proposed by the Contractor.

B. Definition

The Contractor makes a substitution request to the Owner for permission to furnish an equipment or material item other than that named in the Contract Documents that the Contractor believes meets or exceeds the contract requirements.

C. Procedures

1. The Contractor must submit requests for substitution of items named specifically in the Contract Documents within 35 days of contract award in accordance with Section 01630 of Division 1 of the Contract Documents if the request is to receive consideration.

2. The Contractor initiates the consideration of a substitution by completing the Substitution Request form (Attachment 5-10-1) and submitting it, along with all descriptive and technical information normally required for approval, to the CONSTRUCTION MANAGER following the standard submittal process. Attachment 5-10-2 provides for the situation where the substitution request is put on hold.

3. The CONSTRUCTION MANAGER reviews the substitution request for timeliness, compliance and completeness.

4. The CONSTRUCTION MANAGER transmits the substitution request to the Design Consultant for review and consideration in the same manner as a normal submittal.

5. Concurrently with the Design Consultant's review, the CONSTRUCTION MANAGER evaluates the substitution request for schedule, cost and other construction impacts.

6. If the Design Consultant approves the submittal, the CONSTRUCTION MANAGER completes the submittal process and initiates a change order to identify the substitution and incorporate any allowances for construction impacts.

7. The CONSTRUCTION MANAGER's and Design Consultant's evaluation of a requested substitution should be completed within 30 days of receipt of complete information for consideration.

Attachment 5-10-1
Substitution Request

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Substitution Request

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

Description:

By: _____
Originator's Signature

Forwarded to: _____
Date: _____

Resolution:

By: _____ Date: _____

Approved/Disapproved
Change Order Required Yes No

Attachment 5-10-2
Submittal Substitution Hold Notice

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Submittal/Substitution Hold Notice

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: ____
Contractor: _____
Contract No.:_____

This submittal has been placed on hold pending the submittal of the missing or incomplete information indicated below. Failure to provide the information within seven days will result in rejection of this submittal.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

By: _____ Date: _____
Design Consultant's Signature

The Contractor is requested to expedite the response to the Design Consultant's request to avoid a rejection of this submittal.

Forwarded by: _____ Date: _____
Construction Manager's Signature

Contract Specific Tasks/Construction Operations

Task 5-11 – Record Document Updates

A. Objective

To provide a procedure for the Contractor to maintain record documents or current information on as-built conditions.

B. Definition

Record documents, as described in Section 01720 of Division 1 of the Contract Documents, are contract drawings and contract specifications maintained by the Contractor to reflect changes or deviations from the original Contract Documents.

C. Procedures

1. The Contractor maintains an up-to-date set of record documents on site during the course of the Contract. The Contractor marks the contract drawings and specifications in red ink to reflect changes or deviations, concealed utilities, etc. Record Documents may be supplemented by detailed sketches, photographs, etc., as necessary to indicate fully the work as actually constructed.

2. Once each month, the CONSTRUCTION MANAGER verifies that the Contractor is maintaining an up-to-date set of record documents as a precondition to recommending progress payments.

Contract Specific Tasks/Construction Operations

Task 5-12 – Construction Deficiency Reports

A. Objective

To inform the Contractor of specific work, activity, equipment, material or practice that the CONSTRUCTION MANAGER determines does not conform to the Contract Documents.

B. Definition

The Construction Deficiency Report is a standard communication form from the CONSTRUCTION MANAGER, informing the Contractor of nonconforming work.

C. Procedures

1. If the CONSTRUCTION MANAGER's inspection of the Contractor's work reveals the Contractor's failure to conform to the Contract Documents or approved submittals, the CONSTRUCTION MANAGER prepares a Construction Deficiency Report (Attachment 5-12-1) to identify the nonconforming work. The CONSTRUCTION MANAGER sends the Construction Deficiency Report to the Contractor.

2. The Contractor signs and returns the Construction Deficiency Report, and undertakes corrective action. If the Contractor disagrees with the Construction Deficiency Report, the Contractor responds immediately to the CONSTRUCTION MANAGER with reasons for disagreement.

3. If the Contractor fails to correct a deficiency within a reasonable time, but no longer than 30 days, the CONSTRUCTION MANAGER, with the approval of the CIP Project Manager, arranges to have the deficiency corrected. The CONSTRUCTION MANAGER prepares a proposed change, in accordance with contract provisions, to recover the cost of the repair or correction.

4. Also see Task 5-14 Stop Work Order/Notice of Resumption of the Work if conditions of the deficiency merit stopping, suspending, or terminating the Contractor's work.

Attachment 5-12-1
Construction Deficiency Report

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Construction Deficiency Report /Contractor Acknowledgement

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

You are hereby notified that the following construction or work procedure does not conform to the contract requirements:

_____
_____
_____(Reference Spec Section)

Noncomplying work may be required to be removed and replaced at not cost to the Owner.

It is your responsibility to determine the corrective action necessary.

_____
Construction Manager's Signature

Contractor Acknowledgement

☐ Agree with finding We expect to take action by _____

Description of Resolution: _____
_____
_____

☐ Disagree with finding

Reason for Disagreement: _____
_____
_____

_____ _____
Contractor's Signature Date

Contract Specific Tasks/Construction Operations

Task 5-13 – Monthly Invoicing and Employment Reports (EOCP)

A. Objective

To ensure that the Contractor is proceeding and making payments with work in compliance, as required by the Public Contract Code, in a timely manner.

To ensure there are no illegal substitutions or additions of subcontracts.

B. Definition

The submission of information from the Contractor to the City which documents subcontractor participation compliance and prompt payment requirements.

C. Procedures

1. The Contractor prepares and submits to the CONSTRUCTION MANAGER an updated Monthly Invoicing Report and Monthly Employment Report which document ALL subcontractor and employee utilization in the format specified by the City Equal Opportunity Contracting Program. Attachments 5-13-1 and 5-13-2 are the forms to be used.

2. The CONSTRUCTION MANAGER reviews these compliance reports for completeness and conformance with specified content and format. If the utilization report is not complete, the CONSTRUCTION MANAGER requires the Contractor to resubmit it.

3. The CONSTRUCTION MANAGER forwards the reports to the City Equal Opportunity Contracting Program Coordinator, along with comments.

4. When reporting subcontracting activities, the Contractor must report all subcontractors, not just those named in the bid documents, and those approved by the City Equal Opportunity Contracting Program for substitution of firms named in the Bid Documents.

Attachment 5-13-1
Monthly Invoicing Report

MONTHLY INVOICING REPORT

Prime Contractor: _____

Submitted By: _____

Construction Project Title: _____

Contact Person and Phone Number: _____

Original Contract Amt:

Contract Value To-Date: _____

Current Reporting Month: _____ 200

Work Order No.:

Bid No.:

SUBCONTRACTORS/SUPPLIERS: List Names of all Subcontractors/ Supplier	*DBE OR DVBE	Anticipated Start Date	Date of Last Invoice	Dollar Amount Paid This Month	Total Dollar Amount Invoiced To-Date	CUMULATIVE AMOUNTS PAID TO DATE		ORIGINAL AMOUNTS LISTED IN BID		Change Order Paid this Month
						Dollar Amount	Percent	Dollar Amount	Percent	
SUBCONTRACTORS:										
SUPPLIERS:										

TOTAL DBE SUBCONTRACTORS/SUPPLIERS								
TOTAL DVBE SUBCONTRACTORS/SUPPLIERS								
TOTAL NON-DBE/DVBE Subcontractors/Suppliers								
TOTAL AMOUNT PAID TO PRIME								
TOTAL CHANGE ORDERS TO-DATE								

Use this table for federal or federally funded projects:

TOTAL MBE SUBCONTRACTORS/SUPPLIERS								
TOTAL WBE SUBCONTRACTORS/SUPPLIERS								

*On federal or federally funded projects indicate whether DBE is an MBE or WBE.

Revised 05/02 AUTHORIZED SIGNATURE RESPONSIBLE FOR ACCURACY OF ABOVE INFORMATION:

EOCP-CC

Attachment 5-13-2
Monthly Employment Report

Monthly Employment Report

Contractor: _____ Employer's ID #: _____

Project Title: _____ W.O. #: _____ Bid #: _____

Current Reporting Period From: _____ To: _____

Employee List	Last Name, First Name, Middle Initial	Social Security #	Male or Female	∈ Ethnic Symbol	Craft	∉ Employee Source	Number of Hours Worked
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Ethnic Symbol	
Black, African American	BL
Mexican American, Hispanic, Latino, Puerto Rican	MA
Native American, American Indian, Eskimo	NA
Asian, Pacific Islander	FI
Caucasian	CA
Other Ethnicity (not defined above)	OTH

Employee Source	
Apprenticeship Program	A
Employment Agency	E
Training Program	T
Union Hiring Hall	U
Other	O

Contract Specific Tasks/Construction Operations

Task 5-14 – Stop Work Order/Notice of Resumption of the Work

A. Objective

Provide a means for stopping the Contractor or suspending the Contractor from proceeding with an element of contract work scope and restarting the Contractor when necessary.

B. Definition

The General Conditions of the Contract Documents specify the City's right to stop, suspend or terminate work on specific activities for reasons such as defective or nonconforming work, safety deficiencies or interferences with other, more critical work activities on the construction site.

C. Procedures

1. On behalf of the City, the CONSTRUCTION MANAGER may at any time without cause suspend any portion of the work for a period of not more than 90 days by issuing a written Stop Work Order / Notice of Resumption of Work (Attachment 5-14-1) to the Contractor without terminating the contract. A Stop Work Order for cause has no time restriction.

2. Except in an emergency, the CONSTRUCTION MANAGER obtains authorization to issue a Stop Work Order from the CIP Project Manager.

3. An emergency occurs when the Contractor creates a situation which poses imminent danger to person(s) or property on site, as a result of the Contractor's failure to work safely to correct defective work or carry out work in accordance with the contract documents. If the CIP Project Manager is not available, the CIP Deputy Director is notified of this action within two hours of the Stop Work Order issuance.

4. The Contractor immediately stops work on the activities indicated in the written Stop Work Order from the CONSTRUCTION MANAGER.

5. When the factors causing the issuance of the Stop Work Notice are resolved, the CONSTRUCTION MANAGER restarts work by issuing a Notice of Resumption of Work.

6. The Contractor resumes work on receipt of a Notice of Resumption of Work from the CONSTRUCTION MANAGER.

7. The Contractor may or may not be able to request a change due to Stop Work Order.

8. Should the City wish to terminate the contract, the CONSTRUCTION MANAGER prepares and issues a Stop Work Order to be followed by other necessary documentation.

Attachment 5-14-1
Stop Work Order/Notice of Resumption of Work

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Stop Work Order/Notice of Resumption of Work

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

STOP WORK ORDER

☐ You are hereby notified to suspend operation on the following project tasks or activities:
_____
_____
because of _____
_____
effective on _____ 20_____ until further notice.

By: _____
Construction Manager's Signature

Acknowledged By: _____
Contractor's Signature

Date: _____

NOTICE OF RESUMPTION OF WORK

Date: _____

☐ You are hereby notified that since the conditions causing suspension of work on the above project tasks or activities no longer exist. You are authorized to resume operations at
_____ on _____ 20_____.

By: _____
Construction Manager's Signature

Acknowledged By: _____
Contractor's Signature

Date: _____

Contract Specific Tasks/Early Requirements and Approvals

Task 5-15 – Traffic Control

A. Objective

To provide a standard approach for the Contractor to implement temporary traffic control procedures during each phase of construction, and to construct traffic control improvements that are specified in the contract documents.

B. Definition

The Contract Documents require plans and advance notice from the Contractor regarding temporary traffic changes due to construction in City streets in order to preserve public safety and minimize the impact of the interruptive activity. Contractor requirements are found in Part 1 Special Provisions - General, Subsection 7-10.1 or in Division 1 Section 01570 of the Contract Documents.

C. Procedures

1. The Design Consultant prepares traffic control plans as part of the construction drawings for all work on or adjacent to streets carrying average daily traffic volumes of 10,000 or more vehicles. Where incursions into those high volume streets are minor, the Transportation and Drainage Design Division may waive the requirement for the Design Consultant to prepare traffic control plans and allow them to be prepared by the Contractor. For traffic volumes lower than 10,000 VPD, the Contractor submits a traffic control plan to the CONSTRUCTION MANAGER as a shop drawing. In some cases the Contract Documents require the Contractor to provide all services necessary to obtain an approved Traffic Control Plan.

2. The CONSTRUCTION MANAGER verifies that the Contractor has or will have all necessary materials, devices and equipment at hand to implement temporary traffic control procedures expeditiously.

3. The Contractor notifies all affected agencies at least 5 working days in advance of any street or alley closure or before implementing any construction detour. The agencies to be notified are listed in Chapter 15 of Book 1, General Design Guidelines.

4. For traffic striping and pavement markings the Contractor informs all affected residents and businesses of the work by distributing printed notices. The Contractor submits the notices to the CONSTRUCTION MANAGER for review and approval at least two working days prior to distribution.

5. For signalized intersections, the Contractor contacts the CONSTRUCTION MANAGER at least 5 work days prior to any disruption of normal traffic signal operations.

6. The Contractor obtains approval of detector loop locations from the CONSTRUCTION MANAGER prior to installation.

7. Section 7-10.1 of Part 1 Special Provisions - General and Section 01570 of Division 1 are being revised by the Traffic Control Branch. The Design Consultant should check to see when the new versions will be approved for use.

Contract Specific Tasks/Construction Operations

Task 5-16 – Environmental Inspections

A. Objective

To provide a mechanism for the City of San Diego Environmental Services Department to inspect sites and ensure that workers have an environmentally safe workplace.

B. Definition

An environmental inspection is an inspection of a site for compliance with environmental regulations.

C. Procedure

1. The CIP Program Management Division notifies the CONSTRUCTION MANAGER to arrange a date and time to conduct a project inspection.

2. The CONSTRUCTION MANAGER notifies the Contractor of the pending project inspection to ensure team-wide participation.

3. The City of San Diego Environmental Services Department, the CONSTRUCTION MANAGER, and the Contractor jointly conduct the inspection. All violations observed are listed on a Hazardous Waste Handling Violation form (Attachment 5-16-1) with a violation description, the responsible Contractor or subcontractor, and the date by which corrective action should be completed. The Hazardous Waste Handling form is signed and dated by all parties conducting the inspection.

4. Before leaving the project site, the City of San Diego Environmental Services Representative prepares a handwritten report which indicates the date for all corrective action to be completed.

5. A copy of the Hazardous Waste Handling Violation form and a copy of the handwritten report provide official documentation of the environmental inspection. A copy of the official documentation is routed to all the environmental inspection participants.

6. The CIP Program Management Division and the CONSTRUCTION MANAGER conduct a follow-up inspection to ensure that corrective actions are completed.

7. If the responsible Contractor or subcontractor fails to complete or take appropriate actions, the CONSTRUCTION MANAGER prepares a Notice of Contractor Violation of Safety Requirements (Attachment 4-12-5) which includes a deadline for completing the corrective action. If the responsible contractor or subcontractor fails to complete the corrective actions as identified on the Hazardous Waste Handling Violation form within the allocated time as stipulated on the Safety Notice of Noncompliance, the corrective action will be completed by others and

the associated costs for completion backcharged to the responsible Contractor or subcontractor via a change order.

8. Environmental inspections of the project construction site are conducted as frequently as deemed necessary by the City of San Diego Environmental Services Department.

9. Contractor requirements are found in Section 7-8 Part 1 Special Provisions - General, and in Division 1 Sections 01120 and 01560 of the Contract Documents.

Attachment 5-16-1
Hazardous Waste Handling Violation

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Hazardous Waste Handling Violation

Date: _____ Time: _____

Environmental Services Division

Representative: _____ Title: _____

Violation description:

1. _____
2. _____
3. _____
4. _____
5. _____

Contractor/Subcontractor:

Representative: _____ Title: _____

Corrective Action:

You have _____ working days to complete the necessary corrective actions of the above referenced violation. If not complete after _____ working days, the corrective actions will be completed by others and you will be backcharged for all costs.

Additional Time Needed:

We _____ request _____ working days to perform the necessary corrective actions of the above referenced violations. Reason:

_____
_____
_____
_____

_____ Construction Manager

_____ Safety Manager

_____ Environmental Services Representative

_____ Contractor/Subcontractor

Contract Specific Tasks/Construction Operations

Task 5-17 – Construction Photographs

A. Objective

To provide a visual record of the progress on each construction contract.

B. Definition

Photographs taken by the CONSTRUCTION MANAGER to document construction activity.

C. Procedures

1. The CONSTRUCTION MANAGER takes photographs of existing conditions prior to the start of construction. These photos will serve as proof of conditions existing prior to removal, damage or destruction of construction elements of the Work.

2. The CONSTRUCTION MANAGER regularly takes videos and photographs of the work on each construction contract to document progress of the work. Digital photos are labeled as to date, location and activity. Videos are annotated with date/time and informally narrated with location and activity information.

3. The CONSTRUCTION MANAGER takes additional videos and photographs to document special installations, critical construction areas, accidents, etc., and to establish progress on contract milestone dates.

4. The CONSTRUCTION MANAGER takes representative photos of the month to be included with the CONSTRUCTION MANAGER's Monthly Status Report. See Appendix A, Part 1b, Paragraph C, subparagraph 9 for photographic requirements to validate Contractor progress payment estimates.

5. The CONSTRUCTION MANAGER keeps all videos and photographs and negatives on site during the work, then turns them over to the CIP Project Manager at the completion of the work.

6. Section 01380 of Division 1 of the Contract Documents, if used, contains the Contractor's requirement to provide photographic documentation of the progress of the work.

Contract Specific Tasks/Construction Operations

Task 5-18 – Progress and Final Payment/ Release of Claims/ Affidavit of Disposal

A. Objective

To provide a standard procedure for submittal, review and approval of the Contractor's monthly requests for partial payment and request for final payment.

B. Definitions

Applications for payment are the vehicle through which monies are paid to the Contractor during construction to compensate the Contractor for acceptable work performed.

C. Procedures

1. Section 9 of Part 1 Special Provisions - General of the Contract documents outlines the process by which the Contractor submits his Progress (and Final) Payment Request. See Attachments 5-18-6 Application for Payment and 5-18-7 Application for Unit Priced Payment for a suggested format for progress payment requests.

2. The Contractor submits its draft request for payment before the billing date for each billing cycle to the CONSTRUCTION MANAGER. The CONSTRUCTION MANAGER will review the initial draft and discuss it with the Contractor in order to reach agreement with the quantities requested.

3. The CONSTRUCTION MANAGER will contact the CIP Project Manager to discuss the particulars of the billing as agreed with the Contractor. Any comments from the CIP Project Manager may be discussed with the Contractor prior to receiving the formal pay request.

4. Following agreement on the quantities between the CONSTRUCTION MANAGER and the Contractor, the Contractor will formalize the Pay Request and forward the necessary documents as described below with the billing.

5. The Request for Payment shall be supported by the following information:

    a. Pay Quantity verification supported by the cost loaded schedule.

    b. Current EOCP Monthly Invoicing Reports from the Contractor.

    c. Certified Payrolls up to date, if required.

    d. As-Built Drawings including review by the CONSTRUCTION MANAGER and Design Consultant.

e. The CPM Schedule updated to show actual progress per Division 1 Section 01310 of the Contract documents.

6. The CONSTRUCTION MANAGER will attach the Progress Payment Checklist (Attachment 5-18-1) and verify the applicable items on the checklist prior to further processing.

7. The CONSTRUCTION MANAGER has three (3) working days after receipt of the formal Progress Payment Request from the Contractor to verify its accuracy, and the completeness of the attached documents. The CONSTRUCTION MANAGER will forward to the CIP Project Manager his/her payment recommendation with the Contractor's Progress Payment Request.

8. The CONSTRUCTION MANAGER can withhold payment due in the event of damaged or defective Work, failure of the Contractor to perform Work in accordance with the Contract Documents (non-conforming work), failure to maintain and follow the Progress Schedule, disregard for authority or safety infraction. Payment can also be withheld for Liquidated Damages or stop notices in connection with the Work, as specified in the Contract Documents.

9. Final Payment:

a. Prior to processing the final invoice for the Contract, the CONSTRUCTION MANAGER shall review, sign and date the Contractor's As-Built documents and forward them to the CIP Project Manager. The CIP Project Manager will perform a final review before forwarding the As- Built documents to the Design Consultant to incorporate the changes in electronic format. In addition, a closing Contract Change Order must be processed and approved prior to final payment. A closing contract Change Order adjusts all the Contract quantities by reducing, increasing or deleting Contract bid items quantities. Note that additional extra work days or credits may be included in the closing Change Order. The CONSTRUCTION MANAGER will complete the Final Payment Checklist (Attachment 5-18-2) and prepare a Statement of Working Days (Attachment 5-18-5).

b. To be included in the closing Change Order are claim deductibles owed by the Contractor, if any. This will be stated in the Final Contract Close-Out Notice (Attachment 8-4-2). The OCIP Risk Management documentation must be completed and returned to the CIP Project Manager.

c. In addition, the CONSTRUCTION MANAGER must verify that all Stop Notices are cleared and any outstanding permit requirements are satisfied and closed prior to processing the Final Application for Payment Requests (Attachment 5-18-6 and 5-18-7).

d. Release of Retention: At the expiration of 35 calendar days after the recorded date of Notice of Completion and Acceptance, the City shall pay any remaining retention, except for amounts as are required by law to be withheld by properly executed and filed notices to stop payment. In the event of a dispute between the City and the Contractor, the City may withhold from the final payment an amount not exceed to 150 percent of the disputed amount. The Contractor must include a Release of Claim form (Attachment 5-18-4) with the application for final payment plus the Affidavit of Disposal (Attachment 5-18-3).

e. Release of Claims Form: The CONSTRUCTION MANAGER will check the Contractor's submittal of the Release of Claims form (Attachment 5-18-4) to assure that the Date of Acceptance entry is the same as the date shown in Block 12 of the Notice of Completion and Acceptance (Attachment 8-7-2).

Attachment 5-18-1
Progress Payment Review Checklist

CITY OF SAN DIEGO WATER DEPARTMENT
Capital Improvements Program

Progress Payment Checklist

PROJECT: _____

STARTING DATE: _____

CIP #:_____ PAYMENT REQUEST NO. _____

Work Order #:_____ DATE OF PAY REQUEST: _____

==========

Check each of the following with "YES" or "NA" (Not Applicable)

Quantities Checked _____

Amount of Retention Checked _____

EOCP FORMS REVIEWED (Prime) _____

EOCP FORMS RECEIVED (Subcontractor) _____

Update As-Built Drawings _____

Construction Schedule Update Submitted_____

% Time Elapsed _____

% Work Completed _____

PREPARED BY: _____ DATE: _____
Construction Manager

REVIEWED BY: _____ DATE:_____
CIP Project Manager

Attachment 5-18-2
Final Payment Review Checklist

CITY OF SAN DIEGO WATER DEPARTMENT
Capital Improvements Program

Final Payment Checklist

PROJECT: _____

STARTING DATE: _____

CIP #: _____ PAYMENT REQUEST NO.: _____

Work Order #:_____ DATE OF PAY REQUEST: _____

==========

Check each of the following with "YES" or "NA" (Not Applicable)

Quantities Checked _____

Amount of Retention Checked _____

Deductibles (OCIP) from Claims Paid _____

EOCP FORMS REVIEWED (Prime) _____

EOCP FORMS RECEIVED (Subcontractor) _____

Date As-Built Drawings Received _____

Date As-Built Schedule Received _____

Date Contractor's Evaluation Completed _____

Permits and Final Reports _____

Release of Claims Against the City _____

Liens/Stop Notices Cleared _____

Outstanding Permits _____

Closing Contract Change Order _____

Affidavit of Legal Disposal _____

==========

PREPARED BY: _____ DATE: _____
Construction Manager

REVIEWED BY: _____ DATE: _____
CIP Project Manager

Attachment 5-18-3
Affidavit of Disposal
(to accompany Final Payment Application)

Affidavit of Disposal

WHEREAS, on the _____ day of _____,20____, the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for _____
_____
Name of Project

as particularly described in said contract and identified as Bid No. _____ and Work Order No. ____ _____; and

WHEREAS, the specifications of said contract requires the contractor to affirm that "all brush, trash, debris, and surplus materials" resulting from this project have been disposed of in a legal manner; and

WHEREAS, said contract has been completed and all surplus materials disposed.

Now, therefore, in consideration of the final payment by the City of San Diego to said contractor under the terms of said contract, the undersigned contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s) _____ _____ and that they have been disposed of according to all applicable laws and regulations.

Dated this _____ day of _____, 20____.

By: _____
Contractor's Signature

ATTEST:

State of _____
County of _____

On this _____ day of _____, 20_____, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared _____ known to me to be the _____ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

_____
Notary Public in and for said County and State

Attachment 5-18-4
Release of Claims

ORION

CONSTRUCTION CORPORATION
1621 S. RANCHO SANTA FE RD. SUITE A
SAN MARCOS, CA 92069
LICENSE#549309

WHEREAS, heretofore on the 13th day of December, 2000 the undersigned entered into and executed a certain Contract with the City of San Diego, a municipal corporation, whereby the undersigned as Contractor agreed to furnish and deliver to said City the San Carlos Reservoir Rehabilitation-Work Order # 182991 as particularly described in said Contract which said Contract is on file in the office of the City Clerk of said City, bearing official Document No_K01024; and

WHEREAS, said Contract has been completed to the satisfaction of the City Manager of said City, and said the San Carlos Reservoir-Work Order # 182991 has been accepted on behalf of said City, such acceptance being dated June 11th, 2002; and

WHEREAS, under the terms of said Contract it is provided, among other things, that 100 percent of the total price to be paid shall not become due and payable until five days shall have elapsed after the expiration of the period within which any lien may be filed under the provisions of Section 3082 et seq. of the California Civil Code; and thereafter, final payment shall be made, at such time and in such manner as may be provided by law, of any balance due, including the percentage withheld, as above stated, or such portion thereof as may be due the Contractor.

NOW, THEREFORE, in consideration of the payment by the city of San Diego to said Contractor of the sum of Forty Seven Thousand Eight Hundred Twenty Two Dollars and forty six cents ($47,822.46), which is paid to and accepted by said Contractor as payment in full of all sums which may be due 35 days under the terms of said Contract, and further consideration of the sums previously paid to Orion Construction Corporation under the terms of said Contract, the undersigned, Contractor under said Contract, does hereby release and forever discharge the City of San Diego, a municipal corporation, and all officers, employees and agents of said City, from all Claims and demands now existing or hereafter arising under or by virtue of said Contract or any part thereof.

Dated this 11th day of September 2002.

By Fia Dowsing

ATTEST

STATE OF CALIFORNIA
COUNTY OF SAN DIEGO

On this 11th day of SEPT. 2002, before the undersigned, a Notary Public FIA DOWSING known to me to be the PRESIDENT OF Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

ROBERT B. WILSON
Commission # 1308651
Notary Public - California
San Diego County
My Comm. Expires Jun 10, 2005

Robert B. Wilson
Notary Public in and for said County and State

I HEREBY APPROVE the form of the foregoing Release of Claims, this _____ day of _____, 20_____.

_____
City Attorney

By _____
Assistant Deputy City Attorney

PHONE: 760-591-9181
FAX: 760-591-9207

Attachment 5-18-5
Statement of Working Days

The City of
San Diego
Downtown
630 B Street, Suite 700
San Diego, CA 92101
Telephone: (619) 533-4112 Fax: (619) 533-5278

Report No. _____

To:

WATER DEPARTMENT
Capital Improvement Program
W.O. # _____
CC: _____
CIP Project Manager M.S.

Project Title:

Gentlemen:

The following statement shows the number of working days charged to your contract for the week ending _____, 19____:

Date	Day	Working Day	Delay Days Other Than C.C.O.	Working Days No Work Done on Controlling Operation	Reason for Delay Day (Standard Spec Subsection 6-8.1)
	Mon.				
	Tues.				
	Wed.				
	Thurs.				
	Fri.				
Days this week					
Days previously reported					
Total days to date					

	Computation of Extended Date for Completion	Number of Days	Date
1.	Date contract Notice to Proceed		
2.	Working days specified in contract		
3.	Computed Date for Completion (if all working days specified are used)		
4.	Total time extension days approved to date by change order(s)		
5.	Total delay days other than C.C.O.		
6.	Subtotal (Line 4 plus 5)		
7.	Extended Date for Completion (Line 3 plus Line 6)		
8.	Revised working days for contract (Line 2 plus Line 4)		
9.	Total working days to date		
10.	Working Days Remaining (Line 8 minus Line 9)		

Controlling Operation(s) _____
Percent Project Completed: _____ %
The Contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise the statement shall be deemed to have been accepted by the Contractor as correct.

Attachment 5-18-6
Application for Payment

City of San Diego – **Water Department**
Application for Payment

Project Title:		CIP No.:
Contractor:	Address:	
Estimate No.: Period: To:	Job Order No.: Purchase Order No:	Date:

Description	Amounts		
Total Savings for Work and Materials Installed	$	$	$
Plus _____%of Invoice Amount for Materials Stored on Site	$	$	$
Less Adjustment for Previous Materials Invoice	$	$	$
SUBTOTAL	$	$	$
Less Retention	$	$	$
Percent of Retention	$	$	$
Net Earning	$	$	$
Less Previous Payments			$
Plus Reduction in Retainage			$
NET PAYMENT THIS ESTIMATE			$

Percent Time Estimated _____%	% Work Completed _____% (based upon cost)
Contract Completion Date: _____ Notice to Proceed Date: _____ Orig. Contract Completion (Days): _____ Approved Time Extensions (Days): _____ Contract Completion Date: _____	Contract Cost Data _____ Amount of Original Contract: _____ Amount of Funds Authorized: _____(Thru Funding Phase ___) Approved Change Orders: _____(Thru Funding Phase ___) Total Contract Amount _____

I warrant that upon submittal of this Application for Payment all work for which payment has been made and payments received from the City of San Diego, to the best of my knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the contractor, subcontractor, material suppliers, or other persons or entities making claim by reason of having provided labor, materials, and equipment relating to the work.

_____ _____
Contractor's Representative Date

Approved for Payment: _____ Date: _____
Construction Manager

_____ Date: _____
CIP Project Manager

_____ Date: _____
CIP Administration Section (Contracts)

Attachment 5-18-7
Application for Unit Priced Payments

(Company Name)
(Address and Phone Number)
(Project Name)

City of San Diego
Work Order No. ( )
Bid No. ( )
P.O. No. ( )
CIP No. ( )

Billing No. ( )
Date ( )
Billing Period (To)

Item No.	Description	Contract Qty	CCO Adjustment	Qty to Date	Unit Price	Extension

1
2
3
4
5
6
7
8
etc.

Change orders (Only new items of work or bid items with a new unit price. List item numbers.)

1
2
etc.

Total Earned to Date ..... $

Less Retention ..... $_____

Subtotal $

Less Previous Payments..... $

AMOUNT DUE ..... $

Contract Specific Tasks/Construction Operations

Task 5-19 – Shutdown Requests

A. Objective

To provide a standard procedure for the Contractor to make a request for the City of San Diego and its representatives to coordinate shutdown time for connections to or relocation of permanent utilities or treatment processes.

B. Definition

The Contractor uses the shutdown request form to advise the City of San Diego and its representatives of a need to temporarily disrupt or shut down a particular part of a treatment process or a utility so that a connection can be made or relocations completed as a part of the work. Such requests are to be in accordance with Section 01040 of Division 1 of the Contract Documents. There is a modified shutdown procedure for water mains sixteen inches in diameter or larger.

C. Procedure

1. The Contractor anticipates the need to connect to or relocate existing utilities or treatment processes and notifies the CONSTRUCTION MANAGER at least 30 days in advance of the scheduled event using the Shutdown Request Form (Attachment 5-19-1). Complicated shutdowns will require up to 60 days advance notice.

2. The CONSTRUCTION MANAGER verifies that the request is valid, timely and complete and requests the CIP Project Manager to effect coordination with Water Operations Division and other Owner's Divisions and Consultants.

3. Water Operations Division makes necessary arrangements to accommodate the shutdown and indicates approval by signing the form and returning it to the CONSTRUCTION MANAGER. The CONSTRUCTION MANAGER and the Contractor may be required to attend a Water Operations Shutdown Committee meeting.

4. The CONSTRUCTION MANAGER returns the executed form to the Contractor and coordinates the necessary actions between the Contractor, the Water Operations Division and/or the affected utility companies.

5. The modified shutdown procedure for water mains which are sixteen inches in diameter or larger is found at Attachment 5-19-2.

Attachment 5-19-1
Shutdown Request Form

Water Department
Shutdown Request

Project Name:	
Project Manager: Initials:	Telephone #:
Project W.O. #:	Drawing #:
Type of Request: ☐ Planning ☐ Operational ☐ Construction **Type of Shutdown:** ☐ Trial ☐ Actual	
Shutdown Requested by: Signature:	Company Name: Date:
General Contractor:	Telephone #:
Construction Manager: Initials:	Telephone #:
Shutdown Date:	Duration of Shutdown:
Project Description: *(briefly describe work to be accomplished during shutdown)*	
FOR WATER OPERATIONS USE ONLY Operations Division	
Modeling Required:	Trial Shutdown:
Lead Notification Time:	Conservation Required:
Council Notification:	Public Notification:
Service Area Affected:	Pressure Zone Affected:
☐ CIP Presentation Requested	
Operational Changes:	
OPS Contact:	Telephone #:
Shutdown Plan Attached: ☐ Yes ☐ No	
Approved: _____ Water Operations Committee Chairperson	**Date:** _____

Attachment 5-19-2
Procedures for Temporary Shutdown of Water Facilities

THE CITY OF
SAN DIEGO
2797 CAMINITO CHOLLAS • SAN DIEGO, CALIFORNIA 92105-5097
Phone: (619) 668-2726

WATER
DEPARTMENT

Procedures for the Temporary Shutdown of Water Facilities

---

1. All requests for shutdowns are approved and processed by the Shutdown Committee.
2. Turn in the shut down request form **with attached Exhibits "A and "B",** (attached) to the chairperson, or the coordinator, dkeller@sandiego.gov.

Chair: Michael White, Distribution Operations Supervisor, 619-668-2726 mwhite@sandiego.gov.

Meetings: Tuesdays at 1330 hours(1:30p) : Meet only as needed. Contact the Chair, or the coordinator, Don Keller, 619- 527-7490, dkeller@sandiego.gov. to schedule items for the agenda.

Place: Chollas Water Operations Center, Conference Room B; 2797 Caminito Chollas, San Diego, CA 92105-5097

The Shutdown Committee, consisting of water distribution system operators and system engineers was established to review, coordinate, and approve all planned shutdowns of major (sixteen inch and larger) water facilities, to determine potential impacts, and to notify customers prior to the shutdown. The committee's goal is to limit temporary water outages and to prevent prolonged or extensive loss of water service and fire protection. Every shutdown is different. Carefully consider the check list. Be prepared for a successful shutdown, within budget, and on schedule.

Checklist for Shutdown request

1. Submit three approved sets of plans to the committee chairperson. Include the cost estimates of the City Force's work, if possible.
2. Verify the shutdown fee payments for the City Force work prior to scheduling a shutdown date. Please contact Armando Cruz (acruz@sandiego.gov) at (619)527-7423 to verify shutdown fee payment.
3. Date and duration of proposed shutdown will be discussed and determined during the shutdown meeting.
4. Provide accurate maps to each individual committee member, showing the location of

Attachment 5-19-2
Continued

shutdown, proposed system changes, and the hydraulic control facilities (sources of supply, pump stations, reservoirs, PRV's and closed valves) involved.

5. Provide accurate tables, charts, or summary information on historical and shutdown events including water demand, flow and/or pressure conditions, hydraulic control settings of pump and regulating stations, and water storage and supply conditions.
6. Provide accurate assessment of possible impacts on other shutdowns planned for the same time period.
7. Provide accurate assessment of the number of customers and areas affected by the shutdown. A modeling study may be required to assess the impact.
8. Provide a public notification plan for areas affected by the shutdown.
9. Preferred Shutdown Window is between November 1 and April 1 of the following year, when water demand is lowest.
10. **Provide completed attached forms (Exhibit "A" and Exhibit "B"of SDRWQCB Potable Water Discharge Order/Permit).**

What you need to consider: Connections to the existing water distribution mains are done by City Forces. Connections to transmission mains are performed by the private contractor, or by City forces, as determined by the project manager on a case by case basis.

San Diego's water distribution system is very complex. It consists of over three thousand miles of pipelines, more than thirty treated water reservoirs, forty pump stations, and six hundred pressure regulating stations. This constitutes almost 100 pressure zones. Water is supplied by three water treatment plants and eight County Water Authority aqueduct connections. It is not possible to memorize the location of all the facilities, their hydraulic control settings, their daily water level, flow, and pressure readings. Planning the shutdown relies heavily on research and information. Please be as prepared as possible when attending the planning meeting.

Two meetings: It will generally take two committee meetings to get a shutdown approved and scheduled. Major and complex shutdowns may take longer. The first meeting is for presenting the proposed shutdown to the table, discussing the risk management plan, and identifying any critical items and missing sources of information. The second meeting is usually held on a Tuesday just before the date of the actual shutdown and that is used for finalizing the shutdown plan and time, and also to see if all outstanding items were addressed adequately.

Attachment 5-19-2
Continued

Exhibit "A"

- Decision Tree for SDRWQCB Hydrostatic / Potable Discharge Order September 16,2002

1) Does the discharge meet the terms of the permit

   a) Discharge is 500,000 GPD or more per day per project

   Yes _____ or No_____

If Yes move to Step 2, if No then move to step 1 b)

   b) If discharge is less than 500,000 GPD per day per project and

The discharge does not meet one or more of the following conditions:

- The discharge is directly into a MS4 storm drain OR is directly into a blue-line stream, creek, river, etc, but will percolate and/or evaporate prior to reaching any receiving water.
- The discharge does not contain pollutant in excess of the levels specified in the Hydrostatic/Potable Discharge Order
- The discharger is implementing a Best Management Practices Plan before, during and after the discharge.

Yes_____ or No_____

If Yes move to Step 2, if No your discharge doesn't need to be reported for the Hydrostatic / Potable Water Discharge Permit but should be reported to Water Operations FIMS section.

2) If discharge is applicable then, provide information about discharge for the Annual NOI form so the Water Department can provide information to the SDRWQCB.

   Note: Should your discharge not be included in the Annual NOI, then provide information on the discharge two (2) weeks prior to the discharge event on Form shown on Exhibit "B" (Questions 1 through 12) to the SDRWQCB with a copy to the FIMS/ GIS Section of Water Operations.

3) Review the SDRWQCB Enrollment Letter (Parameters to be observed during the discharge event) for the discharge and observe the conditions of the discharge.

   Note: Should the discharge occur outside the City of San Diego, notice to the applicable MS4 (County of San Diego or other Cities in the County) is required.

4) Prior to the Discharge Event address the items outlined in the SDRWQCB Enrollment Form.

Attachment 5-19-2
Continued

Exhibit "A"

Pg. 2

Decision Tree for SDRWQCB Hydrostatic / Potable Water Discharge Order
September 16,2002

5) Contact FIMS/ GIS Section in Water Operations to determine the path of the discharge.

6) Set up monitoring (includes effluent / turbity /sedimentation) for the discharge , contact the Water Dept. Water Quality Lab or have contractor perform monitoring..

Note: Monitoring must be done One (1) Hour before the discharge 100 feet up stream of discharge , during the discharge, at the point of the discharge and One (1) Hour after the discharge 100 feet downstream of the discharge

7) Install Best Management Practices (BMP's) before, and monitor BMP's during and after the discharge for effectiveness.

8) Fill out Exhibit "B" (entire form) after the discharge and provide the form to the Water Ops FIMS/ MIS Section within 24 hours.

9) Provide discharge termination notice within twenty (20) days after discharge event is completed to SDRWQCB with a copy to the FIMS/ GIS Section of the Water Operations.

Attachment 5-19-2
Continued

Exhibit "B"

Planned Annual Discharges/Actual Discharges Form

1. Characterization of Discharge **(Check one)**
   - Potable _____
   - Raw _____

   Reason for Discharge:
   (Check one)
   - Repair and Maintenance _____
     - ➢ Potable water supply pipeline
     - ➢ Tank
     - ➢ Reservoirs
   - Disinfection of Water Supply _____
     - ➢ Water supply pipeline
     - ➢ Tanks
     - ➢ Reservoirs
   - Hydrostatic Testing of: _____
     - ➢ Pipelines
     - ➢ Tanks
     - ➢ Vessels

2. Facility (if applicable)_____
3. Over 500,000 gallons per day_____
4. Under 500,000 gallons per day_____
5. Determine if there are options to use the water (to be discharged) for:
   Water Conservation_____ Land Disposal_____ or Reuse_____
6. Location of Discharge_____
7. Affected receiving water_____
8. The estimated average/maximum daily flow rates for the proposed discharge (if known)
   Average Daily Flow_____
   Maximum Daily Flow_____
9. The frequency and duration of the discharge (if known)
10. Hours_____ Days_____
11. The proposed date of discharge (if known)__/_____/_____
12. Description of the proposed treatment system (if appropriate)_____
    _____
13. Contact County Vector Control about impact of discharge_____
    _____
14. Any other information deemed necessary by the Regional Board.
15. Date discharge was completed:_____/_____/_____

Observations:

Reported By: Name/Phone Number:
Proposed:_____

Attachment 5-19-2
Continued

Exhibit "B" Annual Planned Discharges: Pg 1 of 2

Information required for Reporting of Discharges (Potable Water / Hydro Static Order) (Includes raw water lines which transport water to treatment plants) on the Annual NOI Letter to the San Diego Regional Board:

1) Characterization of discharge (Check one)
   - Repair and maintenance _____
     - Potable water supply pipeline
     - Tank
     - Reservoirs
   - Disinfection of water supply _____
     - Potable water supply pipeline
     - Tanks
     - Reservoirs
   - Hydrostatic testing of _____
     - Testing of pipelines
     - Tanks
     - Vessels

2) The estimated average and maximum daily flow rates for the proposed discharge (if known)

   Average Daily Flow _____

   Maximum Daily Flow _____

3) The frequency and duration of the discharge (if known)
   Hours _____ Days _____

Attachment 5-19-2
Continued

Reported By: Name/Phone Number:
Actual:_____
_____
_____

Reported By: Name/Phone Number:
Field:_____
_____
_____
_____
_____

Reported By: Name/Phone Number:
Lab:_____
_____

Additional Directions:

- Contact the Water Dept. Lab-Biological Section two (2) weeks in advance of the discharge to arrange for a person to do monitoring (sampling & observation of the discharge)._____
- Determine affected receiving water or location of the MS4 storm drain (Contact Water Operations FIMS/GIS Unit for assistance).
- Prepare map showing the path from the initial discharge to ultimate location of the discharge (Contact Water Operations FIMS/GIS Unit for assistance).
- The Water Department is required to report discharges, which don't comply with the permit within 24 hours followed, by a written report in 5 days following the discharge. This would include situations where human and environmental health is endangered, effluent limitations exceeded or violations of enrollment letter or prohibitions of order/permit.
- The report shall consist of:
  - Description of the noncompliance and its cause
  - The period of non-compliance, including exact times and dates
  - If the non-compliance has been corrected
  - The anticipated time it is expected to continue
  - Steps taken or planned to reduce, eliminate, and prevent recurrence of the non-compliance.
- The following occurrences must be reported to the Board within 24 hours:
  - Any exceedence of the Effluent Limitations specified in this order of the Enrollment Letter
  - Any violation of any of the Prohibitions of this Order/Permit or the Enrollment Letter.

Attachment 5-19-2
Continued

Exhibit "B" Annual Planned Discharges Pg 2 of 2

4) The proposed date of discharge (If known) ___/ ____/ ____

5) Any other information deemed necessary by the Regional Board.

6) The day the discharge activity was completed. ___/____/____

Note : This form is to be completed for discharges not included in the Annual Letter (NOI) that is submitted to the San Diego Regional Board.

Attachment 5-19-2
Continued

WATER DEPARTMENT

SHUTDOWN REQUEST FORM

Shutdown No.____

Type of Request: Planning ❒ Operational ❒ Construction ❒ **Type of Shutdown:** Trial ❒ Actual ❒

Project:		**Shutdown:**	
Drwg#: D-_____ Wrk.Ord#:	NSSQ#: _____ JobOrd#:	Trial Duration: Act. Duration:	Trial Dates: Act. Dates:

Proj.Contact: Ph#: Mob.Ph#: Pager#:

Res.Engineer: Ph#: Mob.Ph#: Pager#:

Contractor:

Proj.Contact: Ph#: Mob.Ph#: Pager#:

Attachments: Description of Work ❒ Description of Shutdown & Service Impacts ❒ Construction Drawings ❒ Shutdown Procedures ❒ Map of Modeled Pressure/Flow Changes ❒ Field Book Map ❒ Hydraulic Control Map ❒ Customer Notification List ❒ Public Announcement ❒

FOR WATER OPERATIONS USE ONLY

Ops.Contact: Ph#: Mob.Ph#: Pager#:

City Force Work Estimate:$ -__/__/__, Paid:$ -__/__/__ Verified By:

Trial Shutd-__/__/__ Name: Ph#:	Council Notice-__/__/__ Name: Ph#:
Shutdown-__/__/__ Name: Ph#:	Customer Notice-__/__/__ Name: Ph#:
Modeling-__/__/__ Name: Ph#:	Public Announcmt-__/__/__ Name: Ph#:
Conservation-__/__/__ Name: Ph#:	
Service Area Affected:	Pressure Zone Affected:

Description of Work, Shutdown and Service Impacts:

Pre-Shutdown Operational Changes and Shutdown Procedures:

APPROVED:_____ **Date:**_____
Water Operations Committee Chairperson

J:\DISTRIBUTION-ENGINEERING\SHUTDOWN COMMITTEE\ ShutdownAprocessb rev11-05-02 Revised Date: 2/14/01

Contract Specific Tasks/Construction Operations

Task 5-20 – Emergency Notification Procedure, Repair and Evaluation of Main Break

A. Objective

To provide a standard procedure for emergency notification, repair, and after-the-fact analysis and evaluation of conditions leading to a Water Main Break (Main Break).

B. Definition

A Water Main Break is the result of water pipe failure because of the following scenarios.

1. A construction crew accidentally damages the pipe during excavation in the pipeline area.

2. Joint separation because of contraction or expansion.

3. Pipe rupture due to high surges (water hammer) in the system.

4. A water main that breaks due to pressure, corrosion or earthquake.

5. A damage to a water service line which requires a water main shutdown to repair.

The Water Operations Division (WOD) of the Water Department is the agency responsible for the establishment of policies and procedures pertaining to water main breaks and their repair.

C. Procedure

The CONSTRUCTION MANAGER will use procedures described below that are intended to facilitate key person notification of a main break event, performance of emergency repairs and the analysis and evaluation of the facts and conditions that led up to a main break during the performance of work by a Contractor on a Water CIP construction project.

1. The CONSTRUCTION MANAGER will use the Attachment 5-20-1 as a guide to become acquainted with the sequence of actions and the procedures for repair of a main break. The CONSTRUCTION MANAGER will make the initial notification if the break occurs on the construction site to which he is assigned. The CONSTRUCTION MANAGER will become familiar with the Main Break Notification Lists shown in Attachments 5-20-7 and 5-20-8.

2. If a main break occurs on a Water CIP construction site, the Construction Manager will investigate the circumstances and make recommendations regarding the party or parties responsible for a main break. Attachment 5-20-2, Evaluation Process for Determining Responsibility for a Main

Break, provides a decision-making tool for the Construction Manager to determine responsibility for a main break.

3. Water Operations Directives are provided herein to inform the CONSTRUCTION MANAGER on WOD policy related to water main breaks that may occur on a Water CIP construction project. The CONSTRUCTION MANAGER will become acquainted with these policy memos. WOD Policy C.13 (Attachment 5-20-4) pertains to water main repair. WOD Policy C.14 (Attachment 5-20-5) covers the conditions of a pipeline break that require a main shutdown. The CONSTRUCTION MANAGER will use WOD Policy C.15 (Attachment 5-20-6) as a guideline to oversee pipeline Bacteriological Testing.

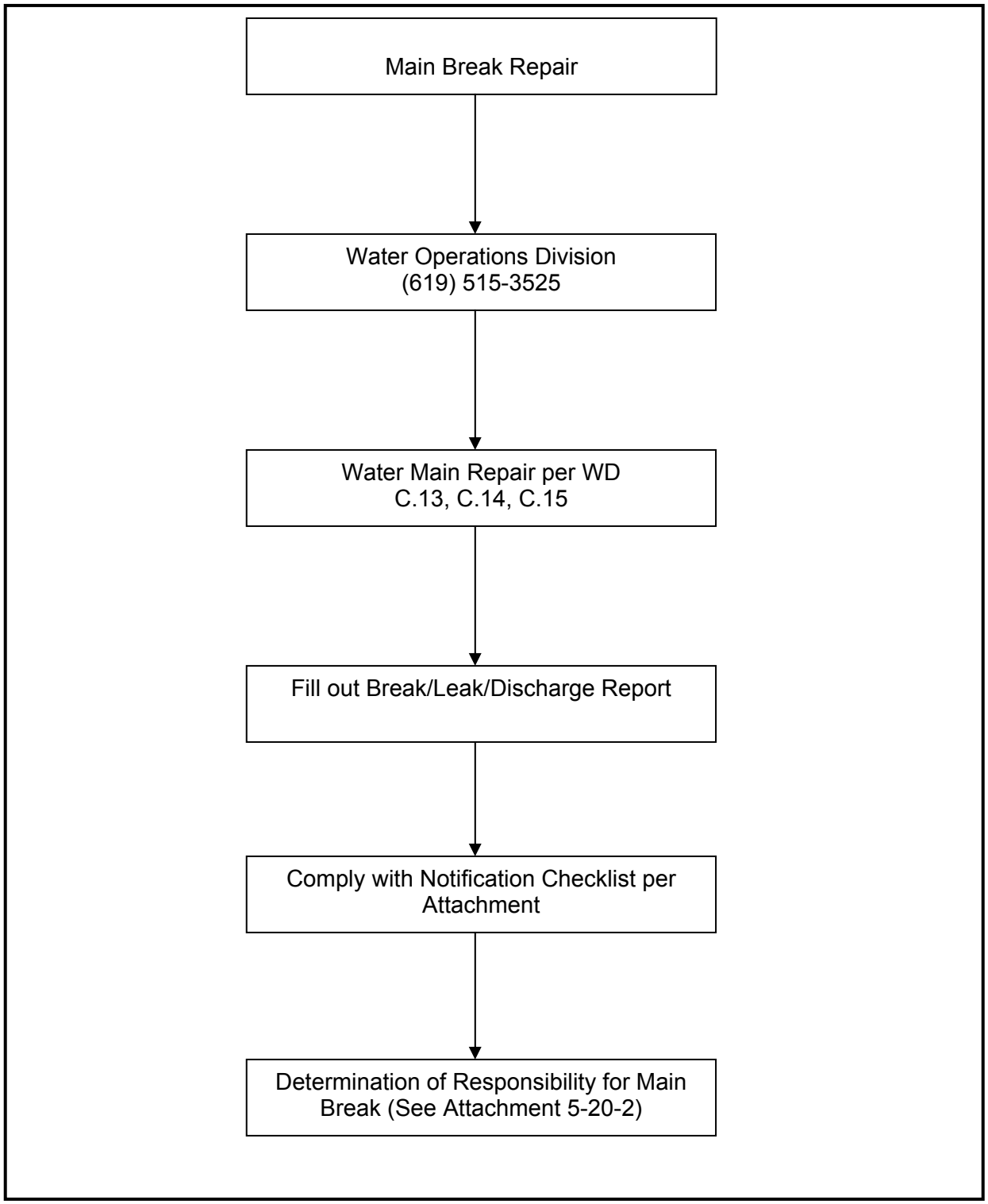
4. Prior to Notice to Proceed, the Contractor should acquaint himself with Water Operatives Division Policy Directives as noted in paragraph 3, above. The response to a main break should be covered in the Preconstruction Meeting. In the event of a main break, the Contractor should immediately notify the CONSTRUCTION MANAGER. If the CONSTRUCTION MANAGER is not available the Contractor should immediately call the WOD emergency service at 619-515-3525. It is the WOD policy that Contractor should not shut down or repair the line.

5. The CONSTRUCTION MANAGER will record the water main break sequence of events in the Daily Construction Report and take photographs of the main break site.

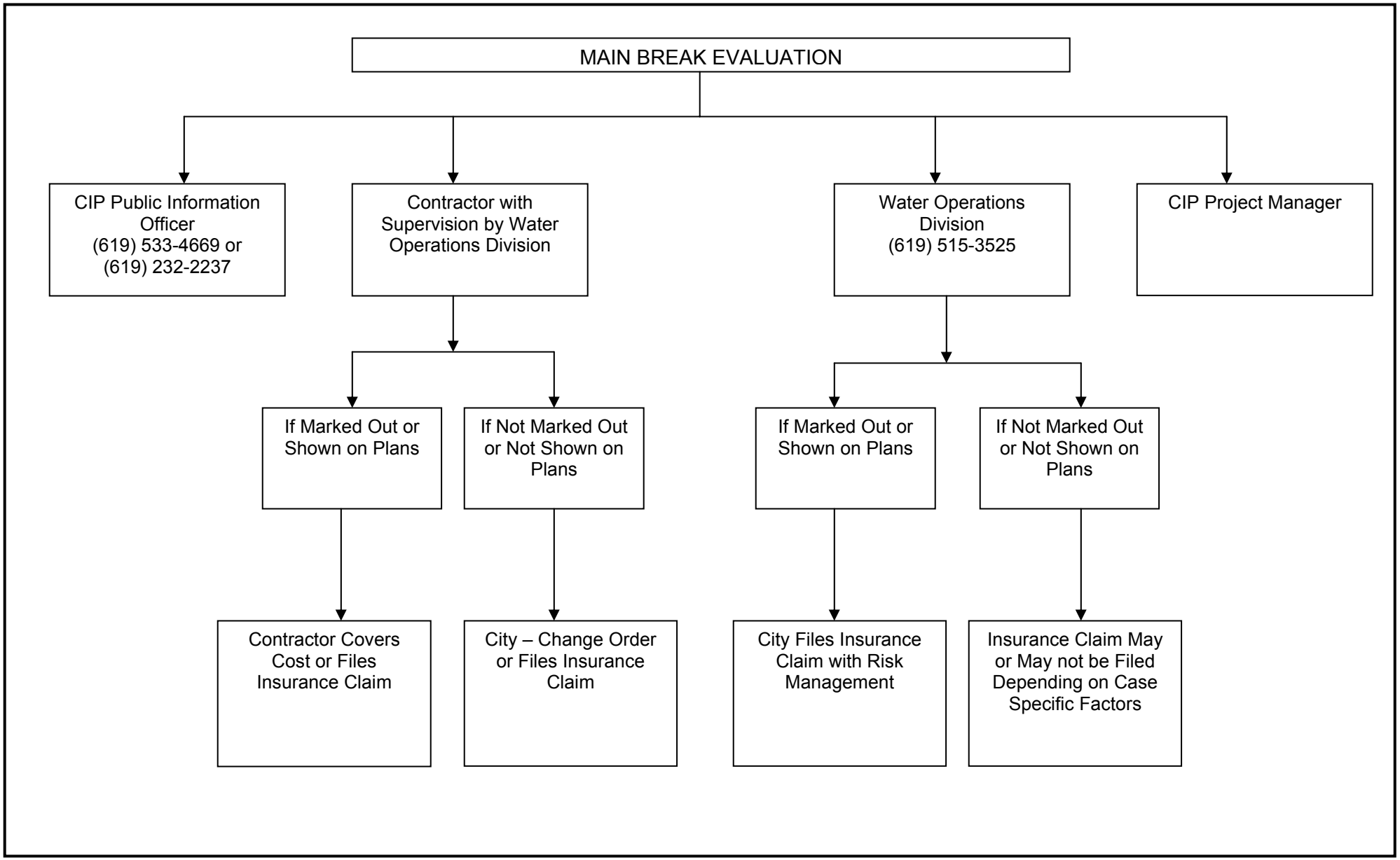
6. When a main break occurs on a Water CIP construction site, the CONSTRUCTION MANAGER will check to assure that WOD completes the Water Break/ Leak/ Discharge Report Form (Attachment 5-20-3) and the CONSTRUCTION MANAGER will retain a copy of the report as part of the CIP project file.

7. The Water Operations Division will perform the repairs as depicted in Attachment 5-20-1 Procedure for Main Break Repair, Attachment 5-20-4, WOD policy directive C.13, and Attachment 5-20-6 WOD policy directive C-14, Bacteriological Sampling - Water Breaks. Any Shutdown required as a result of a main break will be performed by WOD as indicated in Attachment 5-20-5.

Attachment 5-20-1
Procedure - Main Break Repair



Attachment 5-20-2
Evaluation Process for Determining Responsibility for Main Break



Attachment 5-20-3
Water Planned Discharge Report

WATER PLANNED DISCHARGE REPORT

SVC REQ/WAO_____ **DATE:**_____

FIELD BK PG/GRID_____

FAC. SEQ. #:_____ **THOMAS BROS. PG:**_____

FACILITY TYPE: ☐ Air Valve ☐ Fire Service ☐ Hydrant ☐ Main ☐ Service ☐ Distribution Reservoir

ADDRESS:_____ **INTERSECTION**_____

DISCHARGE LOCATION(S) DESC:_____

OFFSET (Meas. In Ft.):_____ **OFFSET REFERENCE (Hyd, GV, etc.):**_____

BEGIN DISCHARGE DATE/TIME_____ **END DISCHARGE DATE/TIME:**_____

DISCHARGE TYPE: ☐ De-Water Pipe ☐ Hyd. Flush ☐ Main Flush ☐ Scheduled Repair

DISCHARGE DESC: ☐ CIP Work ☐ Connection ☐ Planned Maint. ☐ Preventive Maint. (P.M.)

SIZE OF OPENING(S) (1" hole, 2" crack, etc.)_____

DISCHARGE DESCRIPTION COMMENTS_____

SERVICE RESTORED DATE/TIME:_____

WAS DISCHARGED WATER DE-CHLORINATED? ☐ Y ☐ N

ESTIMATED GROUNDWATER DISCHARGED (To be calculated by Maps and Records, not you)_____

WAS GROUNDWATER OR TIDAL WATER REACHED DURING EXCAVATION? ☐ Y ☐ N

CHLORINATED PIPE? ☐ Y ☐ N **IS DISCHARGE A THREAT TO HUMAN OR ENVIRONMENTAL HEALTH?** ☐ Y ☐ N

DID DISCHARGE REACH STORM DRAIN?: ☐ Y ☐ N

ENTRY POINT LOC(S) DESC:_____

NOTIFIED STREET DRAINS: ☐ Y ☐ N **FAX: (619) 527-7534** **DID DISCHARGE REACH PUBLIC WATERS?** ☐ Y ☐ N

PUBLIC WATERS DESC:_____

NOTIFIED ENV. PLANNER/HAZMAT/SAFETY? *(Circle all that apply) ☐ Y ☐ N **BACTI TEST REQUIRED?** ☐ Y ☐ N

NOTIFIED CA REGIONAL WTR QUALITY CONTROL BOARD? ☐ Y ☐ N **ALVARADO LAB NOTIFIED?** ☐ Y ☐ N

REPORT COMPLETED BY (NAME):_____ **RADIO NUMBER:**_____

ENV. PLANNER/HAZMAT/SAFETY COMMENTS_____

_____**SIGNATURE:**_____

PUB. INFO. OFFICER COMMENTS_____

_____**SIGNATURE:**_____

SUPERVISOR'S SIGNATURE:_____

Form revised on 03/07/02 (cg)

THIS REPORT MUST BE SUBMITTED TO MAPS & RECORDS BY FIRST OF NEXT BUSINESS DAY

	CITY OF SAN DIEGO **WATER DEPARTMENT**	**NUMBER:** **C.13**
	WATER OPERATIONS DIVISION **OPERATIONS AND POLICY MANUAL**	**EFFECTIVE:** **FEBRUARY 4, 2002**
	SUBJECT: **WATER MAIN REPAIR**	**SUPERSEDES:** **C.13 date: 6/1/95**

1. PURPOSE

   1.1 To provide guidelines in the repair of water mains

2. AUTHORITY

   2.1 Water Director

   2.2 Deputy Director, Water Operations Division

   2..3 AWWA C. 651-92

3. POLICY

   3.1 An efficient water delivery system shall be maintained to ensure constant delivery of potable water to all consumers. To that end, all interruptions of service because of water main breaks shall be quickly restored, while minimizing the impacts on human and environmental health.

4. PROCEDURE

   4.1 Investigation: Before crews are dispatched, all reported main breaks should be carefully investigated by the appropriate supervisor, or by one-position emergency crews or two-position backup crews. Careful investigation assures repair crews and equipment will not be dispatched to handle minor repairs such as valve packing leaks or drainage from sources other than water mains. Also, if there are environmental or hazardous materials issues appropriate Water Department Personnel and/or consultants should be contacted. Additionally, a determination is necessary to serve customers without water.

   4.2 Notification of Consumers: Notification of consumers shall be done in accordance with Water Distribution Division Directive C.14, Water Main Shutdown.

   4.3 Repair of Main

      A. Longitudinal breaks in cast iron mains, regardless of the length of the split shall be repaired by "cutting in" a length of ductile iron or plastic pipe at least three (3) feet long or long enough to completely remove the split.

      B. Circumferential breaks in cast iron mains may be repaired with stainless steel bands.

      C. Mains will be repaired by using flex couplings, PVC pipe or other approved materials. Repair saddles may be used where corporation stops have been pulled from the main if the main has not been damaged beyond the diameter of the taphole. Repair bands must be all stainless steel, be properly plastic wrapped and taped, and be used only for service pulls or other appropriate repairs. If the damage extends beyond the pulled corporation stop area (i.e., circumferential breaks) repair will be made by replacing the damaged area.

APPROVED BY:	C.13 Page 1 of 4

D. Steel cylinder pipe shall be replaced or patched as appropriate.

E. Use of Flexible Couplings

1. Each flexible coupling when used shall be completely wrapped and taped securely with six (6) mils thick plastic sheeting.

2. Under no circumstances will repair bands be used to make connections.

4.4 Storm Water Protection Measure

A. Water Main is shut down or considered under control.

B. Sand/gravel bags are placed around storm drains.

C. Attach dechlorinator to hydrant(s) or blowoff(s); add tablets to dechlorinator

D. Drain the system by opening hydrant(s) and/or blowoff(s).

E. Attach dechlorinator to pump and add tablets to dechlorinator and pump out the site which leads to storm drain.

F. Spoil from trench digging is either loaded on Water Department truck or stockpiled on the street then loaded and transported by Department truck to Operations Division. If appropriate, place fiber roll around stockpile until it is removed.

G. Test water from hydrant or blow-off with chlorine residual kit; if still present, continue using dechlorinator (see H below).

H. After site is de-watered, crew installs rock in the site(trench). Place pump with dechlorinator attached in trench, add tablets to dechlorinator and continue pumping water to storm drain.

4.5 Site (trench) Preparation and Disinfection

A. Site is prepared for work, pipe is exposed, problem is located and the trench is shored, if necessary.

B. Apply liberal quantities of hypochlorite to wet trench areas.

C. Remove the broken section of pipe from the trench.

D. The interior of all pipe and fittings used in making the repair (particularly couplings and sleeves) shall be swabbed or sprayed with one (1) percent hypochlorite solution before installation.

E. Pipe replacement-Lay in new pipe, clean debris from pipe, if any, and place an appropriate amount of chlorine in new pipe and connect replacement pipe to existing pipe.

F. Attach dechlorinators to all affected hydrants or blow-offs.

G. Test water from hydrant or blow-off with chlorine residual test kit. (If chlorine residual is present, dechlorinate and remove chlorine residual to a level of non-detection.)

ATTACHMENT A
Disinfection Requirements

Disinfection requirements when cutting into or repairing ruptures on existing mains.

Prior to starting repair on any water main rupture the crew leader must visually check area affected for possible contamination by other sources, i.e., sewer, solvents, etc., that may have entered the system. If contamination of this sort is suspected, the affected section of main must be isolated immediately and lab and Treatment Plant Operations personnel must be contacted prior to putting system back in service to determine and oversee proper disinfection.

The following requirements apply primarily when existing mains are wholly de-watered as a result of a rupture where a section or sections of pipe are replaced.

1. Swab or spray the new section/sections of pipe with a one (1) percent hypochlorite solution before they are installed. (AWWA C651-92)

The following materials are needed to apply hypochlorite solution (all materials can be purchased from the storeroom):

1. Hypochlorite (Granular)
2. Clean 5 gallon bucket
3. Clean cotton mop
4. Clean Hudson type sprayer
5. Clean rags

Steps for mixing one (1) percent hypochlorite solution:

1. Mix two (2) ounces of hypochlorite to one (1) gallon of clean water. Ten (10) ounces per five (5) gallons of clean water.

2. Two (2) ounces added to a gallon of clean water makes up a one (1) percent hypochlorite solution.

3. Mix solution in clean five (5) gallon bucket or Hudson-type sprayer.

4. Keep solution free from dust, dirt or other foreign matter during mixing and application.

Steps for applying hypochlorite solution:

1. Make sure pipes and or fittings are cleaned of any dust, dirt and/or foreign particles.

2 Spray or swab the interior of each pipe or fitting while outside of trench just prior to connecting existing main or system.

Quality Assurance:

It is very important that the main is thoroughly flushed after all connections are made. Thorough flushing is the most practical means of removing contamination introduced during repairs Flushing should be started as soon as the repairs are completed and should be continued until water flow is clean of dirt or sand particles. Water Distribution Division's Operations and Policy C.15 - Bacteriological Sampling - Water breaks should be followed after flushing is completed. If possible, flush toward the break from both directions.

ATTACHMENT B

SEE THE PRINCIPAL WATER UTILITY SUPERVISOR

IN YOUR SECTION FOR

A.W.W.A. C 651-92, SECTIONS 5 AND 10

Sec. 5.3 Slug Method

The slug method consists of placing calcium hypochlorite granules in the main during construction, completely filling the main to eliminate all air pockets, flushing the main to remove particulates, and slowly flowing through the main a slug of water dosed with chlorine to a concentration of 100 mg/L. The slow rate of flow ensures that all parts of the main and its appurtenances will be exposed to highly chlorinated water for a period of not less than 3 hours.

5.3.1 Placing calcium hypochlorite granules. Same as Sec. 2.1.5.

5.3.2 Preliminary flushing. Same as Sec. 5.2.2

5.3.3 Chlorinating the main.

1. Same as Sec. 5.2.3(1)

2. At a point not more than 10 feet (3m) downstream from the beginning of the new main, water entering the new main shall receive a dose of chlorine fed at a constant rate such that the water will have not have less than 100 mg/L free chlorine. To ensure that this concentration of chlorine is achieved, the chlorine concentration should be measured at regular intervals. The chlorine shall be applied continuously and for sufficient period to develop a solid column, or "slug," of chlorinated water that will as it moves through the main, expose all interior surfaces to a concentration of approximately 100 m/L for at least 3 hours.

3. The free chlorine residual shall be measured in the slug as it moves through the main. If at any time it drops below 50 mg/L, the flow shall be stopped, chlorination equipment shall be relocated at the head of the slug, and as flow is resumed, chlorine shall be applied to restore the free chlorine in the slug to not less than 100 mg/L.

4. As the chlorinated water flows past fittings and valves, related valves and hydrants shall be operated so as to disinfect appurtenances and pipe branches.

	CITY OF SAN DIEGO **WATER DEPARTMENT**	**NUMBER:** **C.14**
	WATER OPERATIONS DIVISION **OPERATIONS AND POLICY MANUAL**	**EFFECTIVE:** **FEBRUARY 4, 2002**
	SUBJECT: **WATER MAIN SHUTDOWN**	**SUPERSEDES:** **C.14 date: 6/1/95**

1. PURPOSE

   1.1 To provide guidelines for shutting down water mains.

2. AUTHORITY

   2.1 Water Utilities Director

   2.2 Deputy Director, Utilities/Water Distribution Division

3. POLICY

   3.1 Scheduled Shutdown

   A. Planning for a scheduled shutdown must be down by the Principal Water Utility Supervisor and subordinates far enough in advance to allow sufficient attention to detail.

   B. The resources of the Maps and Records Section, such as the 400 scale book, pertinent plans and drawings are to be used to define the area to be isolated, taking into account adjacent areas that may be affected.

   C. A part of the planning process shall be a visual on-site field investigation of the shutdown area. At that time, the types of buildings, structures and establishments will be noted. The adjacent area will be checked for water outage. The Planning Package shall consist of the Water Main Shutdown Procedure for Water Utilities Department (Attachment #1) form and a copy of the water book page (or computer drawing following conversion of gatebook to computer) hi-lighting the area of the shutdown.

   D. When the Planning Package is complete it must be submitted to the General Water Utility Supervisor (at least 72 hours in advance) for approval. Sufficient time shall be allowed to give consumers approximately 72 hours notice. A copy of the shutdown notice and hi-lighted area shall be given to the Emergency Phones, Senior Clerk of Hydraulic Control, Principal Water Utility Supervisor, and Deputy Director.

   E. Where practical, public buildings, hospitals and establishments that have a critical need for water must be hi-lined. If hi-lining is not practical, the shutdown and work must be accomplished within a time frame favorable to most parties.

   F. During notification to consumers, responsible people in each building , i.e., management of large complexes, or residence are to be contacted and advised of the planned shutdown. If no one can be contacted, a printed notice of "Water Interruption" showing date and time of shutdown (form UW 1020) will be left on the doorknob or where it will easily be seen.

G. The Principal Water Utility Supervisor whose crews are doing the work is responsible for coordinating all phases of the work such as initiating the planning, valve closing and openings, coordinating with Hydraulic Control regarding pressure zones, notifying Fire Department of all fire hydrants out of services and other related items necessary to rapid conclusion of the project.

H. During regular work hours Station 38 and Chollas office will be notified when actual shutdown takes place either by radio or by phone. If a scheduled shutdown is canceled, the Chollas office must be notified immediately. After work hours, Station 38 must still be notified immediately.

I. Under normal condition, a test or trial shutdown should be made. This will determine if the valves are operating and if not how far back we will have to go to effect a good shutdown.

J. Test or trial shutdowns should not be made without prior notification to consumers

K Other personnel making a shutdown should notify appropriate construction supervisor of area.

L. Ensure that storm water protection procedures are performed.

3.2 Emergency Shutdowns

A. When apparent rupture of a water main is reported the Emergency Crew making the initial investigation shall determine if an immediate shutdown is needed. This need will be evident if private property is damaged or if there is an imminent potential for such damage; or if the public right=of-way is becoming dangerous to vehicular or pedestrian traffic.

B. If 3.2.A above applies, the Emergency Crew, after notifying Station 38, must begin an immediate shutdown, asking the radio operator for assistance if necessary and following proper procedure for hydrant notification according to C.06.

C. The crew that closes the valve will fill out an Emergency Shutdown Report (US 1589), attached, showing the location of all valves used to isolate the break. This Emergency Shutdown Report will be turned over to the on-site supervisor by the crew at the conclusion of the shutdown. If it is the end of a shift, it is the responsibility of the person making the shutdown to arrange for delivery of the Emergency Shutdown Report to the on-site supervisor.

D. Repair crews will open all valves used to isolate the man break at the conclusion of the repair. The Emergency Shutdown Report received from the emergency crews shall be used by the on-site supervisor to verify that all closed are opened and will initial the Emergency Shutdown Report. The Senior Water Utility Supervisor in charge of repair crews will review the Emergency Shutdown Report for possible valves not opened ant take action as necessary to correct.

3.3 Non-Emergency Shutdowns

A. Definition: A non-emergency shutdown is defined as the need to shutdown a water main or appurtenance because of an apparent failure, but there is no immediate danger to public or private property.

B. Under conditions as in 3.3.A above, the crew making the repair shuts down the water main. Therefore, time should be taken to notify consumers.

C. When the approximate location of the break has been determined, consumers are to be notified of the approximate duration of the shutdown.

4. STORM WATER COMPLIANCE MEASURES:

In the event of a discharge, please follow the listed procedures.

A. Place gravel bags around the storm drain inlet(s) or filter cloth over the inlet held down by sand bags downstream of the work area in order to keep sediment from entering the storm drain.

B. Attach dechlorinator to fire hydrant. Ensure the LPD chlor tablets are in the dechlorinator.

C. Monitor storm drain inlets to ensure that sediment is not entering storm drain inlets.

D. Upon completion of work, detach the dechlorinator and remove sand/gravel bags from around storm drains.

E. Sweep up and remove debris from site.

	CITY OF SAN DIEGO **WATER DEPARTMENT**	**NUMBER:** **C.15**
	WATER OPERATIONS DIVISION **OPERATIONS AND POLICY MANUAL**	**EFFECTIVE:** **APRIL 1, 2000**
	SUBJECT: BACTERIOLOGICAL SAMPLING - WATER BREAKS	**SUPERSEDES:** **C.15 date: 6/1/95**

1. PURPOSE

1.1 To establish a procedure for uniform and prompt compliance wit requirements for bacteriological sampling after all water main repairs.

2. AUTHORITY

2.1 Deputy Director, Water Operations Division

2.2 AWWA Standard C.651-92

3. POLICY

3.1 Bacteriological samples will be taken after every water main repair as soon as possible and delivered to the water treatment laboratory at Alvarado Treatment Plant, within one hour after taking the sample.

3.2 Emergency Services Supervisor is responsible for training the Emergency Service Personnel and for insuring records which include when, where and the date sample was taken. A supply of sample bottles and testing kits shall be the supervisor's responsibility.

4 PROCEDURE

4.1 Prior to completion of water main repairs, the Construction Supervisor on job site shall be responsible for calling an Emergency Service unit to take bacteriological samples at the time repair is completed.

4.2 The Construction Supervisor and the Emergency Services unit shall be responsible for completing the Water Main Repair/Bacti Daily Report and submitting it to his/her supervisor for routing.

4.3 The Construction Supervisor will remain on site until samples are taken to ensure that appropriate sample locations are utilized. If unable to remain, advise Station 38 of location for sample to be taken by the Emergency Services Unit.

4.4 Samples are to be taken from water services (not hydrants) whenever possible as per AWWA C651-92, Section 10.5 (attached).

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4.5 The Emergency Service Unit will, upon delivery of the Bacteriological sample, log in at the Laboratory the following information on the Main Break Log:

Date
WAO#
Location of where sample taken
Sample type
Time sample taken
Unit #
Analysis
Date/time/unit # information entered in log

If gate is locked, dial 20 on the phone at the gate and plant operator will let Emergency Services unit into plant. Then follow above procedures for logging in sample.

4.6 If the sample fails, the main should be flushed and resampled. Resample daily until two consecutive samples are clean.

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Attachment 5-20-7
Main Break Notification List -
Conditionally Notified

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
Alvarado Lab	City	Conditionally	Lab sample (other than bacti)	Phone	John Chaffin cell: 980-2908
Area PWUS	City	Conditionally	16" or greater mains	Stand by list	Station 38
Corrosion Engineer	City	Conditionally	16" and greater, metallic based pipe	Phone/ Cell	Martin Fogata Home: Station 38 Work: 619-533-5156 Cell: 619-666-1396
Emergency Management Coordinator	City	Conditionally	16" or greater, or Hazmat present	Phone/ pager	Jim Van Norman Home: Station 38
Emergency Response Team	City	Conditionally	If in sensitive land area, anything off right of way; drains into creek, pond, etc.	Phone/ Cell/ Pager	Cathy Cibit Work 619-446-5343 Cell: 619-980-0653 (Evenings: see standby list)
Fire Department	City	Conditionally	When large area is out of water; hydrants out for long period	Phone	Fire Communications 1-858-573-1306
Hazmat Contractor	City	Conditionally	If hazardous materials are present and need to be dealt with	Stand by list	Station 38
Hydraulic Crew	City	Conditionally	For assistance with shutdowns or pipelines	Stand by list	Station 38
Park Department	City	Conditionally	Park lands and open space	Pone	619-221-8901 (8 am - 5 pm) 619-221-8800 (After hours)
Public Information Officer	City	Conditionally	16" or greater; media presence; property damage	Phone/ Cell Pager	Tedi Jackson Home: Station 38 Work: 619-527-3121 Cell: 619-666-7197

Attachment 5-20-7
Main Break Notification List
Continued

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
Risk Management	City	Conditionally	Property damage	Phone/ Pager	Art Romero Home: Station 38 Work: 619-236-6670 Pager: #6405
WU Underground Locating Supervisor	City	Conditionally	Troublesome Mark-out	Phone/ Cell/ Pager	Gabe Shipley Home: Station 38 Work: 619-527-7497 Cell: 619-980-9372
Military	Military	Conditionally	Where mains are on military land or break will impact delivery to military property	Phone	1-858-577-1277
Bonita (Pipeline)	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	City of San Diego 619-515-3525
CalTrans	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	Emergency Dispatch 619-220-5370
Cal-American	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-575-1105
Carlsbad Water Department	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-931-2197
County Department of Health	Other Agency	Conditionally	Public Health Concerns	Phone	County Communications Station M-Hazmat 1-858-565-5255
County Water Authority/Other Water Districts	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-858-522-6600
Del Mar Utilities Company	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-858-755-1556

Attachment 5-20-7
Main Break Notification List -
Continued

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
Escondido Mutual Water	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-839-4668
Fallbrook Public Utilities	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-728-1125
Helix Water District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-466-3234
Lakeside Water District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-443-3805
Leucadia Water District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-753-0115
Olivenhain Municipal Water District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-753-6466
Otay Municipal Water District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-670-2222
Padre Water Resources	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-448-3111
Port District	Other Agency	Conditionally	City Mains on Port District lands	Phone	619-973-5963
Poway Municipal Water District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-858-695-1400 After hours: 1-858-679-5451
Ramona Municipal Water District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-789-1330
Regional Water Quality Control Board	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	Sherrie Komeylyan 1-858-467-2734

Main Break Notification List -
Conditionally Notified
Continued

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
Rincon del Diablo Water	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	Message phone number: 1-760-745-5522
S.D. County Water Authority	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	CWA: 1-760-480-1991
San Dieguito Water Department	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-633-2922
Santa Fe Irrigation District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-756-2424
Sweetwater Authority	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-420-1413
Vallecitos County Water	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	619-744-0460
Valley Center Municipal Water	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-749-1600
Vista Irrigation District	Other Agency	Conditionally	Major water shutdowns or other issues affecting them	Phone	1-760-597-3100
Chula Vista	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	Dave McRoberts: 619-585-5641 Police Dispatch: 619-691-5151
Del Mar	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	1-858-755-1555
El Cajon	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	Business Hours: 619-441-1653 Pager: 619-785-8936 Cell: 619-887-1025
Escondido	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	1-760-839-4722

Main Break Notification List -
Conditionally Notified
Continued

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
Imperial Beach	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	Mike Mathias: 619-628-1370 Environmental Programs Specialist
Lemon Grove	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	Dorothy Cantone: 619-825-3810 Heartland Dispatch: 619-460-2744
National City	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	National City Police: 619-336-4411
Poway	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	Lester Berglund - WT Plants: 1-858-679-5451 (24 hours)
San Diego City Street Drains	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	619-527-7500
San Diego County	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	619-338-2048
Santee	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	Rob Zaind: 619-258-4100, ext. 174 Heartland Dispatch: 619-460-2744
Solana Beach	Storm Drain Maintenance	Conditionally	If discharge reaches storm drain system	Phone	David Kirkwood, Public Works Supvr. Pager: 1-858-728-2367 Rancho Dispatch: 1-858-756-3006

Attachment 5-20-8
Main Break Notification List -
Always Notified

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
ES Supervisor	City	Always		Phone/ Cell/ Pager	John Morales Phone: 619-527-7444 Cell: 619-980-5653 Pager: #7590
Emergency Phones	City	Always	Main Breaks	Phone	619-515-3525
FIMS Maps & Records	City	Always	Main Breaks	Phone	619-527-7482
SCADA Control	City	Always	Main Breaks	Phone	619-668-2002
WD Claims Representative	City	Always	Main Breaks	Pager	Jim Coldren Pager: 232-2237 # 7065
Mark Outs Including ATT for Military Bases	Military	Weekends, Holidays, After hours	Emergency Mark - Outs	Phone	1-858-577-1227
US Navy	Military	When Navy fuel line may be present	Emergency Mark - Outs	Phone	1-858-577-1227
USA Dig Alert	One Call Agency	Normal work hours	Emergency Mark - Outs	Phone	1-800-227-2600
Cable Companies	Utility Company	Weekends, Holidays, After hours	Emergency Mark - Outs	Phone	TimeWarner Network Operations: 1-858-635-8726
MCI	Utility Company	Weekends, Holidays, After hours	Emergency Mark - Outs	Phone	619-263-1032

Main Break Notification List -
Always Notified
Continued

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
Pac Bell	Utility Company	Weekends, Holidays, After hours	Emergency Mark - Outs	Phone	1-760-807-6428
SDG&E	Utility Company	Weekends, Holidays, After hours	Emergency Mark - Outs	Phone	611
Water Department Director	City	By Discretion of Area/Standby Supvr or PIO	Immediate Major Events	Phone/ Cell/ Pager	Larry Gardner Phone: 619-533-7555 Cell: 619-66697165 Pager: #884
Deputy Director - Water Operations	City	By Discretion of Area/Standby Supvr or PIO	Immediate Major Events	Phone/ Cell/ Pager	Mark Stone Phone: 619-527-7431 Cell: 619-666-7163 Pager: # 9078
Asst. Deputy Director - Water Operations	City	By discretion of area/ standby supvr or PIO	Immediate Major Events	Phone/ Cell/ Pager	Kent Floro Phone: 619-527-7460 Cell: 619-666-7164 Pager: #8072
Construction Program Mgr- Water Operations	City	By Discretion of Area/Standby Supvr or PIO	Immediate Major Events	Phone/ Cell/ Pager	John Crowder Phone: 619-527-7434 Cell: 619-666-7165 Pager:# 8844
Engineering Program Manager	City	By Discretion of Area/Standby Supvr or PIO	Immediate Major Events	Phone/ Cell/ Pager	Jim Fisher Phone: 619-527-3156 Cell: 619-666-1395
Stormwater Program Contact	City	By Discretion of Area/Standby Supvr or PIO	Immediate Major Events	Phone/Cell/ Pager	Bob Collins Phone: 619-668-2084 Cell: 619-980-9443 Pager: # 8383

Main Break Notification List -
Always Notified
Continued

Name/Group	Business Type	When Notified	Why Notified	Contact Type	Contact
Systems Program Manager	City	By Discretion of Area/Standby Supvr or PIO	Immediate Major Events	Phone/ Cell	Gary Stalker Phone: 619-527-8060 Cell: 619-497-3825
Property Owners Impacted	Consumer	By Discretion of Area/Standby Supvr or PIO	Immediate Major Events	Verbal or Written	Supervisor or PIO

Attachment 5-20-9
Main Break Notification Checklist

SR#_____ **Name** _____
Radio#_____ **Date** _____

Main Break Notification Checklist

Alvarado Lab		Fire Department		Public Information Officer	
Area PWUS		Hazmat Contractor		Ramona Municipal Water District	
Asst. Dep. Director, Water Operations		Helix Water District		Regional Water Quality Control Board	
CalTrans		Hydraulic Crew		Rincon del Diablo Water	
Cal-American Major Water		Lakeside Water District		Risk Management	
Carlsbad Water Department		Leucadia Water District		SD County Water Authority	
City of San Diego		Mark-Outs Including: - ATT for Military Bases		San Dieguito Water District	
Construction Program Manger, Water Ops		- Cable Companies		Santa Fe Irrigation District	
Corrosion Engineer		- MCI		SCADA	✓
County Department of Health		- Pac Bell		Streets Division: -Street Drains	✓
County Water Authority/ Other Water Districts		- U.S. Navy		Other Storm Drain Purveyors	
Del Mar Utilities Company		- USA Dig Alert	✓	Sweetwater Authority	
Deputy Director, Water Operations		Military		Systems Program Manager, Water Ops	
Emergency Management Coordinator		Oceanside City Water		Vallecitos County Water	
Emergency Phones	✓	Olivenhain Municipal Amer. Water Company		Valley Center Municipal Water	
Emergency Response Team		Otay Municipal Water District		Vista Irrigation District	
Engineering Program Manager		Padre Water Resources		Other Storm Drain Purveyors	
ES Supervisor	✓	Park Department		Sweetwater Authority	
Escondido Mutual Water		Police Department		WD Claims Representative	✓
Fallbrook Public Utilities		Poway Municipal Water District		WU Underground Locating Supervisor	
FIMS Maps & Records	✓	Property Owners Impacted			

√ = These contacts must always be notified.

Contract Specific Tasks/Construction Operations

Task 5-21 – Ongoing Plant Coordination

A. Objective

To provide a standard procedure for the Contractor(s) to follow to ensure coordination of construction activities with the City Water Operations Staff.

B. Definition

The procedure provides for advance notice from the Contractor to the Water Operations Staff to allow the staff the opportunity to minimize the effects of the interruptive activity as required in Section 01040 of Division 1 of the Contract Documents.

C. Procedures

1. The Contractor identifies in its construction schedule (as required in Section 01310) the activities that will interrupt the normal facilities procedures and operations and discusses these activities with the CONSTRUCTION MANAGER at least two weeks in advance at the (bi)weekly onsite progress meeting. The Contractor uses the Shutdown Request Form in Attachment 5-19-1 to identify plant interruptions.

2. The CONSTRUCTION MANAGER verifies that the Contractor has or will have all necessary materials, devices and equipment at hand to complete the activity expeditiously.

3. The CONSTRUCTION MANAGER notifies the Water Operations Staff of the scheduled activity and its potential impact on plant procedures and operations.

4. If the Water Operations Staff grants permission, the CONSTRUCTION MANAGER so notifies the Contractor. If the Facilities Operations Staff requests alternatives, the CONSTRUCTION MANAGER works with both parties to arrive at a mutually acceptable time and method, after which the Contractor receives permission to proceed.

Project Specific Tasks/Preconstruction Phase

Task 5-22 – Process Startup Plan

A. Objective

To develop a Process Startup Plan for each facility project with complex systems.

B. Definition

The Process Startup Plan defines the sequence of activities to be performed by the Contractor(s) and the City of San Diego and its representatives to place a new facility online. The Process Startup Plan identifies necessary equipment, tankage, flow streams, pipelines, capacities thereof, and other process constraints which impact the startup. A startup schedule is included to define when specific equipment and flow streams are brought online.

C. Procedure

1. The Contractor prepares a draft copy of the Process Startup Plan early in the construction period per Section 01660 of Division 1 of the Contract Documents. The Design Consultant assists in developing the draft plan. The draft plan is finished before construction is 50% complete.

2. The CONSTRUCTION MANAGER routes the draft Process Startup Plan to the CIP Project Manager, who forwards it to the CIP Deputy Director and the Water Operations Division for review.

3. Based on input from all parties, the CIP Project Manager recommends approval of the draft Process Startup Plan and returns it to the CONSTRUCTION MANAGER.

4. The CONSTRUCTION MANAGER routes a revised version of the Process Startup Plan, based on previous input from all parties, to the CIP Project Manager, Design Consultant, Water Operations Division, CIP Deputy Director, and Contractor(s) for implementation.

General Tasks/Preconstruction Phase

Task 5-23 – Startup Management Plan

A. Objective

To provide a Startup Management Plan for general reference on all Water CIP facilities.

B. Definition

The Startup Management Plan defines the roles of the Water Department, Water Operations Division, CONSTRUCTION MANAGER, Design Consultant and Contractor during the startup phase of a project. In addition, documentation requirements, scheduling, operator training, and warranty management procedures are addressed.

The degree of detail in a startup management plan will depend on the complexity of the project. The responsibility of the Contractor regarding the startup management plan preparation and actual startup must be defined in the contract documents.

C. Procedures

1. The CONSTRUCTION MANAGER, in consultation with the contractor, prepares a Startup Management Plan outlining the roles and responsibilities of the various organizations involved in startup activities. The CONSTRUCTION MANAGER routes the Startup Management Plan to the Water Operations Division, the Design Consultant and the CIP Project Manager. This plan should be produced well in advance of the planned startup to ensure proper coordination between various entities.

2 The CONSTRUCTION MANAGER will convene a startup meeting, including the CONTRACTOR, Water Operations Division, the Design Consultant, and CIP staff to discuss the startup plan and confirm that the current plan is the most effective and has the least impact to Water Department operations.

3. The Water Operations Division, Design Consultant and CIP Project Manager review the Startup Management Plan, and route it to the CIP Project Manager. The CIP Project Manager, in consultation with the CONSTRUCTION MANAGER, will consolidate comments and resolve conflicts.

4. The CIP Senior Civil Engineer informs the Water Operations Division of the approved Startup Management Plan.

5. For projects with complex systems requiring a significant period of operational testing, the Contractor is responsible for preparing a system startup plan as specified in Section 01655 and Section 01660 of Division 1 of the Contract Documents.

6. For complex projects the CONSTRUCTION MANAGER shall convene a special task force consisting of members representing the

CONTRACTOR, the CONSTRUCTION MANAGER, Water Operations Division, and CIP. This group is to meet at regular intervals to discuss the progress of the startup of the facility or facilities and to make modifications to the startup plan as required. This startup team will be led by a representative of the CONSTRUCTION MANAGER, and his/her responsibilities will include briefing the CONSTRUCTION MANAGER and CIP Project Manager on startup progress on a regular basis.

a. The startup task force leader shall insure that all contractor submittals, testing, reports, documentation and training is completed prior to startup of any system or subsystem.

b. During startup of complex systems the startup task force leader is required to brief the CONSTRUCTION MANAGER on the progress of the startup. The CONSTRUCTION MANAGER will then brief the CIP Project Manager and Water Operations as required.

c. The startup task force leader may convene meetings as frequently as daily to ensure proper coordination during startups.

Book 6

Construction Management Guidelines

Chapter 6
Startup and Testing

City of San Diego Water Department
Capital Improvements Program

Chapter 6
STARTUP AND TESTING

6.1 Introduction

The construction management tasks and processes presented in this chapter include:

1. Factory Testing
2. Owner's Manuals
3. Spare Parts
4. Vendor Training
5. Equipment Testing
6. System Testing

Contract Specific Tasks/Startup and Testing

Task 6-1 – Factory Testing

A. Objective

To ensure that equipment to be supplied under the Contract operates and meets all specifications before it is shipped from the appropriate manufacturer.

B. Definition

A factory test of equipment to ensure compliance with the Contract Documents before leaving the vendor's place of manufacture is described in the General Provisions of the Contract Documents. The Technical Specifications must clearly define the type of testing to be performed at the manufacturer's plant, and the CONSTRUCTION MANAGER's inspection plan establishes the amount and frequency of surveillance by the CONSTRUCTION MANAGER or the Design Consultant. (See Section 01400 of Division 1 of the Contract Documents.)

C. Procedures

1. The Contractor, with the concurrence of the vendor, sends a notice to the CONSTRUCTION MANAGER for factory testing at least 45 days in advance of the event.

2. The CONSTRUCTION MANAGER notifies the CIP Project Manager and the Design Consultant.

3. The CONSTRUCTION MANAGER and, if required, the CIP Project Manager and/or Design Consultant witness the factory test and verify the testing procedures and results. The Off-Site Plant Testing (witnessing) service of the City Materials Testing Laboratory is used if applicable.

4. The Contractor submits results of the factory test in accordance with Section 01300 of Division 1.

5. The Design Consultant or the CONSTRUCTION MANAGER approves the factory tests results prior to shipping the equipment to the site.

6. The Engineering & Capital Projects Department Materials Testing Laboratory has inspectors qualified to witness and evaluate pipe manufacturing facilities. The CONSTRUCTION MANAGER, with assistance of the CIP Project Manager, uses City testing resources when available. Specifically, the CONSTRUCTION MANAGER should attempt to schedule E&CPD Material Testing Lab inspectors for factory test witnessing as called for in the Contract Documents.

Contract Specific Tasks/Startup and Testing

Task 6-2 – Owner's Manuals

A. Objective

To obtain complete equipment operations and maintenance instructions.

B. Definitions

Owner's Manuals are manufacturer's operation and maintenance instructions for equipment items. These instructions are necessary to allow the plant maintenance staff to service or rebuild all equipment provided in new facilities. In accordance with Division 1 Section 01730, the Contractor is required to supply text and drawings, assembled into complete manuals.

C. Procedures

1. The Contractor includes Owner's Manuals as a pay item on the cost-loaded schedule.

2. The Contractor prepares the Owner's Manuals in accordance with Section 01730 of the Division 1 of the Contract Documents and submits it to the CONSTRUCTION MANAGER.

3. The CONSTRUCTION MANAGER reviews the Owner's Manuals for proper format and forwards 10 copies of the Owner's Manuals to the Design Consultant and/or the O&M Consultant for technical review.

4. The Design Consultant and/or the O&M Consultant review the Owner's Manuals and return 9 copies to the CONSTRUCTION MANAGER if it is approved, and 10 copies if it is not approved.

5. If it is not approved, the CONSTRUCTION MANAGER returns all 10 copies to the Contractor for correction and resubmittal. If approved, the CONSTRUCTION MANAGER distributes copies as follows:

   a. 2 ea. Contractor
   b. 3 ea. Water Operations Division
   c. 2 ea. CIP Program Management Division
   d. 3 ea. CONSTRUCTION MANAGER

2. If in the Design Consultant's scope of work, the Design Consultant will incorporate the O&M information/instruction and further develop a complete O&M Manual, per Book 1- CIP General Design Guidelines, Chapter 8.

Contract Specific Tasks/Startup and Testing

Task 6-3 — Spare Parts

A. Objective

To establish a procedure to transfer spare parts from the Contractor to the Water Operations Division.

B. Definition

The Contractor provides spare parts in accordance with Section 01750 of Division 1 of the Contract Documents. Spare parts are turned over to the Water Operations Division to ensure timely maintenance and repair of facilities equipment.

C. Procedures

1. The Contractor notifies the CONSTRUCTION MANAGER when the Contractor is ready to transfer spare parts to the Water Operations Division.

2. The CONSTRUCTION MANAGER arranges a suitable time for the transfer of spare parts.

3. The Contractor turns over spare parts to the Water Operations Division. The spare parts are properly identified, protected and boxed in accordance with the Contract Documents.

4. The CONSTRUCTION MANAGER, the Contractor, and the Water Operations Division together inventory each transfer of spare parts; and complete the Spare Parts Transfer Form (Attachment 6-3-1).

Attachment 6-3-1
Spare Parts Transfer Form

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Spare Parts Transfer

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W/O No.: _____
Contractor: _____
Contract No.: _____

	Spec. No.	Item Description	Quantity	Part No.
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

The above listed items have been assembled and are ready for transfer to the Water Operations Department.

Delivered By: _____ By: _____ Date: _____
Contractor Signature

Received By: _____ Date: _____
Construction Manager

The above listed spare parts have been inspected and inventoried and are hereby accepted, subject to all contract provisions by the Water Operations Department.

By: _____ Date: _____
Water Operations Representative

Contract Specific Tasks/Startup and Testing

Task 6-4 – Vendor Training

A. Objective

To provide vendor training for equipment operators and maintenance personnel.

B. Definitions

As required by Section 01670 of Division 1 of the Contract Documents, vendor training consists of detailed lesson plans, training materials, classroom instruction and field instruction on the maintenance and operation of the equipment on complicated projects. Section 01731 of Division 1 contains a less detailed training requirement. The Design Engineer should use one or the other but not both. Simple projects do not require any training program for operating and maintenance personnel.

C. Procedure

1. The Contractor submits lesson plans and training materials to the CONSTRUCTION MANAGER.

2. The CONSTRUCTION MANAGER transmits the training material to the Design Consultant or the O&M Consultant, Water Operations, and the CIP Project Manager.

3. The Design Consultant or the O&M Consultant and Water Operations Division review the materials and provide comments to the CONSTRUCTION MANAGER within 14 days of receipt of the material.

4. The CONSTRUCTION MANAGER forwards comments to the Contractor for incorporation into the training materials.

5. The CONSTRUCTION MANAGER and the Water Operations Division, establish acceptable dates for vendor training. The CONSTRUCTION MANAGER keeps a calendar of available training dates.

6. The Contractor schedules vendors on the available training dates, at least 3 weeks prior to the training date. In case of schedule conflicts or unforeseen circumstances, the CONSTRUCTION MANAGER requests alternate training dates from the Contractor.

7. The CONSTRUCTION MANAGER notifies the Water Operations Division each week of the current vendor training schedule.

8. The Water Operations Division, assisted by the CONSTRUCTION MANAGER, arranges for training rooms, projectors, etc. The Water Operations Division may arrange to have the training sessions video-taped.

9. The vendor presents the classroom and field training in accordance with project specifications.

10. As required by the CIP Project Manager, the Design Consultant or the O&M Consultant presents a block of training to Water Operations Division plant operators on system process and instrumentation. The CONSTRUCTION MANAGER coordinates the system training times with the Water Operations Division in conjunction with vendor training sessions.

Contract Specific Tasks/Startup and Testing

Task 6-5 – Equipment Testing

A. Objective

To verify that equipment is installed correctly and operates properly.

B. Definition

A series of checks and tests on equipment to verify that it is operating properly. Equipment testing includes filling out an equipment checklist and completing a baseline data sheet for each piece of equipment. All testing is in accordance with Sections 01670 and 11000, Division 1 and Division 11 respectively, of the Contract Documents.

C. Procedures

1. The CONSTRUCTION MANAGER prepares an Equipment Checkout Form (Attachment 6-5-1) for each major equipment item. The form includes a list of items required to be completed before the equipment is started up.

2. The Contractor and/or Manufacturer's Service Representative fills in the equipment checklist with initials and a date as the specific items are completed.

3. When the checklist is completed, the CONSTRUCTION MANAGER reviews the checklist to ensure that all items are complete.

4. Following completion of the checklist, the Contractor starts up each piece of equipment in accordance with manufacturer instructions. When required by the specifications, the manufacturer's service representative must be present.

5. The Contractor and/or the manufacturer's service representative completes a baseline data sheet for each equipment item.

6. The Contractor transmits a copy of the baseline data sheet to the CONSTRUCTION MANAGER along with the checklist.

7. The CONSTRUCTION MANAGER transmits a copy of the baseline data sheet to the Water Operation Division, the CIP Project Manager, and the Design Consultant for their records.

Attachment 6-5-1
Equipment Checkout Form

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Equipment Checkout Form

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W/O No.: _____
Contractor: _____
Contract No.: _____

Plant Area _____ Equipment # _____
Name _____ Manufacturer _____
Reference Drawings _____ Vendor _____
Name of Manufacturer=s Representative _____

Item	Checked	Not Checked	Not Required	By	Date
Structural Connections	____	____	____	____	____
Foundations	____	____	____	____	____
Anchor Bolts	____	____	____	____	____
Grouting	____	____	____	____	____
Vibration Mounts	____	____	____	____	____
Mechanical Connections	____	____	____	____	____
Drive Train	____	____	____	____	____
Alignment	____	____	____	____	____
Rotation	____	____	____	____	____
Mechanical Controls	____	____	____	____	____
Chutes	____	____	____	____	____
Ductwork	____	____	____	____	____
Insulation	____	____	____	____	____
Grease	____	____	____	____	____
Oil	____	____	____	____	____
Hydraulic Fluid	____	____	____	____	____
Steam	____	____	____	____	____
Air	____	____	____	____	____
Water	____	____	____	____	____
Fuel Oil	____	____	____	____	____
Gas	____	____	____	____	____
Pressure Test	____	____	____	____	____
Electrical	____	____	____	____	____
Other	____	____	____	____	____
	____	____	____	____	____

Comments: _____
_____
_____

Signatures

By: _____
Manufacturer's Representative

By: _____
Contractor

By: _____
Construction Manager

Contract Specific Tasks/Startup and Testing

Task 6-6 — Systems Testing

A. Objective

To ensure that each system, as specified in the Contract Documents, operates as intended by the Design Consultant.

B. Definition

A series of tests done in accordance with the Technical Specifications and Section 01655 of Division 1 of the Contract Documents carried out by the Contractor to ensure that each system operates as designed. Systems are generally defined as equipment, associated piping, and associated electrical components and controls.

C. Procedures

1. The Contractor submits a proposed Test Plan which must be acceptable to the CONSTRUCTION MANAGER.

2. The Contractor notifies the CONSTRUCTION MANAGER when it is ready to perform systems testing as required by the Contract Documents.

3. When the CONSTRUCTION MANAGER determines that the proposed test requires significant coordination, the Contractor is required to submit a written test plan for approval.

4. The CONSTRUCTION MANAGER notifies the Design Consultant, the Water Operations Division, the CIP Project Manager and CIP Operations Liaison of the scheduled testing, and acts as coordinator for all parties.

5. The CONSTRUCTION MANAGER holds a coordination meeting with the Contractor to discuss all pertinent items, i.e., schedule, coordination, extra equipment, manufacturer requirements, etc., before initiating systems testing.

6. CIP contracts for new water mains require hydrostatic, hi-level chlorine, and bacteriological (bac-t)/chemical testing. For new water main construction contracts, the Contractor requests chemical and bacteriological (bac-t) testing through the CONSTRUCTION MANAGER. The CONSTRUCTION MANAGER arranges for sampling/testing by the Water Operations Division, Water Production Branch, Water Laboratory (Lab) at Lake Murray. Some CIP contracts may allow the Contractor to subcontract with an independent laboratory to accomplish the bact-t test. The sampling must conform to the ANSI/AWWA specification C 651 for new water mains (i.e., two sets of samples 72 hours apart for every 500 linear feet). As part of the chemical testing, the Water Department

requires a pH of less than 8.5; thus, the mains must be flushed with an appropriate velocity per the ANSI/AWWA specification C 651. The testing of water storage facilities must conform to ANSI/AWWA specification C 652. Questions regarding the CONSTRUCTION MANAGER's scheduling and test monitoring responsibilities with the Water Department's lab may be referred to the Water Distribution Branch, Project Coordination at 619-527-7422 (Mr. Randy Welborn).

7. Water Operations Division staff may observe the systems testing.

8. The Design Consultant may observe each systems test.

9. The CONSTRUCTION MANAGER observes each systems test and documents it using a form similar to the example pipe test included as Attachment 6-6-1, System Operational Test. The CONSTRUCTION MANAGER, as needed, devises a similar form to record/present the type of test and the test results.

Attachment 6-6-1
System Operational Test

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Pipe Test Record

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: Pipe Pressure Test

Project Name: _____
CIP No.: _____ W/O No.: _____
Contractor: _____
Contract No.: _____

Test No. _____
Original ☐
Retest ☐

Type of System

Type of Material

Location of Test

Test Medium

Special Test Requirements _____

Pre-Test Deficiencies Noted _____

	Specification	Start	Finish	Pass/Fail
Time				
Pressure				
Loss				

Comments and/or Deficiencies Noted During Test: _____
_____
_____

Retest Required: Yes ☐
No ☐

Signature: _____ Date: _____

Book 6

Construction Management Guidelines

Chapter 7
Changes and Claims

City of San Diego Water Department
Capital Improvements Program

Chapter 7
CHANGES AND CLAIMS

7.1 Introduction

This section highlights construction management responsibilities and processes associated with change order development and approval. Change orders are used when the parties can agree on scope and cost related to changes. Claims are submitted when there is a dispute related to changes. The following tasks included in this chapter are:

- Request for Change (RFC)
- Request for Proposals (RFP)
- Cost Estimates
- Schedule Impact Analysis
- Contractor Proposals
- Negotiations
- Field Orders
- Change Orders
- Contractor Disputes/Claims Prevention

Contract Specific Tasks/Changes and Claims

Task 7-1 – Request for Change

A. Objective

To obtain and validate Contractor requests for change (RFC).

B. Definition

The Contractor initiates and submits an RFC for all cost, time and other impacts pursuant to a Contractor-identified need for work scope revision.

C. Procedures

1. Consistent with the Contract Documents, the Contractor prepares and submits a written RFC to the CONSTRUCTION MANAGER within 7 days of identifying a necessary modification to the work scope that impacts contract cost and/or contract time. Notice of the amount of the request for adjustment in cost or time with supporting data is delivered to the CONSTRUCTION MANAGER within 14 days of the start of the necessary modification to the work scope.

2. The CONSTRUCTION MANAGER logs in the RFC and, in consultation with the CIP Project Manager, determines within 30 days if the RFC has merit. The CONSTRUCTION MANAGER may request comments from the Design Consultant and others as appropriate to validate the RFC.

3. If the CONSTRUCTION MANAGER determines that the RFC has merit, the CONSTRUCTION MANAGER prepares a request for proposal from the Contractor and prepares an Owner's cost estimate of the change.

4. If the CONSTRUCTION MANAGER determines that the RFC is without merit, the CONSTRUCTION MANAGER issues an initial determination in writing rejecting the RFC and stating the reasons for rejection. The CONSTRUCTION MANAGER creates a file for each rejected RFC.

5. Changes submitted by the Contractor under the cost reduction incentive clause of the Contract are processed in a similar manner.

Contract Specific Tasks/Changes & Claims

Task 7-2 – Request for Proposal

A. Objective

To make a request for proposal to the Contractor for a work scope change so that the Contractor can submit a proposal for its cost, schedule and other impacts.

B. Definition

A request for proposal (RFP) is a request to the Contractor to submit a proposal to the CONSTRUCTION MANAGER for a change in the work scope to an existing contract which has been identified by the CONSTRUCTION MANAGER, the Design Consultant, CIP Program Management Division or the Contractor. The proposal should address cost, schedule, and other impacts.

C. Procedures

1. The CONSTRUCTION MANAGER assigns each RFP a number and develops an order-of-magnitude estimate. The CONSTRUCTION MANAGER obtains a verbal approval from the CIP Project Manager prior to issuing any RFP.

2. The Design Consultant prepares a work scope change statement, if required, and prepares any necessary sketches and drawings. If the change is already adequately addressed in a request for information, the Design Consultant response to the request for information is used to define the work scope change. The Design Consultant uses only the latest revision to the Contract Documents to prepare the RFP.

3. The CONSTRUCTION MANAGER prepares and transmits the RFP Form (Attachment 7-2-1) to the Contractor with requests for backup information on pricing, scheduling and other impacts. The status of each request for proposal is entered in the RFP log.

   The CONSTRUCTION MANAGER monitors all RFPs and reports RFP status to the CIP Project Manager, the Design Consultant and the Contractor. The CONSTRUCTION MANAGER discusses RFP status with the Contractor and Design Consultant at each progress meeting and reports to all project participants monthly.

Attachment 7-2-1
Request for Proposal Form

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Request for Proposal #_____

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W/O No.: _____
Contractor: _____
Contract No.: _____

Reference Drawings: _____
Ref. Spec. Section: _____
Referenced RFI: _____

Description:

☐ Shop drawings required
☐ No shop drawings required

- Please submit a firm cost proposal with breakdown of labor hours and cost for labor, material, equipment, and markups for adjustments to your construction contract for the above change no later than _____ days after receipt of this RFP. If you do not believe that this is a reasonable time period, contact me immediately. You may be held responsible for schedule delays resulting from incomplete or late proposals.
- Please identify the first impacted CPM schedule activity. Your proposal should include a request for time extension, if needed.
- Other requirements to be included are: _____
_____
_____

By: _____
Construction Manager's Signature

☐ The verbal approval of the CIP Project Manager has been obtained to issue this RFP to the Contractor.

Contract Specific Tasks/Changes and Claims

Task 7-3 – Cost Estimates

A. Objective

To provide the basis to evaluate the cost impact of proposed changes to the contract cost.

B. Definition

An independent cost estimate and analysis of cost impact for all changes to the work generated by either a Contractor's request for change (RFC) or a City-initiated request for proposal (RFP) prepared by the CONSTRUCTION MANAGER for which the order of magnitude estimated exceeds $5K.

C. Procedures

1. Upon determination that a Contractor's RFC has merit or when an RFP is issued to the Contractor, the CONSTRUCTION MANAGER independently estimates the cost of the change and completes an estimate prior to negotiations with the Contractor. In certain cases the CIP Project Manager may prepare the independent cost estimate.

   The CONSTRUCTION MANAGER gathers the appropriate documents that describe the change to the work. These may include the Design Consultant's responses to requests for information, modifications to plans and specifications, Contractor's proposals, or field sketches prepared by the CONSTRUCTION MANAGER.

2. The CIP Program Management Staff may be asked to provide comments on aspects of the cost estimate that significantly affect evaluation and/or negotiation of the subsequent Contractor proposal.

3. The CONSTRUCTION MANAGER keeps these estimates in a restricted-access file.

Contract Specific Tasks/Changes and Claims

Task 7-4 – Schedule Impact Analysis

A. Objective

To provide the basis to evaluate the impact of proposed changes on all other related contract schedule activities.

B. Definition

The CONSTRUCTION MANAGER'S assessment of schedule impacts caused by proposed changes. See Section 01310 of Division 1 of the Contract Documents for Contractor requirements

C. Procedures

1. The CONSTRUCTION MANAGER determines all time impacts to a Contract or to related contracts that a Contractor's request for change or the CONSTRUCTION MANAGER'S request for proposal might contain. Section 01310 of Division 1 requires the Contractor to submit an Impact Analysis for a project change.

   The CONSTRUCTION MANAGER produces a partial CPM schedule, commonly referred to as a Time-Impact-Analysis (TIA), showing any significant time impact of the proposed change. Each analysis should demonstrate the estimated time impact based on the events of the delay, the date the direction was given to the Contractor to perform the changed work, the status of construction “at that point in time”, and the computation of the event time of all critical activities affected by the change or delay. The event times and activity durations used in the analysis should be those included in the latest revision and updates of the construction schedule at that point in time or as adjusted for the events of the delay.

2. The CONSTRUCTION MANAGER reviews the time impacts with the CIP Project Manager and the Design Consultant as appropriate.

3. The CONSTRUCTION MANAGER keeps these analyses in a restricted-access file.

Contract Specific Tasks/Changes and Claims

Task 7-5 – Contractor Proposals

A. Objective

To obtain a proposal from the Contractor in response to a request for proposal (RFP).

B. Definition

The Contractor submits a proposal for cost, time, and other impacts pursuant to a RFP from the CONSTRUCTION MANAGER.

C. Procedures

1. In accordance with the Construction Contract General Conditions, the Contractor prepares a proposal that addresses associated cost, time and quality impacts and submits it to the CONSTRUCTION MANAGER.

2. The CONSTRUCTION MANAGER forwards a copy of the Contractor's proposal to the CIP Program Manager and evaluates the Contractor proposal using drawings and specifications developed by the Design Consultant.

3. The CONSTRUCTION MANAGER requests comments from the Design Consultant and others as appropriate on matters that significantly impact evaluation and/or negotiation of the change.

4. The CONSTRUCTION MANAGER evaluates the Contractor's proposal using the cost estimate and the cost and schedule impact analysis prepared by the CONSTRUCTION MANAGER and provides a recommendation to the CIP Project Manager.

5. The CONSTRUCTION MANAGER prepares for and schedules negotiations with the Contractor.

Contract Specific Tasks/Changes and Claims

Task 7-6 – Negotiations

A. Objective

To obtain mutual agreement with the Contractor for contract cost, time and other impacts on work scope changes forwarded as a request for proposal (RFP).

B. Definition

Negotiations take place between the Contractor and the CONSTRUCTION MANAGER to arrive at an agreement for all changes in contract cost, time and other impacts for a validated work scope change. The CONSTRUCTION MANAGER leads the negotiation effort with the assistance of representatives from CIP Program Management Division as required, the CIP Project Manager and the Design Consultant. The CONSTRUCTION MANAGER assembles the negotiations representatives as the CIP Negotiation Team.

C. Procedures

1. The CONSTRUCTION MANAGER schedules and coordinates the negotiation sessions with the Contractor, and, as required, the CIP Project Manager and/or the Design Consultant.

2. Prior to negotiations with the Contractor, the CIP Negotiation Team meets to review the scope of the proposed changes and the CONSTRUCTION MANAGER'S and Contractor's cost estimates, to analyze schedule impact issues, and develop a negotiating strategy and position.

3. The CIP Negotiation Team meets with the Contractor and negotiates an agreement for each RFP. The CONSTRUCTION MANAGER conducts the negotiations for the City and, on minor changes, may represent the Negotiation Team. The number of negotiating sessions is determined by the Negotiation Team based on the complexity of the issues and the scope of the change.

4. After negotiations are concluded, the CONSTRUCTION MANAGER prepares a written recommendation and Record of Negotiations (RON) Form (Attachment 7-6-1) and includes the following information:

   a) Applicable marked-up drawings regarding the change

   b) Specifications additions/changes

   c) Negotiation memoranda

   d) Sketches describing the change

   e) RFP form

f) Justification for the proposed modification prepared by the CONSTRUCTION MANAGER or Design Consultant

g) All correspondence relating to the RFP

h) Copy of the Contractor's proposal for each RFP. The Contractor will include a cost estimate on the Proposed Cost Estimate Form (Attachment 7-6-2) and the Cost Proposal Form (Attachment 7-6-3)

i) Copy of the CONSTRUCTION MANAGER's or CIP Project Manager's independent cost estimate for the RFP

j) All time impacts with analysis demonstrating the impact duration

k) MBE/WBE percentage participation proposed by the Contractor

l) The Design Consultant's written concurrence with the technical changes if it did not prepare the work scope change

m) CONSTRUCTION MANAGER's recommendation

The CONSTRUCTION MANAGER updates the status of all negotiations with the Contractor for the CIP program management staff and the Design Consultant monthly.

5. The Record of Negotiations (RON) is forwarded to the CIP Project Manager with the change order after signature by the Contractor and CONSTRUCTION MANAGER. Under no circumstances is the RON to be forwarded to the Contractor (see Change Order Procedures in Task 7-8).

6. If agreement cannot be reached with the Contractor during negotiations, and the change is required, the CONSTRUCTION MANAGER prepares a unilateral change order without the Contractor's agreement which is approved and issued by the appropriate City authority in accordance with change order procedures. Prior to the unilateral change order, the CONSTRUCTION MANAGER can issue a directive to proceed on force account and the CONSTRUCTION MANAGER monitors time and materials daily. The CONSTRUCTION MANAGER uses the Allowance Work Order Form (Attachment 7-6-4) and the Daily Extra Work Report (Attachment 7-6-5) for this purpose.

Attachment 7-6-1
Record of Negotiations Form

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Record of Negotiations

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

1. Summary
   - Description of Work
   - Summary of Cost
2. Justification for Entitlement
3. Justification of Negotiated Price
4. Justification of Time Extension
5. EOCP Impact

Attachment:
- In-house cost estimate
- Contractor's Cost Proposal

Attachment 7-6-2
Proposal Cost Estimate Form

Instruction for preparing proposals/estimate for contract change

All contract change proposals shall be addressed to the Construction Manager. Proposals must clearly state the conditions and scope of the change/modification and shall be accompanied by a breakdown of cost as indicated. Lump sum costs will not be acceptable in either the prime or subcontractor's breakdown of direct cost. The total cost for labor, material, and equipment rental (or ownership) for each item shall be transferred to the corresponding item on the front of this form. The proposal should also include, if applicable, a request for an extension of time; Contractor shall provide explanation for any time extension requests. The Contractor shall not proceed with any of the work included in the change/modification prior to receipt of an executed modification of contract (or Directive, or Notice to Proceed) by the Construction Manager.

Project Title: _____ W.O. No.: _____

Breakdown of Direct Costs: _____ Date: _____

Items of Work for Prime Contractor	QTY	Unit	Material		Labor		R O	Equipment		
			Unit Cost	Total Cost	Unit Cost	Total Cost		Days	Rate	Total
							Total (Rental)			
							Total (Owned)			

Subcontractor's Name, Address, Telephone No., and Contact Person:

Items of Work for Subcontractor	QTY	Unit	Material		Labor		R O	Equipment		
			Unit Cost	Total Cost	Unit Cost	Total Cost		Days	Rate	Total
							Total (Rental)			
							Total (Owned)			

Attachment 7-6-3
Cost Proposal

Cost Proposal

To: (Construction Manager): _____ Date: _____
Project Title: _____ W.O. #: _____
Description of Work: _____
_____
_____

Prime Contractor's Work				Revisions/Comments
1. Direct material				
2. Sales tax on material (% of line 3)	7.75%			
3. Equipment rental				
4. Sales tax on rental equipment (% of line 3)	7.75%			
5. Equipment ownership and operating expenses				
6. Add lines 1 through 5				
7. Material and equipment mark-up (% of line 6)	15%			
8. Subtotal (add lines 6 and 7)				
9. Direct labor				
10 Insurance, taxes and fringe benefits (% of line 9)	%			
11. Add lines 9 and 10				
12. Labor markup (% of line 11)	20%			
13. Subtotal (add lines 8, 11 and 12)				
Prime Contractor's Remarks:				

Attachment 7-6-3
Cost Proposal

Subcontractor's Work				Revisions/Comments
14. Direct material				
15. Sales tax on material (% of line 14)	7.75%			
16. Equipment rental				
17. Sales tax on rental equipment (% of line 16)	7.75%			
18. Equipment ownership and operating expense				
19. Add lines 14 through 18				
20. Material and equipment mark-up (% of line 19)	15%			
21. Subtotal (add lines 19 and 20)				
22. Direct labor				
23. Insurance, taxes and fringe benefits (% of line 22)	%			
24. Add lines 22 and 23				
25. Labor markup (% of line 24)	20%			
26. Subtotal (add lines 21, 24 and 25)				
Subcontractor's Remarks:				

Summary				Revisions/Comments
27. Subcontractor's Work (from line 26)				
28. Prime Contractor's Overhead on Subcontract (% of line 27)				

*10% in the first $2,000.00 and 5% on amount in excess of $2,000.00

Estimated time extension requested for the work and justification for the time extension _____
_____
_____

Signature of Preparer: _____ Title of Preparer: _____

Attachment 7-6-4
Allowance Work Order

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Unit Price/Allowance Work Order

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Affected Activity No.: _____
Contractor: _____
Contract No.: _____

Description of Work
_____
_____
_____

Total Amount of Field Order Funds Authorized in Contract $_____
Cumulative Amount of Prior Work Order(s) $_____
Amount of This Work Order $_____
Amount of Work Order Funds Remaining $_____

Comment, justification, and when applicable, verification of quantity for Unit Priced Item(s):
_____
_____
_____
_____

The Contractor shall proceed with the above described work upon execution of this Work Order by the Contractor's authorized representative and the Construction Manager.

Contractor's Authorized Representative:

_____	_____	_____
Printed Name	Signature	Date

Construction Manager:

_____	_____	_____
Printed Name	Signature	Date

Distribution:

Attachment 7-6-5
Daily Extra Work Report

City of San Diego
Daily Extra Work Report

Distribution:
White • Resident Engineer
Yellow – Contractor
Pink – Work Order File

Contract No. _____ Date Performed _____ Date of Report _____ C.C.C. No. _____ Report No. _____

Work Performed By _____

Description of Work _____

Equip No.	Equipment	Invoice	Hourly Rate		Extended Amounts		P.O. No.	Labor	Hours	Hourly Rate		Extended Amounts	
									O.T.				
									Reg.				
									O.T.				
									Reg.				
									O.T.				
									Reg.				
									O.T.				
									Reg.				
									O.T.				
									Reg.				
									O.T.				
									Reg.				
Material and/or Work done by Specialists								SUBTOTAL					
Description		No. Unit	Unit Cost										
								Labor surcharge – See Special provisions _____					
								Subsistence _____ No. _____@ $_____					
								Travel Expense _____ No. _____@ $_____					
								Other _____					
								TOTAL COST OF LABOR			A		
TOTAL COST OF EQUIPMENT, MATERIALS AND WORK											B		
								+ ___% markup on labor cost per contract			(A)		
								+____% markup on equip, material and work cost			(B)		
								+ ___% markup on subcontracted work			(C)		
											Subtotal		
								+____% bond and liability insurance			(D)		
											Total		

Contractor's Representative_____

Accepted for Progress Payment

Construction Manager _____

Work Done Under Protest (Section 2-3)
Construction Manager_____

Contract Specific Tasks/Construction Operations

Task 7-7 – Field Orders

A. Objective

Execute a contract scope change with or without a contract duration change using a field order.

B. Definition

The CONSTRUCTION MANAGER uses a field order to recommend a contract scope change to the CIP Project Manager. Field Order funds are preassigned as bid "allowance" items in the Contract Documents. Field Orders are processed in accordance with the rules set forth in the Contract Documents. The Field Order is executed by the CONSTRUCTION MANAGER after obtaining the verbal approval of the CIP Project Manager. See Sub-Section 9-3.6 Field Orders, in Part 1 Special Provisions - General of the Contract Documents.

C. Procedure

1. CIP construction contracts may contain a line item in their bid schedules called “Allowance for Field Orders.” Such contracts contain necessary language to implement the Field Order Program. The amount of the allowance for field orders shall be as stated in the Contract Documents.

2. When recommending the use of a field order, the CONSTRUCTION MANAGER should observe the following guidelines:

   a. The work being recommended for a field order is in fact additional work not covered by the scope of the contract.

   b. Sufficient funds are authorized and available in the allowance for field orders.

   c. An element of the work which should be performed as a single unit shall not be subdivided into 2 or more field orders for the purpose of avoiding compliance with the amounts stated in the Contract Documents.

   d. The Contractor concurs in and signs the field order.

   e. The value of each individual field order does not exceed the amounts stated in the Contract Documents and as shown below:

Construction Contract Amount	Max Amount Per Each Field Order
Less than $100,000	$2,500
$100,000 to $1 million	$5,000
$1 to $5 million	$10,000
Greater than $5 million	$20,000

a. Field orders that provide for adjustment of contract time must be incorporated into a change order regardless of the total monetary value.

b. The CONSTRUCTION MANAGER prepares a justification statement which will be included with each Field Order. It will not be shown to the Contractor.

3. If negotiations for a change fall under the criteria of a field order, the CONSTRUCTION MANAGER completes the Field Order Form (Attachment 7-7-1) when the scope of work has been negotiated and the mutual agreement between the Contractor and the CONSTRUCTION MANAGER does not exceed the specified contract value. The CONSTRUCTION MANAGER enters the total field order funds authorized, the value of the field order and amount of field order funds remaining on the field order form. The CONSTRUCTION MANAGER transmits 3 copies of the completed Field Order Form to the Contractor for signature. Supporting documentation is not forwarded to the Contractor.

4. The Contractor reviews and signs the 3 copies of the Field Order Form and returns them to the CONSTRUCTION MANAGER.

5. The CONSTRUCTION MANAGER reviews the Contractor-signed Field Order Forms, attaches the Record of Negotiation along with all supporting documentation including estimates to one Field Order copy, and forwards the copies of the field order documents to the CIP Project Manager for the Water CIP Program Management Division authorization signature. The CONSTRUCTION MANAGER obtains the concurrence of the Design Consultant for changes that could impact the original technical intent of applicable specifications and drawings.

6. The CIP Program Management Division authorized representative signs the Field Order Form and returns 2 copies to the CONSTRUCTION MANAGER. The CIP Project Manager reviews the Field Order package and signs the field order if the field order amount is within his approval authority and there is no change in contract duration. If the field order amount exceeds the approval authority of the CIP Project Manager or includes a contract duration change, the CIP Project Manager forwards the package to the appropriate CIP Senior Civil Engineer with an approval recommendation. The CIP Senior Civil Engineer reviews and approves the field order. Contract field order allowances over $200,000 and individual field orders

exceeding $20,000 require approval of the City Council during form 1472 submittal.

7. The CONSTRUCTION MANAGER logs the executed field order and forwards one copy to the Contractor. Only the fully executed Field Order authorizes the Contractor to proceed with the Work.

Attachment 7-7-1
Field Order Form

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Field Order

Date: _____ Project: _____
To: _____ Contractor: _____
_____ Work Order No.: _____
Attn: _____
From: _____ Field Order No.: _____

Description:
_____
_____
_____

Payment to the Contractor for Field Order items shall provide full compensation for all equipment, materials, labor, field and home office overhead, markups and profit necessary to complete the Work. By executing the Field Order, Contractor agrees that no additional compensation or claims for items of Work listed in the Field Order will be allowed.

No time extension is allowed as a result of this Field Order unless it is incorporated into a change order.

JUSTIFICATION:

_____

CONTRACT INFORMATION

1. Original Field Order Allocation per Contract Authorization $
2. Prior Field Orders Authorized to date $
3. Amount of This Field Order $
4. Total amount of Field Orders (including this one) $_____

5. Net Amount of Field Order Funds Remaining (Line 1 minus Line 4) $

_____

This Field Order was discussed with_____ on (date)_____

Contractor Representative Approval:_____ _____

Construction Manager Approval:_____

CIP Program Management Approval:_____

cc: Construction Management Liaison
Project Manager, CIP Program Management Division

Contract Specific Tasks/Changes and Claims

Task 7-8 – Change Orders

A. Objective

To describe procedures to address a changed condition as a result of a Request for Proposal (RFP), a Contractor claim, a modification to a specification, or an adjustment to Contract time.

B. Definition

The CONSTRUCTION MANAGER uses a change order to recommend changes in scope, cost, and/or time to an existing construction contract. The change order is composed of one or more RFPs or a claim which has been negotiated and mutual agreement has been reached between the Contractor and the CONSTRUCTION MANAGER.

There are three approval levels for Change Orders, each with different signature authorities. See attachment Water CIP Program Management "Memo" (Attachment 7-8-1). The three levels are as follows:

Level 1: Change Orders up to $100,000 must be approved by the Water Department Deputy Director.

Level 2: Change Orders between $100,000 and $200,000 must be approved by the Water Department Deputy Director and the Water Department Director.

Level 3: Change Orders in excess of $200,000 must be approved by the Water Department Deputy Director, the Water Department Director and the City Manager prior to forwarding to the City Council for approval.

C. Procedures

The dollar value of a Change Order will determine the City approval signature level. For signature not required the words "not required" are typed on the appropriate approval lines of the Contract Change Order (CCO) form (Attachment 7-8-2).

1. Upon issuing direction to the Contractor to provide costs for a particular change, the CONSTRUCTION MANAGER shall begin to prepare an independent cost estimate for the changed work. The CONSTRUCTION MANAGER shall prepare an independent estimate for all changes that are greater than the allowable Field Order level (See Task 7-7 and Attachment 7-8-3). These estimates should be prepared on a Time and Material basis as a starting point to negotiate a lump sum change amount. Upon receipt of the Contractor's cost proposal for the change, the CONSTRUCTION MANAGER, with input from the CIP Project Manager, will negotiate an acceptable price for the work involved in the change. A Record of Negotiation (NOC)

shall be included in the Change Order documentation package (see Attachment 7-6-1). Justification will be prepared to accompany the Contract Change Order (CCO) form through the approval process (the justification is not distributed to the Contractor).

2. Several changes can be listed on any one Change Order as long as they are itemized with the dollar value for each change. The Change Order provides a description of each work item. The description should include the approximate location of the work along with the quantities and materials compensated for as the change was agreed to, why the particular method of compensation was selected and why the Contract time was affected.

3. Any request for adjustment to the Contract time must be supported with a Time Impact Analysis from the CPM Schedule identifying how and why the change affected the Contractor's time of completion. (See Section 01310 of Division 1 of the Contract Documents.)

4. Upon completion of draft, Change Order will be forwarded to the CIP Project Manager, via email, for review and comment. The CIP Project Manager will be allowed two (2) working days review time prior to returning it to the CONSTRUCTION MANAGER to finalize.

5. Processing and Distributing the Change Order. Upon completion of the Contract Change Order document, six (6) copies shall be printed for signature. These copies shall be printed on pink paper for Change Orders requiring approval Level 1 and Level 2 and on white paper for approval Level 3. All Change Orders will be forwarded to the CIP Project Manager for further City processing per May 30, 2000 Water CIP Program Management Deputy Director Memorandum (Attachment 7-8-1). Processing and distribution of the six copies will be as follows:

   a. The Contractor receives six (6) copies of the Contract Change Order, without the justification attached. He/she will sign all six (6) copies, retain one (1) copy for his/her files and return five (5) copies to the CONSTRUCTION MANAGER.

   b. The CONSTRUCTION MANAGER receives five (5) signed copies from the Contractor and attaches the Justification to each copy. The CONSTRUCTION MANAGER retains one (1) copy for the Contract files and forwards four (4) copies to the CIP Project Manager.

   c. The CIP Project Manager receives four (4) copies of the Change Order and Justification for internal processing and distribution.

6. For changes to designed work by the Design Consultant of Record, where additional sheets (drawings) are provided to incorporate into the drawing set, the Design Consultant will sign off on Page 1 of the

Contract Change Order (CCO) form (Attachment 7-8-2). All other design changes should be discussed with the Design Consultant for concurrence as applicable.

7. If the change is related to a claim see Attachment 7-8-4, Claim Resolution Flow Chart Explanation, and Attachment 7-8-5, Claim Resolution Flow Chart. Also see Task 7-10 on Contractor Disputes and Claims Prevention.

8. See other related tasks: Task 7-7 Field Orders and Task 7-9 Final Determination.

Attachment 7-8-1
Change Order Procedure Memorandum

CITY OF SAN DIEGO
M E M O R A N D U M

DATE: May 30, 2000

TO: CIP Program Management Staff

FROM: Vic Bianes, Deputy Director, CIP Program Management Division, Water Department

SUBJECT: Revised Construction Contract Change Order Procedure

The following change in processing Construction Contract Change Orders (CCO) shall be effective immediately for all CIP projects administered by Consultant Construction Management firms.

Attached is the revised CCO form (shell) to be used. Note that the CCO Route Slip is no longer necessary to process a CCO. The revised CCO procedure and revised CCO form (shell) can be retrieved from "J" drive - "Construction Management."

This CCO procedure covers routing after the Construction Manager/Resident Engineer reaches an agreement for compensation or credit with the Contractor and obtains the Contractor's signature. The Construction Manager/Resident Engineer shall prepare five (5) signed original CCO's, keep one signed original CCO, and forward four (4) signed originals of the CCO to the Project Manager in accordance with the following approval levels:

1. The Deputy Director must approve all CCO's up to $100,000. (Use pink colored paper.)

2. The CIP Program Management Deputy Director and Water Department Director must approve all CCO's between $100,000 and $200,000. (Use pink colored paper.)

3. The City Council, Water Department Director, and CIP Program Management Deputy Director shall approve all CCO's over $200,000. (Use white colored paper.)

The Project Manager shall sign the CCO, secure the Senior Civil Engineer's signature, keep one copy of the CCO for his or her records, then forward three originals of the CCO to the Water CIP Finance section (currently Margaret Hegarty) for signature.

Attachment 7-8-1
continued

Revised Construction Contract change order procedure
May 30, 2000
Page 2 of 2

The Water CIP Finance section shall sign the three original CCO's certifying that funds are available for the CCO and forward the three original CCO's to the Deputy Director for signature.

The CIP Program Management Deputy Director shall return all three signed, original CCO's to the Water CIP Finance section for further routing of the CCO, including obtaining all necessary approvals from the Auditor and Deputy City Attorney (and Water Department Director and City Council, when required). The Water CIP Finance section will then send copies of the fully-executed CCO to the Auditor and Purchasing for modification of the construction contract purchase order and one signed original of the CCO to the Project Manager.

The Project Manager will make a copy of the completed CCO and forward it to the Construction Manager/Resident Engineer to be included in the construction records and retain the original CCO in the office project file. The completed, signed CCO copy shall be a notification to the Construction Manager/Resident Engineer that the Contractor may invoice for all or part of the CCO.

Please feel free to call Safwat Abuzaid at 533-5194 if you have any questions.

/signed/

VIC BIANES
Deputy Director
CIP Program Management Division

Attachment: CCO Form (shell)

CC:

Marsi Steirer, Deputy Director, Water Dept., Water Policy, Finance and Planning Division
Catherine Bradley, Deputy City Attorney, City Attorney, MS # 59
Sam Gray, Supervising Management Analyst, Water Dept., Water Policy, Finance and Planning Division
Jeff Weien, Program Manager, Parsons
O'Brien Kreitzberg staff
CH2MHill staff

Attachment 7-8-2
Change Order Form

CITY of SAN DIEGO - WATER DEPARTMENT

Job Order No. _____

CHANGE ORDER

Sheet 1 of

Date _____

Contract Change Order No. _____ to Contract for:
Title _____
Contractor _____

Description:

Payment to the contractor for these change order items shall provide full compensation for all equipment, materials, labor, field and home office overhead, indirect and consequential costs, mark-ups and profit necessary to complete the work. By executing this contract change order, the contractor agrees to proceed with this work as a change order per Section 3-2.1 of the Standard Specifications and waives any rights to additional compensation arising out of work listed in this change order, including without limitation, any claims relating to any cumulative effect of change orders, delays, productivity impact or interruption. See attached sheet (2 of 3) for continuation.

CONTRACT INFORMATION

				Original Contract Amount	
Resolution No:				**Contract Amount Authorized Through Phase ____ Funding**	
Fund:		C.I.P. No.:		**Prior Change Orders**	
P.O. No.:		Aud. Cert. No.:		**Amount This Change Order**	
Contract Doc.:		Ref. Dwg. No.:		**New Contract Value**	$0.00

The cost of the Change Order ( ) is ( ) is not available from the contingency funds authorized for the contract. $_____ additional funds are requested.
The Change Order will ( ) not change ( ) increase ( ) decrease the amount of the contract based on:

( ) an **agreed lump sum** of $ _____

( ) **unit prices** agreed upon totaling $ _____

( ) **Cost plus** as provided in Section 3-3 of the Standard Specification for an amount not to exceed $ _____

Original/Previous Contract duration: _____ days. Requested by this Change Order _____. NEW CONTRACT DURATION _____ days.

ORIGINAL CONTRACT COMPLETION DATE: _____ **NEW CONTRACT COMPLETION DATE:** _____

Accepted: _____
Contractor Date

Recommended By:
Construction Manager Date
Project Manager Date
Senior Civil Engineer Date
CIP Finance Date
Deputy Director Date
Director Date

Funds Cert. By:
Auditor Date

Executed By: _____
City Manager Date

Appr. As To Form: _____
City Attorney Date

Return To: **CIP Program Management Division, MS907**

COPY TO:
( ) AUDITOR w/enclosure
( ) CONTRACTOR w/o enclosure
( ) CIP CM w/enclosure
( ) W.O. FILE w/enclosure
( ) PROJECT MANAGER w/enclosure
( ) AUDITOR, 7C w/enclosure
( ) CONSTRUCTION MANAGER w/enclosure
( ) CIP FINANCE

Attachment 7-8-2
Change Order Form
Continued

Project Name: _____
Contractor: _____
Contract Change Order No.: _____

Description(continued):

	INCREASE	DECREASE	TIME
Item No. 1:			
Item No. 2:			
Item No. 3:			
Sub Total Amount	0.00	0.00	0.00
Net Increase			
Net Decrease			
Total Net Change Order Amount	0.00		

By reason of this contract Change Order, the number of working days shall be increased by _____ days.

Attachment 7-8-2
Change Order Procedure Memorandum
continued

Project Name: _____
Contractor: _____
Contract Change Order No.: _____

Justification for Entitlement:

Attachment 7-8-3
Field Order (Form)

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Field Order

Date: _____ Project: _____
To: _____ Contractor: _____
_____ Work Order No.: _____
Attn: _____
From: _____ Field Order No.: _____

Description:
_____
_____
_____

Payment to the Contractor for Field Order items shall provide full compensation for all equipment, materials, labor, field and home office overhead, markups and profit necessary to complete the Work. By executing the Field Order, Contractor agrees that no additional compensation or claims for items of Work listed in the Field Order will be allowed.

Agreed time extension as a result of this Field Order of .....days.

JUSTIFICATION:

_____

CONTRACT INFORMATION

1. Original Field Order Allocation per Contract Authorization $
2. Prior Field Orders Authorized to date $
3. Amount of This Field Order $
4. Total amount of Field Orders (including this one) $_____
5. Net Amount of Field Order Funds Remaining (Line 1 minus Line 4) $

_____

This Field Order was discussed with_____ on (date)_____

Contractor Representative Approval:_____

Construction Manager Approval:_____

cc: Construction Management Liaison
Project Manager, CIP Program Management Division

Attachment 7-8-4
Claim Resolution Flow Chart Explanation

Claims Resolution shall conform to Part 1 Special Provision - General of the Contract Documents. The following general describes the Claims Resolution Process.

1. Upon receipt of a claim from the Contractor, the Construction Manager forwards a copy to the CIP Project Manager and reviews the claim for merit and timeliness. Following review, the Construction Manager discusses the claim with the CIP Project Manager.

2. If the Construction Manager and the CIP Project Manager agree with the merit of the claim, a meeting will be arranged with the Contractor to negotiate the value of the claim. Following a successful negotiation, the Construction Manager will write a Change Order to compensate the Contractor for the negotiated settlement.

3. If the Construction Manager and the CIP Project Manager see no merit to the claim, the Construction Manager denies the claim.

4. Should the Contractor decide the value or merit of the claim is not worth pursuing, he/she can drop the claim. However, if the Contractor feels there is merit to his/her claim and disagrees with the decision of the Construction Manager, he may appeal the decision.

5. The appeal of a claim by the Contractor will elevate the level of review to the Senior Civil Engineer and the Construction Manager.

6. Should this level of review produce sufficient reasoning for settling the claim by either merit or business reasons, the claim is negotiated to the parties satisfaction and a change order is written.

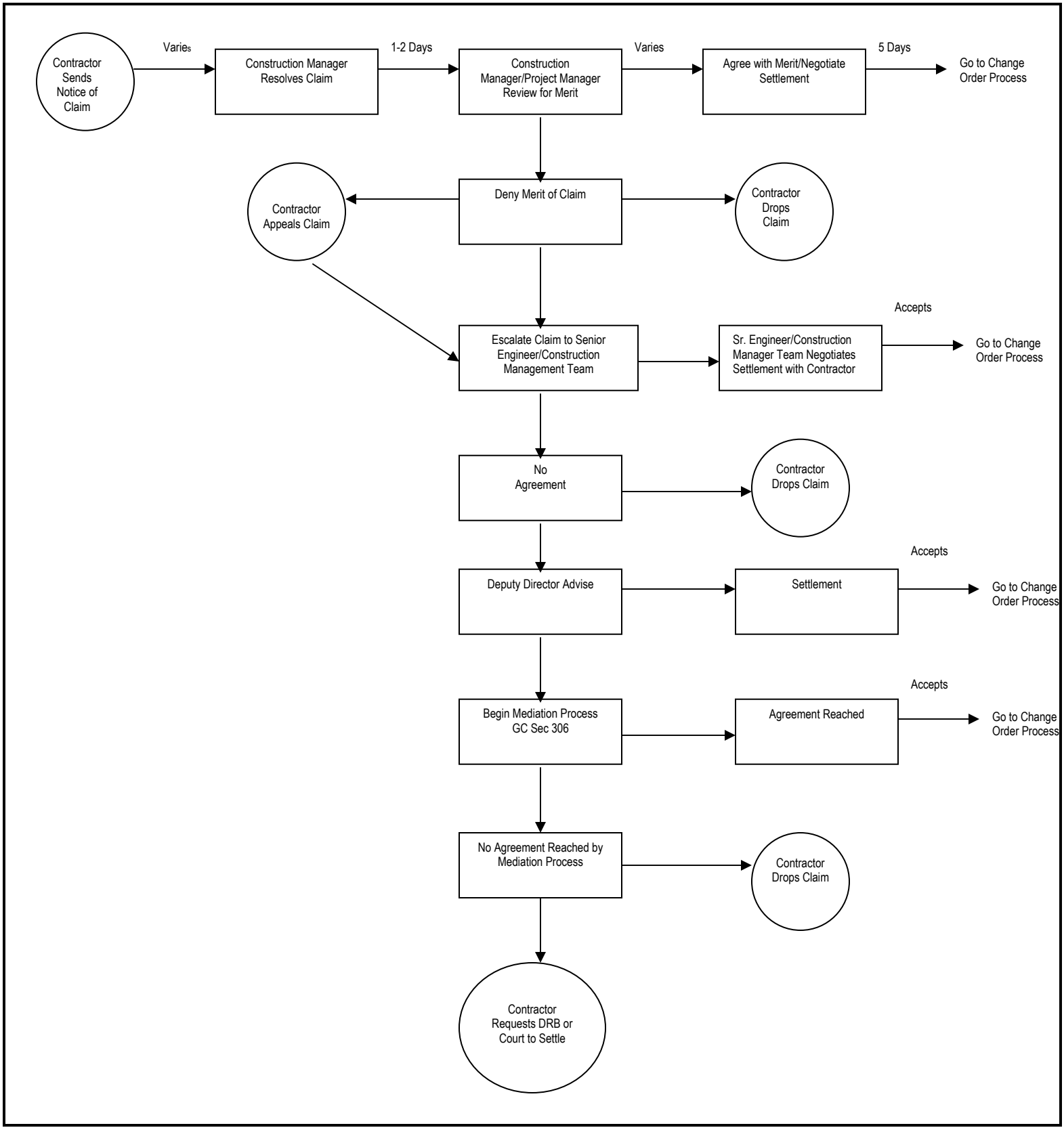
7. Should the claim again be denied at this level, the Contractor again has the option to drop the claim or pursue mediation. The project team would discuss the claim with the Deputy Director for guidance on resolution of claim. The Deputy Director may feel there is a benefit to settle the claim without pursuing mediation.

8. If a settlement is not reached during mediation, the Contractor is required to pursue remedies in a court of competent jurisdiction within the time permitted by law.

9. A claim file is compiled by the Construction Manager and indexed according to Task 3-6. Each claim should be accompanied by an abstract/summary prepared by the Construction Manager.

9. See the attached flow chart for reference (Attachment 7-8-5)

Attachment 7-8-5
Claim Resolution Flow Chart



Contract Specific Tasks/Changes and Claims

Task 7-9 – Final Determination

A. Objective

To provide the Contractor with a method to appeal an initial determination by the CONSTRUCTION MANAGER rejecting the Contractor's request for change (RFC).

B. Definition

A review by the CIP Project Manager of an appeal by the Contractor of an initial determination that its RFC is without merit.

C. Procedures

1. When the Contractor disagrees with the Project Manager's initial determination, the Contractor may, within 30 days after receipt, appeal in writing and request a final determination.

   The Contractor gathers documentation to support its position and presents a written summary explaining why the change is necessary.

2. The CONSTRUCTION MANAGER and the CIP Project Manager review the Contractor's request and make a written final determination within 30 days of receipt of the Contractor's written request for a final determination.

3. If the Contractor disagrees with the CIP Project Manager's final determination, the Contractor may file a claim with the Owner in accordance with the procedures outlined in the Contract Documents.

Contract Specific Tasks/Changes and Claims

Task 7-10 – Contractor Disputes/Claims Prevention

A. Objective

To take appropriate action to prevent/avoid claims situations, to obtain timely notice from the Contractor of a claim due to a change in work scope which the Contractor believes impacts cost and/or time, and to provide a procedure that affords the Contractor fair and equitable consideration in order to maximize settlement by mutual agreement.

B. Definition

Actions can be taken to prevent or avoid some but not all Contractor claims. Claims can develop from disagreement on the merits of a Contractor change request. Once the CONSTRUCTION MANAGER and Owner have made a final determination that a contractor-initiated change is not a valid change and the Contractor wishes to dispute the final determination, the Contractor is obligated to file a formal written Claim in accordance with Section 3-6 of Part 1 Special Provision - General. The Claims process includes several reviews utilizing alternative dispute resolution procedures to achieve a settlement by mutual agreement, and a dispute ultimately is resolved by judicial arbitration or civil court action if no negotiated settlement can be reached.

C. Procedures

1. The CONSTRUCTION MANAGER reviews the Claims Prevention and Analysis (Attachment 7-10-1).

2. If the Contractor disputes the City's final determination issued under the contractor-initiated change procedure, it must make a formal written claim to preserve its rights.

3. In accordance with Section 3-6 of Part 1 Special Provisions - General, if the Contractor is required to:

   a) Enter into nonbinding mediation with the Owner.

   b) If after mediation of a formal written claim a satisfactory settlement is not reached during mediation, the Contractor is required to pursue remedies in a court of competent jurisdiction within the time permitted by law.

4. The CONSTRUCTION MANAGER compiles a claims file. Each claims file is indexed in accordance with Task 3-5, Document Control/Files Index. The CONSTRUCTION MANAGER also prepares an abstract/summary of each claim for the record.

Attachment 7-10-1
Claims Prevention and Analysis

Claims and changes are among the most challenging areas of construction contracts. One of the principal aspects of the construction administration effort is to provide a system for handling these two important subjects.

Claims and changes are an integral part of the construction process, and good claims administration principles are as important as good engineering, safety, cost, and scheduling. Claims and changes should be viewed as processes required to handle construction events that take place where the contract leaves off: changed conditions, design changes, defective specifications, delays, disruptions, and accelerations.

The principal means of claims prevention is to conduct a thorough review of the bid and construction contract documents to look for discrepancies that could result in a claim. Suggested actions that could prevent claims during the contract performance period are summarized below.

The principal means of claims avoidance is prompt issuance of a field order or change order as defined in the construction contract. Field and change orders must allow for fair and equitable adjustments to contract time and cost. Effective practices in dealing with contract changes foster a spirit of teamwork and cooperation between the Water CIP Program Management Division and the Contractor, and benefit the entire program. If the CONSTRUCTION MANAGER and the Contractor disagree over the contractual merit of a change request or the cost or time value of a change, a claim may arise.

Claims are unresolved disputes involving requests by the Contractor for additional compensation and/or time that appear to be outside of the scope of the contract. Unfortunately, the erroneous position is often taken that claims are a nuisance, lack merit, border on the fraudulent, and are perceived as being a result of incompetence and/or stubbornness of the Contractor. Claims must be dealt with in a fair, equitable and timely manner.

The first step in dealing with claims is to recognize them early and begin to document properly all related circumstances. Second, determine whether a valid basis exists for the claim. Third, assess how much the claim is worth based upon the accumulated documentation. Fourth, maintain a positive attitude and make every effort to negotiate a prompt, equitable settlement according to the terms of the contract.

The principal claims evaluation tools and main defense against claims reside in project documentation: contract documents, correspondence files, inspection records and reports, contractor submittals, and field communications, among others.

Types of Claims

The most common claims are those associated with the following situations or conditions:

Acceleration	Ambiguity
Bankruptcy	Bidding errors
Breach of contract	Cardinal changes
Changed conditions	Changes in quality or detail
Changes in dimension	Codes and conflicts
Constructive changes	Deceleration
Defective specifications	Delay
Differing site conditions	Disruption
Errors and omissions	Excessive inspection
Excessive management	Excessive testing
Failure to coordinate	Failure to perform
Failure to provide access	Fast track projects
Hold harmless clauses	Impossibility/impractability
Improper retainage	Improper rejection
Interference	Latent conditions
Liquidation damages	Misinterpretation
Misrepresentation	Negligence
Nonpayment	Over-inspection
Owner conflict	Owner-furnished materials
Performance	Personal Injury
Quality considerations	Reasonable profit
Refusal of change order	Substantial completion
Substitution problems	Subsurface conditions
Supervision by others	Trade practices
Warranty provisions	Weather

To avoid claims, all parties to a contract must understand fully the causes of claims. Ten causes of contract claims are discussed in the following paragraphs:

1. Delayed Completion — A late project can have major cost impacts on both the Contractor and Owner. Determination and proof of liability can be difficult. All parties to a contract must take scheduling very seriously and maintain proper job records to support or refute this type of claim.

2. Changed Time Frame — Any change in starting or ending date should be reviewed carefully for cost and schedule impacts.

3. Restricted Work Sequence — Any sequence of work restriction as a result of existing operation or work of a separate contractor must be clearly stated in the Contract Documents.

4. Chain of Command — Every project has an organizational structure (i.e., supplier reports to sub, sub reports to prime Contractor, etc.) that must not be violated. Prepare an organization chart at the start of the project and make sure all parties follow it.

5. Failure to Coordinate — The Owner of a multiprime contract project and the Contractor with several subs have certain duties to coordinate the work. Failure to provide this coordination may result in cost increases and claims.

6. Quantity Variations — Substantial changes in the quantity of work (plus or minus) to be accomplished can greatly affect the unit cost of the work. This possibility should be addressed in the Contract with a quantity variation clause.

7. Quality of Work — Very difficult to define in words. Too often the CONSTRUCTION MANAGER is left to determine proper quality and often this results in disputes. Where possible, refer to some existing work or written standard, rather than resort to the use of terms such as “workmanlike,” ”reasonable,” and “standard for the industry”.

8. Access to Work Area — Any restriction on access to the work area by one party to another party should be clearly explained in the Contract Documents.

9. Failure of Project to Function Properly — If the Contractor is to be responsible for the performance of the project (i.e., watertight walls, rates of production, etc.), then the Contractor also must design the work. The Contractor cannot be given a detailed set of drawings and specs, be required not to deviate, and then guarantee the results of the engineer’s design.

10. Ambiguous Contract Documents — Any contract that contains words and phrases that are not clear (i.e., reasonable, timely, workmanlike, reasonably workmanlike, etc.) will be subject to interpretation and claims. Final interpretation will usually be by an administrative judge or arbitrator depending on the terms in the Contract.

Claims Criteria

The criteria for a legitimate formal claim under a contract are:

1. The claim arises after contract execution by the Contractor and Owner.

2. The event could not be anticipated by reasonable and prudent parties.

3. The unexpected event affects project costs, project schedule, planned means and methods, planned procedures, and/or planned performance of the Work.

4. The event adversely affects one of the parties to the contract, i.e., it costs time or money to the Contractor or the Owner.

5. The claim is formally presented as a written demand or request for additional time or money under the provisions of the Contract Documents.

All elements of a claim event must be present when a formal claim is filed. The total burden of proof regarding a claim falls on the party making the claim. This rule concerning construction claims prevails regardless of whether the claim is filed by the Contractor against the Owner or by the Owner against the Contractor.

Tips for Prevention of Claims

Some tips and helpful hints on claims prevention are as follows:

1. Prior to bid, conduct a thorough review of the bid and contract documents for discrepancies that could lead to claims.

2. Conduct timely inspections/ communicate clearly/identify problems early.

3. Documentation and recordkeeping.

   a. Keep meeting minutes for preconstruction and all other meetings
   b. Keep written records on everything; respond to all correspondence
   c. Keep inspector personal logbooks and inspection reports
   d. Keep RFI logs and detailed record of contract changes
   e. Insist on updated contractor schedules/record rain days
   f. Keep records of cost negotiations/cost estimates

4. Make timely progress payments; process change orders in a timely manner.

5. Punchlist - substantial completion versus final completion.

6. Notice of completion - liquidated damages assessment - evaluate Contractor performance.

7. Photos and videos

a. Date them
b. Identify locations
c. Provide a relative means of measurement for scale (pencil, coin, ruler, etc.)

8. Be consistent in dealings with the Contractor; be sure the engineering judgments on submittals and RFI responses are consistent.

9. Use a secondary review process. When an issue arises both Contractor and CONSTRUCTION MANAGER can get a second opinion.

10. Avoid personality conflicts.

    a. Use professional demeanor in oral and written communications.
    b. The GREENBOOK specification allows for removal of Contractor's superintendent if necessary.

11. Consult with the CIP Project Manager and/or notify the City Attorney regarding potential claims problems.

Book 6

Construction Management Guidelines

Chapter 8
Completion, Closeout and Post Construction

City of San Diego Water Department
Capital Improvements Program

Chapter 8
COMPLETION, CLOSEOUT AND POST-CONSTRUCTION

8.1 Introduction

This chapter outlines construction management responsibilities and processes associated with:

- Pre-Final Inspection/Discrepancy Lists
- Operations Acceptance Procedures for Water Facilities
- Operations Acceptance Procedures for Water Treatment Plant Facilities
- Notice of Partial Utilization/Beneficial Occupancy
- Operational Demonstration
- Final As-Built Drawings
- Final Inspection
- Certificate of Substantial Completion and Final Payment
- Notice of Completion and Acceptance
- Transfer of Property and Adjustments to Builders Risk Policy
- Warranty Management
- Archiving of Project Field Files
- Final Contract Report

Contract Specific Tasks/Completion Closeout and Post Construction

Task 8-1 — Pre-Final Inspections/Discrepancy Lists

A. Objective

To identify and track discrepancies in construction prior to startup and substantial completion, and to provide systematic checking procedures to see that these discrepancies are corrected before start-up.

B. Definitions

Pre-final inspections are conducted prior to startup and substantial completion to identify incomplete or nonconforming Work. Discrepancy lists delineate all incomplete or nonconforming work.

C. Procedures

1. Upon notification by the Contractor, prior to startup and substantial completion, the CONSTRUCTION MANAGER conducts a pre-final inspection with the Design Consultant, the CIP Project Manager, the landscape special inspector and Water Operations Division Representatives.

2. Upon completion of the pre-final inspections and a review of the Construction Deficiency Log, RFI Log, and other similar logs, the CONSTRUCTION MANAGER prepares a Discrepancy List and issues it to the Contractor, with copies to the CIP Project Manager (see Attachment 8-1-1, Construction Discrepancy List Form).

3. The Contractor corrects all Work identified on the discrepancy list.

4. The CONSTRUCTION MANAGER monitors the satisfactory completion of the individual Work items by the Contractor and checks off completed Work items prior to final inspection.

5. As soon as all landscape work is approved, the 90-day plant establishment period will begin.

Attachment 8-1-1
Construction Discrepancy List

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Construction Discrepancy List

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

Item	Corrected or Completed by Date	Verified By
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

_____
Construction Manager's Signature

Distribution:

Contract Specific Tasks/Startup and Testing

Task 8-2 — Operations Acceptance Procedures for Water Facilities

A. Objective

To provide a standard procedure for Water Operations Division acceptance of all Water CIP construction projects except water treatment plants.

B. Definitions

Operations Acceptance procedures for newly constructed or rehabilitated water pipelines, pump stations, reservoirs/standpipes and pressure regulating stations (PRS) are prescribed by the Water Operations Division (WOD) of the Water Department. WOD acceptance procedures for water treatment plants are found in Task 8-3.

Specific Contractor responsibilities relating to Operational Testing Procedures must be included in Division 1 of the Contract Documents by the Design Consultant during the design phase of each Water CIP project. Water CIP Standards and Guidelines, Book 4, currently contains the following guideline specifications to be considered for inclusion in Divisions 1 and 2 of the Contract Documents:

Section 01655 Placing Equipment in Operation
Section 01660 System Operation and Testing
Section 02666 Water Pipe Testing and Inspection
Section 02667 Test and Disinfection of Hydraulic Structures

Water CIP construction project completion and closeout procedures (including Final Acceptance) are prescribed in Task 8-4 Notice of Partial Utilization/Beneficial Occupancy.

C. Procedure

The CONSTRUCTION MANAGER (CM) or Resident Engineer (RE) will initiate the operational acceptance procedures described below during the Startup and Testing Phase of a Water CIP construction project.

1. At least two weeks in advance, the CM (Water CIP Program Management projects) or RE (Engineering and Capital Projects Department, Field Division for Water CIP projects in the public right-of-way), formally initiate operational acceptance testing/inspection for newly constructed or rehabilitated water pipelines, pump stations, reservoirs/standpipes and PRS, by requesting in writing the WOD, Distribution Engineering Section, Program Management Staff (527-7686/527-7619) to perform the following:

    a. Request to Project Coordination to create a Work Assignment Order number (WAO). The CM/RE should provide the project contact person, project name, drawing number and job order number;

b. Notify various sections of the Water Operations Division, per attachment 6-7-1 or 6-7-2 about the request for scheduling the newly constructed or rehabilitated water pipelines, pump stations, reservoirs/standpipes and pressure regulating stations on the start up process;

c. Distribute seven (7) copies of the plans provided by the RE, one to Project Coordination (527-7422/527-7423), one to the Hydraulic Section (668-2726/668-2036) one to Maps & Records (527-7480/527-7458), one to Corrosion Control section (533-5156), one to Electrical (668-3203/668-2796), one to Telemetering/SCADA (668-2022), and one to Facilities Maintenance (527-7574).

A graphic illustration of the notification procedures for Pump Station, Reservoirs/Standpipe and pressure regulating station Acceptance by Water Operations is provided in Attachment 8-2-1. Notification/coordination procedures for Pipeline Acceptance by Water Operations is illustrated in Attachment 8-2-2.

2. The Program Management Staff (527-7686) of Water Operations Division will coordinate the operational acceptance testing/inspection and start up as follows:

a. Distribute three copies of the PRS pressure settings or Pump Station control points determined based on the approved water study for the project and plans, for review by Water Modeling downtown (533-4287) Program Management Section (527-7686), and the Hydraulic Section (668-2726/668-2036), Maps & Records (527-7480/527-7458);

b. Invite and schedule a team of specialists for the operational acceptance testing/inspection from the following sections: Hydraulics, Plan Checking, Electrical, Telemetry/SCADA, Facilities Maintenance, Landscape, Project Coordination, Corrosion Control Section and Water Quality testing laboratory if the project is a reservoir;

c. Forward FINAL approved PRS pressure settings or Pump Station control points directly to Maps & Records, and to the Contractor via the CM/RE.

The CM/RE must provide seven (7) sets of manuals to Program Management Section including the operational training schedules;

d. Coordinate with Contractor to have the valve manufacturer's representatives to be present to set the pressure settings.

e. The team of specialists identified in Item 2 (b) must witness the detailed operational testing, and the starting of the start up of the

system as indicated in the newly constructed or rehabilitated Pump Station or Reservoirs/Standpipes startup procedure and testing;

f. Notify the CM/RE in writing to perform the seven (7) day operational test, or as stated in Division 1 with the Contractor. After the seven (7) day operational testing, the CM/RE will schedule a meeting with WOD, Program Management representative to declare a pass/fail testing.

g. Document all discrepancies/deficiencies to develop a ”Punch List.” The team of specialists identified in Item 2 (b) should enter all punch lists in the Design Review Database;

h. Forward the ”Punch List“ to the CM/RE for the Contractor/Developer to take the required actions and corrections;

i. Re-inspect and retest facilities as appropriate after notified by the Contractor/Developer via the CM/RE when all items and conditions have been corrected to arrange for the follow up FINAL inspection;

j. Coordinate and schedule the inspection team to conduct the FINAL Operational Acceptance Testing;

k. When all items and conditions have been corrected and accepted, the Project Management Staff (527-7686) will distribute a formal acceptance e-mail/letter to:

- Engineering and Capital Projects, Field Division (Senior Civil Engineer, District Engineer, Resident Engineer) or to Consultant CM

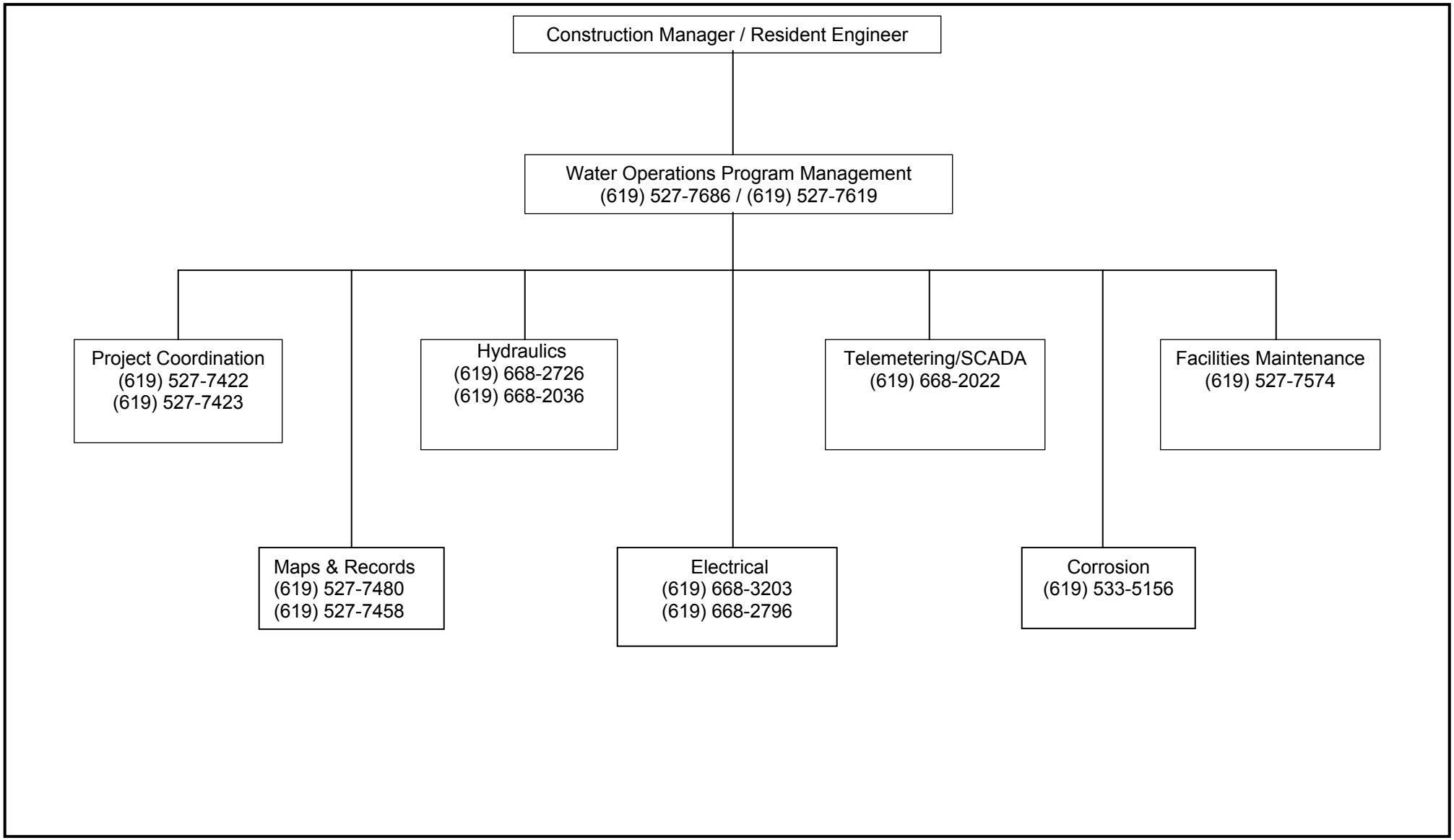
- Development Services Department (533-5150)

- Water Operations Division; System Operation Manager (527-8060), Engineering Program Manager (527-3156), Hydraulics (668-2036), Telemetering/SCADA (668-2022), Corrosion Control (533-5156), Distribution Engineering (527-7619) and Maps and Records (527-7480)

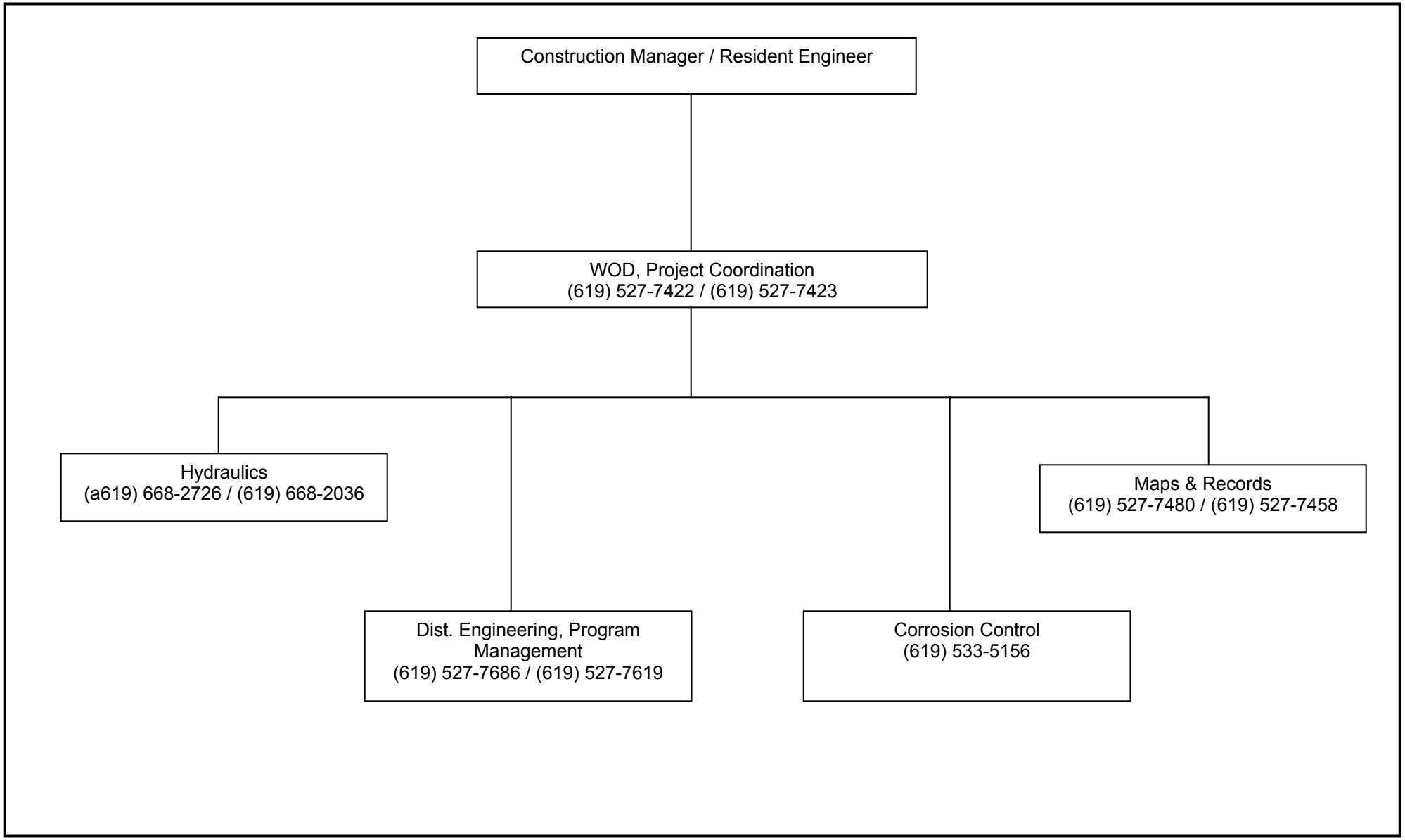
- WD, CIP Program Management Division, Construction Management Liaison (533-6628/533-5304) and the CIP Project Manager.

The CM/RE must issue Attachment 8-4-1 (Notice of Beneficial Occupancy/Partial Utilization), after confirming that all requirements under Task 8-2 (Acceptance Testing Procedure for Water Facilities) were acknowledged by WOD, Program Management Staff.

Attachment 8-2-1
Pump Station and Potable Reservoirs/Standpipe Acceptance by Water Operations Division



Attachment 8-2-2
Water Pipeline
Acceptance by Water Operations Division



Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-3 — Operations Acceptance Procedures for Water Treatment Plant Facilities

A. Objective

To provide a standard procedure for operational test and acceptance of Water Treatment Plants construction projects.

B. Definitions

Operational Acceptance procedures for newly constructed or rehabilitated water treatment facilities are prescribed by the Water Operations Division (WOD) of the Water Department. WOD acceptance procedures for all other water facilities are found in Task 8-2.

Specific Contractor responsibilities relating to Operational Testing Procedures must be included in Division 1 of the Contract Documents by the Design Consultant during the design phase of each Water Treatment Plant project. Water CIP Standards and Guidelines, Book 4, currently contains the following guideline specifications to be considered for inclusion in Divisions 1 and 2 of the Contract Documents:

Section 01655 Placing Equipment in Operation
Section 01660 System Operation and Testing
Section 02666 Water Pipe Testing and Inspection
Section 02667 Test and Disinfection of Hydraulic Structures

Water CIP construction project completion and closeout procedures (including Final Acceptance) are prescribed in Task 8-4 Notice of Partial Utilization/Beneficial Occupancy.

C. Procedure

The CONSTRUCTION MANAGER (CM) will initiate the operational acceptance procedures described below during the Startup and Testing Phase of Water Treatment Plant construction projects. Prior to the initiation of the acceptance procedure, the CM should make sure that all the expectations of the Operations Division have been addressed which include necessary training, completion of the punch list items, equipment and operations manuals and transfer of the spare parts.

1. At least two weeks in advance, the CM for Water Treatment Plant projects formally initiates operational acceptance testing/inspection for newly constructed or rehabilitated water treatment plant projects by requesting in writing the WOD, Engineering Section, Treatment Plant Engineering Staff (527-7436) to perform the following:

    a. Request to create a Work Assignment Order number (WAO). The CM should provide the project contact person, project name, drawing number and job order number;

b. Notify the Engineering Section of the Water Operations Division, Treatment Plant Engineering staff, about the request for scheduling the newly constructed or rehabilitated water treatment facility on the start up process;

c. Provide seven (7) copies of the plans to be distributed to Water Treatment Plant's Operation and Maintenance supervisor, one to Maps & Records (527-7480/527-7458), one to Corrosion Control section (533-5156), one to Electrical (668-3203/668-2796, one to Telemetering/SCADA (668-2022).

2. The Treatment Plant Engineering Staff (527-7436) of Water Operations Division in collaboration with the Construction Manager, will coordinate the operational acceptance testing/inspection and start up as follows:

a. Distribute copies of the plans, for review by Water Treatment Plant's operations and maintenance staff, telemetry and electrical sections and Maps & Records (527-7480/527-7458).

b. Invite and schedule a team of specialists for the operational acceptance testing/inspection from the following sections: Operations, Maintenance, Electrical, Telemetry/SCADA, corrosion Control Section and Water Quality testing laboratory if necessary.

c. Construction Manager must provide seven (7) sets of manuals to Water Operations' Treatment Plant Engineering Section including the operational training schedules.

d. Coordinate with the Construction Manager/Contractor to have the manufacturer's representatives present during the testing/inspection.

e. The team of specialists identified in Item 2 (b) must witness the detailed operational testing, and the start up of the system as indicated in the Maintenance of Plant Operations (MOPO) documents.

f. After the specified number of days of operational testing, the CM will schedule a meeting with WOD, Treatment Plant Engineering section to declare a pass/fail testing.

g. Document all discrepancies/deficiencies to develop a "Punch List." The team of specialists identified in Item 2 (b) should record all punch lists in an electronic database.

h. Forward the "punch list" to the CM for the Contractor to take the required actions and corrections.

i. Re-inspect and retest facilities as appropriate after notification by the Contractor via the CM when all items and conditions have been corrected to arrange for the follow up FINAL inspection;

j. Coordinate and schedule the inspection team to conduct the FINAL Operational Acceptance Testing;

k. When all items and conditions have been corrected and accepted, the Treatment Plant Engineering Staff (527-7436) will distribute a formal acceptance e-mail/letter to:

- Construction Manager

- Water Operations Division; Treatment Plant Senior Supervisor Engineering Program Manager (527-3156), Hydraulics (668-2036), Telemetering/SCADA (668-2022), Corrosion Control (533-5156), Distribution Engineering (527-7619) and Maps and Records (527-7480)

- WD, CIP Program Management Division, Construction Management Liaison (533-6628/533-5304) and CIP Project Manager

The CM must issue Attachment 8-4-1 (Notice of Beneficial Occupancy/Partial Utilization), after confirming that all requirements under this task have been acknowledged by WOD, Treatment Plant Engineering Staff.

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-4 — Notice of Partial Utilization/Beneficial Occupancy

A. Objective

To establish the date when a portion of the Work that the Owner wishes to beneficially occupy and/or partially utilize is substantially complete and ready for the Owner's use. Contractor requirements are as stated in Section 01700 of Division 1 and Section 6-1 and 6-10 of the Special Provisions - General of the Contract Documents.

B. Definition

The CONSTRUCTION MANAGER prepares the Notice of Beneficial Occupancy and/or Partial Utilization of a portion of the Work to notify the Contractor and the Owner that the portion of the work that the Owner wishes to occupy and/or utilize is substantially complete.

C. Procedure

1. The CONSTRUCTION MANAGER communicates to the Contractor the portion(s) of the Work that the Owner wishes to occupy and/or utilize if those portion(s) are substantially completed prior to substantial completion of the entire Work.

2. The Contractor notifies the CONSTRUCTION MANAGER when it believes those portion(s) of the Work are ready for operational demonstrations and requests that a beneficial occupancy punchlist be conducted.

3. Following successful operational demonstrations and when the remaining punchlist items are of a minor nature that permits the Owner to occupy and/or utilize the portion(s) of the Work while the Contractor completes the punchlist items, the CONSTRUCTION MANAGER prepares and issues to the Owner and the Contractor a Notice of Beneficial Occupancy/Partial Utilization (Attachment 8-4-1) that gives the date when the portion(s) of the Work are substantially complete.

4. The CIP Project Manager will fill out the Final Contract Close-out Notice (Attachment 8-4-2) and send it out to the EOC, Public Information Officer, CIP Risk Management, Landscape Development and Safety departments for sign off on the project. Each of these departments will state whether the Contractor has fulfilled their contract requirements. Any information needed will be stated on the form and returned to the Program Manager to collect from the Contractor.

5. The Notice of Beneficial Occupancy/Partial Utilization begins the Contractor's warranty period and permits the Contractor to request final payment for those portion(s) of the Work and starts the Owner's maintenance and operational responsibility for the accepted portions of the Work.

6. The conditions of guarantee and warranty will commence on the date of the Project Acceptance by the City stipulated in the Notice of Completion (NOC). See Task 8-9.

7. Task 5-18 outlines the requirements for making Final Payment to the Contractor. As discussed in Task 5-18, paragraph C.9.d, the Contractor submits a request for payment of Retention 35 calendar days after the recorded date of Notice of Beneficial Occupancy (Attachment 8-4-1).

Attachment 8-4-1
Notice of Beneficial Occupancy/Partial Utilization

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Notice of Beneficial Occupancy/Partial Utilization

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

Definition

The date of Beneficial Occupancy of the Work or designated portion thereof is the date established by the Construction Manager when the Owner occupies or utilizes the Work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

The following portions of the facility will be occupied by the Owner on _____ (date).

_____
_____
_____
_____
_____

By: _____ Date: _____
Construction Manager's Signature

By: _____ Date: _____
Contractor's Signature

Acknowledged By:
_____ Date: _____
CIP Project Manager

Attachment 8-4-2
Final Contract Closeout Notice

Date:

To: See Distribution

From: (Project Manager listed below)

FINAL CONTRACT CLOSE-OUT NOTICE

Site:	_____	Project Name:	_____
CIP#:	_____	Contractor:	_____
Contract Number:	_____	Substantial Completion Date:	_____
CIP Project Manager:	_____		

The construction work associated with the above named project has been completed. In order to verify that all administrative and contractual obligations have been met, please fill out the statement below. Please sign and return to the CIP Project Manager within 45 days. Once all departments listed below, have signed off on the project the Notice of Completion and Acceptance can be processed.

To the best of my knowledge, all contract requirements for this contract have been fulfilled.

☐ Yes.

☐ No. (Please reference the contract clause that has not been completed.)

_____

_____

_____

_____

_____

_____ _____
Signature Date

_____ _____
Printed Name Dept/Division

Distribution: EOC Contract Compliance Officer - Nora Nugent MS 906; OCIP Risk Manager - Howard Prol MS 906; Water Dept - CIP Senior Public Information Officer - Wendy Hovland-Henry MS 907; Water Dept. – Landscape Development – Kathryn Greco; Water Dept. - CIP Parsons Safety Manager - Jeff Kleinfelter MS 85S

Please return completed notice to the project manager listed above.

Contract Specific Tasks/Project Checkout

Task 8-5 — Operational Demonstration

A. Objective

To place newly constructed or modified facilities online and demonstrate its functionality and operability.

B. Definitions

The operational demonstration process is a 7-day test during which the Contractor, under the direction of the Water Operations Division, places newly constructed or modified facilities online. The facilities must pass this Operational Demonstration prior to acceptance by the City. Specification Section 01660 of Division 1 of the Contract Documents defines the requirements for startup and testing. The operational demonstration involves the entire system.

If a full scale operational test is required the details must be added to Section 01660 of Division 1 during the bid document preparation phase.

C. Procedures

1. Three months prior to startup, the Contractor prepares a schedule of activities for the operational demonstration, and submits the schedule to the CONSTRUCTION MANAGER.

2. The CONSTRUCTION MANAGER, Water Operations Division representative, Design Consultant and CIP Project Manager review the schedule of activities and provide input to the Contractor.

3. The CONSTRUCTION MANAGER and Design Consultant inspect the facilities and recommend to the CIP Project Manager if the facilities are ready for the operational demonstration.

4. The CIP Project Manager approves the commencement of the operational demonstration.

5. Contractor starts up the facilities according to the project specifications start up plan. At the direction of Water Operations Division, with the assistance of the CONSTRUCTION MANAGER and the Design Consultant, the Contractor (and/or the equipment manufacturer's representatives if so specified) operates and maintains the facilities according to the provisions of the Contract Documents for the operational demonstration period.

6. If system or equipment malfunctions are discovered during the operational demonstration, the Contractor remedies the malfunctions. Troubleshooting of a malfunction is performed by the Contractor. The CONSTRUCTION MANAGER monitors the troubleshooting and

represents the City. The CONSTRUCTION MANAGER may be assisted by the Water Operations Division or the Design Consultant as needed.

7. The CONSTRUCTION MANAGER may terminate and reschedule the operation demonstration as necessary according to the provisions of the Contract Documents.

8. The City assumes operational control of the facilities from the date of the conclusion of the successful operational demonstration, provided all other conditions are satisfactorily met to issue a Certificate of Substantial Completion. This date becomes the date of beneficial occupancy or substantial completion, as determined by the CONSTRUCTION MANAGER in accordance with the contract documents.

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-6 — Final As-Built Drawings

A. Objective

To obtain a complete set of final as-built documents to be filed and recorded by the City.

B. Definitions

Final as-built documents, as described in the Specification Section 01720 of Division 1 of the Contract Documents, include record drawings and specifications maintained by the Contractor to reflect as-built conditions. Final as-built documents include all changes, deviations, supplemental information, concealed utilities, etc., that revise or supplement the original Contract Documents.

C. Procedures

1. Following substantial completion, the Contractor submits its record documents to the CONSTRUCTION MANAGER.

2. The CONSTRUCTION MANAGER reviews the submittal and forwards it to the CIP Project Manager, who transmits it to the Design Consultant.

3. The Design Consultant updates the original set of contract drawings and specifications to reflect the information on the final record documents. The Design Consultant transmits the original mylar drawings and other record documents to the CIP Project Manager.

4. The CIP Project Manager arranges to have the final as-built documents entered into the City's record system. (see Task 3-3)

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-7 — Final Inspection

A. Objective

To identify all outstanding contract requirements and allow the City to issue a notice of completion.

B. Definitions

In accordance with Section 6-8.3 of Special Provisions - General and Section 01700 Division 1 of the Contract Documents, the final inspection includes both physical examination of the work and the examination of all contract provisions and requirements to ascertain whether the contract has been fully performed.

C. Procedures

1. Following the pre-final inspection and the operational demonstration, the Contractor completes all Work and contractual requirements as listed in the discrepancy list (see Task 8-1). The Contractor then requests that the CONSTRUCTION MANAGER schedule a final inspection.

2. When the CONSTRUCTION MANAGER finds all conditions satisfied, it notifies the CIP Project Manager, the Water Operations Division, the Design Consultant, and the Contractor of the place and time of the final inspection.

3. During the final inspection, all parties inspect the work and examine applicable provisions of the Contract Documents. The CONSTRUCTION MANAGER prepares a final punchlist.

4. The CONSTRUCTION MANAGER inspects all correction Work and notifies the CIP Project Manager when the final punchlist Work is completed.

5. A special final inspection will be scheduled separately for landscape at the completion of the 90-day plant establishment period.

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-8 — Final Payment

A. Objective

Procedures necessary to make final payment to the Contractor.

B. Definitions

Final payment is defined as the last progress payment made to the Contractor for earned funds, less retainage and deductions as applicable. Final payment to the Contractor indicates that the terms and conditions of the contract are fulfilled and acceptance by the Contractor operates as a release to the City of all claims, except as provided for in the Contract Documents.

C. Procedures

1. The detailed requirements and conditions of making final payment to the Contractor are found in Task 5-18 to include Release of Claims and Affidavit of Disposal documentation.

2. Prior to the final application for payment, an appropriate change order is issued as recommended by the CONSTRUCTION MANAGER to reflect actual amounts due the Contractor on account of work covered by allowances, and the contract price is correspondingly adjusted.

3. Prior to the final inspection, the Contractor submits a final application for payment to the CONSTRUCTION MANAGER (Attachment 5-18-2, Final Payment Review Checklist). Approval of the final application is contingent on completion of punchlist items.

4. The Contractor's final application for payment is reviewed by the CONSTRUCTION MANAGER and includes a waiver and release of all liens, claims (Attachment 5-18-4), disputes, an affidavit of disposal (Attachment 5-18-3), and a certification attesting that the Contractor's obligations associated with this project have been discharged in full for all work covered by prior applications for payment. A copy of the final statement of the number of working days charged to the project will be included in the application for final payment package.

   EOC Final Documentation will be submitted by the Contractor after contract Retention is paid.

5. If the CONSTRUCTION MANAGER determines that the final application for payment is applicable, the CONSTRUCTION MANAGER recommends payment to the CIP Project Manager within 14 days of receiving all necessary documentation from the Contractor.

6. Upon Conclusion of the final inspection punchlist work, the CIP Project Manager prepares the Notice of Completion.

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-9 — Certificate of Substantial Completion & Notice of Completion and Acceptance

A. Objectives

To establish the date when the work is sufficiently (substantially) complete and in accordance with the Contract Documents so that the Owner can occupy and utilize the Work for the purpose for which it is intended.

To assure that the Contract requirements for CIP Risk Management and EOC are met.

To establish a date wherein completion and acceptance of the Contract Work is recorded with the County of San Diego and the process begins to release retention.

B. Definitions

The Contractor requirements are as stated in the following references:

Division 1, Section 017000
Part 1 Special Provisions - General

- Section 6-8.1, Substantial Completion
- Section 6-8.2, Partial Utilization
- Section 6-8.3 Acceptance of the Work
- Section 6-10, Use of Improvements During Construction

The CONSTRUCTION MANAGER prepares the Certificate of Substantial Completion (Attachment 8-9-1) and issues it to the Owner and Contractor as notification of the date that the work is sufficiently complete so that the Owner can occupy and utilize the entire work for the purpose for which it is intended. The issuance of the Certificate of Substantial Completion begins the Contractor's warranty period for all work not previously placed under warranty by beneficial occupancy and/or partial utilization, permits the Contractor to make a request for final payment, and starts the City's maintenance and operational responsibility for the entire work.

Prior to the issuance of the Notice of Completion and Acceptance, the Final Close-out Notice (Attachment 8-4-2) will be prepared and distributed by the CONSTRUCTION MANAGER, and departmental concurrences received.

The Notice of Completion and Acceptance is the main document to close out a construction contract. It is recorded on Notice of Completion and Acceptance form (Attachment 8-9-2) and forwarded to the CIP Project Manager and the Deputy Director of the CIP Program.

See Appendix A, Part 3 for additional details on contract closeout and closeout checklist.

C. Procedure

1. The CONSTRUCTION MANAGER will notify the CIP Project Manager in writing that the Certificate of Substantial Completion has been issued. This will start the distribution of the Final Contract Close-out Notice (Attachment 8-4-2).

   a. The CIP Project Manager will fill out the Final Contract Close-out Notice (Attachment 8-4-2) and send it out to the EOC, Public Information Officer, CIP Risk Management and Safety departments for sign off on the project. Each of these departments will state whether the Contractor has fulfilled its contract requirements. Any information needed will be stated on the form and returned to the CIP Project Manager to collect from the Contractor.

2. The Notice of Completion and Acceptance form (Attachment 8-9-2) is used as the Notice of Completion and Acceptance. The CONSTRUCTION MANAGER fills out this form at the completion of the Contract. The condition of Contract Completion is met when the following items have been completed.

   a. After the final inspection the Contractor completes all outstanding punch list items and submits all required documentation (operations manuals, as-built drawings plans, final construction schedule; see Attachment 8-9-1 and 5-18 -2 Final Payment Review Checklist) to the CONSTRUCTION MANAGER.

   b. The CONSTRUCTION MANAGER prepares the Contractor Performance Evaluation Form (Attachment 8-9-3) in draft and submits it to the CIP Project Manager for review.

   c. The CONSTRUCTION MANAGER reviews the punchlist and submitted documentation for completeness and when satisfied, prepares the Notice of Completion and Acceptance and submits it to the CM Liaison and copies the CIP Project Manager with recommendations for acceptance.

   d. The authorized official signature and date in Block 12 of the Notice of Completion and Acceptance (Attachment 8-9-2) formalizes the Date of Acceptance of the completed Contract. It is the responsibility of the CONSTRUCTION MANAGER and the CIP Project Manager to assure that the date entered in this block is correct.

   e. The CIP Project Manager secures all the necessary signatures and submits the Notice of Completion to the Construction Liaison. He verifies correctness and then submits it to the City Clerk.

   f. The County Recorder accepts the work of improvement, which initiates the start of 35 days for Release of Retention (see Attachment 8-9-2).

g. Thirty-five (35) days after recording, the funds retained during the Contract are paid to the Contractor.

h. Copies of the Notice of Completion are distributed to the following individuals:

CIP Deputy Director
Water Operations
Senior Civil Engineer
CIP Project Manager
Construction Management Liaison
EOCP
CIP Risk Manager
Construction Manager's Contract File

Attachment 8-9-1
Certificate of Substantial Completion

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Certificate of Substantial Completion

Date: _____
To: _____
_____
Attn: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ W.O. No.: _____
Contractor: _____
Contract No.: _____

Definition

The date of Substantial Completion of the Work or designated portion thereof is the date certified by the Construction Manager when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

Project or Designated Portion Thereof, Included in this Certificate: _____
_____

The Work performed under this Contract has been reviewed and found to be substantially complete. The date of Substantial Completion of the Project or portion thereof designated above is hereby established as _____, which is also the date of commencement of applicable warranties required by the Contract Documents, except those that may have started earlier under a Notice of Beneficial Occupancy/Partial Completion as noted below: _____
_____

A list of items to be completed or corrected, is attached hereto. The failure to include any items on such a list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents. The date of commencement of warranties of items on the attached list will be the date of Notice of Completion unless otherwise agreed to in writing.

By: _____ Date: _____
Construction Manager's Signature

By: _____ Date: _____
Contractor's Signature

Acknowledged By:
_____ Date: _____
CIP Representative Signature

Attachment 8-9-2
Notice of Completion and Acceptance

CITY OF SAN DIEGO

NOTICE OF COMPLETION AND ACCEPTANCE

After recording mail to:
City Clerk
City of San Diego
Mail Station 2A
Attn: Processing Clerk

(SPACE ABOVE THIS LINE FOR RECORDER'S USE)

1. DEPARTMENT RECOMMENDING ACCEPTANCE

2. NAME AND ADDRESS OF THE CONTRACTOR

3. NAME AND ADDRESS OF THE CONTRACTOR'S SURETY AND ALL BOND NUMBERS HEREIN RELEASED

4. PROJECT TITLE, STREET ADDRESS AND LEGAL DESCRIPTION SUFFICIENT FOR IDENTIFICATION

5. BID NUMBER	6. PURCHASE ORDER NO.	7. JOB ORDER NUMBER	8. CONTRACT AWARD BY ☐ COUNCIL ☐ MANAGER	9. RESOLUTION NUMBER/ MANAGER ACTION NUMBER

10. RECOMMENDATION OF ACCEPTANCE

RESIDENT ENGINEER	BY AREA SUPERVISOR	BY DIVISION HEAD	DEPARTMENT NAME BY DEPARTMENT HEAD

11. ACCEPTANCE

TIME STAMP – CITY CLERK

The City of San Diego hereby accepts the foregoing work of improvement as of:

Date _____

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO)

The undersigned, being duly sworn, deposes and says that he is authorized by the City Manager of the City of San Diego, and makes this verification on behalf of said City; that the City of San Diego is the owner of the property or improvement described in the foregoing notice; that he has read the same and knows the contents thereof; that he accepts the foregoing work of improvement as complete; and that the same is true of his own knowledge.

Subscribed and sworn to before me

this_____ day of _____ 20____. By _____
DEPARTMENT DIRECTOR

CHARLES G. ABDELNOUR, City Clerk

By _____
DEPUTY

Date recorded with County Recorder _____

CITY DOCUMENT NUMBER: _____

Date Filed: _____

CM-1043 (Rev. 8-00)

INSTRUCTIONS: **NO CARBON REQUIRED**

1. ITEMS I THROUGH 10 TO BE COMPLETED IN SEXTUPLICATE BY THE DEPARTMENT RECOMMENDING ACCEPTANCE OF A WORK OF IMPROVEMENT.
2. A LOCATION MAP IS TO BE ATTACHED TO THIS FORM BY THE RECOMMENDING DEPARTMENT.
3. ALL SIX COPIES AND ATTACHED MAP TO BE ROUTED TO THE RECOMMENDING DEPARTMENT FOR FINAL APPROVAL.
4. APPROVED COPIES TO BE TRANSMITTED TO THE CITY CLERK FOR FINAL DISTRIBUTION AS FOLLOWS: ONE COPY TO BE PLACED ON RECORD WITH COUNTY RECORDER AS "NOTICE OF COMPLETION AND ACCEPTANCE", ONE COPY TO THE AUDITOR AND COMPTROLLER, ONE COPY TO THE CONTRACTOR, ONE COPY TO THE PURCHASING AGENT, ONE COPY TO THE CONTRACTOR'S SURETY, AND ONE COPY TO ORIGINATING DEPARTMENT.

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-10 — Transfer of Property Upon Project Completion to City's Property Insurance Policy

A. Objectives

To notify Risk Management that this project is completed, take the project off any applicable Builder's Risk policy, and transfer the property to the City's California State Association of Counties (CSAC) Policy.

B. Definition

Once the project is completed it must either be transferred to the City's Property policy for coverage and taken off any Builders Risk policy or just taken off the Builders Risk policy if the City decides not to add the completed project to its policy.

C. Procedure

1. Once the Notice of Completion is received, the Project Manager (PM) will contact the City's Risk Management Department to determine whether the project will be added to the City's CSAC policy.

2. If the project is not added to the City's CSAC policy, and is currently under the OCIP Builder's Risk policy, the PM will contact the Builders Risk Carrier and request the project be taken off of the CIP Builders Risk policy. This would generate an endorsement with the updated list of projects on the policy.

3. If the project is to be added to the City's CSAC policy, the PM will fill out the attached Property Insurance Form 8-10-1, and will forward this information to Risk Management Liability Division (MS 51B), which will then add the property to the City's CSAC policy.

Attachment 8-10-1

NOTIFICATION REGARDING CHANGES TO CITYWIDE PROPERTY INSURANCE

DEPARTMENT: _____ DIVISION: _____ BLDG/FAC #: _____

LOCATION: _____

ADDRESS: _____

ADDITION: _____ UPDATE EXISTING RECORD: _____ DELETION: _____

Date Facility Constructed: _____ Date of Acquisition: _____
Facility Value: (Estimated/Appraised): _____ Type of Construction: _____
Square Feet: _____ (Roof/Wall/Floor)
Multi-Story Bldg.: _____ (Yes/No) # of Stories: _____
Add-Ons or Renovations to existing facility: _____ (Yes/No)

Facility Occupants: (Is facility shared by various tenants? i.e. Water Department and Transportation Department)_____

Facility Usage: (Type of work performed in the facility? i.e. Administrative offices, Maintenance, Warehouse, Pump Station, Reservoir) _____

Facility Personal Property: Contents: (i.e. Desks, Computers, Machinery) _____

If applicable list types of equipment operated at this facility (i.e. pumps, motors, hydraulic, steam pipes, etc.) _____

Special Coverage Requested: (e.g. Earthquake, Sabotage or Terrorism) _____

_____ _____
Department Head/Designee Signature Date

TO BE COMPLETED BY RISK MANAGEMENT DEPARTMENT

Type of Coverage:

All Perils (Property) Only _____ All Perils with Earthquake _____

Annual Premium Estimates: _____ Annual Premium Estimate: $_____

Total Annual Premium: $_____

Other Policies/Coverages:

Boiler/Machinery _____ Performance Bond _____ Aircraft/Airport _____

Facility Audit performed by: _____ Date: _____

RETURN COMPLETED FORM TO: Bill Lopez, Risk Management Director, MS 51-B

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-11 — Warranty Management

A. Objective

To perform an eleventh-month end-of-warranty inspection, to repair equipment under warranty as quickly as possible; to properly document equipment problems and correct recurring problems before the warranty period expires, and to establish that a problem is in fact a warranty problem.

B. Definition

The process of ensuring that Contractors and vendors warrant materials and equipment supplied and installed, generally for a period of 1 year, and make repairs during this period.

C. Procedure

1. If, at any time during the 12-month warranty period equipment under warranty malfunctions, the Water Operations Division initiates a Warranty Repair Order (Attachment 8-11-1) and forwards it to the CIP Construction Management Liaison. This procedure assumes that following contract close out the CONSTRUCTION MANAGER duties are complete and its services on the project are no longer available. Any warranty issues arising before contract close out are the responsibility of the CONSTRUCTION MANAGER.

2. As the end of the 1-year warranty period approaches, the CIP Construction Management Liaison performs an eleventh-month inspection of all warrantee equipment. The Contractor is notified of this inspection and invited to participate. A Water Operations Division representative also participates in the inspection. The findings of the inspection are reported expeditiously to the Water Operations Division and the CIP Project Manager. The Water Operations Division initiates a Warranty Repair Order on each malfunctioning item of warranted equipment and forwards it to the CIP Construction Management Liaison.

3. The CIP Construction Management Liaison receives and logs the Warranty Repair Order, and performs an independent investigation of the problem. If the CIP Construction Management Liaison verifies that the problem is a warranty item, the CIP Construction Management Liaison issues the Warranty Repair Order to the Contractor with a copy to the Water Operations Division. If the CIP Construction Management Liaison determines that the nature of the problem is questionable as warranty work, and that cost may be incurred by the City in arranging for repairs, the CIP Construction Management Liaison makes a recommendation to the CIP Project Manager regarding appropriate action.

4. The Contractor makes the necessary repairs or calls in the manufacturer's service representative as required. When the repairs are completed, the Contractor so notes and signs the Warranty Repair Order and returns it to the CIP Construction Management Liaison.

5. The CIP Construction Management Liaison verifies that the repairs are complete, signs the Warranty Repair Order, logs the repair date, and returns the Warranty Repair Order to the Water Operations Division with an information copy to the CIP Project Manager.

Attachment 8-11-1
Warranty Repair Order

Capital Improvements Program

DOWNTOWN
600 B Street, Suite 700
San Diego, CA 92101
(619) 533-4112
Fax (619) 533-5278

City of San Diego
WATER DEPARTMENT

Warranty Repair Order #_____

Date: _____ Contract:_____
To: _____ _____
_____
_____
_____
_____

Description of Corrective Work Performed:
_____
_____
_____
_____
_____

Identify any Spare Parts Supplied by Water Operations Department::
_____
_____

Comments:
_____
_____
_____
_____

By _____Work Completed On: _____
Contractor's Signature

Repair Initiated By: _____

Repair Verified By Whom and When: _____
_____

Comments:
_____
_____
_____
_____

This Work Order has been completed.

By: _____ Date:_____
Construction Manager's Signature

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-12 — Archiving of Project Field Files

A. Objective

To ensure that project records and documents are properly prepared for storage and retrieval and turned over to the CIP Records Management Unit (RMU) at the close of the project.

B. Definition

The CIP Records Management System (RMS) is specified in CIP Guidelines and Standards Book 1, Chapter 21. The system defines the responsibilities of the CONSTRUCTION MANAGER, other outside organizations and entities, and CIP staff for identification and control of project documents, how they are prepared, the manner they are indexed and filed, the format and media for storage, and the preparation of a database that facilitates ready retrieval.

C. Procedure

1. Task 3-3 of this Book describes the CONSTRUCTION MANAGER's responsibilities for maintaining field documentation and records of construction activities, maintenance of an electronic library of the files, and the preparation of a database on those files.

2. Upon closure of each construction project/contract, the CONSTRUCTION MANAGER turns over the library of field files and the database to the CIP RMU.

Contract Specific Tasks/Completion, Closeout and Post Construction

Task 8-13 — Final Contract Report

A. Objective

To provide a written history of each contract.

B. Definition

The final contract report is a ready reference for key information about a contract, including a history of performance, lessons learned, financial analysis, organizational structure, MBE/WBE utilization and a description of innovative methods or unusual challenges.

C. Procedure

1. Within two (2) weeks after issuance of a Notice of Completion, the CONSTRUCTION MANAGER prepares a final report for the contract. The report covers all appropriate sections of the Annotated Outline for Final Contract Report (shown in Attachment 8-13-1).

2. If appropriate, the Design Consultant and the Contractor provide input.

3. The CIP Project Manager reviews and approves the report prior to a copy being provided to the Contractor. The lessons learned section of the report is examined to determine if any CM guidelines should be added, deleted, or modified to improve the construction phase management for subsequent CIP projects.

4. The CONSTRUCTION MANAGER retains copies of the report as required by the Notice of Completion and Release of Retention procedure.

Attachment 8-13-1
Annotated Outline for Final Contract Report

The final contract report is a ready reference for key information about the completed contract. This report includes a summary of the contract work, a description of organizational and individual responsibilities, a summary of performance against schedule and cost loaded schedules, lessons learned and a completed list of closeout items

The final report is prepared in draft by the CONSTRUCTION MANAGER within two weeks after the Notice of Completion is prepared and submitted to the CIP Project Manager.

Procedures:

I. Summary of Contract Work – Provide a brief description of the Work accomplished within the Contract.

A. Initial Contract Scope – Summarize the original scope of Work.

B. Change Orders -- Summarize the change order activity. Significant changes to the initial scope of work should be identified in a brief explanation.

C. Organization – Identify Contractor's organizational structure, the major subcontractors, key responsible individuals, the CM organization and the CIP Program Management Division participation

D. Subcontracts – Identify major subcontracts and any significant issues.

E. Submittals – Summarize the submittal activity, noting significant problems and/or accomplishments. Comment on the ability of the Contractor and Design Consultant to maintain schedule.

F. Substitutions – Summarize the Contractor's approach to substitutions in terms of quantity of requests and number of accepted substitutions. Highlight any significant cost savings or increases due to substitutions.

Attachment 8-13-1
Annotated Outline for Final Contract Report
continued

II. Performance Issues – Summarize and highlight the significant problems and the noteworthy accomplishments in performing the Contract. Provide a thorough and objective evaluation of the Contractor's performance.

A. Communication – Identify noteworthy issues regarding the communication process between the Contractor (and subcontractors), the CONSTRUCTION MANAGER, the Design Consultant, and the Owner.

B. Mobilization – Summarize problems or significant achievements experienced by the Contractor during the early phase of the Contract.

C. Schedule Baseline – Summarize the Contractor's performance in complying with schedule submittal requirements and in meeting their milestone and schedule commitments.

D. Cost Loaded Schedules – Summarize the Contractor's performance in establishing and meeting realistic resource projections. Comment on significant variances from these projections.

E. Productivity – Identify and summarize Contractor's production capability or limitation as it affected Contract work. Identify significantly high and/or low productivity with respect to quantities, resources, and activity duration.

F. Contractor's Cooperation
- with other Contractors
- with Owner requested changes
- with carrying out provisions in Contract Documents
- in maintaining a clean and safe worksite
- regarding environmental concerns

G. Subcontractors – Summarize the performance of each major subcontractor.

H. MBE/WBE Participation – Identify the Contractor's degree of compliance with contract goals.

I. Claims – List all claims and identify how they were resolved.

III. Safety – Summarize the Contractor's efforts and contributions toward maintaining a safe worksite. Identify any noteworthy successes and incidents.

IV. Quality of the Completed Work

Attachment 8-13-1
Annotated Outline for Final Contract Report
continued

V. Contractor Closeout Items – Identify dates and major actions that constitute completion of the contract.

A. Lien Releases – Note any unusual issues concerning releases of liens from the Contractor and its suppliers and subcontractors or transfer of title to major equipment.

B. Warranty Documentation – Indicate who is responsible for management and who has custody of the warranty documentation

C. As-Built Documents – Provide dates that O&M manuals and as-built documents were received, reviewed and entered into the permanent document control.

D. Inspection and Acceptance Records – Note unusual issues connected with required test reports, calibration data, inspection results, etc.

VI. Lessons Learned

A. Recommended Changes to Contract Provisions – Identify contract provisions that were missing or that could have been improved to avoid problems and make contract administration easier. Recommend improvements for future contracts of the same type.

B. Other – Identify other issues/problems that arose in the course of construction and indicated how they might be avoided in the future.

The Final Contract Report is completed by the CONSTRUCTION MANAGER and made available for review within two weeks of the filing of the Notice of Completion. The report is reviewed and approved by the CIP Program Management Division. Copies of the approved report are maintained at the Field Office and in the Construction Management Project Control Room.

ATTACHMENTS:

A. Submittal Log
B. RFI Log
C. Change Log
D. Noteworthy or unusual correspondence
E. Copy of the As-Built Schedule
F. Cost Summary (Final Cost File)
G. Media Coverage
H. Community Relations
I. Awards/Recognitions

Book

6

Construction Management Guidelines

Appendix A
Supplemental Information

City of San Diego Water Department
Capital Improvements Program

APPENDIX A

SUPPLEMENTAL INFORMATION

- Part 1- Quality Assurance and Quality Control Improvement Program
- Part 2 - Contractor Performance Measurement Plan
- Part 3 - Contract Closeout

Part 1 - Supplemental Information

Quality Assurance and Quality Control Improvement Program

1.1 Introduction

This section highlights construction management responsibilities and processes associated with the Quality Assurance and Quality Control Program. The following tasks are included in this chapter:

1a. Quality Assurance and Quality Control (QA/QC)
1b. Inspection Procedure and Plan Implementation
1c. Testing
1d. QA/QC Organization
1e Notice of Non-Compliance

Quality Assurance and Quality Control

Part 1a - Quality Assurance and Quality Control

A. Objective

To define the general principles and procedures that govern Quality Assurance and Quality Control of all phases of construction for the Water CIP projects. Specific procedures for daily inspection reports, testing, notices of non-compliance and punchlist inspections are covered in subsequent sections.

B. Definition

Quality Assurance (QA) refers collectively to all of the steps taken to ascertain with adequate confidence that the items inspected and tested will perform satisfactorily and as intended in the design specification documents when placed in service.

Quality Control (QC) applies to each action taken to measure the properties of the items or components inspected, and report their compliance with the design specifications.

Quality Control also includes the administrative actions taken by the CONSTRUCTION MANAGER to obtain Contractor compliance with the design specifications to include corrective measures.

C. Procedures

1. The CONSTRUCTION MANAGER assigned to the project has primary responsibility for the Quality Assurance of that project.

2. The CONSTRUCTION MANAGER is also responsible for Quality Control at the field level. The type of inspection required, based on specialty or required certification, determines which inspector is assigned to that task.

Quality Assurance and Quality Control

Part 1b– Inspection Procedure and Plan Implementation

A. Objective

The objective of this procedure is to outline the inspector's responsibilities on a construction project.

The Inspector must be thoroughly familiar with all the provisions of the contracts, which he/she is administering, as well as plans, current permits, enforceable program policies, and specifications including all revisions, changes, and amendments. Also he/she must be familiar with the City of San Diego's "Water CIP Guidelines and Standards" and know the technical requirements of the project tasks. See Task 5-1 for additional details.

B. Definition

Inspections are performed to ascertain that the work being performed by the Contractor, or a subcontractor, is in compliance with the contract plans, specifications, and any binding regulations or codes.

C. Procedures

1. **Authority**: The Inspector has the authority to require all work to be accomplished in accordance with the contract plans and specifications. If work is not being done in accordance with the plans and specifications, then the Inspector shall prepare a "Non-Compliance" notification to the Contractor and notify the CONSTRUCTION MANAGER. This may or may not justify a work stoppage. Details are provided in Part 1e and Task 5-12.

2. **Plans and Specifications**: The Inspector shall thoroughly review the plans and specifications during the bidding period or when assigned to a specific project. The Inspector shall watch for any omissions or discrepancies in these documents. The Inspector shall compare elevations, grades, and details shown as existing on plans with those at the actual site. The Inspector shall report all errors, omissions discrepancies and deficiencies to the CONSTRUCTION MANAGER.

   The Inspector shall keep a posted and marked up set of plans and specifications convenient for ready reference. The Inspector shall be kept informed by the CONSTRUCTION MANAGER of all amendments and changes to the contract documents and make sure to have copies and know their contents. The Inspector shall make sure that the Contractor has the same information.

   The Inspector is to anticipate the Contractor's operations and make a thorough review of the project schedule (Critical Path Method), plans and specifications as they pertain to each operation before it begins. The requirements of the plans and specifications must be discussed with the Contractor before each operation begins. The Inspector should make

notes or underline those requirements that need special attention, such as unusual requirements, requirements the Contractor is likely to overlook, or repetitive deficiencies. The Inspector shall compare the work actually being performed with each requirement of the plans and specifications.

3. **Pre-Construction Conference**: A project-level preconstruction conference shall be held with the Project Manager, CONSTRUCTION MANAGER and Contractor to discuss and agree upon the order of work for all phases of construction and submissions requiring approval, job site safety, etc. The Inspector shall obtain a copy of the minutes from the CONSTRUCTION MANAGER and carefully review the contents. Also see Task 4-2 for additional details.

4. **Daily Inspector's Report**: The Inspector shall prepare an accurate daily report that tells the complete details of the events on the job each day. This report shall include the following:

   a. Conditions (weather, moisture, soil conditions, etc.): Note if and how any adverse condition hampered or delayed the Contractor's operations.

   b. Activities: Include details of each activity and reference the schedule node description as well as areas in the building being constructed.

   c. Difficulties: Include all difficulties encountered by the Contractor. Note all Contractor errors and their impact and durations.

   d. Controversial Matters (disputes, questionable items, etc.): Note if they were settled, and, if so, how they were settled.

   e. Deficiencies and Violations: Include construction, safety, labor, etc.

   f. Instructions Given and Received: Include how the instructions were transmitted to you and from you.

   g. Progress Information: Report all delays, action taken and action contemplated.

   h. Equipment: Report arrival at the site and shipment from the site of each major item or equipment by manufacturer, model, serial number, and capacity. Report equipment in use and comment on reasons for idle equipment.

   i. Record tests and results thereof.

   j. Changes: Record the effect of all changes on the Contractor (specifically note when changed work starts and stops).

k. List of all man-hours by discipline. (A separate breakdown for subcontractors is to be provided.)

l. Make sure Inspector's reports are dated and signed.

5. **Claims**: The Inspector is always to be alert to the possibility of claims or matters of possible dispute. When the Inspector discovers that a claim or dispute is in the making, the Inspector is to notify the CONSTRUCTION MANAGER and record all facts in the Inspector's daily report. See Task 7-10 for additional information on claims prevention.

6. **Progress Schedules**: The Inspector should render any necessary assistance to the Contractor for its preparation of initial and revised progress schedules. The Contractor should be encouraged to submit timely progress schedules. If the Inspector sees a slippage in progress, it should be reported to the CONSTRUCTION MANAGER. This slippage is to be noted in the Inspector's daily report. If the construction falls behind schedule, the construction operation should be carefully examined. The Inspector shall report findings to the CONSTRUCTION MANAGER and to the Contractor. Only suggestions should be made to the Contractor. The Inspector shall be very careful not to direct or dictate the Contractor's operation.

7. **Labor Enforcement**: The Inspector must keep informed of the labor provisions of the contracts and should always avoid taking part in any labor disputes. The Inspector should promptly notify the CONSTRUCTION MANAGER of any labor disputes or problems. Any Equal Opportunity posters and minimum wage rates are to be kept in a conspicuous place.

8. **Storage of Materials**: The Inspector shall check to see that adequate space is available for the Contractor's operations and storage areas and that any temporary sheds and buildings have been approved and permitted. The Inspector must see that all material and equipment are properly stored and protected and that the storage areas are maintained in a neat and orderly manner. See Task 3-2 for procedures on Materials Management.

9. **Verification of Contractor's Progress Payment Estimate**: The Inspector shall take photographs of the construction site and construction progress on regular basis. Video records also can be kept to make sure that a complete and continuous report is available. Under Task 5-17- Procedure 5, Construction Photographs, procedures are covered in greater detail. The following areas are required to be photographed:

a. Views of construction project at preconstruction and during various stages of completion and when completed.

b. Scenes of value in connection with changed conditions, claims, or potential claims.

c. Detailed views of work in place for which removal has been ordered because of non-compliance with plans or specs.

d. Constructions in which unusual difficulties have been overcome or where the subject is of technical interest.

e. New methods of construction.

f. Property or material damage.

g. Emergency conditions and safety violations.

h. Accident scenes.

10. **Photographs and Video Records**: The Contractor is responsible for keeping a complete set of as-built record drawings up to date at all times. The Inspector is required, along with the Construction Manager, to monitor that the Contractor keeps these drawings up-to-date. A pre-determined time frame should be established to check these drawings with the Contractor at least once a month. See Task 5-17 for additional requirements on construction photographs and videos.

11. **Record Drawings**: The following records and materials are needed for closeout of each project (see Task 8-6 for additional details). They must be obtained and accounted for:

a. Record of property - Name, make, and model number of each piece equipment

b. Equipment test records

c. Approved shop drawings.

d. Operating and maintenance instructions

e. Spare parts and tools

f. Keys

g. Guarantees and certifications

h. As-built drawings

i. All material

Quality Assurance and Quality Control

Part 1c – Testing

A. Objective

The objective of this procedure is to monitor the Contractor's construction activities and to verify that the work, material and equipment are installed per plans and specification, each part of the construction phase must be tested.

B. Definition

Requirements for testing shall be specified in the construction contract documents. The CONSTRUCTION MANAGER is responsible for defining the scope and nature of the testing to be performed and for preparation of the agreements with the testing agency. The QA/QC Manager is responsible for administering the testing contract. (See Task 5-1 Inspection, Testing and Surveying Services.)

C. Procedures

1. The CONSTRUCTION MANAGER is responsible for controlling the testing services, with approval from the CIP Project Manager. For material testing, the City Materials Testing Lab at 9491 Aero Drive (858) 627-3279, shall be utilized when available (see Exhibit 1c.1). Equipment testing shall be performed by certified inspectors under the control of the QA/QC Manager assigned to the project.

    a. When the agreement has been executed, names and phone numbers of the testing firm's contact persons and their supervisors shall be established. The QA/QC Manager shall review the scope of services. The QA/QC Manager shall establish the method of reporting the test findings and the distribution of those findings with the testing agency.

2. Testing shall be performed as ordered by the CONSTRUCTION MANAGER who establishes a procedure with the Contractor to request tests. The following procedure is suggested:

    a. The CONSTRUCTION MANAGER will provide a Test Request Form to the Contractor.

    b. The Contractor uses this form to request the test. The Contractor makes the request at least 48 hours in advance of the needed date for the test.

    c. The Contractor describes the test and the date that the test is required. The request is given to the QA/QC Manager for approval.

    d. The QA/QC Manager requests the services from the testing agency.

e. The testing agency is provided a copy of the testing request, which will be completed by the testing firm indicating the services provided. The QA/QC Manager signs the request for testing upon the testing firm's completion of work, indicating approval.

f. The testing firm is given a copy of the approved request form to be included with the testing firm's monthly billing.

g. The QA/QC Manager reviews the testing agency's billings and recommends payment to the Construction Manager.

h. The QA/QC Manager determines when the services of a testing agency are required in the field.

i. An Inspector from the Construction Management team accompanies the testing agency onto the site, verifies that the testing agency understands the work to be performed, and notes the arrival and departure time of the testing agency personnel in the daily inspection report.

j. The CONSTRUCTION MANAGER reviews the findings of the testing laboratory and verifies that the results are in conformance with the contract documents. If the results are not in conformance, the CONSTRUCTION MANAGER issues a Notice of Non-Compliance.

3. The types of testing performed on a project shall be as listed below, but not limited to:

a. Concrete
b. Rebar
c. Soils
d. Welding
e. Compression
f. Masonry
g. Irrigation
h. Landscaping
i. Electrical
j. Structural
k. Coating
l. Roofing
m. Epoxy
n. Mechanical
o. Corrosion
p. Survey

EXHIBIT 1c.1

CITY OF SAN DIEGO - MATERIALS TESTING LABORATORY
9491 AERO DRIVE
SAN DIEGO, CA 92123

Telephone: (858)627-3279 Fax: (858)627-3292

The function of the City's Materials Testing Laboratory is to perform the various testing that is required on City construction projects in accordance with the job (project) specifications, City standards and Greenbook requirements.

It is the Contractor's responsibility to call and schedule all work. Do not rely on the Technicians to schedule your jobs!

SCHEDULING WORK WITH THE MATERIALS TESTING LABORATORY:
(These requirements will be strictly enforced)

- **48-hours notification is REQUIRED BEFORE the start of any work. The time is especially critical when starting fill work or when soils or other sampling is required.**
- **24-hours notification is REQUIRED when scheduling work for the following day, and calls to the Laboratory MUST be made before noon (12:00 pm) of the previous work day.**
- **Requests for work by the Test Lab <u>must</u> be identified by the following:**
  - **City Work Order number**
  - **Project Name**
  - **Job location (nearest cross streets)**
  - **The Thomas Brothers Map page and coordinates**
  - **The work requested (including the materials supplier when applicable)**
  - **The quantity of material (as needed)**
  - **The time requested for the test (as needed)**
  - **The name of the Resident Engineer**

*R-VALUE testing for pavement design requires minimum seven (7) days for sampling and completion of testing.
*All local Ready-Mix concrete Plants are approved, but please make sure that the plant dispatcher is informed that the concrete being ordered is for a **City of San Diego project**.

PIPE PLANT INSPECTIONS

All RCP, steel cylinder-lined pipe and other specialty pipe to be used on storm drain, sewer or water projects (for the City of San Diego) are inspected at the source of manufacture by the City of San Diego Laboratory Personnel.

*48-hours notification is required prior to manufacturing at local plants (Southern California) only to ensure proper scheduling of Laboratory Personnel.

*7-DAYS (168 hours) notification is required for plants **outside** of the Southern California area to ensure scheduling of Laboratory Personnel.

Quality Assurance and Quality Control

Part 1d. – QA/QC Organization

A. Objective

The objective of this procedure is to explain the organization of the CONSTRUCTION MANAGER'S Quality Assurance Team and identify the chain of command for reporting purposes.

B. Definition

As noted elsewhere in the Capital Improvements Program (CIP) Guidelines and Standards, the CIP Project Manager must approve any outside usage of approved testing labs or testing companies.

The QA/QC Manager working for the CONSTRUCTION MANAGER is responsible for assigning the inspectors assigned to any project.

C. Procedures

1. The Construction Manager dictates instructions for inspection and testing requirements.

2. The Contractor notifies the CONSTRUCTION MANAGER, giving it 48 hours notice when an inspection is required. The inspector shall determine what tests may be necessary. See Section 01400 of Division 1 of the Contract Documents for Contractor QC requirements. Also see Attachment 5-1-1 for the procedure to be followed by the Contractor to schedule tests performed by the City materials testing laboratory.

Quality Assurance and Quality Control

Part 1e – Notice of Non-Compliance

A. Objective

The objective of this procedure is to identify the proper use of the Notice of Non-Compliance. The Notice of Non-Compliance is a tool to track and identify items installed by the Contractor contrary to the contract plans and specifications where the project is ongoing. See Task 5-12, Construction Deficiency Reports, for further details.

B. Definition

The Inspection staff is responsible for reviewing installed work to verify that it complies with minimum standards of acceptability. The Inspection staff is responsible for notifying the Contractor as well as the CONSTRUCTION MANAGER of non-complying work and judging whether instructions to remedy non-complying work have been satisfactorily addressed by the Contractor in a timely fashion. If not, a formal Notice of Non-Compliance needs to be completed by the inspection staff for review and signature by the CONSTRUCTION MANAGER.

C. Procedures

1. When a deficient item of work has been identified by the Inspection staff and not satisfactorily repaired by the Contractor, a formal Notice of Non-Compliance, Exhibit 1.e.1, shall be issued. The notice is a two-part form for (1) noting the deficiency and (2) noting the response of the Contractor.

2. The notices shall be consecutively numbered and contain, at a minimum, the following information in the first part of the form:

    a. Number of Notice of Non-Compliance

    b. Subject of Notice of Non-Compliance

    c. Specification and contract drawing reference

    d. Corrective action required

    e. Signature of CONSTRUCTION MANAGER

    f. Date of transmittal to Contractor

3. A copy of the notice shall be placed in a Notice of Non-Compliance Log for future reference.

    a. The Contractor shall notify the CONSTRUCTION MANAGER of intended method of repair by filling out the second part of the form. The response shall be filed in the Notice of Non-Compliance Log Report.

b. When the Contractor has satisfactorily addressed items of non-compliance, a written confirmation of compliance shall be prepared and signed by the CONSTRUCTION MANAGER and transmitted to the Contractor. Copy of the compliance letter shall be filed with the Notice of Non-Compliance in the logbook for future reference.

c. As the project approaches completion, all unresolved notices of non-compliance form part of the final punchlist for project closeout and final inspection.

Exhibit 1e.1
Construction Deficiency Report

CITY OF SAN DIEGO
WATER DEPARTMENT
CAPITAL IMPROVEMENTS PROGRAM

CONSTRUCTION DEFICIENCY REPORT

Date: _____
To: _____
_____
Attn.: _____
From: _____
Subject: _____

Project Name: _____
CIP No.: _____ **W.O.:** _____
Contractor: _____
Contractor No.: _____

Pursuant to the provisions of the General Conditions, you are hereby directed to remedy or correct the damaged, defective or non-conforming work as described below:

You are hereby notified that the following construction or work procedure does not conform to the contract requirements:_____
_____
(Reference Spec Section)

Noncomplying work may be required to be removed and replaced at no cost to the Owner.

It is your responsibility to determine the corrective action necessary.

_____
Construction Manager's Signature

☐ Agree with finding We expect to take action by: _____

Description of Resolution: _____
_____
_____

☐ Disagree with finding

Reason for Disagreement :_____
_____

_____ _____
Contractor's Signature Date

Corrective Action Completed

_____ _____
Construction Manager Date

cc: PM
CML

Contractor Performance Measurement Plan

2.1 Introduction

This section highlights construction management responsibilities and processes associated with Contractor Performance Measurement Plan. The following task is included in this chapter:

2a. Contractor Performance Measurement Plan

Performance Measurement

Part 2a – Contractor Performance Measurement Plan

A. Objective

The objective of this procedure is to provide the CONSTRUCTION MANAGER and Project Manager with the process for evaluating the Contractor's performance during a project and at the end of the project.

The Contractor Performance Measurement Plan is a method to assist the Contractor in meeting all aspects of the contract in a timely manner and to provide feedback on performance and cooperation during construction. Through the evaluation process involved in this plan, the Contractor will also become more familiar with the Water CIP procedures, which will enable the Contractor to do a better job on the next project.

B. Definitions

The Contractor's performance is measured on a quarterly basis using the Contractor's Quarterly Performance Report, Exhibit 2.a.1 The quarterly report is used to ascertain that the contract obligations are being met and handled in a professional and timely manner.

A final evaluation is done at the completion of the Contract using the Contractor Performance Evaluation Form, Exhibit 2.a.2. The final evaluation is a tool to objectively measure how well the contractor performed the requirements of the contract. Negative ratings may be appealed by the Contractor. See Task 8-7, subparagraph C.2 on the timing sequence (as related to other contract closeout activities) for the preparation and submittal of the Contractor Performance Evaluation Form to the CIP Project Manager. Also see Part 3.a.

C. Procedures

1. Contractor's Quarterly Performance Report. The Quarterly Performance Report is used to review the performance over the course of the contract and provide a measuring stick to assist the Contractor in improving this performance. The intent of this process is to assist the Contractor to become aware of the Water CIP procedures and methods to raise the overall quality of the projects. The following are the responsibilities of the CONSTRUCTION MANAGER for preparation of the Contractor's Quarterly Performance Report (see Exhibit 2.a.1):

    a. On the report, fills in the project title, project CIP and work order numbers, contractor, date, report number, and the percentage project complete.

    b. Assigns subcategories that are pertinent to the project. The subcategories are based on the type of the individual project.

    c. Assigns an assessment rating to each category based on observations and input from the inspector and the other project

team members. Additional clarification shall be provided for any rating less than 3.

d. Assigns a rating to each category based on the following criteria:

"1" - Contractor performed poorly
"2 "- Contractor mostly performed adequately
"3" - Contractor performed adequately
"4" - Contractor performed well
"N/A"- Not Applicable

e. Signs the report, retains a copy, and forwards a copy to the CIP Project Manager and the Construction Management Liaison (CML). The original is filed in the Project Files. A copy is forwarded to the Contractor for discussion.

f. Schedules a meeting with the Contractor to discuss each evaluation. The purpose of the meeting is for the Construction Manager to assist the Contractor in attaining the contract requirements in a complete and timely fashion.

2. Contractor Performance Evaluation Form

a. Upon completion of the contract, the CONSTRUCTION MANAGER completes the Contractor Performance Evaluation Form (Exhibit 2.a.1) and forwards it to the CIP Project Manager for review. A meeting is arranged by the Construction Manager to have the Contractor and the Project Team discuss the evaluation and the Contractor's performance during the course of the contract.

b. When any comments made on the final evaluation are negative, the Contractor has a right to appeal the rating to the Deputy Director of the Water CIP in order to justify why the rating is not warranted.

Exhibit 2.a.1
Contractor Quarterly Performance Report

CITY OF SAN DIEGO
WATER DEPARTMENT
CAPITAL IMPROVEMENT PROGRAM

CONTRACTOR'S QUARTERLY PERFORMANCE REPORT

Project Name: _____ **Contractor:** _____ **Quarterly Report No.** _____

Date:_____ **% Project Complete:** _____ **CIP No.:** _____ **W.O. No.:** _____

SCHEDULE:	RATING:	COMMENTS:
1.	☐	_____
2.	☐	_____
SUBMITTALS:		
1.	☐	_____
2.	☐	_____
CORRESPONDENCE:		
1.	☐	_____
CHANGE ORDERS/CLAIMS:		
1.	☐	_____
SAFETY:		
1.	☐	_____
CLOSEOUT PLANNING:		
1.	☐	_____
OTHER:		
1.	☐	_____
OVERALL: The Contractor's overall performance rating 1- Poorly 2- Mostly adequately 3- Adequately 4- Well N/A -Not Applicable	☐	_____

To the best of my knowledge, the above ratings and comments are by individual assessment of the Contractor's performance.

Prepared By: _____ Date: _____ Reviewed By: _____

Exhibit 2.a.2
Contractor Performance Evaluation Form

Firm Name: _____
Firm Address: _____
Title of Contract: _____

Work Order #: _____ Bid #:_____ NOC Date:_____

1. Title of Work

a. Streets and Highways _____ Bridge_____ Storm Drain _____
Flood Control _____ Traffic Signal _____ Other

b. Water Utilities: Sewer Main_____ Water Main _____
Pump Station _____ Filtration Plant_____ Treatment Plant_____

c. Park and Recreation: Park_____ Recreation Building_____
Recreation Field_____ Comfort Station _____

d. Building (Specify)_____

2. Was the project routine or complex? Explain:_____
_____
_____

3. Work Schedule

a. Did the contractor submit a complete and comprehensive schedule in accordance with contract documents?
Explain:_____
_____
_____

b. Was the baseline schedule followed, tied in to the allotted contract time, and the critical path maintained? Did the contractor take the necessary corrective action to complete the job on time? Explain:
_____
_____

4. Work Performance

a. Was the staffing and equipment adequate enough to maintain the schedule and the quality outlined in the contract documents? Explain: _____
_____

b. Were deficiencies noted in the workmanship (quality related)? If yes, were corrections handled in a timely manner?
Explain:_____
_____

c. Were nonconformance/compliance notices issued? Did the contractor correct the contract issue in question?
Explain: _____
_____

d. State facts where contractor's attitude was cooperative and/or uncooperative with City staff and/or other related agencies. Circle one: *outstanding - above satisfactory - satisfactory - unacceptable*.
Explain: _____
_____

e. Did the contractor adequately monitor subcontractor performance? Explain: _____
_____

Exhibit 2.a.2
Contractor Performance Evaluation Form
Continued

f. Conformance w/EOCP, certified payrolls and other administrative requirements. Circle one: *outstanding - above satisfactory - satisfactory - unacceptable*. Explain:_____
_____

5. Disputed Work

a. Describe disputed work which occurred during the contract.
_____

b. Did the contractor address disputed items as work progressed? Explain: _____
_____
_____

c. Was claim filed prior to the completion of the project? _____

d. Was claim justified or not (include settlements awarded and/or rejected). Explain: _____
_____
_____

6. Traffic Control

a. If required, was traffic control plan followed as issued? Check one: ☐ Yes ☐ No

b. Were the traffic control manual instructions followed? Check one: ☐ Yes ☐No

c. Were revisions made as directed by the Construction Manager? Check one: ☐ Yes ☐ No
Explain: _____
_____
_____

7. Evaluation and Recommendation

a. Contractor's overall rating is: (circle one) *outstanding - above satisfactory - satisfactory - unacceptable*

b. In the space below, indicate issues that you wish to be noted regarding this contractor. This may include areas of needed improvement, areas of exceptional conduct, etc. Please state facts and actual incidences to substantiate judgment.
_____
_____
_____
_____
_____

If an "unacceptable" rating is given, please include date and names of people in contractor's company you discussed the issues with.

CIP Project Manager	**CIP Deputy Director**
By: _____	By:_____
Signature	Signature
_____	_____
Printed Name	Printed Name/Date

cc: CIP Contracts Administrator
Contractor

Part 3 - Supplemental Information

Contract Closeout

3.1 Introduction

This section highlights construction management responsibilities and processes associated with the closeout of the contract. The following task is in this section:

3a.1 Job Closeout Procedure

Contract Completion and Closeout

Part 3a.1– Job Closeout Procedure

A. Objective

To establish a standard format for receiving final contract documents and processing the Notice of Completion (NOC) and Acceptance, as set forth in Task 8-9, Certificate of Substantial Completion and Notice of Completion and Acceptance.

B. Definition

Closeout of a contract is essential to enable the CONSTRUCTION MANAGER to make final payment, file of the Notice of Completion and Acceptance, and release of retention payment at the completion of a construction contract. The Contractor's retention is returned when the Notice of Completion and Acceptance has been filed. At that time, any unused project funds can then be identified for use on other Water CIP construction contracts.

Other closeout procedures are defined in Task 5-18, Task 8-4, Task 8-8 and Task 8-9. The Contractor closeout requirements are spelled out in Section 01700 of Division 1 of the Contract Documents.

C. Procedures

1. At the last regular Weekly Progress Meeting, the CONSTRUCTION MANAGER shall distribute to the Contractor the Contract Closeout Checklist, Exhibit 3.a.1, for the Contractor's documentation.

2. The CONSTRUCTION MANAGER and the Contractor shall identify all the necessary documents requiring submission prior to issuance of the Notice of Completion and Acceptance. These include, but are not limited to, CIP final reporting forms, affidavit of legal disposal, as-built plans, reduced-size irrigation as-built plans, permits, release of claims; final reports for specialty inspection and environmental reports; building permit sign-offs and any required certifications. On the Closeout Checklist form the final check of contract quantities and issuance of the Final Closeout Change Order shall also be identified.

   EOC Final Documentation will be submitted by the Contractor after contract Retention is paid.

3. The CONSTRUCTION MANAGER will complete the Final Contract Closeout Notice, Attachment 8-4-2, and distribute it to City departments and agencies as indicated in Task 8-4.

4. Upon identification of the final documents required, the CONSTRUCTION MANAGER and the Contractor shall identify the responsible party for completing the submission of that particular document. Submission of these documents may lie with a third party,

either a subcontractor, supplier, inspector, inspection supervisor or another city or state agency.

5. A realistic timeframe shall be identified for submission of the particular document and a target date assigned for providing the required document to the Construction Manager. The target date must be practical and achievable, especially if the document needs to be submitted by a third party.

6. The CONSTRUCTION MANAGER and Contractor shall sign and date the form as a statement of good faith that they will work diligently to meet the assigned target dates and thereby expedite the closeout process. The assigned target dates should not be in excess of one month beyond completion of the fieldwork unless several steps are necessary to complete finalization.

7. The CONSTRUCTION MANAGER shall send a copy of the signed form to the Project Manager for use as a tool to track the closeout process.

8. The CONSTRUCTION MANAGER and the Contractor shall meet weekly to keep the process of contract closeout moving forward and status the target dates for the identified items.

Exhibit 3.a.1
Contract Closeout Checklist

CITY OF SAN DIEGO WATER DEPARTMENT
CAPITAL IMPROVEMENTS PROGRAM
CONTRACT CLOSEOUT CHECKLIST

PROJECT: _____

CONTRACTOR: _____

STARTING DATE: _____ COMPLETION DATE: _____

CIP #: W. O. #:

	Target Date	Date R'cvd	Responsibility
FINAL QUANTITIES CHECKED	_____	_____	_____
COMPLETE CONTRACT CLOSEOUT NOTICE (Attachment 8-2-2)	_____	_____	_____
AS-BUILT PLANS RECEIVED:	_____	_____	_____
IRRIGATION AS-BUILT PLANS RECEIVED	_____	_____	_____
AS-BUILT SCHEDULE SUBMITTED:	_____	_____	_____
CONTRACTOR'S EVALUATION COMPLETED:	_____	_____	_____
PERMITS	_____	_____	_____
BUILDING PERMIT	_____	_____	_____
FINAL REPORTS:	_____	_____	_____
RELEASE OF CLAIMS AGAINST THE CITY	_____	_____	_____
LIENS/STOP NOTICES CLEARED	_____	_____	_____
CLOSING CONTRACT CHANGE ORDER	_____	_____	_____
AFFIDAVIT OF LEGAL DISPOSAL	_____	_____	_____
NOTICE OF COMPLETION AND ACCEPTANCE	_____	_____	_____
COMPLETE PUNCH LIST ITEM	_____	_____	_____
OPERATIONAL ACCEPTANCE TRAINING	_____	_____	_____

PREPARED BY: _____ _____
Construction Manager Date

_____ _____
Contractor Representative Date

REVIEWED BY: _____ _____
Project Manager Date

Book

6

Construction Management Guidelines

Appendix B

Forms

City of San Diego Water Department
Capital Improvements Program

APPENDIX B

FORMS

- Contractor Evaluation Form

CITY OF SAN DIEGO
CONTRACTOR PERFORMANCE EVALUATION FORM

Date:_____

☐ **INTERIM REPORT:** ☐ 33%, ☐ 67%, days in contract _____ working/calendar.

☐ **FINAL REPORT:** Submitted at completion of a _____ ☐ working day ☐ calendar day contract.

TITLE OF CONTRACT: _____

CONTRACT AMOUNT (ORIGINAL / FINAL): _____ / _____

FIRM NAME: _____

FIRM ADDRESS: _____

CONTRACTOR REPRESENTATIVE'S NAME: _____

CONTRACTOR SUPERINTENDENT'S NAME: _____

CONTRACTOR FOREMAN'S NAME: _____

WORK ORDER NUMBER: _____ **BID NUMBER:** K - _____

TYPE OF WORK (CHECK ALL THAT APPLY):

TREATMENT PLANT	☐	PUMP STATION	☐	SEWER MAIN	☐	STORM DRAIN	☐
WATER MAIN	☐	FLOOD CONTROL	☐	ENVTL. MITIGATION	☐	BRIDGE	☐
STREETS /HIGHWAYS	☐	TRAFFIC SIGNAL	☐	STREET LIGHTS	☐	PARK	☐
		BUILDING (SPECIFY)	☐	PIPING SYSTEM (SPECIFY) _____	☐	OTHER (SPECIFY)	☐
		_____		_____		_____	

This evaluation represents the conclusions of the City of San Diego, prepared by City staff in the course of their official duties. The contractor may agree with or dispute the contents and conclusions of this evaluation. Anyone not affiliated with the City of San Diego should conduct his or her own investigation to confirm or dispel the conclusions expressed herein.

Contract: Date:
Evaluation of: Page 2 of 11

ABBREVIATIONS

O	=	Outstanding	A S	=	Above Satisfactory
S	=	Satisfactory	N I	=	Needs Improvement
U	=	Unacceptable	Y	=	Yes
N	=	No	N A	=	Not Applicable

1. **CONTRACTOR'S WORKFORCE**

a. Experience / Knowledge of contractor's Superintendent

☐ O ☐ A S ☐ S ☐ N I ☐ U

If O, N I or U is checked explanation on attached sheet(s) is required.

b. Experience / Knowledge of contractor's Foreman

☐ O ☐ A S ☐ S ☐ N I ☐ U

If O, N I or U is checked explanation on attached sheet(s) is required.

c. Experience / Knowledge of contractor's crew

☐ O ☐ A S ☐ S ☐ N I ☐ U

If O, N I or U is checked explanation on attached sheet(s) is required.

d. Was the contractor's staffing level adequate for the proper execution of the work?

☐ Y ☐ N ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 1 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

2. **CONTRACT DOCUMENTS**

a. Contractor's familiarity with the Contract Documents

☐ O ☐ A S ☐ S ☐ N I ☐ U

If O, N I or U is checked explanation on attached sheet(s) is required.

b. Did the Contractor notify the Resident Engineer of any potential problems, including conflicts or deficiencies in the plans and specifications, before performing work?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 2 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

Contract: Date:
Evaluation of: Page 3 of 11

3. MANAGEMENT OF SUBCONTRACTORS

a. General Contractor's management of subcontractor schedule and activities

☐ O ☐ A S ☐ S ☐ N I ☐ U

If O, N I or U is checked explanation on attached sheet(s) is required.

b. General Contractor's willingness to address deficiencies in subcontractor performance

☐ O ☐ A S ☐ S ☐ N I ☐ U

If O, N I or U is checked explanation on attached sheet(s) is required.

The contractor's overall rating for Section 3 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

4. PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

a. Did the contractor furnish all equipment and facilities required for the proper execution and inspection of the work and maintain them good condition?

☐ Y ☐ N ☐ See comments on attached sheet(s).

b. Construction Schedule

i. Was a complete, comprehensive schedule submitted?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Were schedule revisions submitted in a timely manner as required?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iii. Did the contractor adhere to the schedule?

☐ Y ☐ N ☐ See comments on attached sheet(s).

(1) Describe any cases where the schedule was not followed.

(2) What problems, if any, were caused by contractor's failure to adhere to schedule?

(3) What, if any, corrective action did the contractor take bring the work back on schedule and complete the project within the contract time?

iv. Was the work completed within the contract time allocated?

☐ Y ☐ N ☐ See comments on attached sheet(s).

If no, did the contractor have acceptable justification for late completion?

☐ Y ☐ N ☐ See comments on attached sheet(s).

c. Commencement of Work

i. Did the contractor start the work as specified?

☐ Y ☐ N ☐ See comments on attached sheet(s).

d. Prosecution of work

i. Did the Contractor prosecute the work diligently and continuously?

☐ Y ☐ N ☐ See comments on attached sheet(s).

Contract: Date:
Evaluation of : Page 4 of 11

ii. Were Submittals and/or Shop Drawings complete and submitted early enough to avoid impacting the critical path?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

iii. Were RFI's clear, relevant and submitted early enough to avoid impacting the critical path?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

iv. Did the contractor promptly address punch list items as specified?

☐ Y ☐ N ☐ See comments on attached sheet(s).

e. Project Site maintenance

i. Did the contractor sweep/clean the project site and storage areas in accordance with the contract documents without intervention from the Resident Engineer?

☐ Y ☐ N ☐ See comments on attached sheet(s).

f. Protection and restoration of existing improvements

i. Were there any incidents of damage to existing public and/or private improvements by the contractor or subcontractors.

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Was the Resident Engineer promptly notified of each incident of damage to existing improvements?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iii. Did the contractor promptly repair or replace existing improvements damaged in the course of work on its own without intervention from the Resident Engineer?

☐ Y ☐ N ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 4 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

5. CONTRACT COMPLIANCE

a. Materials and Workmanship

i. Quality of materials, parts and equipment furnished in compliance with the contract?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Quality and workmanship in accordance with generally accepted standards?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iii. Materials incorporated into the work approved prior to installation?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iv. Did the contractor take adequate measures to protect the work and materials?

☐ Y ☐ N ☐ See comments on attached sheet(s).

Contract: Date:
Evaluation of : Page 5 of 11

b. Were any written notices issued for corrections, deficiencies or violations?

☐ Y ☐ N If yes, describe circumstances and resolution for any notices issued on attached sheet(s).

c. Did the contractor provide prompt notification of errors in the plans/specifications and/or changed conditions requiring input or direction from the Resident Engineer.

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

d. Did the contractor demonstrate willingness to comply with the contract requirements and reasonable requests from the Resident Engineer (including reasonable minor changes required to complete the work at no additional cost to the City)?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

e. Labor laws / EOCP

i. Did the contractor submit workforce/labor documentation as required including subcontractors?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Did the contractor adhere to applicable labor laws?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iii. Did the contractor pay subcontractors and suppliers in a timely manner?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iv. Was required EOCP documentation complete and submitted at specified intervals?

☐ Y ☐ N ☐ See comments on attached sheet(s).

v. Were complete Certified Payrolls submitted as required or as requested by the Resident Engineer?

☐ Y ☐ N ☐ See comments on attached sheet(s).

f. Disputed Work / Claims

i. Did any disputed work occur during the contract?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Did the contractor address disputed items in advance or as work progressed?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

iii. Were any claims filed prior to the completion date of the project?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iv. Did the contractor request mediation for any claims?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

v. Was any claim justified (include settlements awarded and/or rejected).

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

g. Permits

i. Did the contractor obtain required permits in accordance with the contract documents?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

ii. Did the contractor comply with applicable permits (including coordination/cooperation with other agencies issuing permits)?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

h. Storm Water Pollution Prevention

Contract: Date:
Evaluation of : Page 6 of 11

i. Did the contractor provide site management practices to prevent storm water pollution, inclusive of Best Management Practices (BMPs)?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Were BMPs properly installed and adequately maintained?

☐ Y ☐ N ☐ See comments on attached sheet(s).

i. Water for construction purposes

i. Did the contractor use an approved meter and backflow device when using water from the City?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 5 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

6. SAFETY

a. Did the contractor obtain required safety-related permits and maintain them on-site?

☐ Y ☐ N ☐ See comments on attached sheet(s).

b. Did the contractor provide safe, adequate access for inspections as observed by the Resident Engineer?

☐ Y ☐ N ☐ See comments on attached sheet(s).

c. Was the contractor given any OSHA citations during the conduct of work activities?

☐ Y ☐ N ☐ See comments on attached sheet(s).

d. Did the contractor have any serious injuries or incidents during the course of their project work?

☐ Y ☐ N ☐ See comments on attached sheet(s).

e. Did the contractor provide a safety plan in compliance with regulatory requirements as outlined in the project specifications?

☐ Y ☐ N ☐ See comments on attached sheet(s).

f. Was the contractor identified as having infractions associated with the following areas of construction safety during conduct of work on the project? (Check all that apply)

☐ Fall Protection ☐ Confined Spaces ☐ Cranes

☐ Trench/Excavation ☐ Demolition ☐ Electrical

☐ Personal Protective Equip. ☐ Hazardous Material ☐ Traffic Control

☐ Respiratory Protection ☐ Heavy Equipment

☐ Other (Specify) _____ ☐ See comments on attached sheet(s).

Contract: Date:
Evaluation of : Page 7 of 11

g. Equipment

i. Was equipment used safely and for its intended purpose as observed by the Resident Engineer?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Was equipment properly and safely maintained as observed by the Resident Engineer?

☐ Y ☐ N ☐ See comments on attached sheet(s).

h. Public convenience and safety

i. Was public safety adequately addressed by the contractor?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Was the contractor's traffic and access in and out of the project area maintained in a safe manner that minimized public inconvenience?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iii. Was storage of equipment and materials in the public right of way in conformance with the contract documents and or Resident Engineer's reasonable direction and otherwise minimized to reduce public inconvenience?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 6 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

7. COMMUNICATION

a. With City staff

i. Was the Resident Engineer the contractor's single point of contact as required?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Did the contractor provide clear, timely notice of inspections required?

☐ Y ☐ N ☐ See comments on attached sheet(s).

iii. Did the contractor respond to questions and requests from the Resident Engineer in a complete and timely manner?

☐ Y ☐ N ☐ See comments on attached sheet(s).

b. With the public

i. Did the contractor provide accurate, timely notifications and/or responses to the public and area businesses as required?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Did the contractor, subcontractors and suppliers treat the public and area businesses in a courteous and respectful manner?

☐ Y ☐ N ☐ See comments on attached sheet(s).

Contract: Date:
Evaluation of : Page 8 of 11

c. Internal (communication within contractor's firm, with subcontractors and suppliers)
   i. Was contractor's staff informed of project requirements and requests/directions from the Resident Engineer?

☐ Y ☐ N ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 7 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

8. CHANGES IN WORK

a. Was extra work negotiated in a fair and equitable manner?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

b. Were changed conditions addressed quickly to avoid or minimize delays to the contract?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

c. Was Disputed Work adequately documented and addressed to avoid or minimize delays to the contract?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

d. Were any claims Submitted in a timely manner, adequately documented and settled in a fair and equitable manner?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 8 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

9. COORDINATION / COOPERATION

a. Did the contractor coordinate effectively overall with City staff?

☐ Y ☐ N ☐ See comments on attached sheet(s).

i. Resident Engineer
   (1) Treated in a professional and courteous manner?

   ☐ Y ☐ N ☐ See comments on attached sheet(s).

   (2) Provided advance notice of required inspections in accordance with the contract?

   ☐ Y ☐ N ☐ See comments on attached sheet(s).

Contract: Date:
Evaluation of : Page 9 of 11

(3) Provide adequate opportunity and access to the work in order to perform required inspections?

☐ Y ☐ N ☐ See comments on attached sheet(s).

ii. Survey Section

(1) Did the contractor adhere to the established notification process for requesting survey services during construction?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

(2) Did the contractor understand how to use the survey information provided and/or request clarification when needed?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

(3) Did the contractor take reasonable precautions to protect survey data in the field?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s)

iii. Did the contractor adhere to the established notification process for requesting Materials & Testing Laboratory services during construction?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s).

iv. City Forces

(1) Did the contractor adhere to the established notification process for requesting work and/or assistance from City forces during construction?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s)

(2) Did the contractor perform required contract work and/or address reasonable requests from the Resident Engineer necessary for efficient completion of City forces work?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s)

b. Did the contractor coordinate adequately with private property owners and businesses to maintain access in order to perform the required work?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s)

c. Was the contractor courteous and cooperative when dealing the public?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s)

d. Did the contractor adequately coordinate and cooperate with utility companies?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s)

e. Did the contractor adequately cooperate and coordinate with others performing simultaneous, collateral and essential work?

☐ Y ☐ N ☐ N A ☐ See comments on attached sheet(s

f. State facts where contractor's attitude was cooperative/uncooperative with city staff and/or other related agencies? ☐ See comments on attached sheet(s).

The contractor's overall rating for Section 9 is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked explanation above and/or on attached sheet(s) is required.

Contract: Date:
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OVERALL EVALUATION

THE OVERALL EVALUATION IS DERIVED FROM (9) NINE FACTORS THAT WERE OBSERVED DURING THE CONSTRUCTION OF THIS PROJECT

The contractor's overall rating for the construction of this project is (check one):

☐ Outstanding ☐ Above Satisfactory ☐ Satisfactory ☐ Needs Improvement ☐ Unacceptable

If Outstanding, Needs Improvement or Unacceptable is checked written explanation below is required. Include date(s) and name(s) of people in contractor's company these issues were discussed with.

	RESIDENT ENGINEER	SUPERVISOR
By:	_____ (signature / date)	_____ (signature / date)
	_____ (printed name)	_____ (printed name)
	Section Head's Initial _____	Deputy Director's Initial _____

cc: Director, Engineering and Capital Projects, MS 9B
Contract Services Division, MS 658
Contractor

Contract: Date:
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CONTRACTOR EVALUATION ADDITIONAL COMMENTS
Page ____ of ____

Item No./Page No.	**Comments / Explanation (Double Space)**

Book

6

Construction Management Guidelines

Appendix C
Key Contacts

City of San Diego Water Department
Capital Improvements Program

APPENDIX C

KEY CONTACTS

- Water Department Phone Directory

EMERGENCY PHONES 515-3525
DEPUTY DIRECTOR FAX 527-7678
CITYWIDE PAGER PH # 232-2237
LARRY GARDNER'S FAX 533-7593
LARRY GARDNER'S MS 913
HUMAN RESOURCES MS 913

WATER DEPARTMENT
WATER OPERATIONS DIVISION
2797 Caminito Chollas MS 43
San Diego, CA 92105-5097

ALVARADO LAB
5530 Kiowa Drive MS 85A
La Mesa, CA 91942-1331

HELP DESK 533-4225
CHOLLAS FAX 527-8098
CIP HOTLINE 533-4679
CONFERENCE ROOM B 527-5470
STATION 38 527-5481 FAX 527-7478
SPECIAL PROJECTS FAX 263-6759
RECEPTION DESK 527-7470

April 2, 2003

	TITLE	PHONE	E-MAIL	PAGER	CELLULAR
Larry Gardner	Water Department Director	533-7555	lgardner	8941	279-9303
Janet Bruce	Executive Secretary	533-7555	jbruce		
Mark Stone	Deputy Director	527-7431	mstone		279-9297
Kent Floro	Assistant Deputy Director	527-7460	kfloro		279-9298
Paulette Mormino	Human Resources Manager	533-7558	pmormino	6950	980-8897
Cathy Cibit	Development Service	446-5343/527-3111	ccibit	8597	980-0635
Bob Collins	Groundwater/Watershed Manager	668-2084	rcollins	8383	726-5811
Jim Coldren	Claims Rep/Risk Management	527-5407/236-5598	jcoldren	7065	980-4284
Donna Wallace	Outstation Analyst	527-8037/236-7137	dwallace		
Tony Austin	Associate Human Resources Analyst	533-6694	aaustin		
Erik Hanson	Organization Effective Specialist	533-5276	ehanson		

ADMINISTRATIVE/ SUPPORT SECTION

Robin Currie	Supervising Management Analyst	527-3491	rcurrie		980-9443
Stella Kuzukian	Associate Management Analyst	527-3151	skuzukian	9276	
Yvonne Faiai	CA II	527-3143	yfaiai		
FAX		263-6759			
Tonia Carnell	Associate Management Analyst	527-7407	tcarnell	8407	
Joyce Clark	Administrative Aide II	527-7588	jclark	9284	
Eddie Mae Engram	CA II	668-2784	eengram		
Glenda Evans	CA II	527-7628	gevans	8406	
Sharla Looney	CA II	858-581-7682	slooney		
Ellen Hutter	CA II	527-3136	ehutter		
Wanda Bursey	CA II	527-8009	wbursey		
Linda Rushing	Data Entry	527-7543	lrushing		
Jimmie Grear	Senior Clerk/Typist	527-7473	jgrear	9600	980-9542
Tyra Franklin	W.P.O.	527-8067	tfranklin		
Alisa Harris	W.P.O.	527-7658	aharris		
Betty Lessier	W.P.O.	527-7472	blessier		
Jennise Milton	W.P.O	527-7688	jmilton		
Anna Rodriguez	W.P.O.	527-7404	aarodriguez		
Tamara Horne	CA II	527-7424	thorne		
Tania Lopez	CA II	527-5469	tlopez		
Marilyn Saunders	CA II	527-7406	masaunders		
RECEPTION DESK		527-7470			
FAX		527-8098			

BUSINESS OPERATIONS/BUDGET/ACCOUNTING

Beth Macam	Water Operations Budget Analyst	527-7620	emacam
Jeff Umbrasas	Water Operations Budget Analyst	527-5458	jumbrasas
Monica Davis	Account Clerk	527-7606	mdavis
Carmen Valdez	Account Clerk	527-7471	cvaldez
FAX		527-8024	

CONSTRUCTION/SPECIAL GROUP

Lester Jennings	Construction Program Manager	527-7434	ljennings	8643	279-9299
Irv Little	P.W.U.S.CIP City Wide	527-8038	ilittle	8023	980-2781/Radio 1802
Bernard Powell	S.W.U.S. Group Jobs	527-7439	bpowell	8831	980-2029/Radio 1850
Jeff Remsburg	S.W.U.S. Group Jobs	527-8039	jremburg	8850	980-2542/Radio 1930
Gabe Shipley	S.W.U.S. Inventory/Procurement	527-7421	gshipley	8855	980-9470/Radio 1901
Vacant	P.W.U.S. Dist. 3,4,7,8	527-7420			
Tommy Skates	S.W.U.S. Area C (Dis.3 & 7)	527-7539	tskates	8571	980-9924/Radio 1870
John Morales	S.W.U.S. Emergency Services	527-7444	jmorales	7590	980-5653/ Radio1970
Stan Medina	S.W.U.S. Area D (Dis. 4 & 8)	527-7428	smedina	8863	990-6435/Radio 1630
Stan Lynn	P.W.U.S. Dist. 1,2,5,6	858-581-9969	slynn	8608	980-9438/Radio 1021
Rollo Latney	S.W.U.S. Area B (Dis. 1 & 2)	858-581-9974	rlatney	8338	980-5798/Radio 1810
Sean Willis	S.W.U.S. Concrete/Reclaimed	858-581-9970	swillis	8622	980-7807/Radio 1801
John Pich	S.W.U.S. Area A (Dis. 5 & 6)	858-581-9892	jpich	8337	980-5940/Radio 1830
Sharla Looney	CA II/Rose Canyon	858-581-7682	slooney		
Syl Lisiecki	Store Room #66	527-7448	slisiecki		
FAX/Rose Canyon		581-9967			

FAX/Chollas	527-8001
FAX/CIP	527-8069

	TITLE	PHONE	E-MAIL	PAGER	CELLULAR
ENGINEERING PROGRAM					
Jim Fisher	Engineer Program Manager	527-3156	jfisher	8600	571-3497
ENGINEERING DISTRIBUTION					
Tibor Varga	Senior Civil Engineer	527-7619	tvarga	8073	980-8879
Tatyana Fikhman	Associate Engineer Civil	527-7438	tfikhman		980-8854
Said Mahdavi	Associate Civil Engineer	527-7686	smahdavi		980-6708
Manolito Ramirez	Associate Civil Engineer	527-5439	mramirez	8419	980-8823
Don Keller	Assistant Engineer-Civil	527-7490	dkeller		
Jesus Ramos	Assistant Engineer-Civil	527-3178	jramos		990-4678
Mark Chandler	Principal Engineering Aide	527-3179	mchandler		980-4091
Romeo Montillano	Senior Drafting Aide	527-3187	rmontillano		
FAX		527-7412			
ENGINEERING PRODUCTION/STORMWATER/TREATMENT PLANTS					
Jesus Meda	Senior Civil Engineer	527-7432	jmeda	8074	980-9639
Dwayne Abbey	Associate Engineer Civil	527-3186	dabbey	8778	980-3019
Yana Balotsky	Associate Engineer Civil	527-8028	ybalotsky	9079	
Arlene Dee Dealey	Associate Engineer Civil	527-8065	adeeley	8418	
Jafer Kazem	Associate Civil Engineer	527-7436	jkazem	8826	980-9423
Rosalva Morales	Associate Engineer Civil	527-3119	rmorales	8590	
Dominador Bombonagan	Assistant Engineer-Civil	527-7614	dbombonagan		
Daniel Moran	Assistant Engineer Civil	527-8027	dmoran	8417	
Nathan Grima	Assistant Engineer Civil	527-3185	ngrima		
Jun Panuga	Assistant Engineer Civil	527-3158	fpanuga		
Eric Rubalcava	Assistant Engineer Civil	527-3157	erubalcava		980-9637
Pat Hildebrand	Hydrography Aide	527-8026	phildebrand		
Sue Weber	Principal Engineering Aide	527-5413	sweber		
FAX		527-7412			
CONSTRUCTION ESTIMATING PROJECT CONTROLS					
Randy Welborn	P.W.U.S.	527-7422	rwelborn	8123	980-7806/Radio 1910
Armando Cruz	S.W.U.S.	527-7423	acruz	8636	980-7786/Radio 1911
Vacant	SW.U.S/ Project Coordination	527-7456			
Osami Wakabayashi	W.U.S.	527-5424	owakabayshi	8109	980-8872/Radio 1909
FAX		527-5425			
CORROSION CONTROL SECTION/DOWNTOWN / MS 910					
Martin Fogata/Section Head	Senior Corrosion Specialist	533-5156	mfogata		247-4033
Gilbert Calderon	Associate Engineer-Corrosion	235-1940	gcalderon		247-9290
Bert Madrigal	Associate Engineer-Corrosion	533-5128	rmadrigal		247-4470
Edgar Faralan	Assistant Corrosion Engineer	235-1958	efaralan		279-9291
Rod Galang	Assistant Corrosion Engineer	235-1935	rgalang		279-9301
Juan Picazo	Senior Corrosion Engineer Aide	533-5282	jpicazo		279-9293
Chuck Tessman	Senior Corrosion Engineer Aide	533-5145	ctessman		279-9292
FAX		235-1973			
FACILITY INFORMATION MANAGEMENT SECTION					
Susan Wynne/Section Head	Associate Engineer-Civil	527-7480	swynne	8408	980-8851
Robert (Bull) Wilson	Assistant Engineer-Civil/H&R	527-7458	rwilson	8951	
Vacant	Locating Detection	527-7497			
Tony Abate	Principal Drafting Aide	527-3197	tabate	8647	980-6914
Rod Vigil	Principal Drafting Aide	527-7410	rvigil	7753	
Lois Bennet	Senior Drafting Aide	527-7477	lbennet		
Jay Hermosura	Senior Drafting Aide	527-3193	jhermosura		
Michael Mackey	Senior Drafting Aide	527-3192	mmackey		
Eric Overstreet	Senior Drafting Aide	527-7483	eoverstreet		
MAPS & RECORDS		527-7482			
LABORATORY - KIOWA/MS 85A					
John Chaffin/Section Head	Water Quality Superintendent	668-3233	jchaffin	9956	980-2908
Nita Torres	Public Information Clerk	668-3232	jtorres		
Paul Alesi	Building Supervisor	668-3230	palesi	8744	980-2916
Jeff Pasek	Senior Biologist	668-3240	jpasek	8741	980-5332
Dana Chapin	Senior Chemist	668-3237	dchapin		980-2302
Paul Powell/Bob Campbell	Storeroom	668-3229	ppowel/bcampbell		
FAX					
	668-3250				

LAKES - SAN VICENTE/MS 85V

Jim Brown/Section Head	Lake Program Manager	668-2030	jrbrown	8060	
Joe Weber	Lakes Program Supervisor	668-2075	jweber	8053	
Nelson Manville	Ranger/Diver Supervisor	668-2013	nmanville	8059	990-1465
Sharon Smith	W.P.O.	668-2072	ssmith		
Ranger Office		668-2014			
FAX		443-7681	TITLE	PHONE	E-MAILPAGERCELLULAR

MIS

Kevin Brewer	Information Systems Technician	527-8094	kbrewer	9864	
Nora Hatzis-Deas	Information Systems Technician	527-7685	nhatzisdeas	8491	
Jason(Dung) Lee	Information Systems Technician	527-3449/533-4677	jlee	9712	
Tom Marshall	Information Systems Analyst	533-5431	tmarshall	8462	
Kris Tucker	Information Systems Analyst	527-3190	ktucker	8496	

PAYROLL/HUMAN RESOURCES

Nancy Steele	Administrative Aide II	533-7493	nsteele		
Candi Mitchell	Payroll Supervisor	527-7427	cmitchell		
Jennifer Becker	Payroll Specialist II	527-7475	jbecker		
Diane Heard	Payroll Specialist II	527-8023	dheard		
Ana Mimosa	Payroll Specialist II	527-8008	amimoso		
Jackie Weber	Payroll Specialist I	527-3184	jweber		
Lena Stewart	Payroll Specialist II	533-4247	lstewart		
FAX		527-8021			

PUBLIC INFORMATION

Tedi Jackson	Supvr Public Information Officer	527-3121	tjackson	8379	279-9304
Vacant	Public Information Intern	527-3141			
Vacant	Public Information Officer	527-7413			
FAX		527-7476			

SAFETY SECTION

Bryan Green	Safety Program Manager	527-7494	bgreen	8464	279-9300
Julio Chavez	Light Duty	527-7611	jchavez	8579	990-3135
Lisa Dumas	Safety Rep. I	527-7633	ldumas	8619	980-9409
Glenda Evans	CAII	527-7628	gevans	8406	
Reggie Greene	Safety Rep. II	527-3493	rgreene	9082	980-9538
Regina Norris	Administrative Aide II	527-7668	rnorris`	9279	977-3244
Antonio Ruiz III	Safety Rep. II	527-5406	truiz	8743	980-8813
Jim Van Norman	Emergency Mngt. Coordinator	527-7634	jvannorman	8397	778-8954
FAX		527-7411			

SYSTEMS OPERATIONS

Gary Stalker	Systems Operations Program Manager	527-8060	gstalker		279-9302
FACILITY MAINTENANCE					
Del Hernandez	General Water Utility Supervisor	527-7574	dehernandez	8520	980-3536
Jesse Ballesteros	S.W.U.S./Central Region	668-2073	jballesteros	8148	990-6486
Lorraine Gain	S.W.U.S../South Region	527-7657	lgain	8903	980-2146
David Holodnak	S.W.U.S./Northern Region	668-2774	dholodnak	8580	980-5468
Bob Watt	S.W.U.S/Maint Services	527-3100	rwatt	8913	990-6392
Al Edwards	Carpenter	527-7468	aedwards	8681	
Les McDaniel	Toolroom	527-7447	lmcdaniel	8637	
Vacant	Toolroom	668-2076			
Alan Roby	Equipment Tech I	858-581-9968	aroby	8867	
Welders Shop		527-7466			
ALVARADO TREATMENT PLANT/MS 85					
Greg Burrow	S.W.O.S.	668-2773	gburrow	9936	980-2197
Doug Eno	W.O.S.	668-2016	deno	8068	980-2243
Dennis Sandvik	Plant Tech Supervisor	668-2019	dsandvik	8075	980-5178
Water Plant Operators		668-2017			
FAX		668-2018			
MIRAMAR TREATMENT PLANT/MS 85M					
Sarah Sandvik	S.W.O.S.	858-581-9590	ssandvik	8076	980-8682
Richard Hopson	W.O.S.	858-581-9585	rhopson	8066	980-8933
Albert Jimenez	Plant Tech Supervisor	858-581-9581	ajimenez	9088	980-8672
Water Plant Operators		858-581-9592			
FAX		858-538-8152			
OTAY TREATMENT PLANT/MS 84					
Mike Kedzior	S.W.O.S.	424-0452	mkedzior	8077	pager 619-293-9188
Edna Carroll	W.O.S.	424-0462	ecarroll	8105	980-8336
Jerry Anderson	Plant Tech Supervisor	424-0453	janderson	8093	980-4994
Control Room		424-0451			
FAX		424-0454			
WATER SYSTEMS/ALVARADO/MS 85					
Walter Cooke	Water Production Superintendent	668-2036	wcooke	8094	980-7738
Charlie Sims	SCADA Administrator/ Special Projects	668-2022	csims	8097	980-5011

Rufus Irving/Jose Mesta	Instrumentation/Control	668-2731	rirving/jmesta	8088/8107	980-5168/980-5019
Jim Toci	Telemetry Electrical Supervisor	668-3203	jtoci	8829	990-6083
Eric Jimerson	Plant Process Control Supervisor	668-2796	ejimerson	8812	980-4572
Michael White	SCADA/Control Valve Crew Supervisor	668-2726	mwhite	8323	980-8821
SCADA	Located at Alvarado	668-2025/668-2002			
Telemetry Shop		668-2026			
Eddie Mae Engram	CA II	668-2784	eengram		
FAX		668-2062			

	TITLE	PHONE	E-MAIL	PAGER	CELLULAR
CIP FINANCING AND PLANNING DIVISION					
Marsi Steier	Deputy Director, CIP MS 907	533-4112	msteier	9060	980-8381
Belinda Bradley	W.P.O.	533-4122	bbradley		
Vic Bianes	Deputy Director, CIP MS 907	533-6600	vbianes		247-3205
Gary Hogue	Engineering Liaison	533-6628	ghogue		
Roger Holly	Construction Liaison	527-8063	rholly	8570	980-0535
Rebecca Pond	W.P.O.	533-6632	rpond		
FAX		533-5278			
CUSTOMER SUPPORT DIVISION 600 B STREET DOWNTOWN/MS 911A					
Vacant	Deputy Director	533-7596			
Mike Bresnahan	Assistant Deputy Director	533-5450	mbresnahan	7799	279-9294
Kurt Kidman	Senior Public Information Officer	533-4185	kkidman	8360	
Denise Perkins	W.P.O.	533-4108	dperkins		
Clarrisa Santiago	W.P.O.	533-5153	csantiago		
FAX		533-4191			
METERS/BACKFLOW/MS 43					
Vacant	P.W.U.S	527-7429		8643	980-9473
Bryan Brigham	Principal Engineering Aide	527-7679	bbrigham	8985	980-3539
Mike Basom	S.W.U.S./Fire Hydrant/Meter	527-7452	mbasom	8699	980-3077
Jerry Bellis	ET III/Backflow	527-7455	gbellis	7744	980-1719
Carl Gross	S.W.U.S/Domestic Meter	527-7451	cgross	8843	980-7406
Clement Harris	S.W.U.S./Comm Meter/Backflow	527-7524	charris	8890	980-1796
Virgilio Valero	Shop/Const. Mt.	527-7449	vvalero		
Karen Burrell	W.P.O.	527-7681	kburrell		
Chris Flores	CA II	527-7454	cflores		
Carmela Honeycutt	CA II	527-3177	choneycutt		
FAX		527-3125			
EMERGENCY SERVICES					
Laura Smith	Emergency Phones Supervisor	533-4623			
EMERGENCY PHONES		515-3525			
Emergency(private phone)		533-7433			
EMERGENCY PHONE S FAX		533-4133			
CUSTOMER SERVICES/MS 911		515-3500			
Diana Gonzales	Billing Supervisor	533-4174			
DOWNTOWN FAX		533-4132			
TRAINING/ALVARADO/MS 43A					
Stuart Karasik	Training Manager	668-2093	skarasik	8461	980-6696
Joe Mackey	Training Supervisor	668-2091	jmackey	8391	980-6697
Val Leitch	Senior Clerk	668-2085	vleitch		
Mike Krasovich	Associate Management Analyst	668-2087	mkrasovich	7748	
Tom Badua	Associate Management Analyst	668-2090	tbadua	7747	
Jim Ayala	Multi Media Production Coordinator	668-2752	jayala		
Jane Arnold	Trainer/AMA	668-2755	jarnold		
Kathryn Durand	Trainer/AMA	668-2020	kdurand		
Susan Botello	Intern	668-2003			
Jackie Hall	W.P.O.	668-2756	jhall		
Glory Polzin/External Training Registration		668-2001	gpolzin		
Vacant/Internal Training Registration			668-2083		
Jennifer Ellis	W.P.O.	668-2010	jellis		
FAX		668-2011			

If any changes or corrections-please contact Marilyn Saunders 527-7406