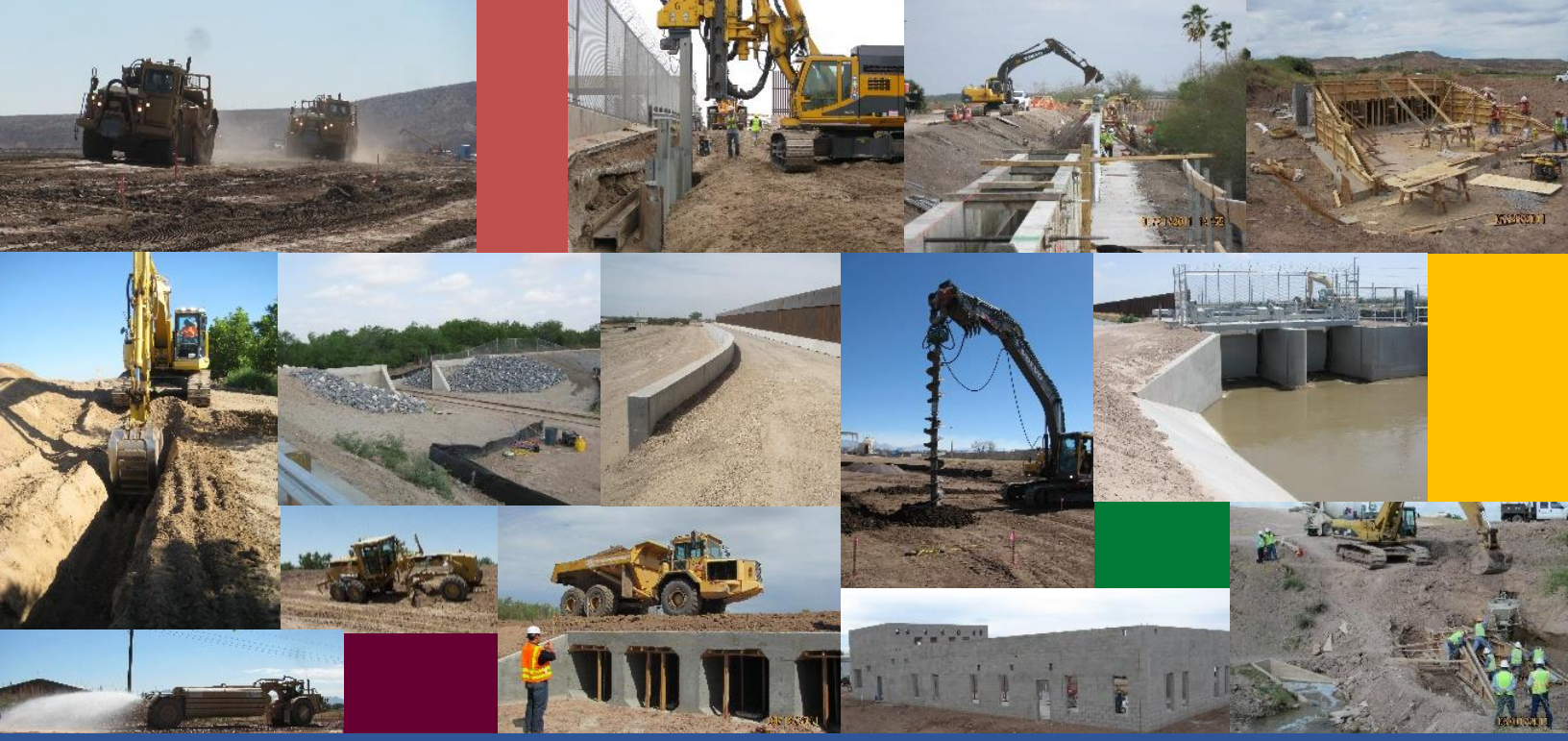


International Boundary and Water Commission

United States and Mexico

United States Section

Construction Management Guide

March 22, 2024

International Boundary and Water Commission
United States Section
Construction Management Division
El Paso, Texas

Front Cover Photos, left to right, top to bottom - Scrapers working on Mesilla Phase II IBM10C0017 2/2011; Placing sheet piling on Hidalgo IBM10C0003 4/2011; Excavator setting concrete forms in place for floodwall on Lateral A IBM10C0007 2/2011; Forming of multiple box culvert on Hatch IBM10C0005 7/2011; Excavator digging toe drain on Mesilla Phase I IBM10C0004 7/2010; Levee gap at railroad tracks on Mission IBM10C0010 4/2011; Concrete floodwall in front of border fence on Fort Hancock IBM10C0009 3/2011; Drilling holes for placement of geopier foundation at Nogales IBM11C0001 2/2011; Finished and operational Riverside Wasteway IBM10C0011 6/2011; Motor grader cutting levee side slope on Mesilla Phase I IBM10C0004 7/2010; Waterpull wetting clay embankment material to reach optimum moisture for compaction on Mesilla Phase II IBM10C0017 7/2011; Off road haul truck brings in clay material for levee embankment over recently placed multiple box culverts on Hatch IBM10C0005 8/2011; New Nogales Field Office administration building once exterior walls were completed IBM11C0001 7/2011; Concrete placement on structure #413 on Arroyo Colorado IBM10C0008 6/2011.

Rear Cover Photos, left to right, top to bottom - Rehabilitation of the International Outfall Interceptor (IOI) pipe in Nogales Wash 191BWC21C0003 8/2022; Excavation of the Rio Grande channel to relocate the river westward IBM15C0007 2/2016; Tying rebar on 12 ft tall American Canal walls IBM17C0001 1/2018; New pipes during South Bay International Wastewater Treatment Plant upgrades IBM16C0003 1/2018; Inspection of CIPP lining in IOI 191BWC21C0003 8/2022; Interior framing of new Amistad Field Office administration building IBM13C0013 6/2015.

International Boundary and Water Commission
United States and Mexico
United States Section

Construction Management Guide

by

Construction Management Division
El Paso, Texas

International Boundary and Water Commission
US Section Headquarters
4191 N. Mesa
El Paso, TX 79902

March 22, 2024

This document has been formatted for double sided printing.

Construction Management Guide

Table of Contents

Appendix A - Directives
Updated 3/20/2024

Appendix B - Forms
Updated 7/11/2023

Appendix C - Posters
Updated 7/11/2023

Log of Changes

Date Changed	Section Updated	Description of Change
CMG issued October 15, 2014		
CMG issued November 21, 2016		
CMG issued April 21, 2023		
		This version of the CMG was a major rewrite therefore changes from prior versions are not indicated.
CMG issued November 3, 2023		
7/28/2023	2.	Email signature (2.1.) revised and information about email backup (2.9.) added
8/8/2023	5.	Added references to SBU/CUI files needed for solicitations (5.1. and 5.2.). Added requirement to review solicitation before posting on sam.gov (5.8.).
8/8/2023	6.	Added 6.4. and revised 6.2.
9/12/2023	7.	Minor revisions to developing prebid agenda.
7/11/2023	28.1.	The website link was updated.
7/11/2023	29.3.	The website link was updated and the HQ construction project folder was added.
6/9/2023	35.1.	Add Realty Office to receive of Form 246.
9/26/2023	38.	Eighth file (floodplains) was added and website link was updated (38.1.).
7/11/2023	39.	The website links (39.1.) and filing details (39.4.) were updated.
11/2/2023	40	Outlook use (40.1.) and PDF stamps updated (40.4.A.) while PDF electronic signatures (40.4.B) and Word macro section added (40.5.B.).
11/1/2023	43.3.	SBU/CUI requirements added.
7/11/2023	Appendix B	The website link was updated.
7/11/2023	Appendix C	The website link was updated.

CMG issued March 22, 2024		
11/6/2023	31	Changed Master Planning Office (MPO) to Master Planning Division (MPD)
11/6/2023	27.9	Cc list changed
1/19/2024	8.2 & 8.3	Details about Numerical Ratings and Business Proposals were added.
1/19/2024	27.5	Information added about how to detail certified payrolls.
3/20/2024	Appendix A	Added newly approved SD.II.01031.

Recommended Changes and/or Corrections

A written document is never without errors and typos. If you find any errors or have a recommendation for additional content or changes, please email crystal.cadillo@ibwc.gov with your recommendation. This Construction Management Guide (CMG) is a living document that is meant to document the procedures that USIBWC uses to manage construction Contracts. It is also meant as a first stop guide for answering questions related to being a COR.

When the CMG is updated only those sections that have been changed from version to version need to be printed; the old sections can be removed and the new sections placed in your CMG. This is intended to save you the hassle of reprinting the entire CMG each time it is updated.

Copies of this Guide

The electronic copies of the Construction Management Guide are located at:

Z:__Templates & Information\Construction Management Guide
at
W:__Templates & Information\Construction Management Guide
and at
P:\COND__Templates & Information\Construction Management Guide

1 Introduction

This Guide is written to provide direction for personnel in the Construction Management Division (COND) as well as for other personnel in the United States Section of the International Boundary and Water Commission (USIBWC) and our contractors who are working on construction projects.

1.1. Construction Management

Construction management takes many forms. There is construction inspection as well as the actual contract oversight. You may be the inspector in the field or you may be the COR reviewing submittals and recommending progress payments or you may be both. In either situation, you are acting as the Government's representative to ensure that the project being built fully meets the drawings, specifications, Contract requirements, and its intended functional purpose. You must also ensure that the finished project is satisfactory for the final owner; this is often USIBWC's O&M section.

Good, effective communication between the COR and the Inspector/CI as well as between the COR and the contractor is the most important component of construction management.

1.2. Federal Acquisition Regulation

The Federal Acquisition Regulation (FAR) is the governing body of regulations covering Contract actions. You should be familiar with the FAR and be able to find pertinent clauses when required. The FAR is updated periodically. It can be found at: www.acquisition.gov/browse/index/far .

1.3. QA vs QC

There are often questions about what compromises quality control (QC) requirements verses quality assurance (QA). In a construction contract, the contractor performs QC while the Government performs QA. In a design-build contract, the A-E firm responsible for the design usually provides QA over the Construction Contractor's QC; in this situation, the Government QAs both programs.

ISO 9000 Quality Management defines QC as a set of activities intended to ensure that quality requirements are actually being met while QA is a set of activities intended to establish confidence that quality requirements will be met. The QA process gives us confidence that the product will meet requirements. QC is a process of verifying requirements. Surveys and testing are the first part of the contractor's QC program. Verifying that these tests and surveys are meeting the Contract requirements is the second part of the contractor's QC program. The third part of the contractor's QC program must include ways to correct unsatisfactory results. Without any verification, QC has not been completed.

QA is a wider concept that covers all policies and activities implemented to assure the quality of the project. These include:

A. Adequate technical requirements

B. Audit of process quality

C. Evaluation of processes established for corrective responses

D. Audit of final output for conformance to all Contract requirements

1.4. Whitepapers

At times it becomes necessary to document issues and items of concern. When that happens, whitepapers are written. Current whitepapers are:

A. Competition in Contracting (41 USC §3301)

B. Geotechnical Reports and the Contractor

C. Levee Floodgates

D. New Mexico Water Rights

E. Superior Knowledge Doctrine

F. Texas Taxes and Surcharges

G. When is it a "Construction" Contract?

H. Workers' Compensation Insurance and your Contracts

1.4.A. Files

Whitepapers are located at:

Z:__Templates & Information\White Papers
or
W:__Templates & Information\White Papers
or
P:\COND__Templates & Information\White Papers

1.5. Files

Throughout this Guide, file locations are listed as xxx\. The xxx indicates the W: drive project folder. The project folder always starts with the Contract (construction and design-build) or the Task Order (A/E) number then a short project name. CM Task Orders are stored under the applicable construction or design-build project.

2 Communications

As a COR, you are representing USIBWC to the outside world. Providing professional communications is imperative. The sections below offer some guidance on items common to all personnel in COND.

2.1. USIBWC Email Signature

On all of your external emails, it is USIBWC policy to include your official email signature.

2.1.A. Official Signature Block

Jane Smith, PE, Civil Engineer	(Ink Free, Italics 16 Blue)
International Boundary & Water Commission, U.S. Section	(Tahoma 11 black)
Construction Management Division (COND)	(Tahoma, bold 10 black)
(915) 832-4101 Office	(Tahoma 10 black)
(915) 599-4190 Cell	(Tahoma 10 black)
4191 N. Mesa, El Paso, TX 79902	(Tahoma 10 black)
or	
325 Golf Course Road, Mercedes, TX 78570	(Tahoma 10 black)

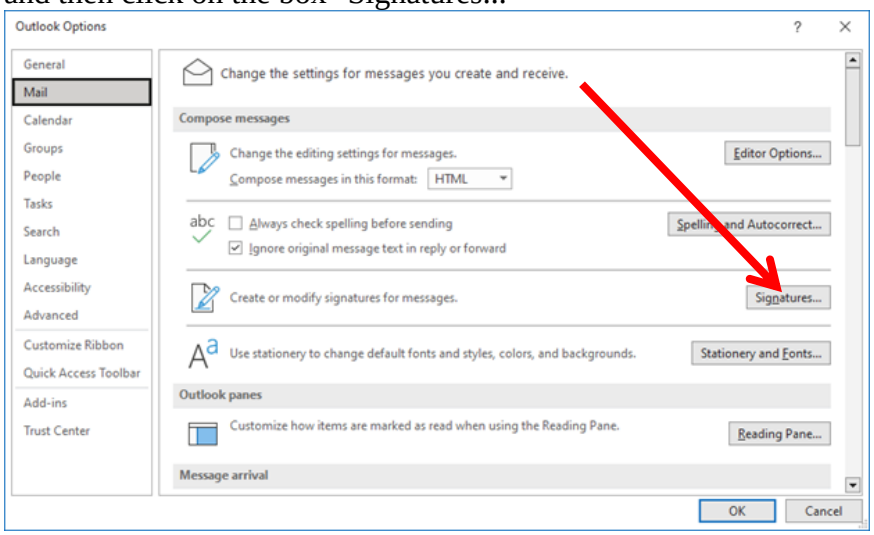
2.1.B. Template

A template with this signature layout is located at:

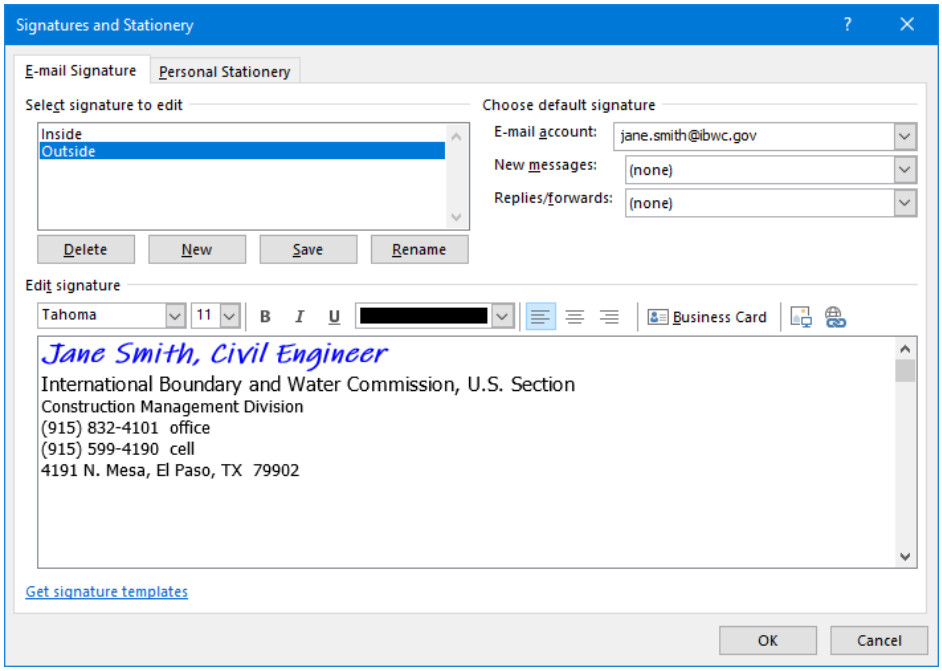
Z:__Templates & Information\Templates-General\Email Signature Block.docx
or
W:__Templates & Information\Templates-General\Email Signature Block.docx
or
P:\COND__Templates & Information\Templates-General\Email Signature Block.docx

2.1.C. Changing Your Outlook Email Signature

Changing your email signature in Outlook is simple. In Outlook, go to File, Options, Mail and then click on the box "Signatures..."



Enter all of the data shown in 2.1.A. above. You will need to highlight each row and adjust the font, color, size, etc. as noted.



If you wish to have a separate signature for internal emails, that is allowed. The internal email is not required to meet the standard signature block.

2.2. Use of Professional Engineer (PE) Title

Any individual that is a licensed professional engineer may use the PE title. However, USIBWC's jurisdiction spreads across California, Arizona, New Mexico, and Texas. As such, people licensed in one state may play roles in projects located in another state. The paragraphs below offer guidance on many issues that PEs face; remember that this is guidance only and that if in doubt, contact the Engineering Board in the state(s) in question.

Engineers in Training (EIT or Engineering Intern/EI) may infer that they must also meet the requirements for the use of the PE title.

2.2.A. Use of PE Title in Texas when Licensed in Another State

Texas offers an exemption for engineers working for the Federal Government from being licensed (§1001.054 of the Texas Engineering Practice Act and Rules effective 12/11/2011). However, when you are a licensed PE in a state other than Texas, special rules apply to how you introduce yourself in official correspondence.

2.2.A.1. §1001.054. Federal Officer or Employee

An officer or employee of the United States is exempt from the licensing requirements of this chapter during the time the officer or employee is engaged in the practice of engineering for the United States in this state.

2.2.A.2. From a letter dated August 10, 2005 from the Texas Board of Professional Engineers:

While our Act supports a prohibition of any designation of "professional engineer" or "P.E." by anyone other than a Texas licensed professional engineer, there are first amendment legal arguments based on "commercial speech" that exist. Based on these, as well as a review of what other state licensing boards allow, our Board has decided to allow the designation to be used provided it is made clear that the individual is not licensed in Texas. … So as not to confuse the public sector and yet provide a clear definition of what is allowed, any professional engineer currently licensed in another state, but residing in Texas, and desiring to use their PE designation, must identify themselves on business cards and other correspondence as shown in the following example: John W. Doe, P.E., Oklahoma

2.2.B. Engineering in New Mexico

There is no specific federal exemption in New Mexico. While technically New Mexico cannot enforce PE requirements on federal property, if there are any project effects that extend outside of the federal property, then a New Mexico PE license is required. This equates to requiring <u>all</u> professional engineers to be licensed.

2.2.B.1. New Mexico Administrative Code 16.39 .1 through .8

16.39.3.11 Practice of Engineering:

A. Neither a person nor an organization shall advertise or offer to practice engineering work in a discipline of engineering unless the person or a member of the organization has been approved by the professional engineering committee in the appropriate discipline and who is legally able to bind that organization by contract.

D. The professional engineering committee will consider the use of the terms, "engineer", "engineering", or any modification or derivative of such terms, in the title of a firm or organization to constitute the offering of engineering. The board will also consider the use of these terms or any modification or derivative of such terms in a corporation's name or its articles of incorporation or in a foreign corporation's certificate of authority as published by the New Mexico public regulation commission to constitute the offering of engineering services.

[16.39.3.11 NMAC - Rp, 16 NMAC 39.3.11, 1/01/2002; A, 7/01/2006]

2.2.B.2. PE Advisory - Use of Seal on Certain Federal Plans/Certifications (8/11/2016)

Several federal programs and regulations (e.g. 40 CFR 112, 40 CFR 60.5360, 40 CFR 60.5360a) require the seal of a registered professional engineer for certain plans and/or certifications. In some cases, these regulations specify that the engineer needs to be registered in the state where the subject facility is located, while other regulations are less clear, or even state that the federal government does not have a position. Regardless of the federal regulation, if the practice of engineering is completed on a facility located within the geographic jurisdictional limits of the New Mexico Board of Licensure for Professional Engineers and Professional Surveyors, this document shall be sealed by a professional engineer duly licensed in the State of New Mexico. In addition, if a seal is not required on such a document, but the choice is made by the preparer to either seal the document or represent themselves as an engineer, that preparer must be a professional

engineer duly licensed in the State of New Mexico, notwithstanding the allowances provided by NMSA 61-23-22.B.

2.2.C. Engineering in Arizona

Like Texas, Arizona offers an exemption for Federal employees. Since Arizona's exemptions state that you are not required to be in compliance with state statues, some may infer that you can use the title professional engineer as a Federal employee working in Arizona, but not licensed in Arizona.

2.2.C.1. Arizona State Statutes effective August 2, 2012

§32-144 Exemptions and Limitations

A. Professions and occupations regulated by the board may be practiced without compliance with the requirements of this chapter by:

1. An officer or employee of the United States, practicing as such.

2.2.D. Engineering in California

California offers an exemption to Federal employees and also seems to allow the use of a professional engineer title if you fall within that exemption.

2.2.D.1. California 2012 Professional Engineers Act

6704. Defines Who may use Engineer Titles

(a) In order to safeguard life, health, property, and public welfare, no person shall practice civil, electrical, or mechanical engineering unless appropriately licensed or specifically exempted from licensure under this chapter, and only persons licensed under this chapter shall be entitled to take and use the titles "consulting engineer," "professional engineer," or "registered engineer," or any combination of those titles or abbreviations thereof, and according to licensure with the board the engineering branch titles specified in Section 6732, or the authority titles specified in Sections 6736 and 6736.1, or the title "engineer-in-training."

6739. Exemption of Federal Officers and Employees

Officers and employees of the United States of America practicing solely as such officers or employees are exempt from registration under the provisions of this chapter.

472. Citations of Unlicensed Persons.

(a) The Executive Officer or his or her designee may issue a citation for any violation of any provision of law enforced by the Board to an unlicensed person who, unless otherwise exempt, is acting in the capacity of a professional engineer or professional land surveyor.

2.2.E. PE Requirement Reference Documents

The PR requirements for Texas, New Mexico, Arizona, and California are found at:

Z:__Templates & Information\PE Requirements
or
W:__Templates & Information\PE Requirements
or
P:\COND__Templates & Information\PE Requirements

2.3. Business Cards

USIBWC usually only provides business cards to CORs and construction inspectors. You will need to check with the Administrative Assistant and have them order business cards for you. Make sure that you provide the Administrative Assistant with how you want your name to be printed on the cards.

Different examples include:

Thomas Jones
Thomas Jones, PE
Thomas Jones, PE (NM & CA)
Thomas (Tom) Jones
Thomas "Tom" Jones

2.4. Memos

Working in the Construction Management Division, you will write many memos. These will include monthly COR Reports (27-Monthly Status Reports), technical analyses (32-Technical Analyses), bid evaluations (8-Evaluating Bid Proposals), and many other things. The COND Chief and the Administrative Assistant will help you with the format required, but most common memos have templates available. The items that follow detail some of the specifics that are required when writing your memos. If you have any questions, please ask.

2.4.A. Files

The memo and technical analysis templates are found at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

2.4.B. Subjects

The first line should include a general title of your document. Be concise but clearly state what the document covers.

The next line should include the Solicitation, RFP, or Contract number and, if applicable, the Task Order number. If the document does not refer to a Contract or Task Order, delete this line.

The next line shows the full name of the associated project. If the memo is about as existing design, construction, design-build project, then use that project name. If the memo is reviewing a license or permit request then see 43.2.-USIBWC Projects for a list of allowable USIBWC project names.

The final line shows the contractor or proponent's name that the memo relates to.

2.4.C. Footers

If you memo includes details about source selection, bids, or proposals, especially prior to award, then use this footer:

This memorandum contains source selection information. The Procurement Integrity Act (41 USC 423) and FAR 3.104-3, 3.104-4, and 5.401(b) prohibits disclosure of this information before and after award. Do not copy or disseminate"

If you memo includes discussions about contract performance or other items that should remain internal to USIBWC, then use this footer:

Prepared in Anticipation of Litigation /Confidential Attorney-Client Privileged Information/Pre-Decisional Information Do not copy or disseminate

2.4.D. Bcc

Three lines under the routing block, list all people that should get a copy of this document. The line starts with "bcc email:" and then lists people by department/division initial of first name and last name. Separate departments/divisions by semi colons.

It is standard policy at USIBWC to cc someone's supervisor whether the memo is to them or they are included in the cc list. For example, if you want to include Elizabeth Verdecchia (environmental protection specialist), you will also include Gilbert Anaya (Chief of EMD).

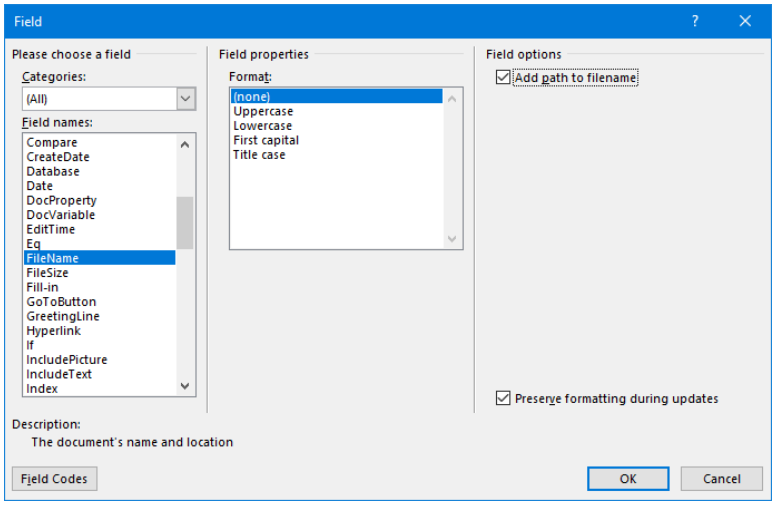
Always list your own name in the bcc list.

For realty reviews, include appropriate people from EMD and the local field offices.

Do not assume that the administrative assistant will add to or correct this list for you.

2.4.E. Final Memo Data

The last 5 lines of your memo will list the record management code (from Table 1), author data, the date that you wrote the memo, and the complete filename. See 2.4.F. for details about the record management codes. To enter the filename in a Word file, place your cursor where you want the filename and click Insert on the ribbon. Choose Quick Parts, Field then filename. Make sure you click the box for "Add path to filename."



Example of final memo data. "XX" indicates your initials. "CC" indicates Construction Chief's initials and "aa" indicates administrative assistants initials.
DEC 7 (DCS 7-3)
XX: CC: xx: aa
April 21, 2023
r:\esd corres\2023 esd corres\construction\cond-23-03-024_review sbiwtp 75% assessment report_cadillo.docx

2.4.F. Record Management Codes

While 29.1.-Records Disposition discusses the length of time that different records are kept, it is up to you to apply the correct record management code on all memos to ensure that they are stored corrected. Papers related to an individual project will be filed in the appropriate case file (902-01) upon closing the project.

Use the record management code indicated in Table 1 that matches the content of your memo.

Table 1-Record Management Codes

Current Code	New Code	Description	Memo Code
DCE 1	DCS 1-2	General Construction Files	DCE 1 (DCS 1-2)
DCE 1	DCS 1-4	Employee Files (Reimbursement, Licenses, Renewal, etc.)	DCE 1 (DCS 1-4)
DCE 1	DCS 1-1	Closeouts	DCE 1 (DCS 1-1)
DCE 2	DCS 2-1	Design COR Reports	DCE 2 (DCS 2-1)
DCE 2	DCS 2-2	Construction COR Reports	DCE 2 (DCS 2-2)
DCE 2	DCS 2-3	Construction Management COR Reports	DCE 2 (DCS 2-3)
DCE 3	DCS 3	Project Memos for Record	DCE 3 (DCS 3)
DCE 1	DCS 4	Interagency Project Letters (TxDOTs, ADEQ, EPA, etc.)	DCE 1 (DCS 4)
DCE 6	DCS 5-1	Design Technical Analysis	DCE 6 (DCS 5-1)
DCE 5	DCS 5-2	Construction Technical Analysis	DCE 5 (DCS 5-2)
DCE 4	DCS 5-3	Construction Management Technical Analysis	DCE 4 (DCS 5-3)
DCE 6-2	DCS 6	Survey	DCE 6-2 (DCS 6)
DCE 7	DCS 7-1	Design Reviews	DCE 7 (DCS 7-1)

Current Code	New Code	Description	Memo Code
DCE 7	DCS 7-2	Environmental Reviews	DCE 7 (DCS 7-2)
DCE 7	DCS 7-3	Realty Applications, Permits, Licenses, & Encroachment Reviews	DCE 7 (DCS 7-3)
DCE 7	DCS 7-4	All other reviews	DCE 7 (DCS 7-4)
DCE 8	DCS 8-1	Executed Projects (902-01b)	N/A
DCE 8	DCS 8-2	Canceled Projects (902-01a)	N/A

2.5. Project Correspondence

You will write and receive a significant amount of correspondence while overseeing your projects. All memos (e.g. TAs, COR reports, etc.) and letters that relate to the project shall be stored in the 05-Correspondence folder. However, these documents may also relate to other areas of the project. For example, a contractor sends in a letter to the CO for a request for equitable adjustment (REA). This is office project correspondence so it will be filed in the 05-Correspondence folder; but, it is also part of the REA which has its own folder under the associated 13-Claims, Mods, REA Backup folder. Ensure that the document is placed in both locations.

All documents stored in the 05-Correspondence folder shall have the date added to the start of the filename. The date shall be in the format of yyyymmdd so that it will always sort correctly.

2.5.A. Emails

Emails are official project correspondence but saving all emails to pdf is simply impossible. You should save important emails to the correspondence folder as individual pdfs. You must save any emails about a contractor's request for a claim, REA, or notice of delay. Saving them to pdfs in the correspondence folder ensures that they are not lost in the mass of emails.

Projects can easily have thousands of emails. Make a folder in your Outlook cabinet for your project. You may make as many subfolders as you want to organize emails in this folder. Just ensure that every project has its own folder and that you keep up with storing project correspondence in this folder.

In order to save these as project correspondence, you need to export the emails from Outlook to a pst file. For smaller projects, export all items when the project is closed out. For larger, longer projects you can export emails by year. To export your emails, click on File, Open & Export, Import/Export, Export to a file, Outlook Data File (.pst), Select your project folder, Save the file under 05-Correspondence\Emails and check the button next to "Allow duplicate items to be created."

Ensure that you have set up Outlook per 40.1.-Outlook. If you don't many of your project emails may not be displayed.

2.5.B. Files

All correspondence shall be filed in the folders noted below as well as in any other appropriate folder.

Construction
xxx\05-Correspondence

Design-Build
xxx\05-Correspondence
CM Task Order
xxx\17-CM Contract\05-CM Correspondence
A/E Design Task Order
xxx\05-Correspondence
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\02-AE Correspondence

2.6. IBWC Logos

High quality IBWC logos are available on the network. These logos are in almost all image formats and are available in color as well as black and white. The png and tiff files are transparent.

2.6.A. Files

The logos are found at:

Z:__Templates & Information\Logos
or
W:__Templates & Information\Logos
or
P:\COND__Templates & Information\Logos

2.7. Disclaimers

It is always recommended that when you write a report that will be available to the public, including contractors, that the following disclaimer be added:

> *Information contained in this document regarding commercial products or firms may not be used for advertising or promotional purposes and is not an endorsement of any product or firm by the International Boundary and Water Commission.*
>
> *The information contained in this document was developed for the International Boundary and Water Commission; no warranty as to the accuracy, usefulness, or completeness is expressed or implied.*

By the same token, when creating maps that will be disseminated to others, include this disclaimer:

> *The International Boundary and Water Commission (USIBWC) shall not be held liable for improper or incorrect use of the data contained herein. These data are not legal documents and are not intended to be used as such. The information contained in these data is dynamic and may change over time. The data are not better than the original sources from which they were derived. It is the responsibility of the data user to use the data appropriately and consistent within the limitations of geospatial data in general and these data in particular. The related graphics are intended to aid the data user in acquiring relevant data. It is*

not appropriate to use the related graphics as data. The USIBWC gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data. Although these data have been processed successfully on a computer system at the USIBWC, no warranty expressed or implied is made regarding the utility of the data on another system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data.

2.8. Construction Calendar

COND maintains a calendar on Outlook. Everyone in the division is expected to put in travel, leave, and meetings. If you will be busy (e.g. meeting) or away from your desk, then it needs to be noted in the COND Calendar.

2.9. USIBWC Email Backup

While it is a little clunky to use, there is an online email backup system that you can refer to if searching for an old email. The site is at: 7479gcs.gwava.com/RetainServer/Manager/login.jsp and you log in with your normal username (email address) and Microsoft password.

Please note that while you can print emails from this system, you cannot re-add them back into Outlook.

3 Fraud Awareness

Fraud is defined as deception intended to result in financial or personal gain. Fraud can entail asset misappropriation, bribery and corruption, or false documentation. Fraud can also entail both civil and criminal law. As a COR you are entrusted with managing a contract to ensure compliance with the terms of the contract and to safeguard the interests of the United States. CORs are involved in contract source selection whereby you are privy to information that cannot be released. You cannot work with contractors or on projects where you have a conflict of interest. A conflict of interest exists when you have personal interests through family, friends, financial, or social interactions that could compromise your judgment, decisions, or actions at work. Overall, your work must be above reproach and cannot include even the appearance of fraud.

Many items in this section address integrity, fairness, and ethics. While all of these items are required in the administration of contracts, they are also the basis of preventing fraud. If you act in an ethical manner with integrity and fairness, then fraud cannot exist.

3.1. Ethical Standards of Conduct

Federal employees are required to abide by specific ethical standards. These are detailed in 5 CFR §2635.101(b) which states "*The following general principles apply to every employee and may form the basis for the standards contained in this part. Where a situation is not covered by the standards set forth in this part, employees shall apply the principles set forth in this section in determining whether their conduct is proper.*

(1) Public service is a public trust, requiring employees to place loyalty to the Constitution, the laws, and ethical principles above private gain.
(2) Employees shall not hold financial interests that conflict with the conscientious performance of duty.
(3) Employees shall not engage in financial transactions using nonpublic Government information or allow the improper use of such information to further any private interest.
(4) An employee shall not, except pursuant to such reasonable exceptions as are provided by regulation, solicit or accept any gift or other item of monetary value from any person or entity seeking official action from, doing business with, or conducting activities regulated by the employee's agency, or whose interests may be substantially affected by the performance or nonperformance of the employee's duties.
(5) Employees shall put forth honest effort in the performance of their duties.
(6) Employees shall make no unauthorized commitments or promises of any kind purporting to bind the Government.
(7) Employees shall not use public office for private gain.
(8) Employees shall act impartially and not give preferential treatment to any private organization or individual.
(9) Employees shall protect and conserve Federal property and shall not use it for other than authorized activities.

(10) Employees shall not engage in outside employment or activities, including seeking or negotiating for employment, that conflict with official Government duties and responsibilities.
(11) Employees shall disclose waste, fraud, abuse, and corruption to appropriate authorities.
(12) Employees shall satisfy in good faith their obligations as citizens, including all just financial obligations, especially those such as Federal, State, or local taxes that are imposed by law.
(13) Employees shall adhere to all laws and regulations that provide equal opportunity for all Americans regardless of race, color, religion, sex, national origin, age, or handicap.
(14) Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards promulgated pursuant to this order."

3.1.A. Conflict of Interest

You cannot work with contractors or on projects where you have a conflict of interest. This includes working on any source selection actions where you have a conflict of interest.

Prior to working on any source selection action, the CO will require you to sign IBWC Form 341, Nondisclosure Agreement & Conflict of Interest Certification.

Where your financial or personal interests and your official duties overlap, you must not take any official USIBWC actions.

3.1.B. Misuse of Position

When working with contractors, personnel cannot use their position for personal gain. This includes the buying scrap/removed items or accepting favors from the contractor. The COR must avoid even the appearance of impropriety.

A. You cannot use our official position for your own gain or for the private gain of any other person or entity.

B. You cannot use your position to induce or coerce anyone to provide a benefit to you or to anyone else.

C. You cannot use, or allow use, of your title, position, or authority to imply USIBWC endorsement or sanction of any outside actions, entities, services, or products.

D. You cannot allow the improper use of nonpublic information for your own or another's gain. Nonpublic information is anything that has not been made public and/or is not authorized to be made available to the public on request. Anything designated confidential. Anything protected from disclosure by law, rule, or order.

E. You have a duty to protect and conserve Government property and may not use Government property, or allow its use, for purposes that are not authorized.

F. You must use official time in a honest effort to perform your government duties, and you may not ask subordinates to perform activities other than those required in the performance of their Government duties.

3.1.C. Outside Employment

COND employees shall contact the Ethics Officer or the COND Chief before starting outside employment with a prohibited source. A Prohibited Source is anyone:

A. Doing business with USIBWC

B. Seeking to do business with or official actions from USIBWC

C. Regulated or has a license or permit with USIBWC

D. Whose interests can be impacted by the performance or nonperformance of your duties

E. An organization with a majority of people listed in A through D.

The law prohibits Federal employees from accepting compensation from anyone but the Federal government for doing our Federal jobs (18 USC §209). Bona fide outside employment is allowable, but payments by others for performing our Federal job are classified as bribes.

3.1.D. Gifts

Every employee has a fundamental responsibility to the United States and its citizens to place loyalty to the Constitution, laws, and ethical principles above private gain. An employee's actions should promote the public's trust that this responsibility is being met. For this reason, employees should consider declining otherwise permissible gifts if they believe that a reasonable person with knowledge of the relevant facts would question the employee's integrity or impartiality as a result of accepting the gift. A "gift" is defined as anything having monetary value.

3.1.D.1. General Rule

1. You may not ask for or otherwise solicit for a gift.
2. Gifts from outside sources are generally not acceptable if based on official position, or from a Prohibited Source.
3. Cash is NEVER acceptable

Where you have a question about a gift or the gift exceptions, ask!

3.1.D.2. Exceptions to the "Outside" Gift Rule

1. Modest items of food and non-alcoholic refreshments, such as soft drinks, coffee and donuts, offered other than as part of a meal.
2. Greeting cards and items with little intrinsic value, such as plaques, certificates, and trophies, which are intended primarily for presentation.
3. Loans from banks and other financial institutions on terms generally available to the public.
4. Opportunities and benefits, including favorable rates and commercial discounts, available to the public or to a class consisting of all Government employees or all uniformed military personnel, whether or not restricted on the basis of geographic considerations.

5. Rewards and prizes given to competitors in contests or events, including random drawings, open to the public unless the employee's entry into the contest or event is required as part of the employee's official duties.
6. Pension and other benefits resulting from continued participation in an employee welfare and benefits plan maintained by a current or former employer.
7. Anything which is paid for by the Government or secured by the Government under Government contract.
8. Free attendance to an event provided by the sponsor of the event to (i) An employee who is assigned to present information on behalf of the agency at the event on any day when the employee is presenting; (ii) An employee whose presence on any day of the event is deemed to be essential by the agency to the presenting employee's participation in the event, provided that the employee is accompanying the presenting employee; and (iii) The spouse or one other guest of the presenting employee on any day when the employee is presenting, provided that others in attendance will generally be accompanied by a spouse or other guest, the offer of free attendance for the spouse or other guest is unsolicited, and the agency designee, orally or in writing, has authorized the presenting employee to accept.
9. Any gift accepted by the Government under specific statutory authority.
10. Anything for which market value is paid by the employee.

3.2. FAR

The FAR reiterates that contractors shall be treated fairly. As a COR it is your duty to treat every contractor in the same manner. No contractor should get special treatment and no contractor should be penalized because you do not like them. Not only is treating every contractor fairly required, but when all contractors are treated the same, there is no appearance of favoritism nor is there any question about the integrity of your contracting actions.

FAR Part 3 covers Improper Business Practices and Personal Conflicts of Interest. Review this part before you perform your first action on any Government contract.

3.3. USIBWC Directive

USIBWC Directive SD.I.05021, "*Solicitation and/or Acceptance of Gifts, Favors, or Money from contractors, Vendors or Others Doing Business or Seeking Business with the United States Government*" and USIBWC Directive SD.I.06052, "*Procurement Integrity Directive*" address requirements for performing work with contractors.

3.3.A. Files

Z:__Templates & Information\Construction Management Guide\IBWC Directives
or
W:__Templates & Information\Construction Management Guide\IBWC Directives
or
P:\COND__Templates & Information\Construction Management Guide\IBWC Directives

or
V:\Directives

3.4. Filing Annual Financial Disclosures

CORs and supervisors overseeing contract administration are required to file annual financial disclosures (OGE-450).

The form OGE-450 is overseen by the US Office of Government Ethics (www.oge.gov). Their website has information about ethics, the filing requirements for OGE-450, as well as past questionnaires and reports on USIBWC. The USIBWC Ethics Officer oversees the filing of the OGE-450s.

3.5. Agency Ethics Officer

The USIBWC Ethics Officer is **Jennifer Pena** in our Legal Affairs Office. If you have questions about ethics or proper behavior, feel free to contact the Ethics Officer directly. If you believe another employee or contractor is practicing fraudulent behavior, contact the Ethics Officer or if you do not feel comfortable doing that, contact the Department of State Office of Inspector General (www.stateoig.gov) or .

3.6. Procedures in Place to Mitigate Possibility of Fraud in Contract Administration

There are many procedures in place that not only work to ensure that projects are administered correctly, but also work to mitigate the possibility of fraud from anyone that performs contract administration. No contract action is initiated in a vacuum. All actions are reviewed and approved by others. These checks and balances help the accuracy of contract actions but are also protections against fraud.

3.6.A. Agency Wide Fraud Protection Measures

A. Contracts and task orders are administered by personnel who have a minimum of a Federal Acquisition Certification of Level I COR certificate. The training required to receive this certificate contains contract integrity and fraud prevention modules.

B. Employees are made aware of who the Agency Ethics Officer is.

C. Employees attend annual ethics training. Newly hired employees are provided training as part of their inprocessing.

D. Personnel working as CORs file annual financial disclosures (OGE-450).

E. Prior to working on any source selection action, the CORs require personnel to sign IBWC Form 341, Nondisclosure Agreement & Conflict of Interest Certification.

3.6.B. COND Fraud Protection Measures

A. The COND Chief reviews all official correspondence related to the contract administration and modifications.

B. Purchase Requests (PRs) are signed by the COND Chief and the Engineering Department Principal Engineer as well as the cost center funding manager. The IGE, memo, or other justification is required by these persons prior to signing for funding.

C. The CO reviews all documents (memos, IGEs, pay estimates/invoices, etc.) submitted by the CORs.

D. The COND Chief randomly checks the electronic network contract files to verify that proper documentation of work is taking place.

E. Construction projects use a Construction Management (CM) Services contractor who provides an onsite construction inspector. The construction inspector oversees work and provides the first line approval for Construction Contractor pay estimates. This contractor may also have a second line technical reviewer to verify the work approved by the construction inspector.

F. Most modifications are reviewed by the CM Services contractor. Copies of their reviews are provided to the CO along with the COR's recommendations.

G. During the CM Services kickoff meeting, the CM Team is notified to contact the CO or the Department of State OIG if they feel that the COR is performing in a fraudulent manner.

H. During the design-build kickoff meeting, the design-builder is notified to contact the CO or the Department of State OIG if they feel that the COR is performing in a fraudulent manner.

I. During the preconstruction meeting, the construction contractor is notified to contact the CO or the Department of State OIG if they feel that the COR is performing in a fraudulent manner.

J. Whenever possible for source selection panels, COND includes a panel member from another department that will provide a balance to the reviews and an alternate point of view to ensure the panel is fair and reasonable.

K. COND works with ESD to establish bidding services with their design task orders. These bidding services require the Design contractor to review costs of construction bids received to help determine if they are unbalanced and if the prices are fair and reasonable prior to award of construction contracts.

3.7. What to Do if You Feel Someone May Be Promulgating Fraud

If you believe another employee or a contractor is committing fraud, there are several actions that you can take.

A. Contact the Chief of COND.

B. Contact the CO.

C. Contact USIBWC's Ethics Officer (3.5).

D. If you do not feel comfortable disclosing possible violations to anyone at USIBWC, you can contact the Department of State's Office of Inspector General at www.stateoig.gov.

It is always recommended that you keep a copy of your notification for your own records. Just keeping a copy of your email may suffice but you can also write a memo for record and have the admin assistant load it into the record management system. Please note that if you do this, the memo is available to anyone that searches for it.

3.7.A. Whistleblower Protection Act

The Whistleblower Protection Act protects employees from discrimination and reprisal if they disclosure instances of illegality, waste, fraud, abuse or public health or safety threats. If you feel that you encounter discrimination or reprisal after making a report of fraud, please contact the Ethic's Office or USIBWC's EEO Officer.

3.8. Template

The current templates for the kickoff and preconstruction meetings can be found at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

3.9. Files

Store copies of the original meeting minutes and any other associated files in the directory:

Construction
xxx\11-Meeting Minutes
Design-Build
xxx\07-Meeting Minutes\Design Kick Off
CM Task Order
xxx\17-CM Contract\04-CM Kickoff Meeting

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4 Requirements Based on Project Size

Smaller construction projects often have reduced requirements for the contractor. For example, there is usually no justification for the contractor to development a detailed safety plan that is over a 100 pages long for a four day long fencing job nor should this contractor need to compile a critical path method schedule. There are exceptions to every rule, but these charts provide a starting point for items to look for and consider in your technical specifications and project oversight for different sized projects.

CONTRACT COST	< $25,000	$25,000 to $100,000	$100,000 to $500,000	> $500,000	Hazardous Waste	Blasting
PAYMENTS	Simple invoice or pay estimate	Basic pay estimate	Full pay estimate packet	Full pay estimate packet	Dependent upon Contract Cost	Dependent upon Contract Cost
SCHEDULE	2 week look ahead or agreed plan of action	1 month look ahead or agreed plan of action	Simple or CPM	Full CPM required	Required	Required
ENVIRONMENTAL CONTROLS	Dependent upon specifications or SOW	Dependent upon specifications or SOW	Dependent upon specifications or SOW	Required	Required	Required
CQC	Onsite supervisor responsible	Onsite supervisor responsible	Onsite supervisor responsible	Required	Required	Required
QC PLAN	Organization chart showing personnel authority	Organization chart showing personnel authority	Organization chart showing personnel authority	Required	Required	Required
SSHO	Dependent upon location	Dependent upon location	Required	Required	Required	Required
SAFETY	AHAs and posting of safety regulations	Basic APP with AHAs	Basic APP with AHAs	Required	Required	Required

5 Getting a Contract Ready for Solicitation

While ESD has the responsibility to provide completed drawings and specifications, it is COND's responsibility to provide the solicitation package to Acquisitions (ACD). The reason for this is that if items are left out of the solicitation, it can greatly affect construction.

5.1. Items to Complete for Solicitation of Construction or Design-Build

The COR shall review the specifications and gather all referenced documents in pdf format. These documents will be provided to the CO as part of the solicitation package. Please note that IBWC Form 256 provides a checklist of the items to provide to the CO near the end of the document.

A. IBWC Form 256, Acquisition Request

B. Summarized Description of Work (synopsis) to advertise the acquisition.

C. An Independent Government Estimate. See 30-Developing Independent Government Estimates for help with estimates.

D. An approved and funded PR with the same number as the one for the solicitation. This PR will be used to award the contract.

   1. Details of how to create a purchase request (PR) are shown in 31-Contract Modifications.

E. An approved and unfunded purchase request for the solicitation.

F. The technical specifications/SOW and drawings in pdf format. Ensure that the solicitation number appears on these documents.

G. Liquidated Damages calculations (IBWC Form 257) for each segment of the project. See 6-Liquidated Damages for help with this form.

H. If this is a request for proposal (RFP), provide the evaluation factors (5.4.), the evaluation criteria, past performance questionnaire (5.5.), and a list of TPEC (Technical Proposal Evaluation Committee) members and chairperson.

I. If sole source, provide a signed sole source justification and approval.

J. If required, provide contractor's minimum qualifications for award (IBWC Form 245).

K. Provide a copy of the Davis-Bacon wage rate. See 19.9 Wage Determinations for more information.

L. Place all referenced documents in the specifications/SOW on SharePoint for the CO.

   1. Use underscores instead of spaces in your filenames.
   2. If any of your reference documents qualify as SBU or CUI follow requirements of 43.3-SBU/CUI Files.

M. Provide a list of all referenced documents showing filenames with extension, date, and number of pages.

N. Market Research Form (IBWC Form 354)

5.1.A. Template

The current template for the synopsis is available at:

Z:__Templates & Information\Templates-Source Selection
or
W:__Templates & Information\Templates-Source Selection
or
P:\COND__Templates & Information\Templates-Source Selection

5.1.B. Files

Store the completed specifications/SOW in the following directories:

Construction
xxx\23-Solicitation Files\Specs
Design-Build
xxx\03-SOW, IGE & PR\SOW

Store the completed Forms in the following directories:

Construction
xxx\23-Solicitation Files\Solicitation Forms
Design-Build
xxx\03-SOW, IGE & PR\Solicitation Forms

Store the completed IGE in the following directories:

Construction
xxx\23-Solicitation Files\IGE
Design-Build
xxx\03-SOW, IGE & PR\IGE

Store the completed PRs in the following directories:

Construction
xxx\23-Solicitation Files\PRs
Design-Build
xxx\03-SOW, IGE & PR\PRs

Store the referenced documents, including the final version of the specifications/SOW and drawings, in the following directories:

Construction
xxx\23-Solicitation Files\Solicitation Files to CO
Design-Build
xxx\03-SOW, IGE & PR\Solicitation Files to CO

5.2. Items to Complete for Solicitation of Task Order

The COR shall gather all referenced documents. These documents will be provided to the CO as part of the solicitation package.

A. An approved and funded PR.

B. An Independent Government Estimate.

C. If sole source, provide a signed sole source justification and approval.

D. A completed, project specific Scope of Work (SOW).

E. Place all referenced documents in the specifications/SOW on SharePoint for the CO.

   3. Use underscores instead of spaces in your filenames.
   4. If any of your reference documents qualify as SBU or CUI follow requirements of 43.3-SBU/CUI Files.

5.2.A. Files

Store the completed SOW in the following directories:

CM Task Order
xxx\17-CM Contract\03-CM SOW, IGE & PR\SOW

A/E Design Task Order
xxx\03-SOW, IGE & PR\SOW

Store the completed IGE in the following directories:

CM Task Order
xxx\17-CM Contract\03-CM SOW, IGE & PR\IGE

A/E Design Task Order
xxx\03-SOW, IGE & PR\IGE

Store the completed PRs in the following directories:

CM Task Order
xxx\17-CM Contract\03-CM SOW, IGE & PR\PRs

A/E Design Task Order
xxx\03-SOW, IGE & PR\PRs

Store the referenced documents, including the final version of the specifications/SOW and drawings, in the following directories:

CM Task Order
xxx\17-CM Contract\03-CM SOW, IGE & PR\SOW

A/E Design Task Order
xxx\03-SOW, IGE & PR\SOW

5.3. Specifications and Scopes of Work

There are several templates or boilerplates available for use in writing construction specifications and scopes of work. These include:

A. Construction specifications (*IBWC Specs Boilerplate YYYYMMDD.dotm*)

B. Construction Management Services scope of work (*SOW CM & FEM Boilerplate YYYYMMDD.dotm*)

C. Design Build scope of work (*SOW DB Boilerplate YYYYMMDD.dotm*)

D. Design Services scope of work (*SOW Design Svcs Boilerplate YYYYMMDD.dotm*)

The templates are kept up-to-date on the ESD network drives. Prior to beginning a new project **ALWAYS** get the latest template from the network. Reusing old files perpetuates errors.

5.3.A. Templates

The templates are found at:

Z:__Templates & Information\Templates-Contracts
or
W:__Templates & Information\Templates-Contracts
or
P:\COND__Templates & Information\Templates-Contracts

The boilerplates are macro enabled templates. To ensure that the macros work, right click the file and choose "Open." After you have done that, you can save the file as a .docm document (macro enabled word document) and it should work fine.

If you ever have any issues with these templates or find items that need to changed, contact Andrea Glover at (915) 832-4747 or andrea.glover@ibwc.gov.

5.3.B. Files

Store the completed specifications/SOW in the following directories:

Construction
xxx\23-Solicitation Files\Specs
Design-Build
xxx\03-SOW, IGE & PR\SOW
CM Task Order
xxx\17-CM Contract\03-CM SOW, IGE & PR\SOW
A/E Design Task Order
xxx\03-SOW, IGE & PR\SOW

5.4. Evaluation Factors

Instead of simply awarding a Contract based upon the lowest price, Contracts can be awarded based upon the best value to the Government. In these situations, the FAR defines a trade off process (FAR 15.101-1). In the trade off process, all evaluation factors and significant subfactors that will affect Contract award and their relative importance shall be clearly stated in the Solicitation; and the Solicitation shall state whether all evaluation factors other than cost or price, when combined, are significantly more important than, approximately equal to, or significantly less important than cost or price. This process permits tradeoffs among cost or price and non-cost factors and allows the Government to accept other than the lowest priced proposal. The perceived benefits of the higher priced proposal shall merit the additional cost, and the rationale for tradeoffs must be well documented in the file.

It is often up to the technical support personnel to let the CO know that Contract award should not be based upon price alone. There are two reasons for that: firstly, it will be up to the technical personnel to write the evaluation factors for the Solicitation (RFP, RFQ, etc.) and secondly, it will be the technical personnel who will be the main fixture in any source selection committee. Awarding based upon best value takes more time prior to award of the Contract, but if the process is successful in its intent, time will be saved after Contract award because the Government will have a contractor who better fits the agency need.

Using the Uniform Contract format, instructions on how to present an Offer's proposal will be located in Section L of the Solicitation while the evaluation factors will be located in Section M. The instructions will include the Source Evaluation and Selection Procedures, the General Proposal Instructions, the Technical Proposal Instructions, and the Pricing Proposal Instructions. Be as specific as possible with your instructions to ensure that required information is provided in a manner that is easily reviewable.

5.4.A. Evaluation Factors and Significant Subfactors

Evaluation factors and significant subfactors must represent the key areas of importance and emphasis to be considered in the source selection decision and support meaningful comparison between and among competing proposals. Past performance shall be evaluated in all source selections for negotiated competitive acquisitions expected to exceed the simplified acquisition threshold (FAR 15.304(c)(3)(i)). The Solicitation shall also state, at a minimum, whether all evaluation factors other than cost or price, when combined, are significantly more important than cost or price, approximately equal to cost or price, or significantly less important than cost or price (FAR 15.304(e)).

5.4.A.1. IDIQ Contracts

When a RFP is issued against our IDIQ Contracts, the evaluation factors are established per FAR 36.602-1(a). These factors are:

1. Professional qualifications necessary for satisfactory performance of required services
2. Specialized experience and technical competence in the type of work required
3. Capacity to accomplish the work in the required time
4. Past performance on Contracts with Government agencies and private industry in terms of cost control, quality of work, and compliance with performance schedules
5. Location in the general geographical area of the project and knowledge of the locality of the project
6. Acceptability under other appropriate evaluation criteria (as defined herein)

5.4.B. Recommended Scoring Adjectives and Definitions

FAR 15.305(a) states that evaluations may be conducted using any rating method or combination of methods, including color or adjectival ratings, numerical weights, and ordinal rankings. Because of human nature to assign importance to numerical ratings (and the tendency to average numbers), it has been suggested not to rate evaluation factors with one to five or other number ratings. Using adjectives is usually easiest because the adjectives can be easily defined in the Solicitation as to their specific meaning in the evaluation.

If using the adjectives shown below in 5.4.B.1. and 5.4.B.2., remember that satisfactory is the baseline. Simply meeting the project requirements is satisfactory. Exceeding the project requirements goes above satisfactory. For example if a project requires that a contractor color in at least three colors and Offeror 1 provides a box of 128 crayons while Offeror 2 provided red, blue, and green crayons, they both meet the project requirements. If Offeror 3 states that they will provide two colors of crayon and will blend the two to create the third color, then this will probably justify a marginal rating; they are technically meeting the minimum requirements, but the risk of them failing is much higher than providing three

separate colors. Also consider that Offeror 1 may still only get a satisfactory for this item since the work will be limited to three colors, providing all of the others may not offer any benefit. Only by understanding the project requirements and reaching consensus can each rating be established.

5.4.B.1. Adjectives for Technical Factors and Subfactors

The following adjectives are recommended in evaluating the all technical factors and significant subfactors except for past performance.

Exceptional: Exceeds the solicitation requirements and exemplifies a thorough understanding of all aspects of the requirements to the extent that timeliness and the highest quality performance is anticipated. Contains strengths, exceptional features, or innovations that should substantially benefit the project. There are no deficiencies and one or more significant strengths. Strengths far outweigh any weaknesses. Risk of unsuccessful performance is extremely low.

Very Good: Demonstrates good understanding of requirements that is anticipated to result in a high level of efficiency, productivity, or quality. May have one of more strengths. Strengths outweigh any weaknesses. Risk of unsuccessful performance is very low.

Satisfactory: Demonstrates adequate understanding of solicitation requirements. Strengths and weaknesses are offsetting or will have little or no impact on contract performance. Risk of unsuccessful performance is low.

Marginal: Demonstrates superficial or vague understanding of the solicitation requirements. Has weaknesses that are not offset by strengths. Only marginally meets performance or capability standards necessary for minimal, but acceptable, contract performance. The risk of unsuccessful contract performance is moderate.

Unsatisfactory: Does not meet the solicitation requirements. There is at least one significant weakness and/or deficiency which indicates a failure to understand the solicitation requirements. The risk of unsuccessful performance is high.

5.4.B.2. Adjectives for Past Performance

The following adjectives are recommended in evaluating past performance.

Exceptional: Performance meets contractual requirements and exceeds many requirements. The contractual performance of the element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective. The Government has a high degree of confidence and no doubt that the Offeror can successfully achieve the requirements of the solicitation. Past performance exceeds "Very Good."

Very Good: Performance meets contractual requirements and exceeds some requirements. The contractual performance of the element being assessed was

accomplished with some minor problems for which corrective actions taken by the contractor were effective. The Government has a high degree of confidence that the Offeror can successfully achieve the requirements of the solicitation. Past performance exceeds "Satisfactory."

Satisfactory: Performance meets contractual requirements. The contractual performance of the element being assessed contains some minor problems for which corrective actions taken by the contractor were, or appear to be, satisfactory. The Government has reasonable confidence that the Offeror can successfully achieve the requirements of the solicitation.

Marginal: Performance does not meet some contractual requirements. The contractual performance of the element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions or the contractor's proposed actions appear only marginally effective or were not fully implemented. The Government is not confident that the Offeror can meet the requirements of the solicitation. Past performance is less than "Satisfactory."

Unsatisfactory: Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element being assessed contains serious problem(s) for which the contractor's corrective actions were, or appear to be, ineffective. The Government has no confidence that the Offeror can meet the requirements of the solicitation. Past performance is less than "Marginal."

Neutral: Pursuant to FAR 15.305(a)(2)(iv), in the case of an Offeror without a record of relevant past performance or for whom information on past performance is not available, the Offeror may not be evaluated favorably or unfavorably on past performance.

5.4.B.3. Definitions.

The following definitions are used in evaluating proposals.

"**Significant Strength**" is an aspect of the proposal that appreciably increases the likelihood of successful contract performance.

"**Strength**" is an aspect of the proposal that increases the likelihood of successful contract performance. (Simple adherence to the requirements of the solicitation is compliance and shall not be listed as a strength.)

"**Deficiency**" is a material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level.

"**Weakness**" means a flaw in the proposal that increases the risk of unsuccessful contract performance. (Failure to provide items listed in respective proposal instructions will be considered a weakness.)

"**Significant Weakness**" is a flaw in the proposal that appreciably increases the risk of unsuccessful contract performance. (Failure to provide items listed in respective proposal instructions that results in an inability to evaluate factors and/or subfactors will be considered a significant weakness.)

"**Magnitude**" is the dollar amount of work performed. Similar in magnitude refers to projects priced at 85% of your bid and above.

"**Scope**" is the technical requirements of work performed. Similar in scope refers to the same type of work with comparable or greater quantities.

"**Complexity**" is the difficulty of performing work due to many varied interrelated parts.

5.4.C. Templates

The current source selection Section L and Section M for construction (one step) and design-build (two step) projects are available at:

Z:__Templates & Information\Templates-Source Selection
or
W:__Templates & Information\Templates-Source Selection
or
P:\COND__Templates & Information\Templates-Source Selection

Evaluation factors and their ranking are listed within the scopes of work for CM Services and Designs. Those templates are available at:

Z:__Templates & Information\Templates-Contracts
or
W:__Templates & Information\Templates-Contracts
or
P:\COND__Templates & Information\Templates-Contracts

5.4.D. Files

Store the completed Section L and Section M for construction and design-build contracts in the following directories:

Construction
xxx\23-Solicitation Files\Solicitation Files to CO
Design-Build
xxx\03-SOW, IGE & PR\Solicitation Files to CO

5.5. Past Performance Questionnaires

Whenever a RFP is issued for construction or design-build projects, past performance questionnaires are required. The FAR requires that we consider past performance and these questionnaires can provide more information than what is available in CPARS.

There is a general template for the questionnaires and many of the questions remain the same from project to project. Add, change, and remove items to ensure that the questionnaires match the work required on your specific project.

After you have edited the past performance questionnaire, convert it to pdf. Open the file "*Past Performance Questionnaire for Copying Fields.pdf*" and replace all of the pages with the pdf that you just made. The replace function will keep all of the form field currently in place. You will need to move form fields around on Page 8 of 16 and 14 of 16 (which may need to be deleted), but the rest of the pages should line up unless you made significant changes. Save this pdf file with the Contract name and move it into your solicitation files.

5.5.A. Templates

The past performance boilerplate and the file "*Past Performance Questionnaire for Copying Fields.pdf*" are available at:

Z:__Templates & Information\Templates-Source Selection
or
W:__Templates & Information\Templates-Source Selection
or
P:\COND__Templates & Information\Templates-Source Selection

5.5.B. Files

Store the finished past performance questionnaire Word file in the following directories so that it is available if changes are required:

Construction
xxx\23-Solicitation Files
Design-Build
xxx\03-SOW, IGE & PR

Store the finished past performance questionnaire pdf file in the following directories:

Construction
xxx\23-Solicitation Files\Solicitation Files to CO
Design-Build
xxx\03-SOW, IGE & PR\Solicitation Files to CO

5.6. NAICS

The North American Industry Classification System (NAICS) is the standard used by Federal agencies in classifying businesses. Each solicitation must be assigned a NAICS code.

Common NAICS codes for USIBWC work include:

A. 236210 Industrial Building Construction
B. 236220 Commercial and Institutional Building Construction
C. 237110 Water and Sewer Line and Related Structures
D. 237130 Power and Communication Line and Related Structures
E. 237310 Highway, Street, and Bridge Construction

F. 237990 Other Heavy and Civil Engineering Construction

Go to www.census.gov/naics/ to look up specialty trade construction. Download the "*NAICS Manual*." In this document you can drill down to each NAICS code to find a detailed description of what it entails. For example:

> **237990 Other Heavy and Civil Engineering Construction**
> This industry comprises establishments primarily engaged in heavy and engineering construction projects (excluding highway, street, bridge, and distribution line construction). The work performed may include new work, reconstruction, rehabilitation, and repairs. Specialty trade contractors are included in this group if they are engaged in activities primarily related to engineering construction projects (excluding highway, street, bridge, distribution line, oil and gas structure, and utilities building and structure construction). Construction projects involving water resources (e.g., dredging and land drainage), development of marine facilities, and projects involving open space improvement (e.g., parks and trails) are included in this industry.
>
> Illustrative examples: channel construction, land drainage contractors, dam construction, marine construction, dock construction, microtunneling contractors, dredging (e.g., canal, channel, ditch, waterway), nuclear waste disposal site construction, earth retention system construction, park ground and recreational open space improvement construction, flood control project construction, railroad construction, golf course construction, subway construction, horizontal drilling (e.g., cable, pipeline, sewer installation), trenching, underwater, hydroelectric generating station construction, and tunnel construction.

5.7. Product and Service Codes (PSC)

Product and Services Codes (also known as Commodity Codes) are also needed to complete the paperwork for contract solicitation. PSC are found at www.acquisition.gov/psc-manual and they are updated every few years.

Construction codes start with "Y1," maintenance codes with "Z1," repair codes with "Z2," and A/E codes with "C1" or "C2."

5.8. Review of Solicitation

Prior to the CO posting the solicitation, ensure that you get a chance to review it. Go through the solicitation carefully. Ensure that information matches the PR, Form 256, source selection criteria, and the attachments that you provided the CO. Also ensure that all documents that you provided to the CO to attach to the solicitation are listed.

6 Liquidated Damages

Many Construction Contracts have liquidated damages (LDs). These are fees charged to the contractor for everyday that they exceed the allowable work period in the Contract. Liquidated damages are not punitive and are not negative performance incentives. Liquidated damages are used to compensate the Government for probable damages.

6.1. Calculating LDs

The LD rate should include the estimated daily cost of Government inspection and superintendence. The rate should also include an amount for other expected expenses associated with delayed completion such as renting substitute property or equipment as well as paying additional allowance for travel and motels.

Therefore, the liquidated damages rate must be a reasonable forecast of just compensation for the harm that is caused by late delivery or untimely performance of the particular Contract. The Contracting Officer may use more than one liquidated damages rate when the Contracting Officer expects the probable damage to the Government to change over the Contract period of performance (often construction vs. closeout).

Prior to solicitation, IBWC Form 257, Liquidated Damages Calculation, shall be completed for each phase of the Contract (design, construction, closeout, etc.). Once completed, a copy is kept in the project files and a copy is provided to the CO.

If liquidated damages are assessed, the Government must be able to show that the costs being used are only those for inspection and administration of the Contract; liquidated damages can also include costs incurred by the Government due to the unfinished construction. For example, a canal is being constructed. If it is not completed in time, the Government may have to rent a water pump to move water that the canal would have taken care of. This additional expense of pump rental could be included in liquidated damages.

Reviewing courts and Boards of Contract Appeals evaluate LDs as of the time of making the Contract and without regard to the amount of actual damages as long as there were valid assumptions used. Therefore, documentation of the assumptions and calculations of LDs are very important.

6.1.A. Files

Store the completed IBWC Form 257 in the following directories:

Construction
xxx\23-Solicitation Files\Solicitation Files to CO

Design-Build
xxx\03-SOW, IGE & PR\Solicitation Files to CO

6.2. Notice to Contractor of Completion Date

If you are administering a Contract where the substantial completion will not be reached by the contractual completion date, provide notice to the contractor and require that the contractor acknowledge the notice.

A sample of such notice is:

> Prior to [*construction contract end date*], please send the CO and myself an email that:
>
> 1. Acknowledges that the Contract completion date is [*construction contract end date*].
>
> 2. Lists your primary reasons for not meeting this completion date (e.g.: prior project management team, slow subcontractor, late deliveries of supplies, etc.).
>
> 3. Provide an updated project schedule with your anticipated completion date. Note any assumptions or milestones that must be met for this schedule to remain valid (e.g.: front doors must be delivered no later than date).
>
> 4. Acknowledges that the Contract contains liquidated damages in the amount of $#,###.## per day effective after [*construction contract end date*].

Make sure you thoroughly document supply deliveries, issues, and subcontractor progress. Ensure that the contractor is accurately documenting progress in their daily reports. These items can be used to show that the contractor is making diligent progress towards completing the project.

Also ensure that the weekly meeting minutes are noting the approach of the contractual completion date or noting the days past such date, if appropriate. Documenting that the contractor is aware of the LDs and the date that the LDs will apply is very important to enforcing LDs.

The Contract counter stops when substantial completion is reached. Substantial completion is discussed in 34-Final Inspection.

6.3. Enforcing LDs

According to FAR 11.501(c), the CO must take all reasonable steps to mitigate liquidated damages. If the Contract contains a liquidated damages clause and the Contracting Officer is considering terminating the Contract for default, the Contracting Officer should seek expeditiously to obtain performance by the contractor or terminate the Contract and repurchase.

Prior to assessing LDs, it is wise to note that in a court case (case of *Utley James*), the court did not assess LDs when the delay did not affect the critical path.

The party challenging a liquidated damages clause - typically the contractor - bears the burden of proving that the clause is a penalty.

6.4. Notes

A downside to having a liquidated damages provision is that it may change the relationship between the Government and the contractor. Because the Government cannot utilize the benefits of a liquidated damages clause if they caused the delay, a savvy contractor may immediately begin to send accusatory letters to the COR anytime the contractor believes there is deviation from the schedule that is even remotely related to the actions of the Government.

Many critics of liquidated damages provisions correctly assert that these provisions foster finger-pointing between the parties and result in an unnecessarily antagonistic relationship between the Government and contractor from day one of the project. Therefore evaluate if LDs are needed before adding them to your contract. Additionally, ensure that the full construction timeframe is a reasonable estimate of performance. Shortchanging the allowed time breeds a poor working relationships with the contractor. Ensure that premobilization time of at least 90 to 120 days is included within the estimate performance period. Make sure to take the weather days included in the solicitation. Some areas may have well over 30 days which takes a significant chunk of time out of the allowable period. When reasonable, add a little additional time to pad the construction period.

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7 Prebid Conference

A prebid conference should be used, generally in a complex acquisition, as a means of briefing prospective bidders and explaining complicated specifications, site conditions, and requirements to them as early as possible after the invitation has been issued. Ensure that the prebid conference is scheduled to allow contractors sufficient time after the conference to adjust and formalize their bid based upon the information received. When questions are expected following the prebid conference add additional time before bids are due to allow submission and responses to questions.

Exchanges of information among all interested parties, from the earliest identification of a requirement through receipt of proposals, are encouraged. Any exchange of information must be consistent with procurement integrity requirements.

The purpose of exchanging information is to improve the understanding of Government requirements and industry capabilities, thereby allowing potential offerors to judge whether or how they can satisfy the Government's requirements, and enhancing the Government's ability to obtain quality supplies and services, including construction, at reasonable prices, and increase efficiency in proposal preparation, proposal evaluation, negotiation, and Contract award.

After release of the solicitation, the Contracting Officer must be the focal point of any exchange with potential offerors. When specific information about a proposed acquisition that would be necessary for the preparation of proposals is disclosed to one or more potential offerors, that information must be made available to the public as soon as practicable, but no later than the next general release of information, in order to avoid creating an unfair competitive advantage. Information provided to a potential offeror in response to its request must not be disclosed if doing so would reveal the potential offeror's confidential business strategy, and is protected under 3.104 or Subpart 24.2.

Use the prebid agenda template and outline critical items for your project. Prior to the prebid meeting, have the COND Division Chief review the proposed agenda.

If meeting is being held concurrently on Teams, make sure that the agenda is sent with the meeting invite.

When conducting a prebid conference, materials distributed at the conference must be made available to all potential offerors in a solicitation amendment. Therefore, following the prebid conference, send the CO the final version of the prebid agenda and a copy of all handouts. Follow up with the CO to ensure that an amendment is posted with this information.

7.1. Template

The current template for the prebid agenda can be found at:

Z:__Templates & Information\Templates-Source Selection

or

W:__Templates & Information\Templates-Source Selection

or

P:\COND__Templates & Information\Templates-Source Selection

7.2. Files

Store the completed prebid agenda and any other associated files in the following directories:

Construction

xxx\23-Solicitation Files\Prebid

Design-Build

xxx\03-SOW, IGE & PR\Prebid

8 Evaluating Bid Proposals

8.1. Proposal Evaluation

Proposal evaluation is an assessment of the proposal and the offeror's ability to perform the prospective Contract successfully. An agency shall evaluate competitive proposals and then assess their relative qualities **solely** on the factors and subfactors specified in the Solicitation. Evaluations may be conducted using any rating method or combination of methods, including color or adjectival ratings, numerical weights, and ordinal rankings. The relative strengths, deficiencies, significant weaknesses, and risks supporting proposal evaluation shall be documented in a comprehensive report.

All proposals are evaluated independently. That is to say that they are not judged against each other until the final best value trade off occurs. You cannot evaluate Offeror 3 lower than Offeror 4 because Offeror 4 noted they would finish two months early. Simply evaluate Offeror 3's proposal against the evaluation criteria and then evaluate Offeror 4's proposal against the evaluation criteria. Do not evaluate them against each other.

8.1.A. Technical Evaluation

When tradeoffs are performed, the source selection records shall include an assessment of each offeror's ability to accomplish the technical requirements and a summary, matrix, or quantitative ranking, along with appropriate supporting narrative, of each technical proposal using the evaluation factors. Specific details on each proposal including strengths, weaknesses, deficiencies, etc. shall be documented in a source selection board report. This report must indicate the source selection board's consensus ratings. Each source selection board will determine how they are to reach consensus on the ratings.

8.1.B. Template

A boilerplate for the source selection committee's consensus report is available at:

Z:__Templates & Information\Templates-Source Selection
or
W:__Templates & Information\Templates-Source Selection
or
P:\COND__Templates & Information\Templates-Source Selection

8.1.C. Past Performance Evaluation

Past performance information is one indicator of an offeror's ability to perform the Contract successfully. The currency and relevance of the information, source of the information, context of the data, and general trends in contractor's performance shall be considered. The Solicitation shall describe the approach for evaluating past performance, including evaluating offerors with no relevant performance history, and shall provide offerors an opportunity to identify past or current Contracts (including Federal, State, and local government and private) for efforts similar to the Government requirement. The Solicitation shall also authorize offerors to provide information on problems encountered on the identified Contracts and the offeror's corrective actions. The Government shall consider this

information, as well as information obtained from any other sources (FAR 15.305(a)(2)(ii)), when evaluating the offeror's past performance.

The evaluation should take into account past performance information regarding predecessor companies, key personnel who have relevant experience, or subcontractors that will perform major or critical aspects of the requirement when such information is relevant to the instant acquisition. In the case of an offeror without a record of relevant past performance or for whom information on past performance is not available, the offeror may not be evaluated favorably or unfavorably on past performance.

8.1.D. Cost or Price Evaluation

Normally, competition establishes price reasonableness. Therefore, when Contracting on a firm-fixed-price or fixed-price with economic price adjustment basis, comparison of the proposed prices will usually satisfy the requirement to perform a price analysis, and a cost analysis need not be performed. The Contracting officer shall document the cost or price evaluation.

8.1.E. Files

Store the bids, proposals, evaluations, and any other associated files in the following directories:

Construction
xxx\23-Solicitation Files\Bids-Proposals
Design-Build
xxx\02-Bids and Tech Analysis
CM Task Order
xxx\17-CM Contract\02-CM Bids and Tech Analysis
A/E Design Task Order
xxx\02-Bids and Tech Analysis

8.2. Numerical Ratings

As noted in Paragraph 8.1 ratings may include color or adjectival ratings, numerical weights, and ordinal rankings. COND has found adjective ratings to be the easiest to follow. Some people will try to use numerical ratings. While there is nothing prohibiting numerical ratings, it is recommended that they be avoided.

A basic tenant of a source selection board is that each person rates each proponent and then the board reaches a consensus rating. A consensus rating results from discussions of strengths, weakness, etc. and is sometimes easy to achieve and sometime takes significant time. When numerical ratings are used, human nature leads people to average each board member's rating for the "consensus" rating^. This is not allowed. If you average the rating, you arrive at an average, not at a consensus. A consensus rating means that all source selection board members are in agreement to the rating.

^ *Please note that sometimes people want to average adjectival ratings also. Ratings can never be averaged.*

Numerical ratings are beneficial if creating a cutoff level for proponents to move to the next step. For example if there are five selection factors and each one is rated from 1 to 10 that are summed for a total rating with a statement that proponents must have a rating of 40 or better to proceed. As long as the Solicitation criteria is clearly outlined and the methodology is followed, numerical ratings work well in this situation. However, this better fits the qualification stage than the final evaluation stage of a Solicitation.

8.3. Business Proposals

Ensure that a copy of the Business Proposal is saved with the Technical and Price Proposals in the project files. Also perform a quick review of the Business Proposal during the proposal evaluations to see if any exceptions to the Buy American Act are proposed.

8.4. Protests

If a protest is filed about the evaluation performed, the Contract Boards repeatedly have stated that they do not reevaluate the proposals, but that they review the agency's evaluation to ensure that it was reasonable, consistent with the terms of the Solicitation, and consistent with applicable statutes and regulations. Therefore, as long as you follow the rules in evaluating proposals and documented your evaluations thoroughly, you will be on strong footing for any challenge. Also remember, you are able to set up the rules that will be used in the solicitation.

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9 Construction Management Services

USIBWC has been using construction management (CM) services to aid the CORs by providing onsite inspection and administrative support. The primary objective of the CM contractor is to confirm to the COR and the Government, that construction performed by the construction contractor conforms to the Contract. The CM services are acquired through Task Orders under the current A-E IDIQ Contracts.

Major components of the CM Task Orders include:

A. Attend onsite kick-off (pre-construction) meeting.

B. Submit monthly reports, based on final schedule.

C. Participate in teleconferences/meetings and prepare minutes, as requested by the COR.

D. Administer all weekly coordination meetings held with representatives from the Construction Contractor, Government, and CM firm.

E. Participate in preparatory phase inspections and meetings.

F. Participate in final onsite inspection and make recommendations to the COR on substantial completion and/or final acceptance, in writing.

G. The CM Contractor shall provide professional and support services deemed necessary to manage and track the progress of construction and to provide advice for the coordination and synchronization of the Construction Contractor's subcontractors.

H. Review all submittals.

I. Review the monthly progress schedule.

J. Review all RFIs.

K. The CM Contractor shall monitor construction in compliance with Contract specifications.

   1. The CM Contractor shall observe and maintain records addressing the progress and quality of the executed work and testing to determine if the work is in conformance with the Construction Contract.
   2. The CI shall inspect construction every workday for compliance with Contract documents. Provide written documentation of daily inspections to the COR, on the calendar day following the inspection; with immediate e-mail or telephone notification of severe issues, conditions, construction deficiencies, etc..
   3. CI shall immediately notify COR if work is not meeting the requirements of the Contract.
   4. While onsite, CI shall not allow unsafe work to be conducted. Immediately notify COR and the Project Superintendent if an unsafe working condition is present onsite;
   5. While onsite, the CI shall interpret and clarify the intent of the plans and specifications as requested by the Construction Contractor, via the COR.

6. CI shall develop a construction deficiency list prior to final inspection and make written recommendation to the COR concerning final acceptance.

L. Monthly and final pay estimate review.

M. Monthly record drawings review

The CM is required to be thoroughly familiar with the Contract: administrative section, technical specifications, and drawings. CM Contractors do not have the authority to waive any Contract requirements.

Determine if the major responsibility for the FEM is biological or cultural when you write the FEM's qualifications. Ensure that the qualifications required meet the project.

Send the file "*Proposal Guidance for Construction Management Services*" to the CO with the scope of work for CM Services and note that it needs to be provided to bidders.

9.1. Template

The current template for CM scope of work is entitled "*SOW CM & FEM Boilerplate YYYYMMDD.docx*." Both that file and the file "*Proposal Guidance for Construction Management Services*" can be found at:

Z:__Templates & Information\Templates-Contracts
or
W:__Templates & Information\Templates-Contracts
or
P:\COND__Templates & Information\Templates-Contracts

9.2. Files

Store the completed SOW and the proposal guidance in the following directories:

Construction
xxx\17-CM Contract\03-CM SOW, IGE & PR\SOW
Design-Build
xxx\17-CM Contract\03-CM SOW, IGE & PR\SOW

10 A/E Post Design Services

USIBWC prefers to keep the designer on board through construction when as all possible. That way the designer can ensure that assumptions they made are appropriate, that any construction changes do not negatively affect the project, and that the final project meets the design intent.

COND will take over the A/E design Task Order once it moved in to the post-design (i.e. construction) phase. You will need to make sure that the CO issues you a COR letter and that the IPP group is changed to COND for all invoices.

Since the Task Order is already ongoing, there are solicitation documents nor kickoff meetings to set up although you will want to meet with the A/E and discuss how they will be proceeding and what your expectations are.

10.1. Files

Go through the A/E Task Order files and copy the Contract, Solicitation files, Task Order, SOW, and all modifications to:

xxx\21-A-E Const Svcs\00-AE Contract

Go through the A/E Task Order files and copy the original NTP and all COR letters along with your new COR letter to:

xxx\21-A-E Const Svcs\01-AE NTP COR Letters

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11 COR Duties

The Government Inspector may or may not be the project COR.

The number one duty of the COR is **READ YOUR CONTRACT**. This includes the administrative sections, the technical specifications/SOW, the drawings, and any other referenced documents.

Keep a working copy of your Contract, especially the drawings. Use this copy to make notes as the construction proceeds. Always keep this set up to date with any changes or modifications that are made to the Contract.

Keep a current version of the FAR available for reference. This can be accessed or downloaded from www.acquisition.gov/browse/index/far.

CORs are encouraged to discuss work and problems with the contractor. However, the COR cannot tell the contractor how to solve a problem or the specific way in which work shall be completed unless it is outlined in the Contract. USIBWC specifications are always performance based. This means that the final result is defined but that the means and methods of achieving that result are the responsibility of the contractor.

11.1. COR Designation

You will be designated as a COR in writing. The designation letter will outline your basic requirements as well as listing items that you cannot perform as part of your COR duties. Subsection 11.7 provides a sample of our typical designation letter. You, the CO, your supervisor/program manager, and the contractor will all sign the letter.

11.2. Inherent Duty to Enable Contractor to Perform

There is an "*implied provision of every contract, whether it be one between individuals or between an individual and the Government, that neither party to the contract will do anything to prevent performance thereof by the other party or that will hinder or delay him in its performance*."[1] This has been extended farther for the Government that not only must we refrain from hindering the contractor's performance, we must do whatever is necessary to enable the contractor to perform.[2] [3]

[1] *George A. Fuller Co. v. United States*, 108 Ct. Cl. 70, 94, 69 F.Supp. 409, 411 (1947)

[2] *Kehm Corp. v. United States*, 119 Ct. Cl. 454, 469, 93 F.Supp. 620, 623 (1950)

[3] To the same effect are *J. G. Watts Const. Co. v. United States*, supra; *Delta Equipment & Const. Co. v. United States*, supra; *Peter Kiewit Sons, Co. v. United States*, 138 Ct. Cl. 688, 151 F.Supp. 726 (1957); *H. John Homan Co. v. United States*,189 Ct. Cl. 500, 418 F.2d 522 (1969); *Dale Const. Co. v. United States*, supra.; *Sterling Millwrights, Inc. v. U.S.*, 26 Ct. Cl. 49, 67 (1992).

11.3. Unauthorized Commitments

FAR 43.102 states that Government personnel shall not act in such a manner as to cause the contractor to believe that they have authority to bind the Government or direct or encourage the contractor to perform work that should be the subject of a Contract modification. Doing this can cause an unauthorized commitment of funds. Subsection 11.8 has a Sample Unauthorized Commitment Letter. As you can see from reading this, ratifying any unauthorized commitment is a long, slow process. If the cost of the unauthorized commitment cannot be ratified, the COR may be liable to the contractor for the cost of the increased/changed work.

11.4. COR Competencies and Training Requirements

Details about the core competencies and general Government COR requirements are found at www.fai.gov/certification/fac-cor. This information includes basic training requirements as well as some sources for training. Follow the directions for FAI and DAU located training to find applicable classes. Many of the classes are online and do not have tuition.

When classes are only a couple of hours here and there, feel free to sign up for them. All CORs are actively encouraged to increase their contracting and contract administration knowledge. Whenever training will take more than a full workday, you will need to submit a SF-182 to request the training even if there is no tuition. The SF-182 will authorize the use of official time to take the training.

11.5. FAI Registration

In order to receive your FAC-COR certificate, you must have an account at www.fai.gov. To set up your initial account, go to saar.dau.edu. A handbook is available at www.dau.edu/faq/Documents/CreateDAUStudentAccount.pdf. Start reading on page 13.

When filling out the form to request access, follow these notes:

A. Choose "Other Federal Agency (Non-DOD)"

B. Under "Please select a system for which you are requesting access*," choose "Virtual Campus (Online Training)."

C. Under "Reason you are requesting an account," type "Training for FAC-COR certification."

D. Under Organization, choose "Federal Organizations."

E. Under Sub Org., choose "Small Agency Council | LS

It can take up to 24 hours before you receive a response to your application. The response received will note "Welcome to DAU" with a link to activate your account. For help with the activation, please see www.dau.edu/faq/p/oktasso.

11.6. COR Certificate in FAI

To get a copy of your COR certification, log in to your FAI account at dau.csod.com. In the menu bar, click on Learning, View Your Transcript. In the list of items that comes up. your FAC-COR certificate should be listed.

11.7. Sample COR Delegation Letter

FOR ACTION
December 6, 2022

MEMORANDUM

TO : Jane Smith, Contracting Officer's Representative

FROM : Jeremy Jones, Contracting Officer

SUBJECT : Designation of Contracting Officer's Representative (COR) for
Contract Number: 191BWC99C9999
Anywhere Levee Reconstruction

Under the authority contained in Federal Acquisition Regulation Part 1.604-1, you are hereby designated as a Contracting Officer's Representative (COR) (or the Alternate COR) for Contract noted above. This delegation remains active until termination or completion of the Contract, unless revoked earlier by the Contracting Officer (CO). You may not re-delegate this authority.

SECTION A: CONTRACT MANAGEMENT INFORMATION

Contract No.:	191BWC99C9999	**Award Date:**	December 23, 2021
Title:	Anywhere Levee Reconstruction		
Contract Type:	Firm Fixed Price	**Acquisition Specialty Team:**	Construction
Period of Performance	Calendar days from NTP	**Estimated Completion Dates**	
Construction:	655	November 5, 2023	
Revegetation:	805	April 3, 2024	
Total Contract:	805	April 3, 2024	
Contract/Task Order Value:		$6,498,887.00	
CO:	Jeremy Jones	**Phone:**	(915) 832-4111
COR:	Jane Smith	**Phone:**	(915) 832-4101

SECTION B: Authority and Limits of Authority under Delegation

1. **COR General Authority:** Subject to the limitations stated elsewhere in this delegation of authority, you are authorized to perform the COR duties for this Contract, including:
   a. Attend any post-award, partnering, or pre-construction conferences. Be prepared to discuss applicable technical provisions and specifications of the Contract.
   b. Coordinate site entry for contractor personnel and if applicable, ensure that any Government-furnished property is available when required.
   c. Verify that the contractor performs the technical requirements of the Contract in accordance with the Contract terms, conditions and specifications. Specific emphasis

will be placed on the quality provisions for both adherence to the Contract and to the contractor's own quality control program.

d. Perform, or cause to be performed, the necessary inspections and verify that the contractor has corrected all deficiencies. Monitor the contractor's performance (within the scope of your authority) to ensure compliance with technical requirements of the Contract and to furnish technical guidance. Work directly with contractor in daily field operations.

e. Coordinate the review of submittals and confirm compliance/non-compliance in a timely manner. Advise the contractor of any submittals not furnished when required by the Contract.

f. Ensure the contractor's Quality Control arranges for necessary tests on materials, equipment, workmanship, etc. to assure compliance with Contract requirements via submittal process.

g. Interpret contract documents and design guidelines and issue clarifying information to the contractor.

h. Review and approve/disapprove the contractor's progress schedules and take appropriate action to inquire of the Contract (in writing) how they plan to correct unsatisfactory progress.

i. Keep copies of all reviews of submittals, written communication, and memoranda of oral communication with the contractor in the project file as they are generated. Maintain records consisting of documents accumulated or created which pertain to this Contract.

j. Taking actions as authorized in the Contract and within this delegation (for example: rejecting unsatisfactory services and/or supplies and ensuring that proper invoices are certified for payment in a timely fashion in accordance with the terms of the Contract).

k. Advise the contractor as necessary regarding safety requirements as prescribed by the Contract and pertinent regulations. Take action necessary to preclude safety hazards and bring known violations to the attention of the CO if the contractor does not take appropriate action.

l. Notify the contractor of deficiencies observed during surveillance and direct appropriate action to ensure correction. Record and immediately report to the CO incidents of faulty or nonconforming work, delays, or problems.

m. Maintain liaison and direct communications with the contractor. Written communications with the contractor and other documents pertaining to the Contract will be signed by the COR and a copy will be furnished to the CO.

n. Review the contractor's request(s) for payment and ensure request(s) for payment are submitted in accordance with the Contract.

o. Perform inspection or acceptance of the work as required by the Contract. If not in compliance with Contract requirements, direct the contractor to correct the work. In the event acceptance is delayed due to deficiencies, furnish the list of such deficiencies to the contractor and the CO (through your supervisory channel).

p. Conducting investigations to ensure the contractor is complying with the Wage Rate Requirements (Construction) (formerly Davis Bacon Act) or the Service Contract Labor Standards (formerly Services Contract Act of 1965), as appropriate.

q. Provide a written report evaluating the contractor's overall Contract performance and specific performance for each month's work. This report is due by the 15th day of the month following the report month. Please submit this report through your supervisory channels. The report will include, as a minimum, the following:
   i. Major accomplishments for the reporting period;
   ii. Significant problems and proposed solutions; and
   iii. Areas in which contractor fails to meet Contractual requirements and recommended actions to correct such deficiencies.

r. Recommend desired Contract changes to the CO in writing. Include justification for the proposed change, and certification that current funds are available and have been allocated for the change.

s. Ensure that changes in work under a Contract are not implemented before written authorization or a Contract modification is issued by the CO.

t. At the completion of the Contract, advise the CO whether all articles and services required to be furnished and/or performed under the Contract have been technically accepted.

u. Assist in Contract closeout activities.

v. Provide a contractor performance evaluation at the time of final acceptance of the work, at the time of Contract termination, or at any other times deemed necessary. This evaluation will be reviewed by an official at an organizational level above that to the COR.

2. You are **NOT** empowered to award, agree to or sign any Contract (including delivery orders) or Contract modification, or in any way obligate the payment of money by the Government. You may not take any action which may affect Contract or delivery order, schedules, funds, or scope. The CO will make all Contractual agreements, commitments, or modifications that involve price, quantity, quality, delivery schedules, or other terms and conditions of the Contract. You may be personally liable for unauthorized acts. You may not re-delegate your COR authority. **Limitation of Authority:** The COR **CANNOT** authorize any of the following:

   a. **CORs cannot** make any agreement with the contractor requiring the obligation of public funds (they cannot sign any Contract, including delivery orders, purchase orders, or modify a Contract, or in any way obligate payment of funds by the Government).

   b. **CORs cannot** encourage the contractor by words, actions, or a failure to act to undertake new work or an extension of existing work beyond the Contract period.

   c. **CORs cannot** interfere with the contractor's management prerogative by "supervising" contractor employees or otherwise directing their work efforts.

   d. **CORs cannot** authorize a contractor to obtain property for use under a Contract.

e. **CORs cannot** allow Government property accountable under one Contract to be used in the performance of another Contract.

f. **CORs cannot** issue instructions to the contractor to start or stop work other than if the COR witnesses an unsafe activity by the contractor, the COR should stop/interrupt the unsafe act and notify the CO immediately.

g. **CORs cannot** order or accept goods or services not expressly required by the Contract.

h. **CORs cannot** discuss acquisition plans or provide any advance information that might give one contractor an advantage over another contractor in future procurements.

3. Penalties for Unauthorized Commitments:

CORs who violate their delegation are subject to penalties if the violation results in an Unauthorized Commitment. An Unauthorized Commitment is <u>an agreement that is not binding</u> solely because the Government representative who made it lacked the authority to enter into that agreement on behalf of the Government. (FAR 1.602-3(a)).

Examples of Unauthorized Commitments include but are not limited to: COR or other Program Office official directs contractor to deviate from the Contract. A contractor mistakes a request from a COR seeking information as an order, ships the item, the COR does not realize it is an improper order and accepts the item rather than reject and return the item. COR exceeds authority and authorizes work, additional time, money or any other type of extension on Contract.

4. If your designation is revoked for any reason before completion of this Contract, you must turn your records over to the successor COR or obtain disposition instruction from the CO.

5. You are required to maintain adequate records to sufficiently describe the performance of your duties as a COR during the life of this Contract and to dispose of such records as directed by the CO. At a minimum, the COR file will contain the following:

a. A copy of your letter of appointment from the CO, a copy of any changes to that letter, and a copy of any termination letter.

b. A copy of the Contract or the appropriate part of the Contract and all Contract modifications.

c. A copy of the Quality Assurance Surveillance Plan (QASP), if applicable

d. A copy of all other Contract submittals/deliverables.

e. A record of inspection performed, results, and reports.

f. All correspondence initiated by authorized representative concerning the performance of the contractor.

g. All correspondence with the contractor including emails and texts.

h. The names and position titles of the individuals who serve on the Contract administration team.

i. Memoranda for record or minutes of any pre-performance conferences.

j. Memoranda for record of minutes of any meetings and discussions with the contractor or others pertaining to the contractor or Contract performance.

k. Records relating to the contractor's quality control system and plan and the results of the quality control effort.

l. Documentation pertaining to acceptance of performance or services, including reports and other data.

6. All personnel engaged in Contracting and related activities will conduct business dealings with industry in a manner above reproach in every aspect and will protect the Government's interests, as well as maintain its reputation for fair and equal deals with all contractors. Standard of conduct for all personnel directly and indirectly involved in Contracting will be in accordance with applicable IBWC rules, regulations, and requirements.

7. A COR who may have direct or indirect financial interests which would place the COR in a position where there is a conflict between the COR's private interests and the public interests of the United States will advise their Supervisor and the CO of the conflict so that appropriate actions may be taken. CORs will avoid the appearance of a conflict of interests to maintain public confidence in the Government's conduct of business with the private sector.

By signing below, the CO appoints the COR/Alternate COR listed above to complete the responsibilities outlined in this delegation.

Jeremy Jones 12/6/2022

Signature Date
CORs Name: Jeremy Jones

SECTION C: CERTIFICATIONS AND SIGNATURES

Procurement Requestor/Program Manager:
By signing below, the Program Manager certifies the nominee is approved for appointment as COR for the referenced Contract. They also certify that the COR has completed the required training or will be provided the time and necessary resources to complete all mandatory training. They also agree to support the COR (providing time, information, etc.) in fulfilling delegated COR duties.

Name: Ramon Macias
Phone: (915) 832-4749
Title: Supervisory Civil Engineer, Engineering Department

Signature Date

COR:
By signing below, the COR/Alternate COR certifies that they have read and understand the responsibilities and limits of authority outlined in this delegation. The COR/Alternate COR further certifies that they have been provided with a copy of the Contract and any other information required to execute their duties.

Name: Jane Smith
Phone: (915) 832-4101

	December 6, 2022
Signature	Date

Contractor
By signing below, the contractor has read and understands the roles of the CO and the COR, and the limits of the COR's authority.

Name: Jefferson Hatter
Phone: (985) 791-3213
Title: Project Manager

Signature	Date

11.8. Sample Unauthorized Commitment Letter

May 22, 2009

[redacted]

Dear Mr. [redacted],

This office is in receipt of your invoice numbers [redacted], respectively, for the costs associated with leasing [redacted] at the [redacted] [redacted] for the period [redacted] through [redacted].

This purchase is considered an Unauthorized Commitment because the person(s) who entered into the agreement with your company on behalf of the Government lacked the authority to do so. Accepting such orders places your company at risk for nonpayment.

This office has determined your invoice numbers [redacted] should be transmitted to the individual(s) who directed this work. Should they fail to pay the obligation, you may request that they process a ratification action through this office.

This office is providing you with Information to be Provided for Unauthorized Commitments (see below) which you may share with the responsible party. The information requested should give you a better understanding of the administrative effort involved in explaining and justifying an unauthorized procurement.

Information to be Provided for Unauthorized Commitments

1. A description of the events that precipitated the unauthorized commitment.
2. The name of the individual who committed the unauthorized commitment.
3. A description of the benefit to the Government from the unauthorized commitment.
4. A statement that funds are currently available and were available at the time the unauthorized commitment was made.
5. A description of the measures taken to ensure that the responsible individual will not make future unauthorized commitments.

Once the above information is received at this office a Contracting Officer will be assigned to determine the appropriateness of the ratification. Before ratification can occur the determination must be approved by the Contracting Officer, Acquisitions Chief, Chief Administrative Officer, Legal Counsel and USIBWC Commissioner. The higher level approval generally delays the final decision for an extended time.

THERE IS NO GUARANTEE THAT, IF SUBMITTED, THE HIGHER LEVEL AUTHORITY WILL APPROVE THE RATIFICATION ACTION.

In the future, delivery of items and services should not commence unless a valid signed purchase order, delivery order, or Contract has been received by your organization. If a verbal order is placed, have your company personnel ensure the person placing the order has the authority to enter into an agreement on behalf of the Government

Please contact me at (915) 832-4714 should you have any questions regarding this matter.

Respectfully,

Hugo E. White
Chief, Acquisitions Division

12 Preconstruction Meeting

Construction cannot begin without holding a preconstruction meeting. It is USIBWC policy to issue the Notice to Proceed (NTP) the day of the preconstruction meeting. Ensure all related Agency personnel are invited. This will include the CO, O&M, EMD, SSD, and others as appropriate. Also invite local irrigation districts, CBP, and others that will have direct interactions with construction operations. The contractor can invite any personnel or subcontractors that they wish. However, the contractor's project manage, QC manager, and superintendent are critical to attend.

The Preconstruction Meeting Agenda is meant as an outline only; the actual information/details is in the Contract itself. Do not substitute the preconstruction minutes for the Contract!

It is good practice to remind the contractor to bring a full copy of their Contract (as issued by CO, technical specifications, and drawings) to the preconstruction meeting. Then whenever possible throughout the meeting, stop and have the contractor go to that location in their Contract. Review what the Contract says. After the review and any discussions, continue to the next item. This process teaches the contractor to go to the Contract for answers.

Like other items used in administration of the project, there is a template available for the preconstruction meeting minutes. Go through the template carefully and update it with your project's information. If there are critical items to be addressed prior to mobilization, add them to the minutes. Prior to the Preconstruction Meeting, review the proposed minutes with the CO.

Print one set of the minutes single sided. Label it with "Original" on the first page. Use this set of minutes during the meeting to fill out blanks and sign at the end. Carefully note any changes or corrections on this set. The signed minutes must be carefully scanned into pdf and sent to all attendees of the meeting. The original of these signed minutes is provided to the CO for inclusion in their file.

12.1. Template

The current preconstruction meeting template is available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

12.2. Files

Store the completed preconstruction meeting minutes in the following directories:

Construction
xxx\11-Meeting Minutes
Design-Build
xxx\07-Meeting Minutes\Precon-MOU

This page intentionally left blank to facilitate double sided printing.

13 Mutual Understanding Meeting

A mutual understanding meeting is usually conducted immediately after the preconstruction conference. This meeting is designed to develop mutual understanding relative to details of the USIBWC system, including the forms to be used for recording of the contractor's Daily Construction Quality Control Inspection, tests, and the interrelationship of contractor quality control and Government quality assurance activities. It is split from the preconstruction meeting to allow all people not involved with the administration, safety, and QC aspects of the project to leave.

Ensure that the contractor will have their project manager, superintendent, safety officer, and QC manager at this meeting. If these people cannot attend after the preconstruction meeting, schedule the mutual understanding meeting for another time.

Follow the mutual understanding meeting template available and adjust as needed to reflect the project requirements. Contract clause FAR 52.246-12, entitled Inspection of Construction, requires that the contractor maintain an adequate inspection system and perform such inspections as to ensure that the work performed under the Contract conforms to Contract requirements. The mutual understanding meeting shall emphasize the requirement for the contractor to provide adequate inspection and not rely on Government inspection for quality control.

Print one set of the minutes single sided. Label it with "Original" on the first page. Use this set of minutes during the meeting to fill out blanks and sign at the end. Carefully note any changes or corrections on this set. The signed minutes must be carefully scanned into pdf and sent to all attendees of the meeting. The original of these signed minutes is provided to the CO for inclusion in their file.

13.1. Template

The current MOU meeting template is available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

13.2. Files

Store the completed mutual understanding meeting minutes in the following directories:

Construction
xxx\11-Meeting Minutes
Design-Build
xxx\07-Meeting Minutes\Precon-MOU

This page intentionally left blank to facilitate double sided printing.

14 CM Services and A/E Kickoff Meetings

Prior to beginning work, or at least prior to beginning any sitework, a Kickoff Meeting needs to be held with the CM contractor.

Like other items used in administration of the project, there is a template available for the CM services kickoff meeting minutes. Go through the template carefully and update it with your project's information. If there are critical items to be addressed prior to work, add them to the minutes. Prior to the kickoff meeting, review the proposed minutes with the CO.

Currently there is not a template for A/E kickoff meetings. You can use the CM kickoff meeting minutes as a starting point and make your own minutes. Ensure that all of the requirements and deliverables are discussed.

Keep track of changes and additions to the minutes during the meeting. After the meeting, finalize the minutes with the changes made and add the sign in sheet. Send the meeting minutes to all attendees.

14.1. Template

The current preconstruction meeting template is available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

14.2. Files

Store the completed kickoff meeting minutes in the following directories:

CM Task Order
xxx\17-CM Contract\04-CM Kickoff Meeting
A/E Design Task Order
xxx\04-Meeting Minutes

This page intentionally left blank to facilitate double sided printing.

15 Field Inspection

Inspection, either by the Government or by the contractor, is the primary means of ensuring that the Government receives the product for which it bargained. Since the Government may have limited rights after acceptance, careful inspection of the work prior to acceptance is essential.

Another concept to consider is the fact that this contractor is required to perform work that meets the Contract requirements regardless of the presence or absence of an Inspector/CI. Never let a contractor tell you that they could not perform because you were not present.

Inspector/CIs usually do not have the authority to order Contract changes or waive Contract requirements, but they do have the responsibility to interpret Contract specifications and make evaluations as to whether a contractor has complied with them.

15.1. Field Inspection

Dealing with paperwork and maintaining complete Contract files is very important for construction management; however, viewing the actual construction progress adds insight and information that cannot be gathered in any other fashion.

Whenever possible, continuous onsite inspection should be conducted throughout the construction project. An inspector uses their knowledge of the Contract documents, their knowledge of construction, and most importantly, their eyes to detail and record the construction process. The Inspector/CI stands elbow to elbow with the contractor every day and documents what they see with daily reports and photographs.

Before proceeding to the construction site, make sure that you have the necessary safety gear (minimum of steel toed boots, safety vest, hard hat, and safety glasses). Also take equipment with you to fully inspect and document the construction. At a minimum you will need:

A. A pen or pencil

B. Notebook

C. Tape measure

D. Camera

Always remember to take climate appropriate clothing with you. In hot weather, keep water, sunscreen, and chap stick with you. In many areas, keeping insect repellant with you is a necessity. Be mindful of dangerous animals or insects such as snakes and bees as you walk about in certain areas. Do not assume that these animals are gone just because it is a certain time of year.

To inspect the construction project, you must have an understanding of the complete Contract including all technical specifications and drawings. Keep a complete set of these documents with you at all time. Review them prior to any inspections.

15.1.A. Photographs

When you take photos of the project work, ensure that your camera is set to the highest resolution available. Also whenever possible, set the camera so that the date appears in the photograph.

Review IBWC Form 148. Take notes while snapping photos to ensure that you have adequate information to complete the required data for every image.

Ensure that photos taken show the scale of the work. In many cases this happens with construction equipment or workers nearby. However, when taking pictures of soil, rocks, or concrete, the image is confined to the object being photographed so scale becomes very important. Use a GSA photo scale in your photos or include a pen, chap stick, quarter, or other item of common size for scale.

An extreme example of scale is shown below in Figure 1. The spillway shown could easily be just 10 or 15 feet wide. The exposed rock offers no data as to the actual size of the concrete structure.

Figure 1 - Spillway (full credit reference is provided in Figure 2)

Now, refer to Figure 2. In this image, a medium sized dozer as well as four people can be seen at the base of the spillway. The spillway which may have only been 15 feet wide according to Figure 1 is now shown to be approximately 100 feet wide.

Images of gravel can look the same as images of riprap without scale. A minor concrete honeycomb can seem to be a huge structural hazard without scale. If an official photo scale is not available, coins, chap stick, pens, and rock hammers are commonly used. People are excellent sources of scale for larger objects.

Figure 2 - Oroville Dam Spillway February 27, 2017 (Photo by Paul Kitagaki Jr. of the Sacramento Bee found via AP)

15.1.B. Files

Store the photos in the following directories:

Construction
xxx\14-Photos
Design-Build
xxx\14-Photos
CM Task Order
xxx\14-Photos\CM
A/E Design Task Order
xxx\14-Photos\Contractor
A/E Post Design (Construction Services) Task Order
xxx\14-Photos\AE

Only in rare circumstances are photos separated to the CM or A/E Post Design Task Order. Photos that they take shall be stored in the 14-Photos directory of the associated construction or design-build contract. If photos deal only with the CM or A/E work, then store them at:

xxx\17-CM Contract\12-CM Photos
xxx\21-A-E Const Svcs\09-AE Photos

15.2. Rejection

The Government is entitled to enforce strict compliance with Contract requirements. This right to reject work for failure to strictly comply with a Contract's requirements is dependent upon the requirement being:

A. Specifically called out in the Contract.

B. Susceptible to some form of precise measurement.

C. If these two items are not present, the Government can only reject work that will not be suitable for its intended purpose.

In construction, the time of defect discovery may also hinder application of strict compliance. When noncompliance is discovered prior to performance, the Government has broad latitude. Rejecting noncomplying materials prior to construction also adheres to strict compliance. However, once construction is complete, application of strict compliance is allowable when the cost of correction does not involve economic waste.

The concept of economic waste has been applied by the courts when repair or replacement is economically wasteful and when the Government receives work that substantially complies with the specifications. In this case, the Government's remedy is limited to a price adjustment based upon loss of value or based upon savings to the contractor.[4]

While the contractor bears the burden of proving that work meets the Contract requirements, the Government bears the burden of proving that work is noncompliant.

If the Government finds work that does not meet the Contract requirements, proper notice must be provided to the contractor. According to FAR 46.407(g), the contractor must be provided with the reason that the Government believes that the work is outside of the Contract requirements.

> (g) Notices of rejection must include the reasons for rejection and be furnished promptly to the contractor. Promptness in giving this notice is essential because, if timely nature of rejection is not furnished, acceptance may in certain cases be implied as a matter of law. The notice must be in writing if-
>
> > (1) The supplies or services have been rejected at a place other than the contractor's plant;
> > (2) The contractor persists in offering nonconforming supplies or services for acceptance; or
> > (3) Delivery or performance was late without excusable cause.

15.3. Quality Assurance of Work

One item that always aids inspection is to go through the Contract and find all references to testing. Make a list of the required testing. This list should include the relevant tests, the testing

[4] *Granite Constr. Co. v. United States*, 962 F.2d 998 (Fed. Cir. 1992), cert. denied, 113 S. Ct. 965 (1993) and others.

interval, and the minimum or required test results. This list will allow the Inspector/CI to track whether the CQC is completing the necessary testing on the project.

The contractor cannot complain that contractually specified tests are too severe since they are clearly required in the Contract.[5] Also the presence of a specified test in the Contract does not preclude the Government from conducting unspecified tests that are "reasonable and necessary" to determine compliance.[6] The Government may use tests in lieu of those specified in the Contract as a basis for rejection if they do not impose a more stringent standard of performance.[7]

A key point that anyone inspecting a Government Contract must understand is that your early performance on the Contract can set the stage for establishment of the contractor's quality requirements; this is especially true if specifications are not precise. There are also many court cases where Government acceptance of deficient work over an extended period with the CORs knowledge was found as conforming to the Contract's requirements because the CORs knowledge established a waiver of Contract requirements (also stated in FAR 46.407(g) that allowing nonconforming work to continue can imply acceptance). The mere fact that the Inspector/CI observes a contractor's defective performance does not result in either acceptance of work nor a waiver of the Contract requirements, but continued ignoring of the defective performance can.

Work in the field does not exist in a vacuum. The contractor must submit product data and testing reports to support their work. When inspecting, you are responsible for making sure that what is happening in the field matches the provided paperwork.

15.3.A. Submittals

Before anything else, make sure that the products delivered to the field match their respective submittal. Sometimes a supplier makes a last minute change. They are out of Product A so they send Product B; sometimes the contractor doesn't even know the substitution was made. There may be no issue with the substitution or the new product may not meet the Contract requirements. Either way, the project documentation needs to show what was actually used for construction. Product B must be submitted.

In other instances, the people working in the field may have been having issues with Product A and bring in samples of Product B to use. They like how it works, so they keep using it. Again, Product B must be submitted. There are countless instances where Product B contained a chemical that was not allowed on the project. What are you going to do if it was just used to place 100 cy of concrete?

Stay on top of what is delivered to your jobsite and match it with compliance confirmed submittals. If substitutions are made, often a very quick review can be performed to at least make sure that the product is allowable. The COR can then provide a tentative or verbal go

[5] *General Time Corp.*, ASBCA 22306, 80-1 BCA 14,393
[6] *Crown Coat Front Co. v. United States*, 154 Ct. Cl. 613, 292 F.2d 290 (1961)
[7] *Donald C. Hubbs, Inc.*, DOTBCA 2012, 90-1 BCA 22,379

ahead to the contractor until they get the submittal paperwork turned in. Follow up with the contractor to ensure that these submittal items are provided.

Examples of substitutions that have been seen onsite:

- Epoxy coated dowels instead of stainless steel dowels
- Epoxy Brand A Type A with Brand A Type B
- Adhesive Brand A with Brand B
- Concrete Mix A with Mix B
- Precast culverts constructed to ASTM C858 instead of C1433
- Gravel meeting specification gradation from Quarry A now provided from Quarry B

Additional information about submittals is contained in 22-Submittal Procedures.

15.3.B. Preparatory and Initial Phase Meetings

Review the contractor's QC Plan for their compliance confirmed list of definable features of work (DFOW). Each DFOW is required to have a preparatory phase meeting (documented on IBWC Form 162) and an initial phase meeting (documented on IBWC Form 166).

Maintain a list of all DFOW. Ensure that preparatory and initial phase meetings are held for each. Also note whether crews and/or management has changed requiring a new meeting to be held. Preparatory and initial phase meetings are held after each demobilization/remobilization for phased projects covering long periods of time.

While keeping track if the meetings have been held, also check that activity hazard analyses (AHA) have been provided. At a minimum, every DFOW shall have an AHA.

Additional information about submittals is contained in 17-Phased Inspection Concept.

15.3.C. Concrete Placements

Concrete requires extra attention because it can often be seen as economically wasteful to tear out and rebuild. After ensuring that all preplacement items have been addressed (e.g. submittals and IBWC Form 238), make sure that the following items are documented when placing concrete:

A. Record the time when truck arrives

B. Record the ambient temperature when the concrete placement begins and any significant weather changes throughout placement

C. Record time when placement (concrete discharge) begins and finishes

D. Note type of discharge/placement (chute, buckets, pumper, tremie, etc.)

E. Write down the batch ticket number of truck from which tests are taken

F. Write down if any water was added onsite and whether it exceeded the amount of water allowed

G. Write down how many cylinders were taken per truck and what size of mold was used

H. Record the concrete type or mix used

I. Write down all field test results

J. Record total volume of concrete ordered for day or structure

K. Record total volume of concrete placed for day or structure

L. Record number of trucks used

M. Record amount of concrete wasted for day

N. Document if any trucks had issues and what the issues were especially if trucks were rejected

O. Record the type of curing method applied and the quantity used

P. Record any issues with concrete spilled or washed out in areas other than washout location

Q. Explain items of note that occurred during placement

Don't just record this information and forget about it. One, transfer it to your daily report. Two, when official tests come in from lab, make sure the batch ticket number and the test results that you recorded match the official test report. If there are any variations, bring them up to the contractor as soon as possible in writing.

Track that the contractor has provided copies of all batch tickets, IBWC Form 238, Concrete Placement Cards, all IBWC Form 235, Concrete Test Results Summary, and that all test results have been provided. Verify that the final compressive strength tests for concrete placements met the specifications. If any tests show failing tests, discuss it with the COR and contractor immediately. Provide a written follow up any discussions either in an email or in your daily report.

15.3.C.1. Files

Store the concrete batch tickets under in the following directories:

Construction
xxx\10-Daily Reports\Materials
Design-Build
xxx\10-Daily Reports\Materials

Store the Form 235 under in the following directories:

Construction
xxx\09-Testing & Record Docs\Form 235-Concrete Test Results
Design-Build
xxx\09-Testing & Record Docs\Form 235-Concrete Test Results

Store the Form 238 under in the following directories:

Construction
xxx\06-Inspection Logs, Cure, D&O\Form 238-Concrete Placement
Design-Build
xxx\22-Inspection Logs, Cure, D&O\Form 238-Concrete Placement

Store the concrete test results under in the following directories although you may want to make subdirectories for structures or placements:

Construction

xxx\09-Testing & Record Docs\Concrete Test Results

Design-Build

xxx\09-Testing & Record Docs\Form 235-Concrete Test Results

15.3.D. Earthwork

Testing for subgrade and fill material is important to verify that the material meets the specifications prior to being covered by a structure/pavement or buried under the next lift. Pay special attention to the timing of compaction and density testing for subgrade and fill material when the specifications indicate these should be performed immediately prior to placement of the subsequent material. "Immediately prior to" may typically indicate no more than a day between compaction and placement of the next material lift or structure if the compaction of the underlying material can be maintained for that duration. If the weather conditions are such that significant moisture content or compaction of the underlying material could be lost over a day, then the compaction of the one material and placement of the next material should be performed on the same day. The timing will also depend on the types of material compacted and to be placed. For example, the moisture of the subgrade for levee embankment must be maintained until the levee material is placed in order to prevent the subgrade from drawing out moisture from the first lift of levee material. Sugar sand also loses its compaction quickly if its moisture is not maintained.

Additional testing is required for fill material to verify that the material proposed is in compliance both prior to use and to verify that the material continues to remain consistently in compliance throughout the fill operations. Prior to use, each type of material to be used as fill and each type of material type encountered within a borrow area should be tested for the soil classification, Atterberg limits, and proctor to determine its compliance. If the fill material is intended for a levee, additional testing is required for the hydrometer, crumb, pinhole, double hydrometer, and organic content (if applicable). It is extremely critical that levee clay material be nondispersive and meet all required testing; no variations shall be allowed for this material.

Once compliance confirmed, one way to start ensuring the material remains consistent is to verify that all engineered fill or levee embankment material has been delivered or hauled from the quarry or borrow location in the submittal. This, however, is not the only conclusive evidence of consistent fill material since soil within a quarry or borrow area can significantly differ or the material may have been blended prior to delivery. To continually ensure the fill material remains in compliance throughout the project, the initial tests performed shall be required to be retested at the frequency indicated in the specifications. It is critical the contractor perform testing at the specified frequencies and that testing results are made available as quickly as possible since fill operations may move quickly, and we want to avoid a significant amount of rework if material is found noncompliant several days after placement.

Make sure that the following items are documented during subgrade preparation and/or fill operations:

A. Record the total quantity and number of loads of material delivered and hauled away for day

B. Record the depth of lifts compacted

C. Record the depth of scarified subgrade

D. Record total volume of fill completed for the day and specify where it was placed (i.e. indicate levee, pipe, or road stationing, identify the number of lifts placed, or indicate the structure)

E. Record whether any material is blended onsite

F. Record any moisture control performed

G. Write down all field test results and the proctor soil type or ID used for testing

H. Document if there were any issues and what the issues were

I. Note when borrow sources change

J. Note when subgrade material type changes

K. Record when Form 241 being filled out

L. Keep a record on whether the testing technician is choosing "good" spots to test

M. Note and record if you see a change in material

N. Keep records if you feel the earthen material is drying funny or becoming friable

Similar to concrete placements, transfer this information to your daily report. When official tests come in from lab, make sure the locations indicated and the test results that you recorded match the official test report. If there are any variations, bring them up to the contractor immediately in writing.

There are various additional tests required when in place density testing is performed. Ensure that the following tests are taken when density testing occurs:

A. Track that the contractor has provided copies of all IBWC Form 237, Nuclear Gauge Results, IBWC Form 241, Nuclear Gauge Standard Count, IBWC Form 240, Nuclear Gauge Moisture Calibration, and that all test results have been provided.

B. Verify that the moisture tests taken by ASTM D6938 correlate with ASTM D2216 to ensure that nuclear testing procedures are within industry guidelines.

C. Verify that the correct proctor was used for the type of material tested.

D. If any tests failed, ensure those are retested if not done so on the same day.

E. If any failed tests remain uncorrected, discuss it with the COR and contractor immediately.

F. Provide a written follow up any discussions either in an email or in your daily report.

15.3.D.1. IBWC Form 241

Prior to use of any nuclear density gauge, IBWC Form 241, Nuclear Gauge Standard Count, shall be completed. This includes every time a nuclear density gauge will be used which may be daily. USIBWC will not accept test results from gauges that exceed the manufacturer's standard count error variation or from gauges where the error has not be calculated. Any gauge which fails the daily standard count verification may be retested up to four times. If the additional tests also fail, the gauge shall be removed from the jobsite.

IBWC Form 241 was created because testing laboratories were not performing their daily standard counts correctly. They were blindly taking the count and writing them down, but they were never calculating the error. All nuclear gauge manufacturers require the standard count before the equipment is deemed acceptable for use. Make sure that the laboratory technician is performing the standard counts and documenting them correctly. If the technician leaves the jobsite for several hours and then returns, they should run new standard counts since it is unknown what the gauge was subjected to when it was offsite.

The Inspector/CI shall ensure that standards counts are being taken and recorded on IBWC Form 241. As noted on IBWC Form 241, handwritten results are considered draft. The draft version should be provided with the contractor's daily report. Track to make sure that the final pdf version of the form is provided by the contractor.

15.3.D.2. Files

Store the Form 241 in the following directories:

Construction
xxx\09-Testing & Record Docs\Form 241-Standard Count
Design-Build
xxx\09-Testing & Record Docs\Form 241-Standard Count

15.3.D.3. IBWC Form 240

Laboratory moisture content (ASTM D2216) shall be obtained to verify the nuclear gauge reading for moisture taken by ASTM D6938. An ASTM D2216 correlation test shall be performed prior to using a nuclear gauge on any new material and one test shall be performed every 20 density/moisture tests performed by ASTM D6938 for each type of material. This means there may be several of these tests performed in a day. IBWC Form 240, Nuclear Gauge Moisture Calibration, shall be used for each ASTM D2216 correlation test performed.

Track and ensure that these tests are being performed and the Form 240 is being submitted. Form 240 requires that the laboratory test results be attached.

15.3.D.4. Files

Store the Form 240 in the following directories:

Construction

xxx\09-Testing & Record Docs\Form 240-Moisture Calibration

Design-Build

xxx\09-Testing & Record Docs\Form 240-Moisture Calibration

15.3.E. Daily Report

While there is a whole section about daily reports (16 Daily Reports), please note that they tie back to quality assurance. You should be able to pick up a test report for March 3, 2023 and your daily report for the same day and find the same information on both. Your daily report should additionally record everything that was ongoing on the project site that day. The progress section of your daily should clearly indicate what construction was complete and what was in-progress. A daily report takes significant time and effort to write correctly.

Situations like the following occur and highlight why all project documentation should be as clear and detailed as possible. The test report for March 3, 2023 is smudged making the station where the testing occurred difficult to read. You cannot tell if it is station 636+00 or 638+00. When you open your daily report for that day, you see that construction was completed through 635+00 and the contractor was building up the embankment from 637+25 through 638+50 on March 3. Now imagine that the daily report simply stated 5.2 miles of levee complete or work complete through 635+00; neither of these statements provide enough details to determine where the contractor was working on that day.

Another situation where daily reports tie directly in with testing is with a failed test. Maybe the earthwork passed densities, but failed a material property. You need to know exactly where the nonconforming material was placed to determine if it should be removed. In a failing concrete test, maybe the daily report offers additional details. The report may explain that the ice chest with cylinders was hit late in the day or maybe that the air content was high but the COR approved placement. Never forget that your daily report is a key component to quality assurance since it documents what occurs on the project.

15.4. Follow Up Paperwork

Mill certificates for most metalwork is not provided to the contractor until the items are delivered onsite. Keep track of project materials and ensure that the contractor submits the mill certificates for all metalwork.

Tests must be examined to ensure that they are covering both the correct test and material type as well as the correct frequency. Keep track of all tests performed by the contractor. Track both failing and passing tests. Make sure that the tests have a PE stamp matching the state where the work took place. Ensure that the minimum frequency detailed in the Contract requirements is being met and that the items are meeting the material requirements. If there are issues with the tests, let the COR and the contractor know immediately in writing.

At any point in the project, you should be able to state how many of Test A and how many of Test B have been performed. This is not something that you wait until the end of the project to perform.

15.5. Acceptance

FAR 46.502 states that the CO has the responsibility of accepting Contract work. In construction this acceptance is after substantial completion has been achieved. Payment for work with monthly pay estimates does not constitute acceptance of work by the Government.

15.6. Excerpt: Construction Inspection - A Field Guide to Practice

Construction Inspection

A FIELD GUIDE TO PRACTICE

Second Edition

James E. Clyde, P.E.

A Wiley-Interscience Publication
JOHN WILEY & SONS
New York • Chichester • Brisbane • Toronto • Singapore

Introduction

The Construction Inspector

As construction inspector, you are the owner's representative closest to the work. The owner must rely on you to see that he gets what he pays for. As the owner's eyes and ears, you must see that the requirements of the plans and specifications are carried out. You are not a resident engineer, although some resident engineers are their own inspectors, particularly on smaller, more complicated projects.

On routine, uncomplicated projects you will quite often work directly for the owner. On larger, more complicated projects there is usually a resident engineer and one or more inspectors. In such cases, you work under and report to the resident engineer. On projects under the control of architects, the inspector is usually called "Clerk of the Works," but your duties are the same regardless of title. When working under a resident engineer, you will be instructed as to what part of the work you are to inspect and as to which of the daily reports it will be your responsibility to complete. (Whenever the word engineer appears in this book, it can mean either engineer or architect, depending on who is in charge of the project.)

You must have a complete up-to-date copy of the plans and specifications with all addenda and changes and any detailed sketches the engineer may have provided for the contractor. ·

The necessary tools include pencil, pen, notebook, report forms, diary book, 6-foot rule, 100-foot steel tape, plumb bob, lumber crayons, flashlight, and any thermometers or gauges required for a particular project. A 4- or 6-inch mirror is handy for checking inaccessible corners.
As inspector, you must be fully familiar with and understand the plans and specifications and be able to compare the work with the requirements of the contract documents. You must make a daily, detailed record of all work as it progresses. You must be able to identify and reject any unsatisfactory work, keeping a written record of what was rejected and why. If you are not proficient in plan reading, take a course on the subject. Courses are available at many community colleges or by correspondence. Proficiency in plan reading is a must for the successful inspector.

On many projects, you will prepare and submit for payment the monthly estimate for work done to date, combining the work of the subcontractors with that of the general contractor for whom they are working. Some contracts require the contractor to compile and submit the monthly estimate, which you will check before forwarding it for payment. In either case, you must have fully detailed records of the work accomplished and preserve the calculations used to arrive at the quantity shown in the estimate. The calculations must be complete and in such form as to be easily understood and quickly checked by others.

As inspector, you must be honest and stable. You must be fair but firm, and you must possess good common sense. You must be in general good health and enjoy working out of doors. You must have a good working knowledge of arithmetic and be accurate in your calculations. A working knowledge of algebra and trigonometry is useful, and the ability to use a: calculator and a typewriter is time saving.

The inspector must avoid certain pitfalls. Some inspectors, particularly the older ones with many years of experience, sometimes get the urge to show the contractor's men what they believe to be a better or easier method. You must resist the urge to "supervise." With supervision goes responsibility for the job, and that is solely the contractor's prerogative. Suggestions are fine and should be offered if a better way is known. However, the contractor or his men must be advised that they are not obligated to take the suggestions. You cannot inspect the work you have supervised.

An inspector who tries to instruct a contractor on the way to do his job runs the risk of having the contractor present a claim that the inspector's method was more costly, but that it had to be followed.

Avoid the pitfall of poor and inadequate records. Your daily records must be complete, accurate, and readable. Make them up daily while the details are fresh in your mind. Most consulting engineers and architects have their own standard forms for the various reports they require. Complete such forms in detail each day. If a standard form is not provided, devise your own and use the same form each day. It is important that you make out the daily reports at the end of each day, or no later than the next morning. The importance of making out the reports while the details are fresh in your mind cannot be overstressed.

Some contractors have made extra money by submitting claims for extra work that the inspector could not confirm or deny owing to poor and inadequate records. By adhering to a policy of keeping full, complete, and readable records on all the work done, you can refute an unjustified claim by the very fact that you have no record of it. If the contractor knows that you keep full and accurate records, he will be less likely to submit an unjustified claim.

Your daily reports should record what was done, where on the project, the quantity of each item of work, the materials and equipment placed, the number of each classification of labor involved, and a list of the contractor's equipment that was on the project site but not used that particular day. The information should include the reason why the equipment was idle (being serviced or repaired, or not being required for that day's operation). If possible, the reports should be typewritten, and a copy should be kept of all records, reports, and correspondence. All records must be kept in a safe place.

Your daily report should show the weather with the high and low temperature, and it should note rain, snow, and other weather conditions. The report should also record all visits of the owner or his representatives and other official visitors, noting the time they were on the site, and any instructions or data they may have given you.

I have found it to be a good idea to keep a diary separate from the daily reports. The diary should be a condensed account of the day's activities, especially noting conferences with the contractor's personnel and any arguments about or criticism of the contractor's operations. A record of repeated problems with the contractor could indicate an uncooperative attitude, showing that the contractor was not trying to do a good job.

Extra work must be particularly well documented, and an agreement on the amount of extra work must be reached with the contractor while the details are fresh in everyone's mind. Except in an emergency, extra work should be authorized in advance by written agreement. Full and complete records are invaluable in case of a dispute with the contractor or in a court action.

It is most important that your relations with the contractor be proper. The relationship should be friendly, firm, and fair, and if they are, the contractor will usually respect you. As an inspector, accept no favors from the contractor. Do not let him pay for your lunch, coffee break, or a few gallons of gas for your car. Do not accept gifts, except possibly a nominal one at Christmas, in which case your superior should be advised and a written thank-you card sent to the contractor. Some contractors make a practice of trying to do favors for the inspector so that you will be obligated. Then the contractor will expect favors in return when work of a borderline quality is encountered.

As construction inspector, you must understand your authority and its limitations. This information is usually spelled out in the specifications, but if it is not, seek advice from your superior. Do not be rushed into a hasty decision. When a decision is required, study the problem, make a decision, and stick to it. If you do not know the answer, admit it. Do not bluff. A phony loses respect. If you do not know. the answer, ask for instructions from your supervisor. Try to anticipate when decisions will be needed, and if you need help, get it from your superior as quickly as possible.

The owner and his inspector have no legal contract with the subcontractor. Any criticism of the subcontractor's work must be taken up with the general contractor involved.

You must not give instructions to the workmen, but only to the foreman or superintendent. If, in the temporary absence of the foreman, you find a workman doing something wrong, you may stop him and inform the foreman as quickly as possible. If a major section of the work is stopped, issue a written stop order, detailing exactly what work is to be stopped and why. Inform the resident engineer and/or the owner immediately and submit copies of the stop order to them. Most consulting engineers and architects have a standard form for use in issuing stop orders. The specifications require that the contractor employ capable supervisors and skilled workmen on the project. You can insist that such personnel be employed.

No two contractors do the same work in exactly the same way. Most successful contractors have worked out methods of construction best adapted to the crews. Allow them to proceed by their own methods, as long as the final result is what the contract plans and specifications require. Most contractors want to do a good job. The uncooperative ones usually go broke. The contractor is in business to make money, and he should be allowed to do so, provided the finished product meets the requirements of the contract documents--in other words, provided the owner gets what he is paying for. Honest cooperation between the inspector and the contractor will usually ensure quality work.

As inspector, you are not responsible for safety on the project-that is the contractor's responsibility. However, be alert to notice unsafe conditions and report them to the contractor. Record such instances in your diary. Do not tell the contractor what to do to correct an unsafe

condition or agree with him that his efforts to correct the situation seem to be okay. Make no comment on safety, except to point out what you consider an unsafe condition. Never give a contractor written advice or instructions on safety.

Part of your responsibility as inspector is to see that the required permits are obtained and displayed. Wage rates and other government mandated notices must be displayed in a prominent place.

Keep a record of any delays experienced by the contractor, with information as to what caused them. Sometimes the delays are beyond the contractor's control, and he may be entitled to an extension of the contract and/or extra payment.

Progress photographs are desirable if you are skilled in the use of a camera. Record all photographs, giving the date, time of day, what is shown, and the angle or direction from which the photos were taken. In areas in which the original condition of the site must be restored, the photographs are useful in overcoming arguments as to the exact original condition.

It is your duty to see that all materials and permanent equipment arriving on the project site meet the requirements of the specifications. It is now the usual custom to have tests and analyses of aggregate, concrete, steel, water, and such items done by commercial laboratories whose personnel come to the jobsite, obtain and handle the samples, take them to the laboratory, and conduct their analyses, submitting a written report. Mill or manufacturer's certificates may be obtained on cement, steel, pipe, and such items. Equipment manufacturers usually supply a written analysis on the operations and efficiency of their equipment. Save these papers and turn them over to the plant operator. You should see that all the test reports and analyses are received and recorded prior to the incorporation of the material into the work.

There are some items on which you should have a general knowledge so that you can inspect them as they are delivered to the jobsite. Dirty or poorly graded stone or gravel, poorly graded lumber, and bent or dirty reinforcing bars are examples of some of the items that can be quickly inspected and rejected before they are unloaded. Numerous books and pamphlets are available at public libraries on construction materials, and some community colleges have evening courses on material. Delays are costly .. to the contractor. Try to anticipate the contractor's needs and do what you can to keep operations running smoothly.

Some of the ways in which you can be of help are the following:

1. See that all work is properly staked out well in advance of the work.

2. See that tests are conducted and reported promptly.

3. When more than one prime contractor is on the project, endeavor to obtain cooperation among them, bringing pressure to bear on anyone who is delaying the others by not keeping up to his part of the schedule.

4. With multiple prime contractors, require a weekly conference to be attended by a responsible representative of each contractor. Prepare written agenda in advance and

mail to each contractor several days before the meeting. Such meetings should be short and businesslike.

5. Try to get all monthly estimates paid promptly to help the contractor's cash flow.

You should have a short (10 to 15 minutes) conference with each prime contractor each morning to keep informed about the major activities of the day.

As stated before, most contractors want to do a good job. However, there are some who make a practice of cheating wherever they can. If you are so unfortunate as to be working with such a contractor, you will have problems and must be extra careful. Such situations call for diplomacy on your part. You must not allow the contractor to intimidate you or to ignore your instructions. You must be sure your instructions are proper and understandable, and if the contractor ignores them and does unacceptable work, you must instruct him in writing to stop the work and remove it. You should inform the contractor that the unacceptable work will not be included in the monthly estimate or paid for, nor will satisfactory work placed on top of unsatisfactory work be paid for. Copies of such written instructions should be immediately submitted to the resident engineer and/or owner.

Set a policy early on the project to issue as few instructions as possible. When instructions are issued, they must be justified, correct, and easily understood. If you establish such a policy early on the project, you will have a much easier time controlling the work. Establish the fact that you are going to be firm but fair.

You must resist the urge to retaliate against an unruly contractor by being unnecessarily tight on inspections. Avoid clashes of personalities. Your only concern is the quality of finished work. If the work is acceptable under the terms of the contract, accept it. Do not require quality higher than that indicated in the specifications or on the plans.
Sometimes a contractor who has had many years of experience will suggest that he be permitted to construct certain portions of the work in a manner different from that indicated by the plans and specifications. Take up such matters with the designer. Even though you may be skilled on the subject, you must not decide on changes in design-that is the design engineers responsibility.

You must have appropriate clothing, including a hard hat, to allow you to inspect all portions of the work, regardless of the weather.

When work is in progress, you must be there.

You must have sufficient time to inspect the work to which you have been assigned. If you feel that you cannot do a proper job because of overload, inform your superior in writing of the facts. Do not neglect this because inspectors have been held legally responsible for inferior work accomplished under their inspection. If you have informed your superior in writing. that you are overworked, you stand a much better chance of not being. held responsible in case of a problem.

3.31 Complaints

Complaints by the public are certain to arise to some extent. Some will be justified and some will not. As part of your public relations function and to protect the owner from criticism, you must investigate all complaints. When a complaint is justified, an attempt must be made promptly to have the problem corrected or eliminated. Take up such problems with the contractor at the daily conference, and make an inquiry at the next conference as to the status of the problem. If no action has been taken, urge the contractor to act at once, pointing out to him that the complaint is justified and that good public relations requires action. If there are still no results, subtly put pressure on the contractor to get the correction made. (See contractor Relations.)

Sometimes the complaint is about a condition that is the result of the contractor's operations and cannot be eliminated until that part of the operation is completed, such as a certain amount of dust and mud, noise of equipment, or the temporary storage of materials. Under such circumstances, try to convince the complainant that although there is a temporary inconvenience, the completed project will be a benefit to the area. A forewarning to the people in the area can help under such circumstances.

Some complaints are totally unjustified; some people just like to complain. Under such conditions, be as diplomatic as possible and try to calm the complainers by telling them the problems will be over in a short while as the work progresses.

3.43 contractor Relations

One of the most important problems facing an inspector, especially a young one, is his relations with the contractor. Such relations must be firm but friendly. You must immediately establish the fact that you mean business, that you will be as friendly as possible but that you expect first-class work done in accordance with the requirements of the contract documents. Inspector-contractor relations are well summed up in articles shown under Appendix I and II. One is a paper issued to me many years ago when I was a resident engineer for the Concrete-Steel Bridge Co. and three articles that have appeared in *Civil Engineering Magazine.*

Appendix I

The following three articles are reprinted by permission of Civil Engineering magazine. They are directed to the construction engineer but concern the construction inspector as well.

"The Engineer-contractor Relationship"
By Herbert R. Falk, Assistant Civil Engineer, NYC, DPW (1958).
From Civil Engineering, June 1958

One of the most difficult problems the field engineer has to face is his personal relation with the contractor when he is the engineer-in-charge of a project. It is very hard to strike just the right note in personal relations. Some men are born with this "knack of leadership." They never have to argue. They never raise their voices. They say "do this," and it is done. They command the respect of their associates and run a job well. Conversely, some engineers do not have this knack and never learn it. They find it very hard to get contractors to obey instructions. They are either too easy going or too rigid. The result is constant bickering and lack of harmony. The job and the owner suffer.

Just what should be the attitude of the engineer toward the contractor? How can a balanced, harmonious relationship be attained? And maintained?

There are no hard and fast rules. Individuals vary, as do jobs and con- tractors. The contractor is in business to make money. The engineers task . is to see that the job gets done and done right. These different viewpoints are not necessarily incompatible.

It is well to realize, and to convince the contractor, that all job forces are on the same team. The owner wants the best job he is entitled to, at the earliest practical time. The engineer and the inspectors are there to get this job for the owner. But the engineer is also an arbiter and must resist any pressure on the contractor to do more than the contract calls for or to do extra work without fair compensation. You will find that most contractors want to build and maintain a reputation for good work.

In the interest of better engineer-contractor relations and to help young engineers just starting in the profession develop leadership, the following six points are offered for consideration.

1. Be firm. Once you have made up your mind, stick to it. Let's assume that you have thoroughly thought out a certain situation and have made a decision. You tell the contractor that something must be done in a certain manner. He starts raising the roof. Don't let him scare you. Nine times out of ten he is screaming for effect-or just to see how serious you really are. If you let his noise bother you, or change your mind, you are in for a lot of the same treatment every time. Make sure you're right. If you think you are-stick to it. But if sometime you really are wrong, be man enough to admit it and correct your error. You will not lose standing by being fair.

2. Don't let anybody rush you. Many times you may be asked for a quick decision. Don't be hurried. It's best to take the situation back to the office with you and think it over in all its ramifications. You can be sure that the other fellow has thought it over. Ask yourself if this change or decision you have made affects only what you are doing now, or will affect something else later. Remember that you are setting a precedent.

Nothing looks quite so bad as changing your mind once you realize the full implications of your snap decision. You can't tell the contractor one thing one day and another thing the next.

3. Be fair. Many young engineers and others have a tendency to apply specifications too rigidly. They "go by the book." Even when they are shown an equal or better solution to a problem, they insist on following the specifications to the letter. In situations like that, common sense is your best friend. Your judgment will tell you when your contractor is honestly trying to do a good job. Remember many contractors have been around a good many years and have had a lot of experience. It pays to listen. There will be lots of times when you will be glad you did.

4. Don't be overfriendly. Most contractors try to cultivate the engineer. They are very eager to please him and become good friends. Starting with coffee breaks, you will go to lunch and have a drink, and before you know it you will wind up by being very, very chummy. You'll be on a first-name basis. Soon you'll start thinking that the contractor is a fairly good job. The truth of the matter is that he probably is a very pleasant fellow.

Now you are in something of a predicament. Because, when the situation comes up-and it surely must-it's awfully hard to tell one of your "friends" to do something you know very well he isn't going to like doing. You are going to be thrown together a lot during the course of your project. And no one wants to be stiff and unfriendly. A pleasant, courteous attitude with a modicum of reserve will help maintain an easy businesslike relationship. Keep your friends for your personal life.

5. Think ahead. It is taken for granted that the engineer is thoroughly familiar with what is happening on his project every day. But how about what's going to happen tomorrow? Try to anticipate tomorrow's trouble today. Look ahead. If you spot any trouble, talk it over with the contractor. Your foresight will probably save both the owner and the contractor money.

6. Be a diplomat. A soft answer gets better results than loud talk. Ask or request rather than order. Grease the wheels a little. An engineer acts somewhat as a broker in that he tries to bring both parties, owner and contractor, together in harmony, the end result being a job well done.

For better or for worse you are stuck with your contractor for the duration. It's a delicate situation at best. But with common sense and a good engineer- contractor relationship, your owner will get a good job, your contractor will do all right, and you will increase your stature in your chosen profession.

Appendix III

What kind of a person is the construction inspector? Is he a special breed? Some say the inspector is born, not made.

I believe any technically oriented person who is honest with himself and others and who finds satisfaction in creating things can be trained to become a good inspector. He must accept the fact that to be truly successful he must be as Caesar's wife, "above reproach."

No honest person can accept favors, however small, from a contractor on one day and rule against him the next and keep his conscience clear for very long.

Over the years some contractors have offered me expensive gifts and favors, all of which I rejected promptly. Later most of these contractors submitted large claims for extra work or requested the relaxing of parts of the specifications. Each case was considered on its merits and if deemed unjustified, was rejected with no fear of claims of past favors.

Articles appear from time to time on scandals and payoffs in the construction field. As in all businesses and professions, there are some undesirables who cheat and exchange favors with the contractors to make a fast buck. Sooner or later, they are exposed and their careers ruined. Don't let it worry you. Keep your own nose clean, and you won't have problems.

A good, conscientious inspector can build a reputation for himself that will lead to a satisfying and rewarding career. He may choose to remain an inspector, going on to bigger projects with greater responsibilities. He may, if qualified, become a resident engineer for one of the large consulting firms. He may choose to switch to the contracting side of the field. A few years as a construction inspector is a good basis for a construction supervisor, which in turn can lead to one's own contracting firm. The graduate engineer with a few years as an inspector will become a better design engineer.

The construction business, like many others, is subject to "peaks and valleys"-either too much work or not enough to keep everybody busy. During slack times, it is usually the younger, newer inspector who is subject to layoff. However, this is not always ·the case. Quality inspection is a vital part of the engineering business. The inspector most likely to be kept employed, regardless of age or length of service, is one whose projects run smoothly, who is energetic, and who submits complete, detailed, easy-to- read reports promptly. Be concerned about the quality and progress on your projects and put in the time required to attain them. If you are a "nine to five" person I recommend that you do not try to become a construction inspector.

16 Daily Reports

16.1. Government Inspection Reports

The Construction Inspector's Daily Report is a very important part of the Inspector's job. As the primary record of day to day construction activities, the report provides a formal record of Contract information. Particular care is to be taken to record and preserve all possible data and exhibits with respect to any matter which may become the basis for a claim (finding of fact). The report is to be complete, legible and carefully prepared; this record may be used at a later date to determine the particulars of a situation or event. Report only facts and observations.

In no instance should two daily reports read the same when work is being performed. No two days on a construction site are the same so therefore the reports must vary. Reading many past daily reports shows that the level of detail and observation are not present. Many times you cannot determine when the contractor began working on a specific structure or moved from one portion of the job to another. This is unacceptable.

There should be a report for every day of the Contract. If the contractor does not work on a certain day, the report should read "No construction work performed by contractor today." Sometimes the contractor may be repairing equipment, etc., on a weekend or holiday; if so, then note such on the report. The report is to be written the same day that work is performed whenever possible, but no later than 24 hours later. Carrying a small memo notebook during the day for noting information is a useful tool for providing a complete report.

Daily reports should be detailed. Except for rare instances, daily reports are not short. They take time to write correctly. Detail all facts and occurrences for each day of the Contract. Keep emotion out of your writing but ensure that you detail behavior issues with personnel, landowners, and other contractors. Remember that your daily report will be kept with the construction file as a legal record of construction.

IBWC Form 145, Construction Inspector's Report, is used by Government personnel to detail construction activities. IBWC Form 145A, Construction Inspector's Report, is used by contracted construction management services personnel (CI) to detail daily construction activities.

CORs are expected to read all daily reports.

16.1.A. General Items

Use names instead of titles to describe items. The CO or PM may change many times over the project. Someone should not have to go back through other files to determine which person is being referenced. Using just a first name is acceptable when no one else on the job shares that name.

Specify dates instead of days of the week or cite both. Instead of stating work completed last Monday, say work was completed last Monday (2/3).

16.1.B. Weather

Whenever the weather impacts working conditions, it should be noted by the Inspector/CI. Also record the high and low temperatures for that day. The Inspector/CI will need to install a thermometer that records daily highs and lows for an accurate record. If the contractor has not placed a rain gage onsite, the Inspector/CI should install their own. Temperatures and rainfall amounts are important for determining the amount of care that needs to be handled in placing and curing concrete as well as ensuring that earthen materials can be readily used when the shift comes on in the morning.

If the contractor shuts down due to weather note what time they ceased work, why they had to cease work, as well as what type of work was being performed before shutdown.

16.1.C. Equipment

When the contractor is using many pieces of equipment, listing the equipment is acceptable, but lists must include where the equipment is being used, what it is being used for, and whether it was used all day. Always note when equipment is being stored or idle as well as equipment deliveries and demobilizations. Whenever a piece of equipment is used for less than a full day, note the total hours it was used. Identify if the equipment is provided by the contractor or one of the subcontractors.

Providing more detail is always preferred. Instead of a list, writing about the equipment and how it was used provides greater detail and insight into construction. For example:

> *The loader (Kawasaki WA-450) was used to process borrow material in the pit for future use on other jobs. The material was considered too wet and therefore was being spread out to dry.*
>
> *The water truck, Ford F-8000 with a 2,000 gallon capacity, hauled and applied water for dust abatement and construction use to pit, site #1, site #2, and site #3 jobsites. A total of 10 loads (20,000 gallons) of water were used during today's operations. A 4-inch Gorman-Rupp load pump was used to load the water from the metered source.*
>
> *Other vehicles used today include a 1 ton Ford flatbed truck (Superintendent's) and a 1 ton utility truck.*

or:

> *Three single axle dumps were used to haul riprap to the El Guique Dam Site. The proper truck turning and flagmen signs were installed on NM68 and NM582. The Kawasaki 95ZII worked processing riprap and loading the dump trucks until it lost its rear pin (articulating pin?) at 11:30. While it was determined if there was other work that the dumps could perform, the operators performed maintenance on their trucks and then ate lunch. At*

13:00, Fred sent all everyone home except for Ray Goodnight (loader operator). Ray needed to wait until the mechanic arrived to help him fix the loader. Smith Trucking's mechanic arrived from Albuquerque at 14:20 and began fixing the loader. The loader was able to work for 1.5 hours processing riprap after it was repaired.

Using conversational paragraphs to describe the equipment provides the reader with a picture of what was accomplished on the jobsite that day with the equipment. If someone picks up this report years later and reads it, they get a very good idea of what was going on.

A detailed list is acceptable as long as all information is included. The list below is acceptable as long as no subcontractor equipment is being used onsite. Otherwise identify who owns what pieces of equipment.

Komatsu D65WX Dozer	*Borrow Pit F - Excavate and process*
Komatsu D61PX Dozer	*54+00 to 57+00 - Bench excavation*
CAT D6K (GPS) (#1)	*39+00 to 54+00 - Place clay & subgrade prep*
CAT D6K (GPS) (#2)	*Not used*
CAT D6N (GPS)	*30+00 to 33+00 - Remove slope overbuild and finish*
Komatsu PC360LC Excavator (#1)	*Borrow Pit F - Excavate, process, & load trucks*
CAT 140M Blade (GPS)	*Not used - waiting on mechanic to fix hydraulics*
CAT 120M Blade	*54+00 to 57+00 - Bench excavation*
CAT 615C CAT Scraper (#1)	*60+00 to 65+00 - Bench excavation with haul to Borrow Pit G*
CAT 615C CAT Scraper (#2)	*60+00 to 65+00 - Bench excavation with haul to Borrow Pit G*
HAMM 3410 Sheep Foot Roller (#1)	*Not used*
HAMM 3410 Sheep Foot Roller (#2)	*39+00 to 54+00 - Place clay & subgrade prep*
HAMM 3410 Smooth Drum Roller (#1)	*39+00 to 54+00 - Place clay & subgrade prep*
HAMM 3410 Smooth Drum Roller (#2)	*39+00 to 54+00 - Place clay & subgrade prep*

Your project may benefit from a combination of both a list and a narrative of the equipment being used.

a. Poor Examples

Here is an equipment list that was provided on a Saturday report when no work was performed:

4 Blade CAT 140 H; Grading, dressing, processing and ripping.
1 Blade Deere 770 D; Grading, dressing, processing and ripping.

1 CAT 631D Water Wagon; Haul water for Dust Control and embankment processing.
1 CAT 615 Water Wagon; Haul water for Dust Control and embankment processing.
2 Deere 762B Water Wagon; Haul water for Dust Control and embankment processing.
1 Deere 613C Water Wagon; Haul water for Dust Control and embankment processing.
1 Water Truck; Haul water for Dust Control and embankment processing.
3 CAT 623F Scrapers; Levee Construction
2 CAT 623G Scrapers; Levee Construction
1 Dynapac Smooth Drum Roller; Compaction of flex base
2 Dynapac CA 260 Sheepsfoot Roller; Compaction of subgrade and embankment
1 Ditch Witch 3701 Trencher; Silt fence installation
1 Deere 744J Loader; Miscellaneous jobs including placement of toe drain rock.
1 Deere 744H Loader; Miscellaneous jobs including placement of toe drain rock.
1 Deere 544 Loader; Miscellaneous jobs including placement of toe drain rock.
1 CAT 966H Loader; Miscellaneous jobs including placement of toe drain rock.
1 Hitachi 300 Excavator; Mining and loading embankment material at clay pits.
1 CAT 345 Excavator; Mining and loading embankment material at clay pits.
1 Cat D6 Dozer; Misc jobs including cutting benches and spreading topsoil & clay
1 Deere 450J Dozer; Pulling seed imprinter
1 834 Cat Rubber Tire Dozer(the Beast); Filling in Borrow Pits only, not on project site
28 Semi-Trucks w/Belly Dumps; Clay Haul
1 Deere Farm Tractor w/disc; Embankment processing
2 Power Brooms; public road maintenance
1 Deere 120C Excavator; Toe drain trench and land side grubbing
1 Komatsu 128 Excavator; Toe drain trench and land side grubbing
1 Seed Imprinter; Seeding

This equipment list, even if work had been going on, does not provide any information about where the work was being performed. It is also apparent since the list was provided in a Saturday report, that it is just stuck in the report with no real thought and may not be updated daily.

Here is another equipment item which definitely does not meet the necessary requirements:

Equipment listed on the contractor's Daily Report confirmed.

It is unclear why any inspector not create their own list and detail what the equipment was used for. In no instance shall a COR or CO accept a daily report that refers the reader to the contractor's report. The inspector's report is an independent document that must stand alone in its content; it cannot rely on another report.

16.1.D. Personnel

The daily report shall not list the names of key project personnel on every report. For personnel normally on the jobsite, list days that they are offsite. For others, list them whenever they show up. For example, the CQC should be onsite all of the time. Therefore list when they have left. Note who the acting person is in their place.

Note sizes and types of work crews. Be sure to include contractor and all subcontractors. Don't simply state five people, but explain what they are doing, especially if the project is broken out into different worksites. For example: Meridian 6-laborers and 2-equipment operators all working within canal, D"Ambra 10-tieing rebar, Acme 1-surveyor and 1-rodman recording last week's construction.

16.1.E. Progress

Work performed each day, giving location, description, quantity, and by whom completed (prime, sub, etc.). Note specific items worked on, model number, location, and quantity installed each day. For buildings and other projects with many different items being installed be sure to provide details about exact areas of work, etc. When building levees, progress should be indicated by station number.

Detail the construction progress, both accepted/tested as well as ongoing. Progress should indicate where the contractor is currently working and to what station the work has been verified through QC testing. If an official inspection is customary prior to billing or proceeding with the work, then indicate what items have been cleared via inspection.

List deficiencies noted along with corrective action. Identify items added or deleted from the punch list.

Record the quantity and type of materials received at the site. Document loads of concrete, riprap, clay, water, etc. used each day. For other deliveries, include manufacturer and model number. Whenever possible split these load quantities up by site or structure.

16.1.F. Verbal Communication with Contractor

Write specifics about any conversations. Include the background and reasoning behind issues or decisions. Always note if the CO or COR provide guidance for the CI or the contractor, but use their names in the report instead of their titles. Often the verbal communications with the contractor will overlap with other areas of your daily report. The conversation is often the supporting data for these other areas.

Samples of conversations with contractors are shown below. These are from old daily reports and show how conversations can be detailed to provide valuable data of record.

> *At 13:00 Noris and I met with Zeke to discuss the need of the 1 ton utility truck. None of the inspectors had ever seen it being used at the borrow pit. Zeke said that the truck was used to store the first aide stretcher and to tow/place the water pump every morning and evening. Noris inquired if Zeke's flatbed truck could be used to tow and place the water pump. Zeke said that it could, but with the flatbed truck, a ground guide was needed to properly back the water pump trailer. Zeke figured that we would not want two people performing that operation. Since Kenneth Cordova was already there with Zeke when the water pump was setup and broken down, Noris stated that using one person as a ground guide should not be difficult. Noris also stated that USIBWC could see no benefit of having the utility truck onsite, and therefore, we would stop paying for it starting 2/16/00. ACME was welcome to continue using the vehicle, but USIBWC would not pay for it. Zeke said that removing the truck would not be a problem. It would just take a little more time each morning to setup. Zeke also stated that he would move the first aide items from the utility truck to his flatbed.*

or:

> *Zeke asked me about USIBWC safety procedures for having a superintendent onsite and/or having an available vehicle onsite in case of emergencies. I informed him that while we did not like to leave operators unattended, but that there was nothing against it in USIBWC safety policy. Jim Wilson suggested that Zeke follow his company's policy for leaving operators unattended. Both Jim and I felt that this was an attempt by ACME to justify getting the utility truck back on the payroll. AMC attempted for almost 2 hours to reach Zeke to request the water truck. I reached Zeke at 15:00 and Kenneth was just leaving with the water truck to go to AMC. Zeke had finally received word just before I arrived at the borrow site.*

or:

> *Fred was told to make sure that all oil and fluid spills were cleaned up and the material disposed of. Fred was also notified that losing the rear pin was not routine maintenance and, therefore, USIBWC would not pay for that downtime (operator included). Since the dumps were dependent upon the loader, they too would not be paid. Fred was told that everyone could start work earlier on Tuesday to help make up for lost time. He was also reminded that no one was authorized to work beyond 40 hours in a week.*
> *or:*
> *Noris informed me that ACME has an agreement with Mel Madina at the Adobe Factory to provide a dozer and an operator. At 10:30, I asked Zeke to make arrangements for getting the haul road to the borrow pit graded. Zeke agreed to notify Tom McCarl prior to the dozer beginning work.*

At this time, Zeke also brought up a concern with Smith Trucking's haul trucks. He stated that on several occasions the tailgate of the haul trucks were not properly secured and when they were loaded with soil, the gates opened. This caused the drivers to dump that load, shut the gate completely, and get reloaded. This is a valid safety and operating concern.

After discussion with Fred Espinoza (Smith Trucking), it was agreed that the water truck was NOT to water down the El Guique dam site unless Fred calls Zeke and asks for water. Excessive watering of that site has made it difficult for the haul trucks to exit the site. Zeke was notified of this decision at 13:00.

Conversations through an eight or 10 hour work day are never "none" or a simple sentence. The Inspector and the contractor interact throughout the day. They identify problems and incorporate solutions. Whenever possible, provide as much detail as possible. Daily inspection reports are the first item looked at in a claim or a legal challenge. If one person's report states "We performed X after talking with Y." and another person's report details the basics of the conversation and the reasoning behind any decision made, the more detailed report will be taken more seriously.

16.1.G. Testing Performed

Record all pertinent data about the testing performed on the jobsite that day. Do not simply state five tests performed and all passed. State which tests which performed and where. List all testing results. Use this record to follow up to ensure that official test results received match what was recorded onsite.

16.1.H. Has Anything Developed Which Might Lead to a Change Order or Finding of Fact?

Specifically note any conflicts found between drawings and specifications or any site conditions that differ from Contract documents. Also note any newly discovered site conditions that may cause variations in the Contract. Just because something is placed in this section does not mean that the Contract will automatically be changed. This just brings an important item to everyone's attention easily.

List and explain items that need to be changed or added to record drawings. Be specific to drawing number and change required. Identify whether it was something brought up before the item was constructed or if it was something noted after the fact.

16.1.I. Safety

Describe any safety violations, safety meetings, and general concerns. Explain safety evaluations stating what was checked, results, and instructions or corrective actions taken by the contractor. List any equipment that was inspected or broke down on the job. Make sure to include observations of the haul route and any offsite project locations.

Specifically state "no safety violations were noted" instead of "none noted." "N/A" is never acceptable in this section.

16.1.J. Subcontractors

If crew and equipment information for subcontractors is listed in sections above, it does not need to be repeated here. However, all subcontractors onsite each workday shall be noted.

16.1.K. Remarks

Add any other items of note during the day that did not fit into any other category. Include details of any site visitors including time onsite and time leaving.

Do NOT list all Contract personnel; e.g. COR, contractor, project manager, project superintendent, CQC, SSHO, foreman, testing technician. The Contract personnel are known and can be found in other areas. The Daily Report is to be used for items that came up that day onsite. Only list these people if daily events include them. Or list people that are not onsite when they normally are. For example note that the SSHO is offsite and the alternate SSHO is providing coverage.

16.1.L. Photos

Include photos of compliant and noncompliant work that occurred that day as well as any safety issues or other items of concern. Be sure to detail the photo with where it was taken, what is in the photograph, and all other data that is required per IBWC Form 148.

16.1.M. Signature and Date

By signing the form you are attesting that you have written this report. Date the report for the day that you signed it.

16.1.N. Files

Store the completed daily reports in the following directories:

Construction
xxx\10-Daily Reports\IBWC
Design-Build
xxx\10-Daily Reports\IBWC

16.2. Government Inspector's Diary

While a project diary is not required, some inspectors keep copious notes in a journal or diary throughout the day. They then refer back to this diary to write up their daily report. If the inspector chooses to use a diary, whether formal or informal, is shall be considered project documentation and shall be retained similarly to Inspector's Daily Reports.

If keeping a diary, follow these rules:

A. Title the book with the project name and Contract number.

B. Write your name near the title as Inspector and author.

C. Always date each page. If a page contains information from two different project days, ensure that there is a line or other obvious separation between the two dates.

D. Never tear pages from the book. A page or item can be voided by crossing it out and writing "void" across it.

E. When the book is filled or the project finished, sign and date the last page.

F. If more than one book is used on the project, number the books sequentially.

More formal dairies shall have every page signed and dated while project notebooks are usually less formal and are usually only signed at the end.

Besides the information required on the daily reports, other items of interest in the project should be kept in the diary. Include trips that you made through the day to different parts of the project, note telephone calls, list photographs taken and their description, annotate survey shots that you took or observed. Make note of the times when concrete trucks showed up onsite, etc.

16.3. Contractor's Daily Reports

The contractor shall assure quality control of their operations by inspecting their own work and providing a Daily Construction Quality Control Report (IBWC Form 163) to the Government. Usually this report shall be provided to the Government by noon of the following day (the Contract may dictate different requirements so double check). The contractor is required to complete each and every space or blank on the report with pertinent information related to the contractor's operations. If no information is available, the contractor shall indicate so on the report and the report shall read "none." Reports with items left blank will be returned to the contractor by the Government as incomplete. The contractor's authorized representative shall sign each and every report.

The contractors provide their daily report in pdf format. The daily report is still required to have a signature. The signature can be a scan of the physically signed sheet or can contain an electronic signature.

The contractor shall attach field tests, preparatory phase meetings, initial phase meetings, geotechnical testing data, environmental monitoring, SWPP inspections, safety meetings, etc. to their daily reports as separate pdf files.

The Inspector/CI shall review each report for accuracy and shall coordinate any additions or corrections to the report with the contractor's authorized representative. The Inspector/CI will not mark on any portion of the Daily Construction Quality Control Report. Corrections or additions shall only be made by the contractor.

When a CM Inspector (CI) is used, it is the best practice to have the Construction Contractor provide their daily reports to the CM at the same time that they are provided to the COR. In some instances, the COR may decide to have the Construction Contractor provide their daily report to the COR only. In this instance, the COR can compare data provided between the Inspector/CI and the contractor via their daily reports.

Regardless of how the daily reports are provided, they shall be copied to the Contract folder on the W: drive without delay. Posting them on the W: drive makes them available to the CO.

The COR needs to read the daily reports. Compare what is being stated in the daily reports with items discussed in the weekly coordination meetings. Ensure that what is being seen in the field

during site visits matches the daily reports. Note items of concern in the daily reports and follow up on these items.

16.3.A. Files

Store the daily reports, equipment inspections, and material deliveries in the following directories:

Construction
xxx\10-Daily Reports
Design-Build
xxx\10-Daily Reports

Store all test results in the following directories:

Construction
xxx\09-Testing & Record Docs
Design-Build
xxx\09-Testing & Record Docs

17 Phased Inspection Concept

17.1. Preparatory Inspection

The Preparatory Inspection is important to ensure that quality is controlled. The purpose of the inspection is to assure that quality control and production staff (including subcontract staff) have a clear understanding of the Contract for each phase of work. The preparatory inspection is performed to assure that materials incorporated into the work comply with the Contract and comments on the submittals, that preceding work is satisfactory, that methods of installation comply with the Contract requirements, that Contract labor provisions are complied with, that all work restrictions are known, that site conditions are known, and that accident preventing preplanning is suitable for the operation.

17.1.A. Conducting the Preparatory Phase Meeting

In order to guarantee that quality is controlled, the a Preparatory Phase Meeting will be attended by the prime contractor's superintendent, subcontractor's foreman (the person who will direct the operation in the field), and the Inspector/CI. The Preparatory Inspection will be held at the construction site so that materials, equipment, and site conditions can be reviewed and so that Contract requirements, material approvals, equipment approvals, testing procedures, inspection procedures, labor provisions, and accident prevention preplanning can be reviewed and accepted by all attendees.

The CQC shall conduct the inspection and shall advise the Inspector/CI at least 24 hours in advance of the inspection. A Preparatory Phase Meeting for a particular phase of work will be conducted again if a change in field supervision or work force is made. A Preparatory Phase Meeting shall be conducted for each phase of work. No work shall be allowed to commence for any phase of work until a Preparatory Phase Meeting is conducted and accepted.

It is the Inspector/CI's responsibility to ensure that all Preparatory Phase Meetings are conducted in a timely manner and that all Activity Hazard Analyses associated with each major phase of work are fully addressed, with special emphasis on safety.

Even though some of the analysis seems repetitive, they must still be completely identified and addressed for each Preparatory Inspection to affirm that the individuals performing the work are fully aware of the hazards and control measures.

The contractor shall complete the Record of Preparatory Phase Meeting (IBWC Form 162). All completed inspections shall be attached to the contractor's daily report.

17.1.B. Files

Store the completed Form 162 in the following directories:

Construction

xxx\06-Inspection Logs, Cure, D&O\Form 162-Preparatories

Design-Build
xxx\22-Inspection Logs, Cure, D&O\Form 162-Preparatories

17.2. Initial Inspection

The Initial Phase Meeting shall be accomplished at the beginning of a definable feature of work. This inspection is meant to reinforce the Preparatory Phase Meeting and ensure that the preliminary work is in compliance with Contract. As always, check safety to include compliance with and upgrading of the Safety Plan/Accident Prevention Plan and Activity Hazard Analysis. The contractor shall review the Activity Hazard Analysis with each worker.

The Government shall be notified at least 24 hours in advance of beginning the Initial Phase Meeting. Separate minutes of this inspection shall be prepared by the CQC and attached to the Daily QC Report. Exact location of Initial Phase Meeting shall be indicated for future reference and comparison with follow-up phases.

The Initial Phase Meeting shall be prepared for each new crew to work onsite or at any time specified quality standards are not being met or are unacceptable.

The contractor shall complete the Record of Initial Phase Meeting (IBWC Form 166). All completed inspections shall be attached to the contractor's daily report.

17.2.A. Files

Store the completed Form 166 in the following directories:

Construction
xxx\06-Inspection Logs, Cure, D&O\Form 166-Initial Insp

Design-Build
xxx\22-Inspection Logs, Cure, D&O\Form 166-Initial Insp

17.3. Follow-up Inspections

Follow up inspections shall be conducted daily by the QC Systems Manager to warrant that material, equipment and workmanship continue to be acceptable. Dimensions, temperatures, and other specified criteria shall be measured using appropriate measuring devices.

18 Construction Schedule

Pursuant to USIBWC Contract clause Construction Program, the contractor shall submit a schedule of construction in accordance with the Contract specifications/SOW. The schedule shall account for all planned work, seasonal weather conditions, and other activities that may affect completion. The schedule shall show Contract completion within the number of calendar days specified in the Contract.

After issuance of the Notice to Proceed and prior to mobilization, the contractor shall submit a baseline project schedule for compliance confirmation. Once the progress schedule is compliance confirmed, the schedule will be used by the contractor for planning, organizing and directing the work, and for reporting progress and requesting payment for work accomplished.

Each Contract may require slightly different items in the project schedule. Ensure that the Contract requirements are thoroughly reviewed and understood.

Anytime that Contract time or completion date changes, the contractor shall submit a revised schedule from the date of Contract modification forward. Once this revised schedule is compliance confirmed, it becomes the new baseline schedule for reporting purposed.

If the contractor thereafter desires to make changes in the method of operating and scheduling, the contractor shall notify the CO in writing, stating the reasons for the change. If the CO considers these changes to be major, the CO shall require the contractor to revise and submit for compliance confirmation, without additional cost to the Government, a revised schedule.

The contractor shall submit, as part of the monthly request for payment, an updated copy of the progress schedule which shows the amount of work completed for each feature of the work and of the Contract as a whole. The COR shall review the Contract for the required sizes and numbers of progress schedules to be submitted each month. If the COR prefers a smaller size of printouts or fewer copies of the schedule, they can inform the contractor of this change.

The construction specifications require the contractor to produce a two or three week "look ahead" schedule every week during the weekly coordination meeting. These smaller schedules are often produced in Excel and show keep operations or crews and the work that they will be doing every day. These schedules provide better detail in the weekly progress meetings than a list of their weekly plan work.

18.1. Weather Days

When IBWC Form 161 shows that weather days in any month exceeded the value shown in the Contract, the contractor is due a Contract modification adding days to the period of performance. Keep track of the amount of weather days on your weekly coordination meetings (Section 23). If you have another Contract modification pending add the weather days due to the Contractor. Otherwise, wait for at least three or four months before asking the CO for a modification. Grouping weather day modifications together over several months minimizes the number of

modifications required for the CO process and since the weather days are being tracked in the weekly meetings, the contractor knows that these owed days have not been forgotten.

See 20.7 for details on initiating a Contract modification to add allowed weather days and where to save associated files.

18.2. IBWC Form 149

IBWC Form 149 forces the contractor to analyze where they are in the project. If they are behind, they also must explain why. When reviewing pay estimates and completing Form 242 (see 20.16 Form 242 - Pay Estimate Checklist), Form 149 is one of the items that you will review and determine if you agree with the contractor's statement.

18.2.A. Files

Store all Form 149 in the following directories. Name them per each pay estimate.

Construction
xxx\04-Submittals\### Schedule

Design-Build
xxx\06-DB Submittals-Deliverables\### Schedule

18.3. Showing Calendar Days in Primavera

A contractor may show activity durations in working days, but they must also show them in calendar days. When other people view the schedule, they do not think in working days. They only see the number of days and do not convert them. Also when asked for items from management, it is easy to simply read the calendar day column and not have to convert. However, many contractors fight back about showing calendar days.

In Primavera, you can show calendar days on the schedule while still using working days for all scheduling activities. Below are the steps to show activity duration in calendar days in Primavera P6.

A. Creating 3 User defined fields as follows
   1. UDF Start using value as integer
   2. UDF Finish Using value as integer
   3. UDF Duration using value as integer

UDF Days	Integer
UDF Finish	Integer
UDF Start	Integer

B. Global change using the following steps
   1. Select Subject Area set to (Activities)
   2. If , add parameter where (original duration) is greater than (zero days)
   3. Then, (UDF Start) = (Start)
   4. Then, (UDF Finish) = (Finish)
   5. Then (UDF Duration) = (UDF Finish) – (UDF Start)

C. Then show the (UDF Duration) column that will show the activity duration.

18.4. Files

Store the baseline and all updated schedules in the following directories:

Construction
xxx\04-Submittals\### Schedule
Design-Build
xxx\06-DB Submittals-Deliverables\### Schedule

ITEM / DESCRIPTION	QUANTITY	UNIT	RESPONSIBLE PARTY	CREW		EQUIPMENT UTILIZATION
SAFETY FIRST						
WEEKLY TOOL BOX						
WEEKLY AUDIT						
Silt Fence Installation						
Close out Park						
552 - 830 Land Side	4,400	LF				Skid Steer / Gator
Silt Fence Maintenance from BOP to 845+00						GATOR
Toe Drain						
397 - 406	900	LF				
406 - 418	1,150	LF				
418 - 433	1,450	LF				
434 - 442	800	LF				
442 - 444	200	LF				
444 - 450	600	LF				
567 - 592	2,499	LF				
597 - 628	2,060	LF				
619 - 675	5,676	LF				
SUBMITTALS						
020 A Vibration Monitoring Report						
RFI						
032 Sluice Gate Install @ Structure 540+00						
QUALITY CONTROL						
Quality Control (Compaction, Moisture Content)					1	Nuclear Density Gauge
QC PERSON ON-SITE					1	Work Truck
on-site sampling (Proctors &PI's)					1	Mobile Testing Facility
TEM conducting on-site surveys						
Flex Base Initial Phase Meeting						
SWPPP and Safety weekly inspection						
SURVEY						
Survey As Needed						Emp # 9393 (Party Chief) Emp # 15332 (Helper)
PROCUREMENT						
Sluice / Flap Gates						
WATER SUPPLY						
PREP R.O.W- SEGMENT ONE+TWO						
FLETCHER PIT 2						
Haul from Fletcher 2 and stockpile at Shalem						
Backhaul and place waste						
Jurado Farms Pit						
Prep Pit - Strip and stockpile 12 inch topsoil, build and widen roads						
Haul from Jurado Farms and stockpile at Picacho						
LEVEE CONSTRUCTION						
Maintain Haul Roads						Tractor and BE-Ge 8000 Gallon Waterpul

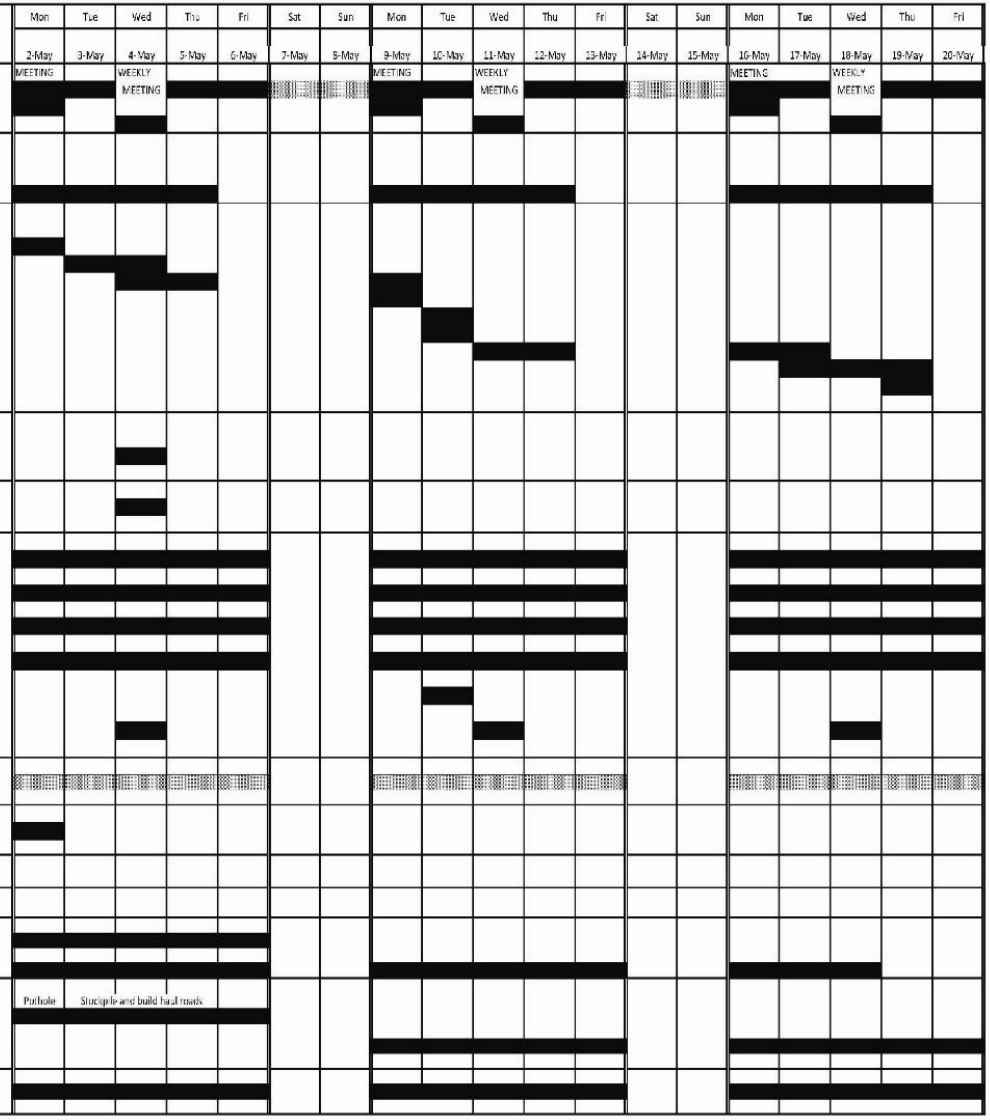


Figure 3 - Sample Three Week Look Ahead Schedule

19 Labor Compliance Checks

The Contracting Officer shall assure that the contractor is in compliance with applicable labor law provisions of the Contract. The Davis-Bacon Act (DBA), the Fair Labor Standards Act Of 1938 (FLSA), the Contract Work Hours and Safety Standards Act (CWHSSA), and the Copeland "Anti-Kickback" Act are usually in Government Construction Contracts. Additionally, both construction and service Contracts are covered by Executive Order 13658 which sets a federal minimum wage.

The COR and Inspector/CI shall ensure that required labor posters and DBA wage determinations are properly displayed at the work site, or an adjacent location, at all times. The posted items must be visible at all times so they may not be kept inside an office. No employee should have to ask to enter an office to view the wages.

19.1. The Davis-Bacon Act

The Davis-Bacon Act (DBA) was passed to protect communities and workers from the economic disruption caused by competition arising from non-local contractors coming into an area and obtaining federal Construction Contracts by underbidding local wage levels. DBA requires payment of locally prevailing wages and fringe benefits to laborers and mechanics employed on Federal Government Contracts in excess of $2,000 for construction, alteration, or repair (including painting and decorating) of public buildings or public works. When the Davis Bacon Act applies to a Construction Contract, it applies to all subcontracts regardless of amount.

The FAR now refers to the DBA as Wage Rate Requirements (Construction).

19.1.A. Files

Please refer to the IBWC whitepaper entitled "*When is it a "Construction" Contract?*" for help in determining when DBA is applicable. Whitepapers are located at:

Z:__Templates & Information\White Papers
or
W:__Templates & Information\White Papers

19.2. Fair Labor Standards Act of 1938

The Fair Labor Standards Act (FLSA) establishes minimum wage, overtime pay, recordkeeping, and child labor standards affecting full-time and part-time workers in the private sector and in federal, state and local Governments. The FLSA established a nationwide overtime pay standard a rate of not less than one and one-half times the regular rate of pay for all hours worked over 40 in a workweek.

19.3. Contract Work Hours and Safety Standards Act

Contract Work Hours and Safety Standards Act (CWHSSA) requires overtime pay for laborers and mechanics at a rate of one and one-half times the basic rate of pay for hours worked on covered Contracts in excess of 40 in a workweek. Effective January 1, 1986 the daily (8-hour)

overtime requirement was eliminated. Laborers and mechanics under CWHSSA has a slightly different definition than under DBA.

19.4. Copeland "Anti-Kickback" Act

The Copeland Act applies to DBA Contracts. Copeland Act prohibits "kickbacks" of wages and back wages. It require contractors on covered projects to submit weekly a "Statement of Compliance" (certifying that the contractor has paid the required wages). This Act also regulates payroll deductions from wages and specifies methods of payment of wages.

19.5. Federal Minimum Wage for Contractors

Executive Order 14026 (which replaced EO13658) requires that federal contractors pay workers performing work on or in connection with construction and service Contracts at least the minimum rate established every year. The poster for this WH 1091 (WH 1089 covered EO13658) and is usually released in December. If your project extended past December 31, the minimum wage required will change.

This is not like the Davis-Bacon wage which remains constant throughout the life of the Contract. contractors are required to pay at least the minimum wage in effect at any given time. Also unlike a Davis-Bacon wage, part of paid wages cannot be covered through fringe benefits. The Federal minimum wage must be met via cash/money only.

19.6. Reviewing Certified Payroll

The COR is responsible for ensuring that the contractor's payrolls are checked to verify that they are paying the appropriate Davis Bacon wage rates as well as the appropriate overtime. Often, the Administrative Assistant is available to assist with checking payrolls.

A wage determination is published with the original Construction Contract. This wage determination lists the minimum wage rates and fringe benefits that must be paid to all laborers and mechanics working on the jobsite. Additionally, Executive Order 14026 requires payment of a minimum Federal wage. Unlike Davis Bacon wages, the Federal minimum wage applied to all personnel working on or in conjunction with the Contract. Also while Davis Bacon wages remain the same through the life of the project, the minimum Federal wage changes each calendar year.

The contractor shall submit weekly, for each week in which any Contract work is performed, a copy of all payrolls. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is a Wage and Hour form available to contractors on www.wdol.gov the form is also available in the forms provided by IBWC. The prime contractor is responsible for submission of the certified payrolls to the Contracting agency. Each payroll submitted must be accompanied by a Statement of Compliance.

The week number shall be noted on each payroll. When work is completed, the final payroll submitted shall be marked as "final."

There are times when a contractor or subcontractor have submitted a final payroll then they return to the worksite. This could be because of a break in the work period (demobilization) or because they are coming back for warranty work. The payrolls received to cover this new period can begin with week #1 again. You do not need to change the "final" payroll received nor do you need payrolls to cover the break in work. It may be beneficial to add a file to your payroll directory noting the break and why there are duplicative week numbers for the same entity. Once this return to work period is complete, you will need to receive another "final" payroll.

Each payroll submitted shall be accompanied by a Statement of Compliance, signed by the contractor or subcontractor or their agent who pays or supervises the payment of the persons employed under the Contract. This Statement of Compliance is what constitutes a "certified" payroll record. IBWC Form 226 is available for adding the Statement of Compliance to any standard payroll. Also, IBWC Form 228 can be used in lieu of blank payrolls to certify weeks where no work was performed.

The contractor must submit weekly a copy of all payrolls to the Contracting agency. The COR shall collect all certified payrolls in pdf format. Ensure that payrolls are provided in at least 300 dpi so that they can be read easily.

19.6.A. The Payroll Checker

The payroll checker is responsible for verifying that the wages paid to the construction contractor's and subcontractor's employees are at least equal to the applicable wage rate as stated in the wage determination from the project Contract. The CO, COR, Inspector/CI, or Administrative Assistant may all act as the payroll checker.

19.6.B. Initial Payroll Verification

A. The payroll checker shall obtain a copy of the Contract's wage determination and current Federal minimum wage.

B. All payrolls must have a Statement of Compliance.

C. If no work was performed on the Contract during any weekly period of the Contract, a Statement of Nonperformance (IBWC Form 228) or a non-work payroll shall be submitted. Weeks cannot be skipped.

D. Using the weekly payroll for the contractor (or subcontractor) verify the following in accordance with the wage determination:
   1. The employees name and identifying number are listed on the payroll.
   2. The classification (aka job, class, category or craft) for the employee is listed and is identifiable on the wage determination.
   3. The hours worked and hourly wage are listed on the payroll.

4. Cross reference the job classification from the payroll to the wage determination and ensure that the payroll hourly wage is equal to or more than the wage listed in the wage determination. For each classification read the determination to ascertain the hourly wage to be used:
   = hourly wage + fringe benefit + any benefits listed in narrative
5. If there is a discrepancy between the wage determination and the payroll, determine the reason.
6. Review the deductions. See 19.6.D Payroll Deductions below.
7. Annotate any discrepancies and notify the contractor's timekeeper. If the discrepancy is with a subcontractor then the contractor shall contact them. The contractor is responsible for their subcontractors' payroll submissions.
8. Maintain a spreadsheet for record of noncompliant issues and outstanding issues and a call log for record and tracking purposes.
9. Report unresolved discrepancies and noncompliant issues to the CO and COR.

Some contractors will only list their employees whom they believe to be subject to DBA; other contractors will submit all employees working on the project. Only those employees subject to Davis-Bacon (laborers and mechanics) must have their payroll verified. Superintendents, foreman, etc. that perform manual or physical sitework for more than 20% of the week are subject to DBA even though they may be salaried. See 19.6.E Salaried Employees for information on checking their wages.

Continue checking every payroll for a couple of weeks until you are satisfied that the contractor, or subcontractor, is performing correctly. If there is a major change in work crews or if a new subcontractor is added, perform initial payroll level verifications again.

Through the course of the project, perform spot checks. As labor interviews are performed, verify that these people are covered in the certified payrolls.

19.6.C. Maintenance Payroll Verifications

Once it has been established that the contractor and subcontractors are paying their employees correctly and that their payrolls are accurate and up-to-date, then payrolls should only require spot checking on a regular basis.

Choose an employee or two for smaller projects and up to five for larger projects and go through a complete review of these employee's payrolls. If everything is fine for these employees then proceed no further for that week.

If problems are found, determine the cause of the discrepancy and contact the contractor to have it remedied. Based upon the problems identified, review the entire payroll as if it was an initial verification.

19.6.D. Payroll Deductions

The following deductions from wages are allowed:

A. Deductions for social security or federal or state income tax withholding.

B. Deductions for bona fide prepayment of wages.

C. Deductions for court ordered payments.

D. Deductions for contributions to fringe benefit plans, provided that the deduction is not prohibited by law, that it is either voluntarily consented to by the employee in writing in advance of the time the work is done or provided for in a collective bargaining agreement, that no profit or other benefit is obtained by the contractor, and that the deduction serves the convenience of the employee.

E. Deductions for purchase of U.S. savings bonds when voluntarily authorized by the employee.

F. Deductions to repay loans or to purchase shares in a credit union.

G. Deductions voluntarily authorized for contributions to organizations such as the Red Cross, United Way, or similar charitable organizations.

H. Deductions to pay union initiation fees and membership dues, not including fines or special assessments, provided that a collective bargaining agreement provides for such deductions and the deductions are not otherwise prohibited by law.

I. Deductions for the "reasonable cost" of board, lodging, or other facilities.

J. Deductions for the cost of safety equipment purchased by the employee if such equipment is not required by law to be furnished by the employer, if such deduction is not prohibited by FLSA or other law, and if the cost on which the deduction is based does not exceed the actual cost to the employer.

IBWC Form 227 authorizing the contractor to take deductions is required for items D. through J. must be included in the first certified payroll with the deductions.

19.6.E. Salaried Employees

In many cases salaried employees perform work on DBA covered projects and noncovered projects in the same workweek. To determine whether the employee has been properly paid for the time spent on the DBA project, it is first necessary to determine the hourly rate of pay. For example, an employee who is working 40 hours per week and paid a salary of $600.00 per week would be paid at the rate of $15.00 per hour. If this same employee is entitled to a prevailing rate of $19.50 per hour for DBA covered work, they would be entitled to an additional $4.50 per hour for work performed on the DBA project. An employer may not arbitrarily allocate a greater portion of the employee's salary to DBA work in order to achieve compliance with the Act.

19.6.F. Hourly Employees

The problem may be encountered with regard to hourly paid employees working on DBA covered work and noncovered work in the same workweek. The contractor may not arbitrarily change the employee's hourly wages to meet its DBA obligations. For example, assume an employee's regular rate of pay is $15.00 per hour and the prevailing wage under DBA is $19.50 per hour. In a week in which both DBA and noncovered work are performed, the employer cannot reduce the employee's regular rate of pay of $15.00 per hour on

non-government work to offset the higher rate required under DBA This same principle applies where an employee performs work in more than one DBA classification; an employee may be paid not less than the specified wage determination rate for each of the actual hours worked in each classification.

19.6.G. Piece Rate Employees

In order to determine the basic hourly rate for a piece rate employee, it is necessary to divide the total hours worked in the workweek into the total wages paid. The basic hourly rate for a piece rate employee must be calculated on a weekly basis.

19.6.H. Differing Rates

When an employee works in more than one classification during the workweek, the employee MUST be paid the highest rate for all hours worked unless the contractor keeps accurate records indicating which of the hours were included in the periods spent in each classification of work.

19.6.I. Overtime (OT)

No OT requirements are included in DBA; OT provisions to employees subject to the DBA will depend on coverage under CWHSSA and/or FLSA.

CWHSSA applies to laborers, mechanics, guards, and watchmen for the time spent on covered Contract work only. CWHSSA requires the payment of time and one-half the basic rate of pay for all hours worked in excess of 40 hours in a week. FLSA provides that an employer shall not employ any employee to work in excess of 40 hours in a workweek unless such employee receives compensation for their employment in excess of the hours above specified at a rate not less than one and one-half times the regular rate at which they are employed.

The basic rate of pay under is the straight time hourly rate and cannot be less than the basic hourly rate required in an applicable wage determination. Under DBA, amounts paid as fringe benefits (both contributions to bona fide benefit plans and cash payments made to meet wage determination fringe benefits requirements) are excluded in computing OT obligations.

If an employee worked in more than one classification and at different rates on covered Contracts during a workweek, the overtime premium is computed based on the average rate of pay. The average rate is the weighted average of the rates; that is, the total earnings (except statutory exclusions) at the different rates are divided by the total number of hours worked in the workweek.

19.6.J. Filing

After each certified payroll has been checked and noted as received, it shall filed in the project folder. Any hardcopies shall be filed in the Contract drawer and provided to CO at Contract closeout.

19.6.K. Files

Store the completed payroll files in the following directories:

Construction

xxx\08-Payrolls & PEs\Certified Payrolls

Design-Build

xxx\08-Invoices, PEs & Payrolls\Certified Payrolls

19.7. Definition of Laborers and Mechanics

The terms "laborer" and "mechanic" are defined in 29 CFR§5.2(m), and generally include workers whose duties are manual or physical in nature as distinguished from mental or managerial, and include apprentices, trainees, and helpers. The terms do not apply to workers whose duties are primarily administrative, executive, professional, or clerical, rather than manual Generally, mechanics are considered to include any worker who uses tools, or who is performing the work of a trade. The DBA requires payment of the applicable prevailing wage rate to all laborers and mechanics "regardless of any Contractual relationship which may be alleged to exist." Although guards and watchmen are not considered laborers or mechanics under DBA, they are considered so under CWHSSA by virtue of its express statutory language.

19.8. Owner-Operators

A DOL administrative policy excludes bona fide owner-operators of trucks who are independent contractors from DBA/CWHSSA provisions concerning their own hours of work and rate(s) of pay. These truck "owner-operators" must be reported on weekly payrolls but the payrolls do not need to show the hours worked or rates - only the notation "Owner-operator." Note that any laborers or mechanics, including truck drivers, employed by the owner-operator/independent contractor are subject to DBA/CWHSSA provisions in the usual manner.

This policy does not pertain to owner-operators of other equipment such as backhoes, bulldozers, cranes, scrapers, or other equipment.

The contractor shall complete IBWC Form 232, Owner-Operator Payroll Listing, for all owner-operator trucks on the jobsite each week. Also, each owner-operator shall complete an IBWC Form 231. These forms shall be provided to the COR the first week that any owner-operator is on the site.

19.9. Wage Determinations

The wage determination is a listing of wage rates and fringe benefit rates for each classification of laborer and craftsman which has been determined to be prevailing in a given locality. Wage determinations are published at sam.gov/content/wage-determinations.

There are four basic categories of wage determinations based on the type of construction:

A. Building: Sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies. This category includes all construction of such structures, the installation of equipment, as well as incidental grading and paving. Such structures need not be "habitable" to be building construction. Examples of "building"

construction projects are auditoriums, city halls, apartment buildings (five stories and above), hospitals, office buildings, schools, warehouses, and shopping centers.

B. Residential: Single family houses or apartment buildings of four stories or less.

C. Highway: Alteration or repair of roads, streets, highways, runways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

D. Heavy: This is a catch-all category. It includes all other projects not classified as building, highway or residential (e.g. bridges over navigable waters, dams, dredging and irrigation projects, tunnels). Of the four categories of construction, this is the only type of construction that can be broken into subcategories such as water and sewer line projects and dredging projects.

19.9.A. Files

Store the wage determination that was issued with the solicitation in the following directories:

Construction
xxx\08-Payrolls & PEs\Certified Payrolls
Design-Build
xxx\08-Invoices, PEs & Payrolls\Certified Payrolls

19.10. Labor Standards Interviews

The Inspector/CI shall perform labor compliance checks. Each month, the Inspector/CI shall interview prime contractor employees and employees from all subcontractors. Whenever possible, all employees working on the jobsite shall be interviewed. Pay attention to the project schedule. When a work crew will only be onsite for a short period, ensure that the employees are interviewed before they demobilize. In general, no employee shall be reviewed more than once, unless they have taken on a new work assignment or if advised by the Contracting Officer. The Inspector/CI shall submit the completed original SF-1445 to the COR within five days after each interview.

USIBWC has modified the official SF-1445 by adding Spanish text to all fields. The COR may add text to the Comments field and may fill out the Checker information prior to the forms being used for interviews.

The COR shall hold on to the SF-1445 until the certified payroll covering the date of the interview is received. When the applicable payroll has been received, the COR or another payroll checker shall fill out the bottom of the SF-1445 entitled "For Use by Payroll Checker." Make sure to check the assigned labor classification against the work that was being performed during the labor interview. If errors are found, follow the directions indicated under 19.6.-Reviewing Certified Payroll for clarification and/or correction.

After the SF-1445 is completed, the COR will scan and file the form in the project files. During Contract closeout, the original interview forms are provided to the CO.

19.10.A. Files

Store the completed labor interviews in the following directories:

Construction
xxx\08-Payrolls & PEs\Labor Interviews

Design-Build
xxx\08-Invoices, PEs & Payrolls\Labor Interviews

19.11. Applying Davis-Bacon to Specific Types of Employees

19.11.A. Apprentices

An apprentice (29 CFR §5.2(n)(l)) is any person employed under a bona fide apprenticeship program registered with a State apprenticeship agency which is recognized by the US Department of Labor (DOL) or a person in the first 90 days of probationary employment as an apprentice in such an approved apprenticeship program who is not individually registered in the program, but who has been certified by DOL or a State apprenticeship agency to be eligible for probationary employment as an apprentice. All apprentices other than probationary apprentices must be individually registered in the approved program.

The proper wage rates to be paid to apprentices are those specified by the particular programs in which they are enrolled, expressed as a percentage of the journeyman rate on the wage determination. In the event employees reported as apprentices on a covered project have not been properly registered within the meaning of the Regulations and the contract stipulations, or are utilized at the jobsite in excess of the ratio to journeymen permitted under the approved program, they must be paid the applicable wage rates for laborers and mechanics employed on the project performing in the classification of work they actually performed. This applies regardless of work classifications which may be listed on the submitted payrolls and regardless of their level of skill.

19.11.B. Trainees

A trainee is any person who is receiving on-the-job training in a construction occupation under a program which has received prior approval, as evidenced by formal certification of the approval or recognition by the DOL.

A trainee must be paid at the rate specified in the program for their level of progress, expressed as a percentage of the journeyworker hourly rate specified in the applicable wage determination. Also, trainees are to be paid the fringe benefits stipulated in the trainee program. If the program does not mention fringe benefits, trainees must receive the fringe benefits reflected on the wage determination for the craft.

19.11.C. Summer Youth Employment

DOL will take no exception to the practice of paying less than the predetermined laborer or journeyworker's rate to bona fide students employed on a temporary basis for the summer months only if the employment is part of a bona fide youth opportunity program such as that sponsored by union and management or by a Governmental or community group. Also, such employment must be in accordance with statutory age and minimum wage requirements.

Sponsorship by an individual contractor for only one particular project would not qualify for the exception.

19.11.D. Federal Youth and Student Programs

Participants in federal youth programs (Youth Conservation Corps, Public Lands Corps, American Conservation, Youth Services Corps, and Volunteers in Service to America) that establish specific compensation to be given participants are not covered by Davis-Bacon labor standards.

19.11.E. Helpers

Helpers are permitted on a DBA Contract only if the helper classifications are specified in the applicable wage determination. A helper may not be used as an informal apprentice or trainee, and it is not permissible for helpers to use "tools of the trade" in assisting a journeyworker.

19.11.F. Air Balance Engineers

In general, air balance engineers are not considered laborers or mechanics within the meaning of the Davis-Bacon Act. The primary function of such employees is to take measurements and to accumulate data upon which recommendations are based to advise mechanical contractors how to rectify imperfections or imbalances in heating and air conditioning systems which may become apparent after the contractor(s) have installed such systems. Generally, however, such employees do not physically make the required corrections. If, however, such employees spend a substantial amount of their time in any workweek (i.e., more than 20 percent) on the site performing manual, physical, and mechanical functions which are those of a traditional craftsperson, they would be considered laborers or mechanics for the time so spent.

19.11.G. Architects and Engineers

Architects, engineers, technicians, and draftspersons are not covered by DBA, unless they perform duties as laborers and mechanics.

19.11.H. Dredge Workers

Government Contracts for dredging involve the construction, alteration, or repair of "public works of the United States." Workers on a dredge engaged in dredging operations are generally laborers or mechanics subject to the DBA. However, employees engaged in the operations of the vessel or tugboat as a means of transportation are not laborers or mechanics.

19.11.I. Flaggers and Traffic Directors

The duties of flaggers themselves have been determined to be manual and physical in nature; flaggers typically work on or around heavy or highway construction projects as part of the construction crew and their work is integrally related and a necessary incident to the other construction activities at the site.

Employees of traffic service companies which operate as subcontractors on DBA projects to set up and service traffic control devices (e.g., barricades, directional signs, lights, arrowboards, etc.) are generally covered by DBA. However, traffic service companies which rent equipment to the prime contractor and perform only incidental functions at the site in connection with delivery of the equipment are regarded as material suppliers whose

employees would not be subject to DBA unless particular employees spend a substantial amount of time (20% or more) in the workweek on the covered site or sites.

19.11.J. Guards and Watchmen

Guards and watchmen whose duties consist solely of watching or guarding are not considered laborers or mechanics for purposes of DBA. However, if such an employee actually performs physical or manual work on the construction project in addition to or in connection with guarding activities, the employee should be classified as a laborer or mechanic for the time so spent and paid the appropriate rate.

19.11.K. Helicopter Pilots

Helicopter pilots are laborers and mechanics for purposes of DBA.

19.11.L. Inspectors

Employees who make inspections at a covered construction site to see that the work meets the specifications and requirements of the Contract or established standards and codes are not usually considered to be laborers or mechanics for purposes of DBA. However, if such workers perform other duties as laborers or mechanics, they must be paid the rate for the particular classification involved for the time so spent.

19.11.M. Managerial and Professional Employees

An individual employed in a bona fide executive, administrative, or professional capacity, as defined in 29 CFR Part 541, is not a laborer or mechanic for purposes of DBA. A supervisory employee who is not exempt under 29 CFR Part 541 and who spends more than a substantial amount of time (20 percent) in a given workweek as a laborer or mechanic must be paid the applicable DBA prevailing wage rate for the classification of work performed for all hours engaged in such work as a laborer or mechanic.

An employee who owns at least a bona fide 20-percent equity interest in the enterprise in which they are employed, regardless of the type of business organization (e.g., corporation, partnership, or other), and who is actively engaged in its management, is considered a bona fide exempt executive. An individual with a 20 percent or greater interest in a business who is required to work long hours, makes no management decisions, supervises no one and has no authority over personnel does not qualify for the executive exemption.

19.11.M.1. Overtime

Per FLSA, executive, administrative, and professional employees must be paid overtime unless make at least $913 per week (effective December 1, 2016). Therefore, even if these personnel are exempt from DBA, the payrolls must be checked to ensure that they are being paid the appropriate overtime.

19.11.N. Material Suppliers

The manufacture and delivery to the work site of supply items such as sand, gravel, and ready-mixed concrete, when accomplished by bona fide material suppliers operating facilities serving the public in general, are activities not covered by DBA.

If a material supplier, manufacturer, or carrier undertakes to perform a part of a Construction Contract as a subcontractor, its laborers and mechanics employed at the site of the work would be subject to DBA in the same manner as those employed by any other contractor or subcontractor. Employees of a material supplier who are required to perform more than an incidental amount of construction work in any workweek at the site of work would be covered by the DBA and due the applicable wage rate for the classification of work performed. This would include warranty and/or repair work.

19.11.O. Owner-Operators of Trucks and Other Hauling Equipment

As a matter of administrative policy, the provisions of DBA/CWHSSA are not applied to bona fide owner-operators of trucks who are independent contractors. For purposes of these Acts, the certified payrolls including the names of such owner-operators need not show hours worked nor rates paid, but only the notation "Owner-operator." This position does not pertain to owner-operators of other equipment such as bulldozers, scrapers, backhoes, cranes, drilling rigs, welding machines, and the like. Moreover, employees hired by owner-operators are subject to DBA in the usual manner.

19.11.P. Relatives

There are no exceptions from coverage, on the basis of family relationship for relatives who are performing the work of laborers or mechanics. They must be paid the prevailing wage rate for the classification of work performed and included in the payroll records.

19.11.Q. Repair Employees (tire repair companies and heavy equipment dealers)

An employee of an equipment rental dealer or tire repair company who performs onsite repair work on leased equipment is subject to DBA if the employee performs more than an incidental amount of work onsite.

19.11.R. Soil Boring

Soil boring contractors and workers are considered covered by the DBA if they are directly related and incidental to, or an integral part of, the actual construction process (such as setting foundations or drilling a well). This is to be distinguished from the situation where such Contracts are for the formulation of engineering plans and specifications, designs, and the conduct of site investigations. The latter activities are regarded as preliminary work, and not as a part of the construction process.

19.11.S. Survey Crews

Where surveying is performed immediately prior to and during actual construction, in direct support of construction crews, such activity is covered by DBA.

The determination as to whether certain members of survey crews are laborers or mechanics is a question of fact. Such a determination must take into account the actual duties performed. As a general matter, members of the survey party who hold the leveling staff while measurements of distance and elevation are made, who help measure distance with a surveyor chain or other device, who adjust and read instruments for measurement or who direct the work are not considered laborers or mechanics. However, a crew member who primarily does manual work, for example, clearing brush, is a laborer and is covered for the time so spent.

19.11.T. Timekeepers

Timekeepers who perform no manual labor on construction projects are not considered to be laborers or mechanics for purposes of DBA. However, if such workers perform other duties as laborers or mechanics, they must be paid the rate for the particular classification involved for the time so spent.

19.11.U. Truck Drivers

The application of Davis Bacon to truck drivers is based on the definition of "construction, prosecution, completion, or repair" in 29 CFR §5.2(l). Truck drivers are covered by DBA in the following circumstances:

A. Drivers of a contractor or subcontractor for time spent working on the site of the work.

B. Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis[8].

C. Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.

D. Truck drivers transporting portions(s) of the building or work between a site established specifically for the performance of the Contract or project where a significant portion of such building or work is constructed and the physical place(s) where the building or work called for in the Contract(s) will remain.

Truck drivers are not covered in the following instances:

A. Material delivery truck drivers while off "the site of the work."

B. Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the "site of the work."

C. Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

19.11.V. Tugboat Operators, Tugmasters, Captains and Deckhands

In general, tugboat personnel are engaged in navigational transportation, and are not considered to be laborers or mechanics. However, for example, if a crew member on a dredging project is performing work directly related to the covered construction project such as connecting, extending, and controlling the pipeline through which dredged material is being pumped, the individual would be considered a laborer or mechanic for the time so spent and entitled to the applicable prevailing wage rate.

19.11.W. Volunteers

There are no exceptions to DBA coverage for volunteer labor and DOL does not have the authority to grant waivers for volunteer labor.

[8] According to Merriam-Webster's Dictionary, de minimis is lacking significance or importance; so minor as to merit disregard; insignificant

19.12. Warranty Work

Davis-Bacon coverage applies to warranty or repair work if it is provided for in the original Construction Contract. This is true regardless of whether there is a pay item for the work. If an employee spends more than 20% of their time in a workweek engaged in such activities on the site of the original work, they are covered for all time spent on the site. The Contract minimum wage rates apply regardless of whether the work is done 5, 10, or even 20 years after the Contract execution.

20 Pay Estimate Processing Procedures

Per FAR Clause 52.232-5 Payments under Fixed-Price Construction Contracts, the Government shall make progress Payments monthly as the work proceeds on estimates of work accomplished. The Contractor shall submit an electronic copy of their pay estimate to the Invoice Processing Platform (IPP) at www.ipp.for.fiscal.treasury.gov. The Contractor's pay estimate is not officially received by the Government until submitted to IPP.

All pay estimates submitted shall be numbered in IPP with the last 5 digits of the Contract number, underscore, and the 2 digit pay estimate number (e.g. C0008_03). A pay estimate resubmitted to IPP shall include a letter (e.g. C0008_03A) immediately after the 2 digit number.

A. Pay estimate numbers shall start at '1' and increase by 1 for each pay estimate submitted.

B. The pay estimate number on all of the IBWC forms, shall just be the number noted above without the Contract number.

The Inspector/CI and the contractor's superintendent or CQC shall meet prior to the contractor's submittal of their pay estimate and discuss billable quantities. It is expected that the Inspector/CI and the contractor will reach concurrence on the billable quantities. Once quantities are agreed upon, it is recommended that both individuals shall sign the Draft 119B containing the established quantities. Both people shall keep copies of the signed document and both people should be able to providing documents to support the billable quantities.

Once in a while, the Inspector/CI and the contractor's representative cannot reach agreement on billable quantities. In that instance, the Inspector/CI shall draft an email to the COR that states their reasoning that warrants a different quantity. This memo shall reference any related Contract requirements as well as notes in the daily reports and any applicable photographs. The COR will get with the contractor and reach agreement on the quantities.

After billable items are agreed upon but prior to submission of the pay estimate to IPP, the Contractor shall submit a full pay estimate package to COR for review. Any comments or corrections noted by the COR shall be addressed in the pay estimate package. Corrections to the pay estimate shall be provided to the COR for verification before submission to IPP. Once all comments have been addressed, the pay estimate may be submitted to IPP. This draft review will ensure the pay estimate package submitted to IPP will not require rejection and will assist in determining any retainage and/or deductions required for the pay estimate.

Per FAR 52.232-5(e) once work is substantially complete to ensure adequate protection of the Government for remaining punch list items and deliverables, the COR may limit full payment on some CLINs. Discuss this with the contractor prior to the end of the work so they can plan accordingly for any limits on payments.

Review the measurement and payment clauses in your Contract. Many items have multiple actions that must be completed before the task is complete. For example, if the item must be

maintained and removed prior to being complete, then, it is not reasonable to pay the contractor 100% of the CLIN just because 100% of the quantity has been installed. How much effort does maintenance and removal account for? You may consider telling the contractor that you will agree to pay up to 95% of the CLIN quantity for installation and will pay the final 5% once all of the item is removed from the site.

The Inspector/CI and the COR must know how each CLIN is described and must discuss with the contractor how each CLIN will be handled. The earlier in the Contract management that this is discussed, the better the understanding and relationship for everyone.

CLINs covering mobilization, items requiring compliance testing (since the Government needs official, stamped test results), and seeding are common for entailing more Contract work for full measurement and payment than simply performing the initial function.

The pay estimate procedures shall be discussed in detail with the contractor at or after the preconstruction meeting. Stress the importance of promptly submitting a complete pay request accompanied by all required supporting documents in order to receive timely payments.

Construction specification 01.29.00 or design-build SOW 01.29.00.01 detail the required documents and payment processing requirements. Ensure that you are familiar with what is required.

Name the pdf pay estimate file "*yyyymmdd 191BWCxxCxxxx PE##*" and stamp it with the received stamp.

20.1. Pay Estimate

20.1.A. Form 119 - Payment Estimate - Contract Performance

Think of Form 119 as the contractor's invoice to the Government. All other forms provided are simply backup data. Verify that the header data is correct. Check that the date that the contractor's representative signed the form is logical (many times contractor's forget to change the date from the prior month). Signing this form is critical because it has the certification required by FAR 52.232-5(c).

If the dollar amount is correct but there are errors on Form 119, use Abode Acrobat and place red lines through the errors. Then add adjacent red text with the correct value.

Once the COR has reviewed all of the other forms and attachments to the pay estimate and feels that the pay estimate is valid, the COR shall complete blocks 13.G., 13.I., 13.J., 13.K., 13.M., 15., 16., and 17.A.

20.1.B. Form 119B - Pay Estimate Quantities

All CLINs shall be listed on Form 119B. This form is what is used by the Administrative Assistant to enter the contractor's pay estimate into the receiving report. This report needs to be accurate and up-to-date.

Verify that the words "stored materials" have been placed in the CLIN description for which stored materials have been billed. Additionally verify that when stored materials have been completely incorporated into the project, that the words "stored materials" are deleted.

contractors often want to charge a unit of "1" with a unit price matching the invoice for stored materials. This is incorrect. A line items unit price cannot change; this is a Contractual value. The unit must be adjusted so that "unit" times "unit price" = "invoiced amount." Many times this results in strange units with several decimal places.

20.1.C. Form 152 - Pay Item Breakdown

All Contract line items shall be listed on Form 152. All columns shall be filled out to represent the current project status.

This form provides a quick reference showing how much of each CLIN has been billed. Always double check that CLINs showing 100% are valid.

Verify that the words "stored materials" have been placed in the CLIN description for which stored materials have been billed. Additionally verify that when stored materials have been completely incorporated into the project, that the words "stored materials" are deleted.

Ensure that the contractor entered their scheduled progress, actual progress, and days ahead/behind on the bottom of Form 152. This data is expected to be similar to that calculated by the Inspector/CI on Form 242. If there is a large discrepancy, investigate where the problem lies.

20.1.D. Form 154 - Subcontractors" Payment Breakdown

The contractor must fill out this form in its entirety. Verify this list against previously received SF-1413s as well as the subcontractors that the Inspector/CI noted on Form 242.

20.1.E. Form 239 - Schedule of Materials

It is a general policy to allow payment for stored materials which will be incorporated into the final work provided that the materials:

A. Are properly stored at the jobsite;

B. Have been addressed by a submittal evidencing compliance with the Contract; and,

C. Are supported by invoices indicating the project (by name or Contract number), material description, quantity, and cost of each type of material.

Payment for materials stored offsite shall not be made unless the Contract specifically allows such payment. Nevertheless, this restriction can be waived if the material is of very high value and highly vulnerable to damage, e.g., electronic equipment or rolls of carpet. In such cases, certain requirements must be enforced:

A. The material must be stored at a nearby location where it can be readily inspected;

B. It must be segregated and labeled for our specific Contract; and,

C. The contractor must show evidence that they have acquired title to the materials, such as paid invoices.

All materials to be authorized for payment, both onsite and off, must be inventoried and be accounted for continuously until incorporated into the work. The COR and Inspector/CI shall discuss whether items are being properly stored and that they have been inspected during this billing period.

Verify that proper invoices have been provided for stored materials. Check Forms 119B and 152 to verify that the words "stored materials" have been placed in the CLIN description for which items have been billed. Ensure that the amount claimed with invoices matches that billed on Form 119B.

20.1.F. Files

Store the pay estimate including Forms 119, 119B, 152, 154, and 239 as a single pdf in the following directories:

Construction
xxx\08-Payrolls & PEs\PE##
Design-Build
xxx\08-Invoices, PEs & Payrolls\PE##

20.2. Deductions

Deductions are subtractions from payments due to the contractor to reimburse the Government. Examples include CM Services CI or FEM overtime or payment for utilities. The allowability for deductions will be enumerated in the Contract.

Deductions must be tracked, but they are treated as if the contractor received full payment for work performed. For example, the Contract details a total of $995 of work. The contractor has performed $432 worth of work and has submitted a pay estimate for it. Deductions are authorized in the amount of $84. The contractor will be paid $348 ($432-84) but you will track payments in the amount of $432.

While deductions are only allowed if detailed in the Contract, it is still required to let the contractor know how much each deduction will be and what it covers before the pay estimate processing is complete.

IPP is limited and does not allow the Government to make corrections, take deductions, or assign retainage. Therefore, the contractor shall change their pay estimate prior to submittal to IPP after the COR notified them of required deductions.

20.3. Retainage

USIBWC does not automatically take retainage on pay estimates. FAR 32.103 explains about retainage and progress payments:

> *When satisfactory progress has not been achieved by a contractor during any period for which a progress payment is to be made, a percentage of the progress payment may be*

retained. Retainage should not be used as a substitute for good contract management, and the contracting officer should not withhold funds without cause. Determinations to retain and the specific amount to be withheld shall be made by the contracting officers on a case-by-case basis. Such decisions will be based on the contracting officer's assessment of past performance and the likelihood that such performance will continue. The amount of retainage withheld shall not exceed 10 percent of the approved estimated amount in accordance with the terms of the contract and may be adjusted as the contract approaches completion to recognize better than expected performance, the ability to rely on alternative safeguards, and other factors. Upon completion of all contract requirements, retained amounts shall be paid promptly.

If you feel retainage is warranted, ensure that it is due to an issue that you have been trying to have the Contractor correct. Write a memo to the CO documenting the issue and how much retainage is to be withheld on each specific CLIN. Retainage will not be assessed on the whole pay estimate but rather on the CLINs associated with the unsatisfactory work. Once the memo is sent to the CO, talk to them. If the CO agrees with the retainage, contact the contractor and have them change their pay estimate prior to submittal to IPP.

Name the memo "*yyyymmdd 191BWCxxCxxxx PE## Retainage.*"

When processing the pay estimate, include your retainage memo in the COR Review package that is uploaded to IPP.

20.3.A. Files

Store the retainage memo in the following directories:

Construction
xxx\08-Payrolls & PEs\PE##
Design-Build
xxx\08-Invoices, PEs & Payrolls\PE##

Ensure that retainage memo is also filed in the following directories:

Construction
xxx\05-Correspondence
Design-Build
xxx\05-Correspondence

20.4. Prompt Payment Interest

FAR Subpart 32.9 covers the Prompt Payment Act. This act requires that the Government pay contractors within set timeframes or we pay interest. The following deadlines must be adhered to:

Normal construction pay estimate	14 days
Final construction pay estimate	14 days
Release of retainage	30 days
A/E invoice	30 days

20.5. COR Record Keeping

Besides the preponderance of files that are used and submitted with each pay estimate, the COR is tasked with tracking all expenditures. There is a file entitled "*Estimated Work Completed.xlsx*" that is available to track this. Ensure that all modifications, deductions, retainage, and payments are thoroughly noted. At any time you should be able to accurately state how much money is left on every CLIN in your Contract and Task Orders.

20.6. Form 153 - Monthly Exposure and First Aid Report

A separate Form 153 shall be submitted for every contractor and subcontractor who works on the jobsite each given month. This is required for all Contract periods when workers are onsite.

The data on this form shall be checked against the daily reports provided by the contractor and the Inspector/CI. Did the daily reports note any property damage? Is an accident shown on Form 153 that was not noted on any daily reports or vice versa?

20.6.A. Files

Store the Form 153 for each separate entity in the following directories:

Construction
xxx\06-Inspection Logs, Cure, D&O\Form 153-Monthly Exposure

Design-Build
xxx\22-Inspection Logs, Cure, D&O\Form 153-Monthly Exposure

20.7. Form 161 - Actual Weather and Working Conditions Report

Weather days documentation is to be performed each month as part of the pay estimate processing. Documentation is to be discussed with the contractor at the same time pay estimate quantities are discussed. Upon acknowledgment of the Notice to Proceed and continuing throughout the Contract on a monthly basis, the contractor shall record actual adverse weather days on a calendar day basis (including weekends and holidays).

The Contractual basis for granting time extensions due to inclement weather is in Contract Clause 52.249-10, entitled Default (Fixed-Price Construction). Administration of the Default Clause is prescribed in Time Extensions for Unusually Severe Weather -- IBWC. This special condition provides a listing of monthly anticipated adverse weather calendar days for the geographical location of the project. For each month, the number of adverse weather calendar days are to be noted on the documentation form until the number of anticipated calendar weather days is expended. After the anticipated calendar days are expended, only adverse weather working days are recorded as lost days due to adverse weather. At the end of the monthly documentation, this total number of working days lost (due to adverse weather) is converted on the record form into calendar days for granting a time extension. The conversion factor is determined as a ratio of the number of days in a week (7) to the number of workdays in a week. For example, if a contractor works a normal 5-day workweek, the conversion factor is 7/5; if a contractor works a 6-day workweek, the conversion factor is 7/6.

The "Ant. Delay" line of IBWC Form 161 shall be filled in with the Monthly Anticipated Adverse Weather Calendar Days as listed in Contract Clause entitled Time Extensions for Unusually Severe Weather in the Contract.

In recording whether a day is lost due to adverse weather, it is important to realize that a whole day is lost if work is prevented for 50% or more of the day and the work is critical to timely completion of the project.

Prior to receipt of the form by the COR, the Inspector/CI should have signed it. If they haven't send it to them for signature. Once a completed form has been received, the COR shall sign the bottom of the form and file it as noted below.

If documentation justifies a time extension due to adverse weather, the COR note such on their monthly report. Once another Contract modification is pending or several months' worth of weather delays are due, write a technical analysis to the CO indicating how many days should be added to the Contract. The contractor cannot assume that just because IBWC Form 161 is completed that these days are automatically added to the Contract. A Contract modification must occur before the time is officially added to the Contract.

20.7.A. Files

Store the Form 161 in the following directories:

Construction

xxx\06-Inspection Logs, Cure, D&O\Form 161-Wx Report

Design-Build

xxx\22-Inspection Logs, Cure, D&O\Form 161-Wx Report

Store the technical analysis and modification support documentation in the following directories:

Construction

xxx\13-Claims, Mods, REA Backup\Mod Name

Design-Build

xxx\13-Claims, Mods, REA Backup\Mod Name

20.8. Updated Progress Schedule

Contractors are required to update their progress schedule with every pay estimate to provide actual dates and to update planned work dates. The schedule will be provided in both pdf and in the native scheduling software format.

The CM contractor is required to review the updated progress schedule and providing a memo of their analysis. Many CM contractors go farther and actually perform a full Primavera analysis of the schedule. This will produce about five files. Name all files with the PE#.

20.8.A. Files

Store the updated progress schedule and all CM review files in the following directories:

Construction

xxx\04-Submittals\### Schedule

Design-Build
xxx\06-DB Submittals-Deliverables\### Schedule

20.9. Form 149 - Schedule Analysis

IBWC Form 149 forces the contractor to analyze where they are in the project. If they are behind, they also must explain why. Review what the contractor has stated on the form as well as the CM contractor's review of the updated progress schedule. Evaluate if the data on Form 149 is accurate and use the gathered information to complete the schedule section of Form 242.

20.9.A. Files

Store all Form 149 in the following directories. Name them per each pay estimate.

Construction
xxx\04-Submittals\### Schedule
Design-Build
xxx\06-DB Submittals-Deliverables\### Schedule

20.10. Photos and Form 148 - Log of Photographic Documentation

Form 148 shall be checked to verify that the photos provided by the contractor are adequately listed. Check the provided photo files to very that they meet the minimum resolution requirements of the Contract.

20.10.A. Files

Store all of the photos and Form 148 in the following directories:

Construction
xxx\14-Photos\Contractor or Contractor's Name\YYYY MM
Design-Build
xxx\14-Photos\Contractor or Contractor's Name\YYYY MM

20.11. Form 233A - RFI Log

The contractor is required to submit an updated RFI log with every pay estimate. Review the log to ensure that it has captured all RFIs. If items are missing, return it to the contractor to fix.

20.11.A. Files

Store the updated RFI log in the following directories:

Construction
xxx\03-RFIs
Design-Build
xxx\04-RFIs

20.12. Form 147 - Submittal Register

The contractor is required to submit an updated submittal register with every pay estimate. Review the submittal register to ensure that it has captured all submittals with correct dates. If items are missing or in error, return it to the contractor to fix.

20.12.A. Files

Store the updated submittal register in the following directories:

Construction

xxx\04-Submittals\### Submittal Register

Design-Build

xxx\06-DB Submittals-Deliverables\### Submittal Register

20.13. S Curve

An updated S curve graph with associated Excel tables utilizing actual billed values to date. The contractor shall show in an Excel table the changes in monthly totals between all monthly values used in the prior estimate and the values used in the compliance confirmed baseline S curve. Significant changes in monthly values (greater than 50% shall have a narrative included explaining the change. The contractor shall show in an Excel table the changes in monthly totals between all monthly values used in the prior estimate and the values used in the current pay estimate. Significant changes in monthly values (greater than 50% shall have a narrative included explaining the change.

20.13.A. Files

Store the S curve and Excel files in the following directories:

Construction

xxx\08-Payrolls & PEs\PE##

Design-Build

xxx\08-Invoices, PEs & Payrolls\PE##

20.14. Record Drawings

Record Drawings shall be kept up to date. The Contractor shall submit cross sections, a copy of the current AutoCAD files that include up to date survey data and surfaces, and any applicable pdfs with their pay estimates and shall make available all hardcopy notes, drawings, and write ups detailing items that will be included in the Record Drawings.

20.14.A. Files

Store the provided files named per pay estimate in the following directories:

Construction

xxx\24-As-Builts\Pay Estimate Updates

Design-Build

xxx\24-As-Builts\Pay Estimate Updates

20.15. Survey Data

When measurement and payment requires surveyed quantities, provide up to date surveyed quantities signed and stamped by a surveyor.

20.15.A. Files

Store signed and stamped quantity calculations in the following directories:

Construction

xxx\08-Payrolls & PEs\PE##

Design-Build
xxx\08-Invoices, PEs & Payrolls\PE##

Store the actual survey data in the following directories:

Construction
xxx\24-As-Builts\Pay Estimate Updates

Design-Build
xxx\24-As-Builts\Pay Estimate Updates

20.16. Form 242 - Pay Estimate Checklist

The Inspector/CI shall begin filling out IBWC Form 242 once they receive the emailed pay estimate. The Inspector/CI is responsible for items A, B, and C though the COR may have some of this data instead of the Inspector/CI; if that is the case, the COR shall inform the Inspector/CI of what data they have reviewed and/or received.

If there have not been any stored materials on this project, then an IBWC Form 239 is not required. This form acts as the Stored Materials Inventory referenced in A.3. on Form 242. If Form 239 is not required, answer "Yes" to A.3.

Any "No" answers to Section A requires an explanation on the back of Form 242. The Inspector/CI can also recommend retainage amounts for failure to provide the required documentation.

For Section B, the COR shall provide the Inspector/CI with a list of subcontractors who have submitted SF-1413s. If the Inspector/CI views any other subcontractors onsite, they must be listed under Section B. If the Inspector/CI identifies subcontractors onsite who have not turned in an SF-1413, the COR shall contact the contractor and require that this documentation be turned in immediately.

The Inspector/CI shall review the current baseline progress schedule for the project. Based upon the contractor's progress on the date of the pay application, the Inspector/CI shall estimate the actual and scheduled progress of the contractor as a percentage. The difference between these two shall be calculated in days ahead or behind.

The Inspector/CI shall review all of the billed quantities and verify that they are the same as those agreed upon earlier with the contractor. If any of the quantities have changed from the signed consensus Draft Form 119B, the Inspector/CI shall draft a memo to attach to the Form 242 that states which quantities have changed. The Inspector/CI shall attach their copy of Draft Form 119B to this memo.

The COR shall answer all of the questions under Section D after discussing the payroll verifications with any payroll checkers. If any of the questions are answered with a "No," then provide a short explanation in Section E.

While additional remarks can be added to Section E, usually any details about retainage or progress will require more room than is available on Form 242. Depending upon the CO, full disclosure of the COR's recommendations can be made in a detailed email or in a memo.

The COR will review the overall pay estimate and complete and sign the appropriate documents and submit the pay estimate through the Administrative Assistant for processing. The Administrative Assistant will forward the Form 242 to the Construction Office Chief who will review the whole packet. If the pay estimate packet is complete, the Construction Office Chief will sign in the "Project Engineer" spot and then return the pay estimate packet to the Administrative Assistant.

Name the original Form 242 provided by the Inspector/CI as "*yyyymmdd Form 242 CM Name PE##*." The COR signed version gets included in the file "*yyyymmdd 191BWCxxCxxxx COR Review PE##*."

20.16.A. Files

Store the Inspector/CI completed Form 242 in the following directories:

Construction
xxx\08-Payrolls & PEs\PE##
Design-Build
xxx\08-Invoices, PEs & Payrolls\PE##

20.17. FEM Recommendation

When the CM Services covers a Field Environmental Monitor (FEM), they are required to write a memo noting whether the construction contractor is keeping up with environmental items and whether the FEM recommends payment.

Name the pdf file "*yyyymmdd CM Name FEM Recommendation PE##*."

20.18. Memo for Record

The FAR generally notes that acceptance of work occurs seven days after the work was completed. Therefore if a pay estimate covers work through September 30, acceptance is considered to occur on October 7. It is very common to not receive a pay estimate by that date or if a pay estimate is receive, that all of the forms and documents required have not yet been provided. Since submission of all forms, test results, surveys, etc. are required for work to be acceptable, if these items are not received until October 10, COND does not agree with the default seven day rule.

In order to properly document all time sensitive items associates with a pay estimate, you must write a memo for record to process the pay estimate.

20.18.A. Templates

A template for the memo entitled "*Memo IPP Template-Construction.docx*" is available at:
Z:__Templates & Information\Templates-General

or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

20.19. Pay Estimate Processing

No more than seven workdays shall elapse between official receipt of a normal pay estimate or invoice and the date it is approved by the COR in IPP. Normal payments to the construction contractor shall be made 14 calendar days after receipt of the pay estimate by the Government. Payments made on Task Orders and final construction/design-build contracts shall be made within 30 days after receipt.

For construction, make sure you are uploading to IPP the following files saved in to a single pdf:

1. Your IPP memo for record.
2. CM schedule review memo.
3. Memo to take retainage or release retainage, if applicable.
4. IBWC Form 242 completed by both the CM and the COR.
5. The complete pay estimate (119, 119B, 152, 154, 149, and 239 if applicable) where you have filled out 119 boxes 15, 16, and 17.A.

Name the file "*yyyymmdd 191BWCxxCxxxx COR Review PE##*."

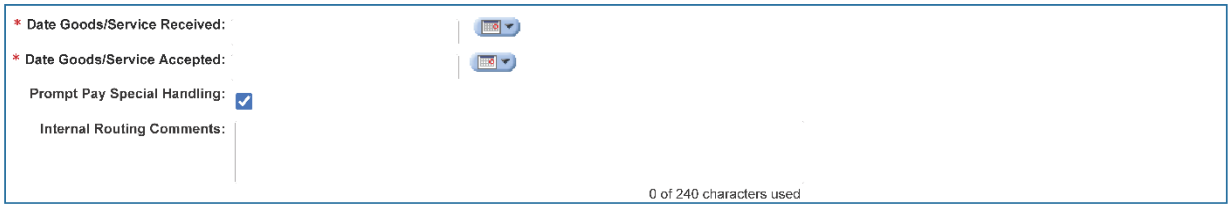
20.19.A. Files

Store the uploaded file in the following directories:

Construction
xxx\08-Payrolls & PEs\PE##
Design-Build
xxx\08-Invoices, PEs & Payrolls\PE##

20.20. IPP Dates and Routing Comments

Log on to IPP and go to the pay estimate. Prior to authorizing payment, upload the file "*yyyymmdd 191BWCxxCxxxx COR Review PE##*." After the file is uploaded, click on Authorize. When you do, the window below will pop up.



To fill out the items follow this guidance:

A. For Date Goods/Service Received, enter the ending date of pay estimate period.

B. For Date Goods/Service Accepted, enter 7 days after ending date of above.

C. Click the box for Prompt Pay Special Handling.

D. Under Internal Routing Comments, enter the text below while changing m/d/yyyy to your appropriate dates. The pay estimate itself if one of the documents required, so if it is the last item submitted, then the pay estimate date shall be used. Otherwise, list the date when all items listed from 20.6 through 20.15 were received. Depending upon contractor performance, daily reports and test results may also need to be up to date prior to considering the pay estimate complete.

For Construction
Agreement of quantities & docs required in Contract Spec 01.29.00 were received on m/d/yyyy. Per FAR 52.232-27(a)(i)(A), payment for Construction Contracts is due 14 days after this date. COR recommends approval on m/d/yyyy.

For Design-Build (construction portion)
Agreement of quantities & docs required in Contract SOW Spec 01.29.00.01 were received on m/d/yyyy. Per FAR 52.232-27(a)(i)(A), payment for Construction Contracts is due 14 days after this date. COR recommends approval on m/d/yyyy.

20.20.A. IPP Status

IPP never provides any status to you after you process your authorization. Therefore, the COR needs to go back in to IPP about two weeks later and printout items for the Contract files.

In IPP navigate to the pay estimate in question. It should show PAID. Click on the Summary tab. Next click on History. At the top, you should see the date that the pay estimate was paid. Print each page of the history to pdf then go back to the pay estimate. Next click on Routing Details. Print this page. As a note, you will see the comments that you entered for Item D above listed in the Routing Details.

Combine all of the IPP pages you printed in to a single file. Name them "yyyymmdd PE## IPP Status" with the date being the date paid.

As a note for printing to pdf in Chrome. Set your printer as "Save as PDF." That way when the item prints, the actual words, etc. are retained instead of a single pdf image.

20.20.B. Files

Store the IPP processing printouts in the following directories:

Construction
xxx\08-Payrolls & PEs\PE##

Design-Build
xxx\08-Invoices, PEs & Payrolls\PE##

20.21. Files

After completing all of the pay estimate processing, there only should be a six or seven pay estimate files left in the pay estimate directory:

yyyymmdd 191BWCxxCxxxx PE##.pdf
yyyymmdd 191BWCxxCxxxx PE## Survey Quantities.pdf

yyyymmdd 191BWCxxCxxxx PE## S Curve.pdf
yyyymmdd 191BWCxxCxxxx PE## S Curve.xlsx
yyyymmdd 191BWCxxCxxxx COR Review PE##.pdf
yyyymmdd Form 242 CM Name PE##.pdf
yyyymmdd CM Name FEM Recommendation PE##.pdf
yyyymmdd PE## IPP Status.pdf

When the project has been closed out, move these files into the base folder and delete all individual pay estimate folders.

21 Invoice Processing Procedures

Processing an invoice is very similar to processing a pay estimate. A/E firms provide invoices to cover their work. The invoice should be one designed by the submitting firm instead of an USIBWC form like a pay estimate is. The invoice should show the billing period, the item being charged, and any previous balances.

21.1. Invoice

The contractor shall submit an electronic copy of their invoice via the Invoice Processing Platform (IPP) at www.ipp.for.fiscal.treasury.gov. The Contractor's invoice is not officially received by the Government until accepted by IPP.

As noted in the 20-Pay Estimate Processing Procedures, IPP does not offer the option for the COR to make corrections to the invoice. Therefore the A/E should confirm the billable amount with the COR prior to submittal. The A/E shall also send the COR a copy of their pdf invoice at the same time that they submit it in IPP. This gives the COR a heads up that the invoice is in the system. If you do not receive an email within two days about processing the invoice, send an email to FAD asking for the status.

No more than seven workdays should elapse between official receipt of the invoice from the contractor and the date it is processed by the COR in IPP. The payment to the contractor shall be made 30 calendar days after receipt of the invoice by the Government.

Name the pdf invoice file "*yyyymmdd 191BWCxxFxxxx Invoice ###*" and stamp it with the received stamp.

21.1.A. Files

Store the date stamped, received invoice in the following directories:

CM Task Order
xxx\17-CM Contract\08-CM Invoices
A/E Design Task Order
xxx\08-Invoices
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\04-AE Invoices

21.2. S Curve

An updated S curve graph with associated Excel tables utilizing actual billed values to date. The Contractor shall show in an Excel table the changes in monthly totals between all monthly values used in the prior estimate and the values used in the compliance confirmed baseline S curve. Significant changes in monthly values (greater than 50% shall have a narrative included explaining the change.

Name the file "*yyyymmdd 191BWCxxFxxxx Invoice ### S Curve*."

21.2.A. Files

Store the provided S curves in the following directories:

CM Task Order
xxx\17-CM Contract\08-CM Invoices
A/E Design Task Order
xxx\08-Invoices
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\04-AE Invoices

21.3. Memo for Record

The FAR generally notes that acceptance of work occurs seven days after the work was completed. Therefore if a invoice covers work through October 31, acceptance is considered to occur on November 7.

In order to properly document all time sensitive items associates with a invoice, you must write a memo for record to process the invoice.

Name the file "*yyyymmdd 191BWCxxFxxxx COR Review Invoice ###*."

21.3.A. Templates

A template for the memo entitled "*Memo IPP Template-Construction.docx*" is available at:

Z:__Templates & Information\Templates-AE
or
W:__Templates & Information\Templates-AE
or
P:\COND__Templates & Information\Templates-AE

21.3.B. Files

Store the memo for record in the following directories:

CM Task Order
xxx\17-CM Contract\08-CM Invoices
A/E Design Task Order
xxx\08-Invoices
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\04-AE Invoices

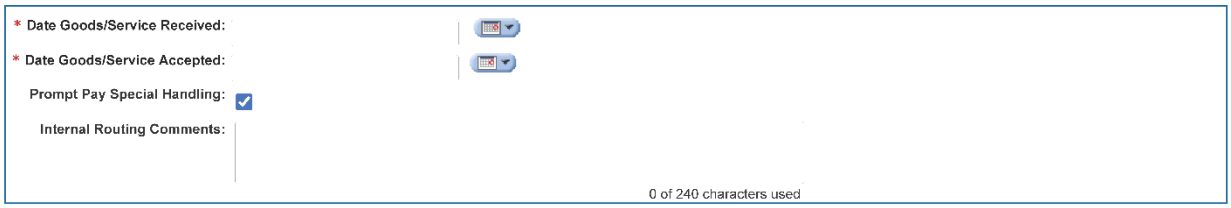
21.4. Invoice Processing

Receipt is deemed to happen at the later of submittal of a complete invoice or completion of all work required that's covered by that invoice. Therefore if a contractor submits an invoice on June 3 for work ending on May 31, but they have not yet provided you deliverables for that period, the date to begin counting for interest penalties does not start until the work is submitted.

Upload the file you created named the file "*yyyymmdd 191BWCxxFxxxx COR Review Invoice ###*."

21.5. IPP Dates and Routing Comments

Log on to IPP and go to the pay estimate. Prior to authorizing payment, upload the file "*yyyymmdd 191BWCxxCxxxx COR Review Invoice ###*." After the file is uploaded, click on Authorize. When you do, the window below will pop up.



To fill out the items follow this guidance:

A. For Date Goods/Service Received, enter the ending date of invoice period.

B. For Date Goods/Service Accepted, enter 7 days after ending date of above.

C. Click the box for Prompt Pay Special Handling.

D. Under Internal Routing Comments, enter the text below while changing m/d/yyyy to your appropriate dates. The invoice itself if one of the documents required, so if it is the last item submitted, then the invoice date shall be used. Otherwise, list the date when all items required in the SOW were received.

For Monthly A/E Invoice (usually CM services)
Agreement of quantities & all docs covering this period of work as required to meet the terms & conditions of the Contract in the SOW/PWS were not received until m/d/yyyy. COR recommended approval of invoice on m/d/yyyy.

For Design A/E Invoice (usually a lump sum)
The COR received a proper progress payment invoice on m/d/yyyy in accordance with FAR 52.232-26 (a)(4)(i)(B) and recommended approval on m/d/yyyy.

For Design-Build (design portion)
Agreement of quantities & all docs covering this period of work as required to meet the terms & conditions of the Contract in the SOW 01.29.00.01 were not received until m/d/yyyy. COR recommended approval of invoice on m/d/yyyy.

21.5.A. IPP Status

IPP never provides any status to you after you process your authorization. Therefore, the COR needs to go back in to IPP about two weeks later and printout items for the Contract files.

In IPP navigate to the pay estimate in question. It should show PAID. Click on the Summary tab. Next click on History. At the top, you should see the date that the pay estimate was paid. Print each page of the history to pdf then go back to the pay estimate. Next click on Routing Details. Print this page. As a note, you will see the comments that you entered for Item D above listed in the Routing Details.

Combine all of the IPP pages you printed in to a single file. Name them "yyyymmdd PE## IPP Status" with the date being the date paid.

As a note for printing to pdf in Chrome. Set your printer as "Save as PDF." That way when the item prints, the actual words, etc. are retained instead of a single pdf image.

21.5.B. Files

Store the IPP processing printouts in the following directories:

CM Task Order
xxx\17-CM Contract\08-CM Invoices
A/E Design Task Order
xxx\08-Invoices
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\04-AE Invoices

21.6. Files

After completing all of the invoice processing, there only should be a maximum of four invoice files related to each invoice:

yyyymmdd 191BWCxxFxxxx Invoice ###.pdf
yyyymmdd 191BWCxxFxxxx Invoice ### S Curve.pdf
yyyymmdd 191BWCxxFxxxx Invoice ### S Curve.xlsx
yyyymmdd 191BWCxxFxxxx COR Review Invoice ###.pdf
yyyymmdd Invoice ### IPP Status.pdf

22 Submittal Procedures

Submittals include shop drawings, manuals, certifications, samples, color chips or charts, brochures, schedules, photographs, and other items furnished by the contractor for Government review, information, and other purposes.

The primary responsibility for scheduling, accuracy, and control of submittals lies with the contractor doing the work. The contractor is responsible for incorporating all submittals for Government compliance confirmation into the baseline progress schedule. Compliance confirmed submittals become Contract documents. Therefore, the contractor must understand that the handling of submittals is as important as the actual construction and installation activities. The COR will address this requirement during the Mutual Understanding Meeting (Section 13). Quality control supervision personnel should be knowledgeable of the Contract requirements for each phase of work, including compliance confirmed submittal documents. The construction contractor is responsible for obtaining materials and equipment as specified in the Contract. Experience indicates that a principal cause of construction progress falling behind schedule is due to delays in the delivery of materials and equipment.

Submittal procedures will be detailed in the Contract. Review and follow those procedures. Items outlined here are general and will aid your reviews, but the Contract procedures govern.

The CQC is responsible for reviewing the Contract and determining what submittals are required. The Inspector/CI shall also keep up with what Contract work requires submittals and then double check that all submittals are compliance confirmed prior to work commencing. If the contractor decides to proceed with construction without compliance confirmed submittals, they are proceeding at their own risk.

Please note that much of the submittal review process switches to the designer of record in a design-build contract. Only those submittals detailed in our SOW require Government compliance confirmation. All other submittals are provided for our records. If we notice that they do not meet Contract requirements we will return them for correction, but if they meet the requirements then we return them stating that no exceptions were noted.

22.1. Files

Store all submittals in the following directories:

Construction
xxx\04-Submittals\### Submittal
Design-Build
xxx\06-DB Submittals-Deliverables\### Submittal

22.2. Submittal Register

The Submittal Register (IBWC Form 147) details all submittals that have been turned in or are planned to be turned in on the project. This should be one of the first submittals provided by the contractor for Government review and ensures that the contractor has reviewed the Contract to

determine which items will require submittals; it also aids the contractor in preplanning their work.

The contractor shall coordinate the preparation of the Submittal Register with the compliance confirmed baseline project schedule. The Submittal Register shall not be interpreted as relieving the contractor of its obligation to comply with the Contract for the items listed. The contractor shall update the Submittal Register once a month and maintain a current copy at the jobsite; this updated Submittal Register shall be provided to the COR with the monthly pay estimate (see 20.12).

22.2.A. Files

Store the submittal register in the following directories:

Construction

xxx\04-Submittals\### Submittal Register

Design-Build

xxx\06-DB Submittals-Deliverables\### Submittal Register

22.3. Contractor Submittal Procedures

The Contract's technical specifications/SOW will dictate how submittals shall be provided in Sections 01.33.00 or 01.33.00.01. Overall, all submittals are provided as electronic files only.

All submittals are required to have IBWC Form 146, Transmittal Form, as a cover.

Each submittal shall be numbered consecutively. If a submittal requires resubmittal, the number shall be amended with an "A," then a "B," and so on. No two submittal packets shall ever have the same number.

The transmittal sheet shall indicate if this is a new submittal, a resubmittal, or an amendment/change of a prior submittal. A resubmittal is when the contractor is submitting items again after receiving a C (examined and returned for correction), D (incomplete), or E (unacceptable) response from the COR. An amendment/change is when the contractor chooses to change material suppliers, personnel, make changes or corrections or plans, etc. A key point on amendments/changes is that the prior submittal was compliance confirmed for use and now changes are being presented.

The contractor's representative's (CQC) signature certifies that the contractor has reviewed the submittal and coordinated the work of all trades involved and that the submittal is in conformance with the Contract. In most cases, a subcontractor provides the CQC with submittal items. The CQC is supposed to review these items for compliance with the Contract. If the CQC believes that these items are acceptable, they are forwarded to the COR with a transmittal form (IBWC Form 146); if the CQC discovers that the items provided are incomplete or do not meet the Contract requirements, then the submittals should be returned to the subcontractor for revision. No submittal shall be given to the COR unless it has been reviewed and approved by the CQC.

If the submittal varies from the Contract requirements in any fashion, the departure must be noted on the transmittal sheet. Departures not noted by the contractor in the contractor's letter of transmittal may cause rejection of the submittal or any construction work based upon this departure.

22.4. Submittal Review

Electronic submission of submittals constitutes an official submission. The electronic copy shall contain the signature of the contractor's CQC.

Submittals are supposed to be correct and accurate. If items such as the transmittal number are incorrect, the submittal can be rejected. However, it often takes less effort to simply cross out the wrong transmittal number and write the correct one; otherwise, a letter needs to be written detailing what was wrong and why it needs to be corrected. Always balance the pros and cons before rejecting a submittal for review or assigning an E (unacceptable) rating.

No work called for by the submittals shall be done until compliance has been confirmed by the Government. If the contractor does proceed, they are doing so at their own risk.

Be sure to process submittals as quickly as possible so that potential problems can be resolved quickly. Usually, the Government has 14 days to review submittals. However, there is no benefit to the Government nor the contractor in waiting the full 14 days before returning the submittal.

The procedure for review of submittals will be thoroughly detailed in your Contract. In addition to those requirements, these steps should be followed:

A. When the COR receives the submittal, it shall be date stamped in the appropriate box of Form 146. See 40.4.A.-PDF Stamps for details on adding this pdf stamp to your computer.

B. The date stamped, clean copy of the contractor's submittal shall be filed within the project file. Keeping a clean version of the submittal provided to the Government is greatly beneficial if issues arise during or after construction.

C. Next, the COR and the Inspector/CI shall review the submittal to ensure that the proposed items meet the Contract requirements. Submittals shall not extend to means, methods, sequences, techniques or procedures of construction or to safety precautions or programs incident thereto unless the Contract requires it. Compliance confirmation shall not

relieve the contractor of responsibility for the accuracy of such submittals, nor for the proper fitting and construction of the work.

When necessary, ask for help in reviewing a submittal. No one is an expert in all areas of construction. If the submittal covers a subject area that you have little or no knowledge of, ask around the office and see who might know about it. The review that someone else provides for you does not need to be official but should contain some notations in writing. Simply emailing that they agree with the submittal or have problems with certain issues because of detailed specifics is sufficient. You can print out the email to pdf and save it in the submittal folder.

Once the Inspector/CI has finishes their review of the submittals, they shall write a brief memo recommending who they think the submittal should be rated and providing comments and recommendations. The COR shall compare the information provided by the Inspector/CI with their own review and decide upon a final submittal rating.

The submittal rating are:

A - Compliance Confirmed
A perfect submittal. No comments are required. This is a rare rating on any submittal.

B - Compliance Confirmed as Noted
This can be a fully compliant submittal with no corrections required but you wish to remind the contractor of key points relating to the Contract or construction, or it is a submittal that requires minor corrections that are not critical to the overall submittal being correct. In this case, the corrections are listed and the contractor is required to update their copy of the submittal with these corrections.

C - Examined and Returned for Correction
The submittal requires corrections that must be addressed before the submittal can be considered compliant with the Contract requirements.

D - Incomplete Submittal
The submittal lacks required and important data.

E - Unacceptable
The submittal fails to address the submittal requirements to such an extent that review is impossible.

DB-Design-Build Contract Submittal - No exceptions noted
In Design-Build Contracts, the Design-Builder is responsible for review and compliance confirmation of all submittals identified in the construction specifications although submittals are still provided to the COR for review. If during the review, the submittal is found to meet the requirements of the Contract, the Design-Build SOW, and the construction documents, it shall be stamped "Design-Build Contract Submittal - No exceptions noted."

If during review, the submittal is found to not meet the Design-Build Scope of Work or the construction documents, then rate it a C or D and require resubmittal.

For Information Only

Not many items within the Contract fall into this category; offsite trackout rock or stabilization gravel are instances where there are no Contract requirements for the product, but the material details are needed for our Contract files. When we receive submittals that do not need to be reviewed for compliance, they can be returned with a stamp that simply acknowledges receipt.

Samples of the stamps used for these submittals rating are shown in Figure 4.

D. The COR shall stamp Form 146 with the appropriate USIBWC submittal review stamp. As with the received date stamp, see 40.4.A.-PDF Stamps for details on adding these pdf stamp to your computer. The submittal review stamp will automatically add today's date once it is inserted into the file.

E. The COR shall write a letter to the contractor detailing the rating given and any corrections, reminders, or notes pertaining to the submittal. The letter shall be saved to a pdf. Figure 6 provides an example of a submittal response letter.

F. Your letter along with the stamped Form 146 and the original submittal information shall be combined into one pdf file. This pdf file shall be filed in project file on the W: drive.

G. Email the project team the electronic file of the complete reviewed submittal packet.

The COR needs to keep a list of submittals that includes the date received and the date returned to the contractor. This allows the COR to check that everything that has been turned in by the contractor has been returned. The Inspector/CI should also have their list of submittals including what should be turned in, what has been turned in, the code it received, and any other action required. It is up to the Inspector/CI and COR to double check that all submittals have been turned in and compliance confirmed prior to work beginning.

Figure 4 - Examples of Submittal Response Stamps

22.5. Sample Completed IBWC Form 146, Transmittal

TRANSMITTAL FORM
Read instructions on the reverse side prior to initiating this form

DATE	05/13/2023
SUBMITTAL NO.	25-F *Only one submittal number may be used per form*
TO	Your Name, COR USIBWC COND 4191 N Mesa El Paso, TX 79902
FROM	John Doe, CQCSM ABC Excavation & Construction 123 Main St El Paso, TX
USIBWC DATE RECEIVED	RECEIVED May 15 2023 U.S. International Boundary & Water Commission Construction Management Division
CHECK ONE	☒ THIS IS A NEW SUBMITTAL ☐ THIS IS A RESUBMITTAL ☐ THIS IS AN ADDENDUM OR CHANGE TO AN APPROVED SUBMITTAL
SPECIFICATION SECTION NO.	01.35.23 *Cover only one section with each form ◆◆*
PROJECT TITLE	Make Believe Levee Work
CONTRACT NO.	191BWC99C9999

DESCRIPTION OF ITEMS SUBMITTED Type, size, model number/etc.	CONTRACT REFERENCE DOCUMENT SPECIFICATION PARA. NO.	DRAWING SHEET NO.	VARIATION *	FOR IBWC USE
First Aid/CPR Records	1.5.B.10			INTERNATIONAL BOUNDARY & WATER COMMISSION U.S. SECTION REVIEW RESULTS AS INDICATED BELOW A - Compliance Confirmed. B - Compliance Confirmed as Noted. Resubmission not Required. C - Examined and Returned for Correction. See Attached Sheet. D - Incomplete Submittal. E - Unacceptable. See Attached Sheet. NAME DATE 5/23/2023

REMARKS

◆◆ *When submittal is required in multiple specification sections, list the main one in the form box and list all others in the "Remarks."*

* *Contractor to provide detailed description of variation requested on separate sheet of paper.*

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the Contract Documents except as otherwise stated.

SIGNATURE OF CONTRACTOR'S REPRESENTATIVE

John Doe, CQCSM

PRINTED NAME OF CONTRACTOR'S REPRESENTATIVE

IBWC Form 146(COND) Updated 12/21/2022 www.ibwc.gov

Figure 5 - Example of Completed Form 146

22.6. Submittal Response Letter Template

The current submittal response letter template is available at:

Z:__Templates & Information\Templates-Submittals
or
W:__Templates & Information\Templates-Submittals
or
P:\COND__Templates & Information\Templates-Submittals

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO
CONSTRUCTION MANAGEMENT DIVISION

Date

Name of Project Manager
Project Manager
Company Name
Local Office Address

RE: 191BWCxxCxxxx Project Name
Submittal ## Title

Dear Mr. Name,

The USIBWC has reviewed the above referenced submittal.

This submittal received a **"Code B,"** entitled **"Compliance Confirmed as Noted."**

Please assure and note the following comments:

1. List comments.

Compliance confirmation of this submittal does not relieve the Contractor of their responsibility to meet the requirements in the specifications, drawings, and other contractual standards or regulations. The Contractor is also reminded to verify dimensions and quantities prior to ordering or constructing any item.

If you have any questions, please do not hesitate to call me at 915-xxx-xxxx or email me at your_email@ibwc.gov.

Sincerely,

Your Name
Contracting Officer's Representative

Figure 6 - Example of Submittal Response Letter

22.7. Submittal File Naming Convention

With the 04-Submittals directory for construction projects or the 06-DB Submittals-Deliverables directory for design-build projects, the submittals shall be organized and filed as noted:

22.7.A. During Ongoing Project

Create a directory for each submittal. Name the directory with a three digit submittal number (no A, B, C, etc.) and with a brief name.

Within this directory, place everything associated with this submittal number. DO NOT create subdirectories for each subsequent or resubmittal (i.e. A, B, C).

Since the directory has the name of the submittal, it is not critical that any item within the directory have a descriptive name. Each item shall have the three digit submittal number, the date, and the company name. Dates shall always be YYYYMMDD.

When a CM Contractor provides a review, that file shall be ### YYYYMMDD CM Name Review.pdf.

The final, reviewed submittal with a signed and stamped Form 146, the review letter from the COR, and the original submittal data shall be named ### YYYYMMDD IBWC Response & 146.pdf.

22.7.A.1. Examples

Within a sample directory of "013 APP" you could find these files where "Arcadis" is the CM Contractor:

013 20170728 Meridian APP Plan.pdf
013 20170802 Arcadis Review.pdf
013 20170809 IBWC Response & 146.pdf
013-A 20171004 Meridian APP Plan Rev.pdf
013-A 20171010 Arcadis Review.pdf
013-A 20171016 IBWC Response & 146.pdf
013-B 20171212 Meridian APP Plan Rev 2.pdf
013-B 20171220 Arcadis Review.pdf
013-B 20171222 IBWC Response & 146.pdf
013-C 20190122 Meridian APP Plan Update.pdf
013-C 20190124 Arcadis Review.pdf
013-C 20190410 IBWC Response & 146.pdf

All subsequent or resubmittals falling under "013 APP" are kept together. They are organized first by the submittal number and then by the date of the document. Items are easy to locate and identify.

In most cases each submittal version (i.e. initial, A, B, C) will have three files and only three files associated with it.

22.7.B. After Project Closeout

Once the project has been closed out, keeping the submittals in separate directories is no longer beneficial. Move all contractor submittals, CM reviews, and COR responses into the base directory (04-Submittals or 06-DB Submittals-Deliverables). Delete all subdirectories.

Delete all Word files since everything should have been saved in a pdf. Delete all non-submittal files such as product catalogs or other items that you kept to help you keep track of items.

22.8. Critical Submittals for Starting Construction Work

The question is often asked: What does the contractor need to do to start work? As always, review your Contract. The premobilization submittals are considered critical and, if applicable, must be provided before mobilization. These applicable submittals should be referenced in Section 01.11.00 Paragraph 3.1 of the technical specifications in construction contracts or 00.24.00.01 Paragraph 3.1 in the scope of work for design-build contracts.

A. Code of Business Ethics (01.31.75)

B. Baseline Schedule (01.32.16)

C. Scheduler Qualifications (01.32.16)

D. Video and Photographs of Existing Conditions (01.32.33)

E. Submittal Register (01.33.00)

F. Accident Prevention Plan and applicable AHAs (01.35.23)

G. Site Safety and Health Officer Qualifications (01.35.23)

H. Employee First-Aid and CPR Training Records (01.35.23)

I. Contingency Evacuation Plan (01.35.23)

J. Quality Control Plan (01.45.00)

K. contractor Quality Control System Manager Qualifications (01.45.00)

L. Staging Area/Haul Routes/Trailer Location/Storage (01.52.13 and 01.57.00)

M. SWPP Plan (01.57.19)

N. SWPPP NOI (01.57.19)

O. Resource Conservation Construction Plan (01.74.19)

P. Flood Protection Plan (02.02.00)

Q. Preconstruction Survey (02.21.00)

R. Vibration Control Plan (02.22.00)

S. Preconstruction Condition Survey (02.22.00)

22.9. Submittal Guidance

22.9.A. Record Drawings

The contractor shall keep one current and updated record copy of all specifications, plans, agenda, supplementary drawings, shop drawings, change orders, modifications, and clarifications at the contractor's field office. Specifications, plans, supplementary drawings, and shop drawings shall be annotated to show all changes made during the construction process. These shall be available to the Government on at least a monthly basis to inspect for accuracy and completeness. Failure by the contractor to maintain a current and satisfactory record copy of the aforementioned documents shall result in retainage of an appropriate amount of the monthly pay estimate, as determined by the Government.

22.9.B. Accident Prevention Plan

After award of the Contract, the contractor will prepare a written proposal outlining the steps taken to implement the accident prevention clause of the Contract. One of the first submittals provided to the COR for review and compliance confirmation should be the Accident Prevention Plan or Safety Plan; either title is acceptable. The written proposal will become the contractor's Accident Prevention Program for the Contract after it is accepted.

The following guidance is provided to assist the COR in reviewing the contractor's Accident Prevention Plan in accordance with the Safety and Health Requirements Manual, EM 385-1-1, dated November 30, 2014. The Accident Prevention Plan should be based upon Appendix A of EM 385-1-1. Ensure that the Accident Prevention Plan is site and project specific.

A. Signature Sheet
   Check that all necessary signatures have been included with the Accident Prevention Plan. The APP shall be signed by the person or firm (senior person) preparing the APP, the contractor's project manager, the contractor's onsite superintendent, and the designated Safety and Health Officer (SSHO).

B. Background Information
   In addition to contractor name, Contract number, and project name double check that a date has been included on the safety plan. If the plan is updated at a later date, you must be able to tell which is correct copy.

   Review the phases of work list provided. These will probably be the only areas for which the contractor will write an AHA. Ensure that all phases are included.

C. Statement of Safety and Health Policy
   Provide a copy of current corporate/company Safety and Health Policy Statement, detailing commitment to providing a safe and healthful workplace for all employees. The contractor's written safety program goals, objectives, and accident experience goals for this contract shall also be provided.

D. Responsibilities and Lines of Authorities
   Are the responsibilities clear? Is the person listed as being in charge of the safety program really in charge? Do they have the authority to stop work or change how work is proceed?

E. Subcontractors and Suppliers
Make sure the safety responsibilities of subcontractors and suppliers has been identified.

F. Training
Besides basic training of employees, supervisors, and new hires make sure that any specific training for specific hazards (e.g., explosive actuated tools, confined space entry, crane operator, diver, vehicle operator, hazardous materials) has been identified.

G. Safety and Health Inspections
There must be an assignment of responsibilities for a minimum daily jobsite safety and health inspection during periods of work activity: Who will conduct (e.g., SSHO, PM, safety professional, QC, supervisors, employees – depends on level of technical proficiency needed to perform said inspections) inspections? What happens if an activity fails inspection?

H. Accident Reporting
The person responsible to provide accident reporting data to USIBWC shall be identified.

I. Plans (Programs, Procedures) Required by the Safety Manual
Based on a risk assessment of Contracted activities and on mandatory OSHA compliance programs, the contractor shall address all applicable occupational risks and compliance plans. If you know of local hazards or conditions that have not been addressed, let the contractor know. There are 61 possible plans, programs, and procedures listed in EM 385-1-1. contractor shall only include only plans, programs, and procedures (Item i. on EM 385-1-1 page A-5) that apply to this project.

1. Medical Support (Section 03) - All employees shall be certified in CPR and first-aid per shift/site. Hospital information and maps. First aid kit sizes and locations.
2. Radiation Safety Program (06.F) - When using nuclear density gauges on the jobsite, a radiation safety program should be mentioned.
3. Heat/Cold Stress Monitoring Plan (06.J) - Most of USIBWC's area of operations includes parts of the country that experience very hot and sometimes humid summers. This is a serious health risk that must be dealt with by the contractor.
4. Fire Prevention Plan (09.A) - Vegetation around the Rio Grande can be dense. What are the contractor's fire prevention plans? How will they coordinate their work with local emergency services?
5. Emergency Plan for Severe Weather (01.E) - Not only is flooding often a risk on IBWC projects, but throughout the region, lightening is common. Severe weather can include heavy rains, thunderstorms, damaging winds, tornados, hurricanes, floods, and lightning. The contractor's safety plan shall include a discussion of:
   a. Severe weather triggers to alert the safety officer to monitor weather conditions;
   b. Training on severe weather precautions, and actions;
   c. Identified area of retreat.
6. Fall Protection & Prevention Plan (21.D) - This is often overlooked on levee or other "ground" work. If large concrete forms or other structures will be worked on, fall protection still applies.

7. Excavation/Trenching Plan (25.A) - Soil collapse is the most overlooked safety hazard on heavy construction sites. How will the contractor keep excavated slopes safe? What are their procedures for trenching?

22.9.C. Activity Hazard Analysis

See 24.5 for information on AHAs.

22.9.D. Flood Control Plan

The following is offered as a rough guide only for development and review of a flood control plan. This needs to be adapted to your site and work conditions. However, the basic components of a Flood Control Plan should include these, or similar, aspects.

The Flood Control Plan includes the Emergency Levee Closure Plan. As a reminder, the contractor must plan to close the levee within a 24 hour time frame in the event of emergencies. The plan shall indicate how the levee will be closed and ensure that the repair will survive the 100 year flood without collapse, breach, or damage. The plan shall include the method of closure, the procedures of closure, and who is responsible for determining when a closure is required.

The contractor is reminded that they are required to use their own judgment to determine when to move to a different flood stage and what work to continue at any given time. contractors should monitor the Rio Grande flows and current weather conditions. Releases from upstream dams also contribute to the river flows.

Once there is a potential for the river to exceed the banks and rise into the floodplain. It is recommended that the contractor maintain strict surveillance on floodplain conditions in order to decide whether or not to invoke the flood protection plan for their project. The contractor may always choose to amend any flood protection plan submittal, based on conditions and viable alternatives for working conditions in order to meet the specification requirements to protect the work, existing conditions, and adjacent properties.

Throughout all flood stages, the contractor shall maintain surveillance of the water conditions and keep communications ongoing with the Inspector/CI and COR.

22.9.D.1. Stage 1

A flood watch has been issued by the NWS (National Weather Service) or the onsite superintendent enacts this stage. All work continues as normal but weather conditions and river levels are watched carefully.

22.9.D.2. Stage 2

A flood warning has been issued by the NWS or the onsite superintendent. The contractor continues to work but begins to limit the length of open excavations (breaches) in the levees.

22.9.D.3. Stage 3

The Rio Grande begins to overbank. The contractor should use their discretion about continuing excavation operations. Embankment (backfilling with material that meets Contract specifications) operations usually can continue. The contractor should have sufficient equipment on hand to close all breaches if required. If spoil or stockpile exist in the floodplain, the contractor may want to begin moving them against the levees.

22.9.D.4. Stage 4

Water begins to flow into the floodplain. The contractor should begin to close all breaches immediately with material on hand (material does not need to meet Contract specifications). Any spoil or stockpiles located in the floodplain needs to be pushed up against the levee. All stockpile tops and levee crowns need to be flattened to allow the passage of emergency vehicles.

22.9.D.5. Stage 5

Flood waters are up against the levee. The contractor has stopped all levee construction work and is maintaining vigilance to protect breaches from developing in the levee.

22.9.D.6. Definitions from NWS:

a. Warning

A warning is issued when a hazardous weather or hydrologic event is occurring, imminent or likely. A warning means weather conditions pose a threat to life or property. People in the path of the storm need to take protective action.

b. Watch

A watch is used when the risk of a hazardous weather or hydrologic event has increased significantly, but its occurrence, location or timing is still uncertain. It is intended to provide enough lead time so those who need to set their plans in motion can do so. A watch means that hazardous weather is possible. People should have a plan of action in case a storm threatens and they should listen for later information and possible warnings especially when planning travel or outdoor activities.

c. Advisory

An advisory is issued when a hazardous weather or hydrologic event is occurring, imminent or likely. Advisories are for less serious conditions than warnings, that cause significant inconvenience and if caution is not exercised, could lead to situations that may threaten life or property.

22.9.E. Quality Control Plan

A contractor's Quality Control Plan is extremely important. Acceptance of the QC Plan can establish the extent of the contractor's obligations. Thus if a lower level of inspection, approval, or testing is shown in a compliance confirmed QC Plan, the contractor may be able to argue that by accepting their QC Plan, we accepted the lower standards.[9]

[9] *Maizel Labs., Inc.*, ASBCA 8597, 1963 BCA 3898 and *Lehigh Chem. Co.*, ASBCA 8427, 1963 BCA 3749

23 Weekly Coordination Meetings

After issuance of the Notice to Proceed, the COR, Inspector/CI, and contractor shall discuss the contractor's plans for mobilization and field office establishment. Once the contractor begins to mobilize for construction, weekly coordination meetings shall be scheduled. The COR sets the day and time for these meetings.

The coordination meetings are held at the contractor's field office or jobsite trailer, whichever is more appropriate. The COR, Inspector/CI, prime contractor's superintendent, prime contractor's project manager, prime contractor's CQC, and representatives from major subcontractors should always be at the weekly meetings.

These meetings are meant to offer everyone the chance to review current work quality and progress as well as upcoming work. Problems, issues, solutions, submittals, etc. are discussed. The COR runs the meeting while the Inspector/CI keeps minutes. The minutes are circulated to everyone that attended before the next meeting. Corrections to the minutes can then be suggested prior to the next meeting. The meeting minutes are approved via general consensus at the next scheduled meeting.

The general process used is that the minutes from the prior meeting are used as the agenda for the current meeting. Using this method, the prior minutes are thoroughly reviewed. Any items that were closed or resolved last week are to be deleted from the current minutes; last week's new business will become old business this week. Usually, items should not be closed, resolved, or deleted directly from new business.

When two or three week look ahead schedules are used, have the contractor provide copies for everyone attending the coordination meeting. These schedules quickly show what is planned on the jobsite. Also have the contractor provide you with a pdf file of these schedules every week so that they can be attached to the weekly minutes.

Always ensure that meeting minutes correctly reflect what was and was not agreed to. Decisions by the COR and Inspector/CI are critical to note correctly. These minutes are maintained throughout the Contract and are often referenced back to for critical items. The minutes are also kept as part of the official Contract file that is maintained after project completion by the CO.

23.1. Minute Entries

The minutes do not need to contain every item ever discussed during the meetings. Usually keeping just the last two or three meeting entries is sufficient. If more detail or background on an item is required, prior minutes can be reviewed.

For example, an Old Business items might look like:

Border Incidents

6/17/2021: Last week, in the middle of a work day, an individual ran across the river and stole a skill saw. It was reported that Border Patrol agents are leaving food trash on the levee in the area of the triple box culvert.

6/24/2021: An illegal border crosser was apprehended this morning crossing the river at the International Dam.

Guardrail & Gate Posts

7/26/2016: Shawn stated they have the flared end section product data and it would be submitted shortly and Sanbar is scheduled to be onsite next week for guardrail installation. Andie stated the IBWC surveyors should have the property lines laid out today, she needs to confirm access road rights and would get back with guardrail locations. Andie asked that the vehicle gate be secured to stop post when open to prevent damage or injury. Andie asked Junior and Nick to measure the guardrail distance between Del Rio inlet and mesquite tree as well as distance between vehicle gate and edge of IBWC right of way to confirm total is under the 180 feet contracted on the project.

8/2/2016: Completed.

Always ensure that an entry for "Schedule" or something similar is maintained. In this section, specially note the required completion date. If the completion date has passed and work is continuing, note the days late.

23.1.A. Template

The weekly meeting minutes and sign in sheet template is available at:

Z:__Templates & Information\Templates-General

or

W:__Templates & Information\Templates-General

or

P:\COND__Templates & Information\Templates-General

23.1.B. Files

Store the completed meeting minutes with all attachments as a single pdf in the following directories:

Construction

xxx\11-Meeting Minutes

Design-Build

xxx\07-Meeting Minutes\Weekly Mtgs

23.2. Look Ahead Schedules

Most construction and design-build have requirements for the contractor to provide a look ahead schedule for the weekly coordination meetings. However, there is no requirement for these schedules to be produced from scheduling software. They can be anything from a simply list on up. The only requirement is that they estimate work for the next two to three weeks.

23.2.A. Files

The look ahead schedules are included with the weekly meeting minutes, but also store the all look ahead schedules in the following directories:

Construction

xxx\04-Submittals\Schedule Submittal Folder\Look Aheads

Design-Build

xxx\06-DB Submittals-Deliverables\Schedule Submittal Folder\Look Aheads

This page intentionally left blank to facilitate double sided printing.

24 Safety

FAR 52.236-13 requires the contractor to provide and maintain work environments and procedures which will:

A. Safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to contractor operations and activities;

B. Avoid interruptions of Government operations and delays in project completion dates; and

C. Control costs in the performance of this Contract.

For these purposes on Contracts for construction or dismantling, demolition, or removal of improvements, the contractor shall:

A. Provide appropriate safety barricades, signs, and signal lights;

B. Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and

C. Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

The easiest location to get clean pdf files of these CFRs is at www.govinfo.gov/app/collection/CFR.

Additionally, the Contract clause Construction Safety Standards -- IBWC requires the contractor to comply with all pertinent provisions of the USACE Safety and Health Requirements Manual, EM 385-1-1, dated November 30, 2014. In the event that there is a conflict between EM 385-1-1, 29 CFR Part 1926, and 29 CFR Part 1910, the more stringent requirement shall prevail.

Before commencing the work, the contractor shall:

A. Submit a written ***site specific*** plan (Accident Prevention Plan or Safety Plan) for implementing IBWC's Contract clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in Contract work performance and a plan for controlling these hazards; and

B. Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

Notes on reviewing the contractor's Accident Prevention Plan are located in 22-Submittal Procedures, Page 11.

The Government Inspector/CI will assess the unit of work or operation for safety compliance before proceeding with inspection for the technical compliance. The field personnel must be familiar with the contractor's safety program and be certain that the contractor implements it and reviews their Activity Hazards Analysis before beginning each phase of work.

24.1. EM 385-1-1, USACE Safety and Health Requirements Manual

The USACE Safety and Health Requirements Manual can be obtained on the internet in a pdf file from: www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_385-1-1.pdf.

This file is also available on the network at:

Z:__Templates & Information\Forms\EM 385-1-1
or
W:__Templates & Information\Forms\EM 385-1-1
or
P:\COND__Templates & Information\Forms\EM 385-1-1

Hard copies of the EM 385-1-1 are not available.

24.2. Accident Reporting and Follow Up

The contractor shall submit a separate Form 153, Monthly Exposure and First Aid Report, for every contractor and subcontractor on the jobsite. This is required for all Contract periods when workers are onsite.

If an accident or first aid incident occurs, it should be noted in the daily reports. The Inspector/CI shall be notified immediately and shall evaluate the scene. The COR shall be notified of the occurrence and provided with an accident report per the contractor's Accident Prevention Plan. The COR will also be provided with copies of any doctor's visits and follow up reports related to the accident.

It the accident is serious or fatal, notify the COND Chief immediately.

After the accident, the contractor shall review all of the factors that caused the accident and shall recommend changes to work methods, materials, the Accident Prevent Plan, or AHAs.

The contractor must fill out OSHA Form 301, Injury and Illness Incident Report, within seven calendar days after a recordable work-related injury or illness has occurred. A copy of this form shall be provided to the Inspector/CI and COR.

24.2.A. Files

Store the completed Forms 153 in the following directories:

Construction
xxx\06-Inspection Logs, Cure, D&O\Form 153-Monthly Exposure
Design-Build
xxx\22-Inspection Logs, Cure, D&O\Form 153-Monthly Exposure

Store the safety issues or accident investigations in the following directories:

Construction
xxx\07-Safety
Design-Build
xxx\23-Safety

CM Task Order
xxx\17-CM Contract\06-CM D&Os and Other Problems
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\03-AE D&Os and Other Problems

24.3. Noncompliance

The contractor shall be responsible for being cognizant of and ensuring compliance with 385-1-1, 29 CFR Part 1926, and 29 CFR Part 1910 requirements. Such responsibility shall apply to both the contractor's operations and those of the contractor's subcontractors. When violations of the safety and health requirements contained in the Contract are called to the contractor's attention by the Government, the contractor shall immediately correct the condition to which attention has been directed. Such notice, either oral or written, when served on the contractor or the contractor's representative, shall be deemed sufficient. When oral notice is provided, follow it up as soon as possible with written notice. All notices of noncompliance should be detailed in the daily reports.

In the event the contractor fails to or refuses to promptly comply with the compliance directive issued, the COR will notify the CO who will issue an order to stop all or any part of the work that has been deemed unsafe. The stop work order will remain in effect until satisfactory corrective action has been taken. The contractor shall not be entitled to any equitable adjustment of the Contract price or extension of the performance schedule on any stop work order issued under this clause. Failure of the Government to order discontinuance of any or all of the contractor's operations shall not relieve the contractor of the contractor's responsibility for the safety of personnel and property.

24.3.A. Files

Store the safety violation in the following directories:
Construction
xxx\07-Safety
Design-Build
xxx\23-Safety
CM Task Order
xxx\17-CM Contract\06-CM D&Os and Other Problems
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\03-AE D&Os and Other Problems

24.4. Checklist for Monthly Safety Evaluations

The contractor is required to maintain the following files at the jobsite:

A. Safety Program and/or Accident Prevention Plan.

B. Preconstruction and Meeting of Mutual Understanding minutes.

C. Activity Hazard Analysis attached to Preparatory Inspection Checklist.

D. Equipment checklists including, but not limited to: Form 264 (Safety Inspection for Mechanical Equipment), Form 265 (Safety Inspection for Cranes), Form 266 (Safety Inspection for On Highway Equipment), or other appropriate equipment inspections.

E. Contractor's Daily Construction Quality Control Report.

24.5. Activity Hazard Analysis

Before beginning each work activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform the work, the contractors performing that work activity shall prepare an Activity Hazard Analysis (AHA). The contractor shall use IBWC Form 164A.

AHAs shall define the activities being performed and identify the work sequences, the specific anticipated hazards, site conditions, equipment, materials, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level of risk.

Work shall not begin until the AHA for the work activity has been accepted by the COR and discussed with all personnel engaged in the activity, including the contractor, subcontractors, and Inspector/CI, at preparatory and initial control phase meetings.

The names of any Competent/Qualified Person(s) required for a particular activity (for example, excavations, scaffolding, fall protection, other activities as specified by OSHA and this manual) shall be identified and included in the AHA. Proof of their competency/qualification shall be submitted to the COR for acceptance prior to the start of that work activity.

The AHA shall be reviewed and modified as necessary to address changing site conditions, operations, or change of competent/qualified person(s).

A. If more than one Competent/Qualified Person is used on the AHA activity, a list of names shall be submitted as an attachment to the AHA. Those listed must be Competent/Qualified for the type of work involved in the AHA and familiar with current site safety issues.

B. If a new Competent/Qualified Person (not on the original list) is added, the list shall be updated (an administrative action not requiring an updated AHA). The new person shall acknowledge in writing that they have reviewed the AHA and is familiar with current site safety issues.

The AHA is intended to be created and used in the field, where the involved workers are located. They are NOT intended to be corporate documents, nor just submittals. Ideally, the workers involved with the activity should develop the AHA, as these workers normally have the technical expertise to know the process and the hazards involved. It should be used as a training tool for all members involved in the activity, and reviewed before work begins.

24.6. Safety Meetings

The contractor shall conduct safety meetings to review past activities, plan ahead for new or changed operations, review pertinent aspects of appropriate AHAs (by trade), establish safe

working procedures for anticipated hazards, and provide pertinent safety and health training and motivation.

Meetings shall be conducted at least once a month for all supervisors on the project location and at least once a week by supervisors or foreman for all workers. Weekly Tool Box Safety meetings may be documented on IBWC Form 164 or on the contractor's own forms. The minutes shall indicate the subjects covered and names of personnel attending. The labor count should match the number of personnel attending the Weekly Tool Box Safety Meeting. The Inspector/CI will attend Weekly Tool Box Safety meetings. Completed forms shall be submitted to the Government as an attachment to that day's construction quality control report.

24.6.A. Files

Store safety meeting records in the following directories:

Construction

xxx\10-Daily Reports\Contractor Safety or xxx\07-Safety

Design-Build

xxx\10-Daily Reports\Contractor Safety or xxx\23-Safety

24.7. Extremely Small Construction Projects

In very small construction projects (<$25,000) safety is still important, but having the contractor produce a full blown Accident Prevention Plan can quickly eat into hours the contractor had planned for the project. In these cases, the Accident Prevention Plan should be scaled down (abbreviated) or even eliminated. The use of AHAs is always required and accident notification and reporting requirements remain the same regardless of project size.

See 4-Requirements Based on Project Size for a chart recommending safety items based upon project size.

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25 Archaeological and Environmental Considerations

As a Government Representative, not only do you have an obligation to ensure that environmental and archaeological protection laws are enforced on USIBWC lands, but you also have an obligation to ensure that these laws are enforced in the use of federal monies on public and private land. This means that just because a borrow site is on private land does not exempt it from meeting the environmental requirements defined by law; since federal money is being used to pay for the work on the private land, it becomes entangled in the federal mandates to protect archaeological and environmental resources.

First and foremost as COR, read the EA, EIS, FONSI, ROD, Categorical Exclusion (CE/CATEX), or any other environmental document that pertains to your project. Do not rely on others to tell you what must be addressed to ensure that your project meets all legal requirements.

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26 Deficiency Notification and Correction

When it has been discovered that the contractor has allowed work contrary to the Contract or has violated (willfully or not) clauses of the Contract (or specifications/SOW), a Deficiency and Omissions (D&O) Report (IBWC Form 202) shall be presented to the contractor by either the CO or COR. A D&O is similar to a "fix it" ticket. The contractor is told specifically what is viewed as being noncompliant and is tasked with developing a plan to fix it.

The form has room for the contractor to detail their corrective action. If the contractor does not believe that they have violated parts of the Contract, they will use this area to refute the D&O. After the contractor has responded, the initiating party (CO or COR) shall determine if the response or corrective action is sufficient to close the D&O. If it is, the disposition portion of the form is completed and signed as appropriate.

If the corrective action is insufficient or if it may take a while to determine if items will be corrected, the D&O can remain open. In this instance, the CO/COR shall provide the contractor with periodic updates as to the status of the D&O. When the item has been resolved, it is closed.

Not acknowledging or responding to a D&O can be grounds for terminating a Contract. Additionally, all D&Os should be closed prior to completion of the Contract. All D&Os shall be documented in the CPARS ratings (see 36-CPARS-Past Performance Evaluations).

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27 Monthly Status Reports

A written report is required from the COR to the CO evaluating the contractor's overall Contract performance and specific performance for each month's work. This report is due by the 15th day of the month following the report month. It takes a couple of days for the reports to be processed by the Administrative Assistant, so CORs should submit these reports prior to the 15th.

This monthly status report is usually called the COR report. As detailed in the COR's appointment letter, the monthly report must contain:

A. Major accomplishments.

B. Significant problems and proposed solutions.

C. Areas in which contractor fails to meet Contractual requirements and recommended actions to cure such deficiencies.

Each COR report covers these items for the reporting period noted in the subject of the monthly report.

The monthly COR report for a Construction Contract varies slight from that of a CM Contract. Each section of the monthly COR report is detailed below.

27.1. General Project Information

In this section, fill out the pertinent data about your Contract. Also enter the total amount of pay estimates received during the reporting period and the total money remaining on the Contract at the end of the reporting period.

Many construction projects have an extended period of performance for the contractor to fully vegetate the site; therefore, the construction period is often not the same length as the total project period. Additionally, in Construction Management (CM) Contracts, there is often the option of extending the CM Contractor past the original performance period. As these options are exercised, the performance period will change.

27.2. Percentage Complete

For each item listed on the COR report, complete the appropriate percentage as of the end of the reporting period.

27.2.A. Construction Time Passed

Calculate the total number of days from the Notice to Proceed through the end of the reporting period. Divide that by the total number of days allowed in the Contract for construction as of the end of the reporting period.

27.2.B. Percent of Contract Paid

Calculate the total amount of funds that have been paid or submitted for payment by the COR as of the end of the reporting period. Divide this value by the total value of the Contract at the end of the reporting period.

27.2.C. Embankment Percent Excavated and Placed

Most of the current construction projects involve levee construction (if your project involves a structure or building, change "embankment" to "structure") so how much of the actual levee has been completed is a common question. Embankment complete includes only excavation and fill to design top-of-levee-elevations. Topsoil and flex base are not dependent upon the embankment complete percentage.

Different CORs computer this in different manners. Some CORs determine where the contractor finished work on the last day of the reporting and then calculate the total stations (or mileage) which have been completed, divided by the total stations (or mileage). Other CORs only include placed embankment that has been completely inspected and passed. Whichever method you choose to use to calculate this percentage, be consistent.

27.2.D. Completion of all Flood Control Requirements

Your Construction Contract most likely contains gates or other structures within the footprint of the levee. Any item that fills a hole or gap in the levee is important as a flood control structure. Since substantial completion cannot be achieved without all flood control structures being complete, this is an important item. The embankment percentage complete may be 100% while the completion of all flood control structures may be 75%. This lets the CO immediately know that the contractor has significant work prior to substantial completion.

Calculate this percentage in a similar manner as you calculated embankment percentage.

27.2.E. Base Task Order Time Passed

As mentioned before, most CM Services Task Orders have a base Contract period and then optional items that can be exercised to extend the Task Order. Calculate the total number of days from the Notice to Proceed through the end of the reporting period. Divide that by the total number of days allowed in the Task Order for the base Contract period.

27.2.F. Total Task Order Time Passed

Calculate the total number of days from the Notice to Proceed through the end of the reporting period. Divide that by the total number of days allowed in the Task Order if all optional items were exercised. Do not include overtime hours and days.

27.2.G. Base Task Order Paid

Calculate the total amount of funds that have been paid or submitted for payment by the COR as of the end of the reporting period. Divide this value by the total value of the Task Order for CM Services covering the base period.

27.2.H. Total Task Order Paid

Calculate the total amount of funds that have been paid or submitted for payment by the COR as of the end of the reporting period. Divide this value by the total value of the Task Order at

the end of the reporting period. This should include costs for the base period, options, hourly overtime, and daily overtime.

27.3. CM Contractor Activity

Most CORs choose to use bullets to quickly identify what items the CM Services contractor has aided them with during the reporting period. Sample bullets are included with the report templates. Change these bullets to fit your project.

27.4. Change Orders and Modifications

This section includes four items which include:

A. Pending Change Orders

B. Pending Contractor Claims

C. Pending Contract Modifications

D. Processed Contract Modifications

A common question that arises is what constitutes a "change" when any change to the Contract is a modification. A change order is any issue which is required to be implemented but was somehow missed and not included in the Contract. Obviously, any recommended change has to go through several stages, before it becomes legitimate. A change may be initiated by anyone involved with the Contract.

For example, the contractor may send in an RFI requesting additional information about a structure. The COR realizes that the required information is missing and that it is required to build the structure. At that time, it becomes a change to the Contract and should be tracked to monitor the progress in resolving the issue. After the COR receives the required data, the data is provided to the CO with appropriate backup documentation requesting that it be incorporated into the Contract. Now the change has progressed to a pending modification.

27.4.A. Definitions

Pending Change Order - An issue for potential change to the Contract.

Pending Contractor Claims - A contractor can make a claim against the Government for any reason. Sometimes these claims are legitimate and after analysis are processes as Contract modifications; other times these claims are invalid and are rejected by the Government. In both cases, the COR is responsible for keeping track of all claims until the CO has issued a response to the contractor.

Pending Modification - Proposed Contract alteration that has been sent to the CO for processing or which the COR is working on completing the documentation that the CO will require (T/As, SOW, IGE, funding, etc.).

27.5. Submittals, RFIs, Reports, and Meetings

This section is simply a tabulation of submittals, RFIs, reports, and meetings that took place within the reporting period. Exception, if the contractor has submitted all Daily QC reports, enter "Reports were received to cover all Contract days;" otherwise, enter how many Daily QC reports are missing. For certified payrolls, indicate the date through which all payrolls have been received such as "Payrolls received through 3/16/2025."

27.6. Construction/Inspection Activity, Problems, Solutions, and Schedule

In paragraph form, explain to the CO current project activity, problems, including any solutions, and an update of the project schedule. This section should provide the CO with a snapshot of the current project condition as it related to this contractor. Once items have been resolved, delete them.

27.7. Areas Where Contractor Fails to Meet Contractual Requirements

Detail in this section any areas where the contractor is failing to meet Contractual requirements. These items may or may not be on the deficiency log. Explain why the area of work does not meet the Contractual requirements and any effort you, the Inspector/CI, and/or the contractor are taking to resolve the problem.

27.8. Items on Deficiency Log or Receiving a D&O

If a Deficiencies and Omissions Report (D&O) has been issued to the contractor, provide details of the situation that caused the report to be issued and the current status of the issues. If the D&O has been closed, no additional discussion of this item needs to occur.

Additionally list all items that are currently on the contractor's deficiency log (Form 150). Update the CO on the length of time that these items have been on the log and the efforts that the contractor is taking to remedy the situation. If the contractor is ignoring the deficiencies, be sure to let the CO know, so that they can step in and help with a resolution.

27.9. CC List and Footer

The cc list for all COR reports shall include at a minimum:

Engineering Department PE
Chief Financial Officer
COND Division Chief
ACD Division Chief
FAD Division Chief
MPD Division Chief

See 2.4.D.-Bcc for additional details about the cc list of your COR report.

27.10. Record Management Codes

Use code "DCE 2 (DCS 2-1)" for design COR reports, code "DCE 2 (DCS 2-2)" for construction and design-build COR reports, and "DCE 2 (DCS 2-3)" for CM Task Order COR reports. See 2.4.F.-Record Management Codes for information on the placement of this code in your report.

27.11. Template

Templates exist for COR reports for construction projects, for CM Services Task Orders, for A/E Task Orders, for A/E Task Orders used during post design services (i.e. construction), and for design-build contracts. These templates are available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

27.12. Files

Store both the Word and pdf files sent out by Administrative Assistant in the following directories after adding "*yyyymmdd* " to the beginning of the filenames:

Construction
xxx\05-Correspondence
Design-Build
xxx\05-Correspondence
CM Task Order
xxx\17-CM Contract\05-CM Correspondence
A/E Design Task Order while in the design phase of work
xxx\05-Correspondence
A/E Design Task Order while in the post design (construction) phase of work
xxx\21-A-E Const Svcs\02-AE Correspondence

Store both the Word and pdf files sent out by Administrative Assistant in the following directories:

Construction
Use filename format of "*yyyymm Project Name Construction COR Report*"
xxx\12-COR Monthly Reports
Design-Build
Use filename format of "*yyyymm Project Name DB COR Report*"
xxx\12-COR Monthly Reports
CM Task Order
Use filename format of "*yyyymm Project Name CM Svcs COR Report*"
xxx\17-CM Contract\10-COR Monthly CM Reports
A/E Design Task Order while in the design phase of work
Use filename format of "*yyyymm Project Name AE Design COR Report*"
xxx\12-Monthly COR Reports
A/E Design Task Order while in the post design (construction) phase of work
Use filename format of "*yyyymm Project Name AE Post Design COR Report*"
xxx\21-A-E Const Svcs\06-COR Monthly AE Reports

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28 Contractor Monthly Reports

Almost all SOWs require contractors to submit monthly reports. Review the SOW to determine the minimum requirements for the monthly reports. When they are provided by the contractor, review the provided report and ensure that they meet the SOW requirements.

Notify the contractors if the monthly reports or any required logs do not meet the SOW requirements. Otherwise, file the documents as indicated below.

28.1. Templates

A template for the monthly report entitled "*CM Monthly Report Template 20221115.docx*" is available at:

Z:__Templates & Information\Templates-Contracts
or
W:__Templates & Information\Templates-Contracts
or
P:\COND__Templates & Information\Templates-Contracts
This template is also available to outside entities under the "*Construction Management Services Templates and Guidance*" link at www.ibwc.gov/resources-info/.

28.2. Files

Store the monthly report and all logs in the following directories. Start each file name with yyyy-mm to indicate the month the report/logs cover.

Design-Build
xxx\11-Monthly Contractor Reports
CM Task Order
xxx\17-CM Contract\11-CM Monthly Reports
A/E Design Task Order
xxx\11-Monthly Contractor Reports
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\07-AE Monthly Reports

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29 Government Office Files

No one enjoys filing, but keeping accurate and complete Contract files is a major component of Contract management. Maintaining the projects files is the responsibility of the COR.

29.1. Records Disposition

Often Contract paperwork is seen as a necessary evil to get off of your desk as soon as possible. However, when you are managing a Construction Contract, you must realize that the paperwork that is being processed not only reflects and documents the construction, but that it will kept by the Government permanently.

Some files are kept in Acquisitions by the CO while other files are kept in construction. The key determination as to which office maintains the original of any file is determined by record retention differences. All construction related files are kept permanently by the US Government. The Contract files are kept for 6 years and 3 months prior to **destruction** (General Records Schedule 3 3.a.(1)).

Per USIBWC directive SD.I.6103 (old numbering Volume II, Chapter 507), Files Maintenance and Records Disposition Manual - Records Disposal Schedules, the retention period for all Contract and construction files is permanently.

A. IBWC Project Planning, Design, and Construction Case Files
   Retention Period: Permanent. Cut off at close of calendar year in which construction is completed. Retire to Federal Records Center in 10 years after cutoff. Offer to the National Archives 30 years after cutoff.

B. Construction Field Survey Notebook Files
   Retention Period: Permanent. Cut off at close of the calendar year when project is completed. Offer to the National Archives when no longer need for recurring surveys or 30 years after cutoff, whichever is earlier.

C. Construction Contracts for International Boundary Projects or Contracts for Engineering and/or Consulting Services
   Retention Period: Destroy 6 years and 3 months after final payment.

29.2. Paper Files

Current construction contracts require that all materials be provided in electronic format. Some items will still be provided in paper formats including meeting sign-in sheets and labor interviews.

When Contracts are managed at a field office, all of these files are kept there until construction is finished. Once construction is complete, the files can be boxed up and sent to the headquarters office in El Paso. All of the files need to be organized and scanned prior to sending forward.

29.3. Electronic Files

The electronic files shall be organized similar to the office files. Having all of the data stored electronically allows the CO and others in ESD to reference any Contract information when they need it. **It is imperative that electronic files be complete and filed correctly!** It is also very important to keep the network data up to date. You can work day-to-day on your laptop, but keep a full, current backup of your project data on the W: drive.

All Contract files shall be stored on the W: drive. Both ESD and Contracting has access to this drive. This allows your CO the ability to view needed files at any time. You may also keep a copy of all of these files on your hard drive; just make sure that any updates are copied to the W: drive on a regular basis.

The location of your files shall be determined by the location of your project. Place your files in the appropriate folder listed below.

W:\Construction AMISTAD
W:\Construction FALCON
W:\Construction HQ
W:\Construction LRG
W:\Construction NOGALES
W:\Construction PRESIDIO
W:\Construction SAN DIEGO
W:\Construction URG

Ensure that a current, complete copy of the technical specifications and drawings are always kept in the Contract folder (00-Contract). Whenever there is a Contract modification that adds, deletes, or updates specifications and drawings, change the files to represent these changes. If you do not have a version of Adobe Acrobat that will perform these functions, put in a USIBWC Help Desk Ticket to request a copy of Adobe Acrobat Pro.

29.3.A. Construction Project Directory Structure

The construction project directory structure to be used is shown below. Design-Build structure is very similar.

- 00-Contract
  - Solicitation from sam.gov
- 01-Award NTP COR Letters
- 02-Precon & MOU Meetings
- 03-RFIs
- 04-Submittals
  - Additional directories created for each submittal
- 05-Correspondence
  - Emails
- 06-Inspection Logs, Cure, D&O
  - Form 153-Monthly Exposure
  - Form 161-Wx Report
  - Form 162-Preparatories
  - Form 166-Initial Insp

- Form 238-Concrete Placement
- 07-Safety
- 08-Payrolls & PEs
  - Bonds & Insurance
  - Certified Payrolls
  - Labor Inspections
  - SF-1413
  - Additional directories created for each pay estimate
- 09-Testing & Record Docs
  - Form 235-Concrete Test Results
  - Form 237-Nuclear Gauge Results
  - Form 240-Moisture Calibration
  - Form 241-Standard Count
- 10-Daily Reports
  - CM
  - Contractor
  - FEM
  - Lab
  - Additional directories for SWPPP, equipment inspections, materials, etc.
- 11-Meeting Minutes
- 12-COR Monthly Reports
- 13-Claims, Mods, REA Backup
  - Make a separate directory for each claim and/or item reviewed by the COR
- 14-Photos
  - CM
  - Contractor
  - USIBWC
- 15-Other Agency Coordination
- 16-Property Owners
- 17-CM Contract
  - 00-CM Contract
    - Solicitation-RFP
  - 01-CM Award NTP COR Letters
  - 02-CM Bids and Tech Analysis
  - 03-CM SOW, IGE & PR
    - IGE
    - PRs
    - SOW
  - 04-CM Kickoff Meeting
  - 05-CM Correspondence
    - Emails
  - 06-CM D&Os and Other Problems
  - 07-CM RFIs
  - 08-CM Invoices
  - 09-CM Claims & Mods Backup

- 10-COR Monthly CM Reports
- 11-CM Monthly Reports
- 12-CM Photos
- 13-CM Submittals
- 14-CM Closeout Files

18-NEPA
19-Survey-GIS Information
20-Design Data
21-A-E Const Svcs

- 00-AE Contract
- 01-AE NTP COR Letters
- 02-AE Correspondence
  - Emails
- 03-AE D&Os and Other Problems
- 04-AE Invoices
- 05-AE Claims & Mods Backup
- 06-COR Monthly AE Reports
- 07-AE Monthly Reports
- 08-AE Site Visit Reports
- 09-AE Photos
- 10-AE Closeout Files

22-Reference Docs
23-Solicitation Files

- Bids-Proposals
- Drawings
- IGE
- Prebid
- PRs
- Solicitation Files to CO
- Solicitation Forms
- Specs

24-As-Builts
25-O&M Manuals
26-Warranties
27-Contract Closeout
in root directory, place contact list

29.3.B. Template

A blank folders with the directory structure to be used are available at:

Construction

- Z:__Templates & Information\00 Blank Construction File Structure
- W:__Templates & Information\00 Blank Construction File Structure
- P:\COND__Templates & Information\00 Blank Construction File Structure

Design-Build

- Z:__Templates & Information\00 Blank Design-Build File Structure
- W:__Templates & Information\00 Blank Design-Build File Structure

P:\COND__Templates & Information\00 Blank Design-Build File Structure

CM Task Order

CM directory structure is included under 17-CM Contract under both the construction and design-build directories.

A/E Design Task Order

Z:__Templates & Information\00 Blank Design File Structure-Contract
W:__Templates & Information\00 Blank Design File Structure-Contract
P:\COND__Templates & Information\00 Blank Design File Structure-Contract

A/E Post Design (Construction Services) Task Order

A/E construction service directory structure is included under 21-A-E Const Svcs under the construction directory.

29.3.C. Filename Limits

The longest that a filename can be including the full file path is 260 characters. This may seem like it will very difficult to reach this limit, but it isn't. For example, a testing form stored on the network will begin with "W:\URG Construction Files\191BWC23R0001 Am Canal Lower\09-Testing & Record Docs\Form 237-Nuclear Gauge Results\." This is 111 characters long. Often network names are shown by other names or IP addresses which increase the characters used. Our specifications and SOWs limit the length of filenames to ensure that documents can be saved and stored on our network without having filename issues.

Be aware that when you create subdirectories within subdirectories, that it quickly lengthens the filename. Also because the network pathname is much longer than the same pathname on your computer, a filename that is workable on your C: drive may not work when copied onto the network.

29.3.D. Location of Electronic Files

P: Drive is shared with EMD, MPD, BRO, GIS, and WAD
W: Drive is shared with ESD and ACD
Z: Drive is just ESD and COND

29.3.D.1. Forms

Z:__Templates & Information\Forms
W:__Templates & Information\Forms
P:\COND__Templates & Information\Forms
Forms are available to outside entities under the "*USIBWC Construction Forms*" link at www.ibwc.gov/resources-info/.

29.3.D.2. Contract Templates

Z:__Templates & Information\Templates-Contracts
W:__Templates & Information\Templates-Contracts
P:\COND__Templates & Information\Templates-Contracts
Our construction specifications available to outside entities under the "*USIBWC's Construction Specifications Template*" link at www.ibwc.gov/resources-info/.

29.3.D.3. Contract Source Selection Templates
Z:__Templates & Information\Templates-Source Selection
W:__Templates & Information\Templates-Source Selection
P:\COND__Templates & Information\Templates-Source Selection

29.3.D.4. Contract Submittal Templates
Z:__Templates & Information\Templates-Submittals
W:__Templates & Information\Templates-Submittals
P:\COND__Templates & Information\Templates-Submittals

29.3.D.5. Other Templates
Z:__Templates & Information\Templates-General
W:__Templates & Information\Templates-General
P:\COND__Templates & Information\Templates-General

29.3.D.6. USIBWC Logos
Z:__Templates & Information\Logos
W:__Templates & Information\Logos
P:\COND__Templates & Information\Logos
Logo files are available to outside entities under the "*IBWC Logos*" link at www.ibwc.gov/resources-info/.

29.3.D.7. Construction Management Guide
Z:__Templates & Information\Construction Management Guide
W:__Templates & Information\Construction Management Guide
P:\COND__Templates & Information\Construction Management Guide
This document is available to outside entities under the "*Construction Management Services Templates and Guidance*" link at www.ibwc.gov/resources-info/.

29.3.D.8. PE Requirements
Z:__Templates & Information\PE Requirements
W:__Templates & Information\PE Requirements
P:\COND__Templates & Information\PE Requirements

29.3.D.9. PDF Stamps
Z:__Templates & Information\PDF Stamps
W:__Templates & Information\PDF Stamps
P:\COND__Templates & Information\PDF Stamps

29.3.D.10. Publications
Z:__Templates & Information\Publications
W:__Templates & Information\Publications
P:\COND__Templates & Information\Publications

29.3.D.11. Whitepapers
Z:__Templates & Information\White Papers
W:__Templates & Information\White Papers

P:\COND__Templates & Information\White Papers

29.3.D.12. Current USIBWC Directives Effecting COND
W:__Templates & Information\Construction Management Guide\IBWC Directives
Z:__Templates & Information\Construction Management Guide\IBWC Directives

29.3.D.13. All USIBWC Directives
V:\Directives

29.3.D.14. Past Powerpoint Presentations
Z:\Power Point Presentations

29.3.D.15. Powerpoint Templates
Z:__Templates & Information\Templates-Powerpoint
W:__Templates & Information\Templates-Powerpoint
P:\COND__Templates & Information\Templates-Powerpoint

29.3.D.16. Engineering Office Files (EOFs)
These were the original drawings delineating USIBWC Canalization land purchases in the 1930"s and 1940"s.
P:\REALTY\Engineering Office Files

29.3.D.17. Geotechnical Reports
P:\COND\Geotech Reports

29.3.D.18. IBWC Work Requirement
The seven files that make up IBWC work requirements are available to outside entities under the "*USIBWC's Requirements for Work on or Affecting our Projects*" link at www.ibwc.gov/resources-info/.

29.3.D.19. IBWC Standard Drawings and CAD Requirements
Z:__Templates & Information\Std Drawings
W:__Templates & Information\Std Drawings
P:\COND__Templates & Information\Std Drawings
Standard drawings are available to outside entities under the "*USIBWC's Standard Drawings*" link at www.ibwc.gov/resources-info/.

USIBWC's AutoCAD settings, AutoCAD support files, and USIBWC's "*Drawing and CAD Standards*" are available to outside entities under the "*USIBWC's CAD files and Drawing and CAD Standards*" link at www.ibwc.gov/resources-info/.

29.3.D.20. Construction Project File Structures is stored at:
Z:__Templates & Information\00 Blank Construction File Structure
W:__Templates & Information\00 Blank Construction File Structure
P:\COND__Templates & Information\00 Blank Construction File Structure

29.3.D.21. Basic Design-Build Project File Structure is stored at:
Z:__Templates & Information\00 Blank Design-Build File Structure
W:__Templates & Information\00 Blank Design-Build File Structure
P:\COND__Templates & Information\00 Blank Design-Build File Structure

29.3.D.22. Construction Project Files, including Design-Build, are at:
W:\Construction AMISTAD
W:\Construction FALCON
W:\Construction HQ
W:\Construction LRG
W:\Construction NOGALES
W:\Construction PRESIDIO
W:\Construction SAN DIEGO
W:\Construction URG

29.3.D.23. Design Project Files are usually at:
W:\LRGFCP Design Projects
W:\URG Design Projects

29.3.D.24. Basic Design Project File Structure is stored at:
Z:__Templates & Information\00 Design File Structure-Contract
Z:__Templates & Information\00 Design File Structure-In House
W:__Templates & Information\00 Design File Structure-Contract
W:__Templates & Information\00 Design File Structure-In House
P:\COND__Templates & Information\00 Design File Structure-Contract
P:\COND__Templates & Information\00 Design File Structure-In House

30 Developing Independent Government Estimates

An independent Government estimate (IGE) is simply a cost estimate developed by the Government for proposed work or Contract modifications. USIBWC Directive SD.II.1023, Guidance for the Development of Independent Government Estimates for USIBWC Construction Projects, shall be reviewed but the document has not been updated in a long time.

Resources that can aid you in the cost estimating process include:
Davis-Bacon wage determinations.
Many local or regional equipment rental firms have price lists and/or quoting systems online.
R.S. Means books.
Manufacturer's or distributor's websites. Often you can email or call for quotes on materials.

Many times our IGEs are based on the designer's Opinion on Probable Cost (OPC). If this was provided, it is up to you to review the OPC and all assumptions used. Determine if you believe items should be priced differently based on what you know about the specific project or area.

Your IGE shall be formatted per CLIN and shall include all markups and costs associated with each item. Ensure that the CLINs used and unit (i.e. cy, month, sy, each, LS, etc.) used on each CLIN is consistent with the PR for the project. When complete, date and sign the IGE and saved this signed version as a pdf.

30.1. Files

Store the completed IGE in the following directories:

- Construction
  - xxx\23-Solicitation Files\IGE
- Design-Build
  - xxx\03-SOW, IGE & PR\IGE
- CM Task Order
  - xxx\17-CM Contract\03-CM SOW, IGE & PR\IGE
- A/E Design Task Order
  - xxx\03-SOW, IGE & PR\IGE

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31 Contract Modifications

Very few, if any, Construction Contracts are completed without any Contract modifications. A Contract modification is a generic term meaning any written change in the terms or scope of the Contract. Contract modifications may be recommended by either the Government or the contractor, but only the Government can initiate a Contract modification.

According to the FAR, there are only two types of Contract modifications:

A. Bilateral. A bilateral modification (supplemental agreement) is a Contract modification that is signed by the contractor and the Contracting officer. Bilateral modifications are used to:
   1. Make negotiated equitable adjustments resulting from the issuance of a change order.
   2. Definitize letter Contracts.
   3. Reflect other agreements of the parties modifying the terms of Contracts.

B. Unilateral. A unilateral modification is a Contract modification that is signed only by the CO. Unilateral modifications are used, for example, to:
   1. Make administrative changes.
   2. Issue change orders.
   3. Make changes authorized by clauses other than a changes clause (e.g., Property clause, Options clause, or Suspension of Work clause).
   4. Issue termination notices.

No contracting action can begin unless funds are available to cover the activity (FAR 43.105). Because of this, the first step for the COR when contemplating a Contract modification is to ensure that funds are available.

Once it has been determined that a Contract modification will probably be required, the COR or the Inspector/CI shall prepare an IGE of the cost of the changed work. Sometimes the modification is simply a reduction or increase in CLIN quantities. In this case, the Government estimate primarily deals with the quantity of the change since the unit price is already set.

Once a cost estimate is completed, a PR must be completed.

A. Contact the Master Planning Division (MPD) for a PR number.

B. Complete IBWC Form 41 (PR).

C. After the PR is completed, you will need to sign it as the requestor then send it to the COND Chief for their signature.

D. If the PR is over $10,000 then after the COND Chief signs it, forward it to the Engineering Department PE for signature.

E. Next forward the PR to the cost center manager for signature.

F. After all approval signatures have been gathered, send the PR to the Administrative Assistant so it can be entered into the budget computer system (ILMS).

G. After BUD approves the PR, the CO is provided with a copy and is free to act upon the proposed Contract change.

The COR is responsible for providing justification to the CO for the Contract modification. This justification is usually in the form of a TA but depending upon the situation, it may be less formal. Talk to your CO and determine what level of documentation that they need for the proposed Contract modification.

31.1. Forms

IBWC Form 41 (PR) is available at:

Z:__Templates & Information\Forms
or
W:__Templates & Information\Forms
or
P:\COND__Templates & Information\Forms

31.2. Files

Store the completed PRs and all Contract modification supporting paperwork in the following directories:

Construction
xxx\13-Claims, Mods, REA Backup\Mod Name
Design-Build
xxx\13-Claims, Mods, REA Backup\Mod Name
CM Task Order
xxx\17-CM Contract\09-CM Claims & Mods Backup
A/E Design Task Order
xxx\13-Claims, Mods, REA Backup
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\05-AE Claims & Mods Backup

Store the final Contract modification in the following directories:

Construction
xxx\00-Contract
Design-Build
xxx\00-Contract
CM Task Order
xxx\17-CM Contract\00-CM Contract
A/E Design Task Order
xxx\00-Contract
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\00-Contract

32 Technical Analyses

One of the basic functions in managing a Contract is being able to analyze what the contractor is proposing to do. Performing a technical analysis is not limited to just CORs; they may also be created by CMs and Inspector/CIs. The critical deciding factor is that the person performing the analysis is familiar with the type of work being performed and the construction site.

Usually the CO will specifically request that a technical analysis be performed. The CO may also provide the grading factors for the analysis.

FAR 15.404-1(e) lists several situations where the CO should request a technical analysis.

> *(1) The contracting officer should request that personnel having specialized knowledge, skills, experience, or capability in engineering, science, or management perform a technical analysis of the proposed types and quantities of materials, labor, processes, special tooling, equipment or real property, the reasonableness of scrap and spoilage, and other associated factors set forth in the proposal(s) in order to determine the need for and reasonableness of the proposed resources, assuming reasonable economy and efficiency.*
>
> *(2) At a minimum, the technical analysis should examine the types and quantities of material proposed and the need for the types and quantities of labor hours and the labor mix. Any other data that may be pertinent to an assessment of the offeror's ability to accomplish the technical requirements or to the cost or price analysis of the service or product being proposed should also be included in the analysis.*
>
> *(3) The contracting officer should request technical assistance in evaluating pricing related to items that are "similar to" items being purchased, or commercial items that are "of a type" or requiring minor modifications, to ascertain the magnitude of changes required and to assist in pricing the required changes.*

32.1. Template

TA template is available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

32.2. References

Adding FAR or court decisions to your technical analysis is beneficial to reinforcing your point. Reviewing these items will also provide you with guidance on how to judge the contractor's request. The FAR provides the framework while court cases provide the common law of how the FAR and Governmental contract administration should be analyzed.

If a prior court decision validated the decision, you should follow the guidance to approve the action; however, if the courts struck down a similar contractor request, then you have a basis for recommending a denial to the CO. Remember as the COR you are not simply administering the Contract to support the Government. You have to be fair and impartial and balance decisions between both parties.

Civilian Board of Contract Appeals (CBCA)	www.cbca.gsa.gov/
FAR	www.acquisition.gov/browse/index/far
GAO Legal Decisions	www.gao.gov/legal/bids/bidprotest.html
GSA Board of Contract Appeals (GSBCA)	No longer active. See CBCA.
US Court of Federal Claims	www.uscfc.uscourts.gov/

32.3. Review of Costs

If the Contract contains line items, at a minimum, review each line item. If the Contract is lump sum, then review definable features of work.

A. Is the contractor proposing a reasonable number of laborers, hours of work, and number/type of equipment?

B. Do the equipment hours match the operator hours?

C. Are Davis-Bacon wage rates used?

D. Is the labor burden reasonable?

E. Are the items in the labor burden allowable?

F. Is overhead, administrative expenses, profit, bonds, and taxes reasonable and within the Contract?

Since the costs being presented are only coming from the contractor, there is no competition. This means that you must analyze them more closely and ensure that what is being presented is fair and reasonable to the Government.

32.3.A. FAR Guidance

The FAR actually provides the groundwork for items that are required in an analysis of contractor's cost proposals. The bottom line in any cost analysis is for the cost to be fair and reasonable to the Government.

FAR 31.105 outlines cost principles to use on A-E and construction Contracts. Also see FAR 31.205 for a breakdown of different costs. FAR 31.2 breaks down reasonableness as well as direct and indirect costs.

While FAR Section 31 provides details on specific costs, FAR Section 15 provides guidance on how to proceed with Contract negotiations. Changes and modifications to the Contract are often made through negotiation.

According to FAR 15.404-1, you may use different proposal analysis techniques in evaluating a contractor's costs.

(b) Price Analysis

(2) The Government may use various price analysis techniques and procedures to ensure a fair and reasonable price. Examples of such techniques include, but are not limited to, the following:

(i) Comparison of proposed prices received in response to the solicitation. Normally, adequate price competition establishes a fair and reasonable price (see 15.403-1(c)(1)(i)).

(ii) Comparison of the proposed prices to historical prices paid, whether by the Government or other than the Government, for the same or similar items. This method may be used for commercial items including those "of a type" or requiring minor modifications.

(A) The prior price must be a valid basis for comparison. If there has been a significant time lapse between the last acquisition and the present one, if the terms and conditions of the acquisition are significantly different, or if the reasonableness of the prior price is uncertain, then the prior price may not be a valid basis for comparison.

(B) The prior price must be adjusted to account for materially differing terms and conditions, quantities and market and economic factors. For similar items, the contracting officer must also adjust the prior price to account for material differences between the similar item and the item being procured.

(C) Expert technical advice should be obtained when analyzing similar items, or commercial items that are "of a type" or requiring minor modifications, to ascertain the magnitude of changes required and to assist in pricing the required changes

(iii) Use of parametric estimating methods/application of rough yardsticks

(such as dollars per pound or per horsepower, or other units) to highlight significant inconsistencies that warrant additional pricing inquiry.

(iv) Comparison with competitive published price lists, published market prices of commodities, similar indexes, and discount or rebate arrangements.

(v) Comparison of proposed prices with independent Government cost estimates.

(vi) Comparison of proposed prices with prices obtained through market research for the same or similar items.

(vii) Analysis of data other than certified cost or pricing data (as defined at 2.101) provided by the offeror.

(3) The first two techniques at 15.404-1(b)(2) are the preferred techniques. However, if the contracting officer determines that information on competitive proposed prices or previous contract prices is not available or is insufficient to determine that the price is fair and reasonable, the contracting officer may use any of the remaining techniques as appropriate to the circumstances applicable to the acquisition.

(4) Value analysis can give insight into the relative worth of a product and the Government may use it in conjunction with the price analysis techniques listed in paragraph (b)(2) of this section.

(c) Cost analysis.

(1) Cost analysis is the review and evaluation of any separate cost elements and profit or fee in an offeror's or contractor's proposal, as needed to determine a fair and reasonable price or to determine cost realism, and the application of judgment to determine how well the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency.

(2) The Government may use various cost analysis techniques and procedures to ensure a fair and reasonable price, given the circumstances of the acquisition. Such techniques and procedures include the following:

(i) Verification of cost data or pricing data and evaluation of cost elements, including-

(A) The necessity for, and reasonableness of, proposed costs, including allowances for contingencies;

(B) Projection of the offeror's cost trends, on the basis of current and historical cost or pricing data;

(C) Reasonableness of estimates generated by appropriately calibrated and validated parametric models or cost-estimating relationships; and

(D) The application of audited or negotiated indirect cost rates, labor rates, and cost of money or other factors.

(ii) Evaluating the effect of the offeror's current practices on future costs. In conducting this evaluation, the contracting officer shall ensure that the effects of inefficient or uneconomical past practices are not projected into the future. In pricing production of recently developed complex equipment, the contracting officer should perform a trend analysis of basic labor and materials, even in periods of relative price stability.

(iii) Comparison of costs proposed by the offeror for individual cost elements with-

(A) Actual costs previously incurred by the same offeror;

(B) Previous cost estimates from the offeror or from other offerors for the same or similar items;

(C) Other cost estimates received in response to the Government's request;

(D) Independent Government cost estimates by technical personnel; and

(E) Forecasts of planned expenditures.

(iv) Verification that the offeror's cost submissions are in accordance with the contract cost principles and procedures in part 31 and, when applicable, the requirements and procedures in 48 CFR Chapter 99 (Appendix to the FAR loose leaf edition), Cost Accounting Standards.

(v) Review to determine whether any cost data or pricing data, necessary to make the offeror's proposal suitable for negotiation, have not been either submitted or identified in writing by the offeror. If there are such data, the contracting officer shall attempt to obtain and use them in the negotiations or make satisfactory allowance for the incomplete data.

(vi) Analysis of the results of any make-or-buy program reviews, in evaluating subcontract costs (see 15.407-2).

(d) Cost realism analysis.

(1) Cost realism analysis is the process of independently reviewing and evaluating specific elements of each offeror's proposed cost estimate to determine whether the estimated proposed cost elements are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the unique methods of performance and materials described in the offeror's technical proposal.

(2) Cost realism analyses shall be performed on cost reimbursement contracts to determine the probable cost of performance for each offeror.

(i) The probable cost may differ from the proposed cost and should reflect the Government's best estimate of the cost of any contract that is most likely to result from the offeror's proposal. The probable cost shall be used for purposes of evaluation to determine the best value.

(ii) The probable cost is determined by adjusting each offeror's proposed cost, and fee when appropriate, to reflect any additions or reductions in cost elements to realistic levels based on the results of the cost realism analysis.

(3) Cost realism analyses may also be used on competitive fixed-price incentive contracts or, in exceptional cases, on other competitive fixed-price-type contracts when new requirements may not be fully understood by competing offerors, there are quality concerns, or past experience indicates that contractors" proposed costs have resulted in quality or service shortfalls. Results of the analysis may be used in performance risk assessments and responsibility determinations. However, proposals shall be evaluated using the criteria in the solicitation, and the offered prices shall not be adjusted as a result of the analysis.

32.3.B. Indirect Costs

FAR 2.101 defines an indirect cost as "any cost not directly identified with a single, final cost objective, but identified with two or more final cost objectives or an intermediate cost objective. It is not subject to treatment as a direct cost." Further, an indirect cost shall not be allocated to a final cost objective if other costs incurred for the same purpose in like circumstances have been included as a direct cost of that or any other final cost objective.

Because of their nature, indirect costs cannot be charged to final cost objectives on an individual basis. Therefore, indirect costs must be classified and grouped together into indirect cost pools, typically either an overhead cost pool or the G&A cost pool. The pools in turn are allocated to final cost objectives in reasonable proportion to the beneficial or causal relationship of the pooled costs to the cost objectives.

FAR 31.203 (e) states: "The method of allocating indirect costs may require revision when there is a significant change in the nature of the business, the extent of subcontracting, fixed-asset improvement programs, inventories, the volume of sales and production, manufacturing processes, the contractor's products or other relevant circumstances."

32.3.C. Overhead

Costs incurred for, or that only benefit, an identifiable unit or activity of the contractor internal organization, such as an engineering or manufacturing department, are considered overhead costs. It is common to have separate overhead pools for engineering, manufacturing, material handling, and for certain offsite activities. A very small contractor could have only one overhead pool.

Examples of overhead pool costs are:

A. Department supervision

B. Depreciation of department buildings and equipment

C. Training of department employees

D. Fringe benefits of department employees

Overhead rates are developed by dividing the overhead pool costs by the selected allocation base (e.g., direct labor dollars or direct labor hours).

To "allocate" means to distribute overhead pool costs to contracts. In order to distribute overhead pool costs, the contractor must select an allocation base. There must be a beneficial or causal relationship between the selected allocation base and the pool of costs to be allocated to contracts. For example, an engineering overhead pool would logically be allocated over total engineering direct labor dollars or engineering direct labor hours.

32.3.D. G&A Expenses

G&A expenses represent the cost of activities that are necessary to the overall operation of the business as a whole, but for which a direct relationship to any particular cost objective cannot be shown. G&A includes the top management functions for executive control and direction over all personnel, departments, facilities, and activities of the contractor. Typically, it includes human resources, accounting, finance, public relations, contract administration, legal, and an expense allocation from the corporate home office.

The G&A rate is developed by dividing total general and administrative expenses by the selected allocation base, e.g., total cost input (i.e., total direct and indirect costs, except G&A), value added cost input (i.e., total cost input except G&A, material and subcontract costs), or single element cost input (e.g., direct labor dollars, direct labor hours, direct materials costs).

32.3.E. Labor Burden

Labor burden is classified as such because, for the employer, it is an added cost of employing individuals over and above the wages reflected on the payroll. Further, with an exception for

liability insurance, it must be a direct benefit to the employee. Except for Social Security taxes, labor burden rates vary for each contractor and sometimes between employees. Fringe benefits are compensable as labor burden, but are optional and may not apply to all employees.

Often when reviewing a cost proposal, the details of a contractor's labor burden are not provided. If the burden is in the reasonable range of 25% to 35% often substantiation is not required. If the contractor is showing a high labor burden or is including items in direct costs that you believe may be duplicated in the labor burden, details of the labor burden rate are required.

When reviewing a contractor's labor burden it is very important to determine if the costs are allowable as such. In business accounting, vehicle expenses, auto insurance, employee meetings, cell phones, and sometimes small tools or office space are included in the labor burden. While this portrays a true accounting of the cost to the business for each employee to work, many of these are not allowable labor burden costs for federal Contracts.

32.3.E.1. Statutory Labor Burden and Compensable Insurance

a. Social Security Tax

The total burden for Social Security is 7.65 percent. This tax has two components "OASDI" (Old Age, Survivor and Disability Insurance) and "Medicare." The tax rates are a percentage multiplier of the individual wages (base plus overtime and shift differentials) up to an annual income ceiling for the OASDI portion (no income ceiling for the Medicare portion). The income ceiling has gradually increased over the years and is currently (2023) fixed at $160,200.

Only the employer's share of these taxes, 6.20 percent (OASDI) and 1.45 percent (Medicare), respectively, for the two portions is considered reimbursable. It applies to total dollars paid to the employees and, therefore, the percentages shown are applied to straight and overtime total dollars paid.

b. Unemployment Insurance

The burden for unemployment insurance ranges from 0.1 percent to 4 percent of total payroll. The premium is a percentage multiplier of the individual wages up to an income ceiling. The premium has a federal component, Federal Unemployment Tax Act (FUTA), and a state component, commonly referred to as SUTA.

The state component varies from employer to employer based on a contractor's layoff experience. The SUTA unemployment insurance tax rate ranges from 0.3 percent to 8 percent of the individual's base wages up to an income ceiling of $9,000. The federal tax is 0.8 percent up to an income ceiling of $7,000. Once an employee reaches these income ceilings no more tax is required until the next fiscal year. This burden's cost should be distributed to the employee's wages for the year.

c. Workers Compensation Insurance

From reviewing data, the overall payroll rate varies from 2.5 percent to 10 percent. The premium, wholly paid by the employer, is in dollars per hundred dollars of total payroll of a craft category. The standard schedule for the premium varies with the classification of the employee and the employer's accident record. It is assessed on the total payroll of an employer.

In Texas, workers compensation insurance premium standard rates generally vary from 0.5 percent for non-craft employees (e.g., office workers) up to 18 percent for construction craft categories. There are rare cases of rates for marine construction work; the rate can be as high as 26 percent.

These values are further adjusted for other issues such as additional surcharges for terrorism premiums; paid deductibles; contractor size; waivers of subrogation; dividends (refunds) received; and increased labor liability insurance a contractor may carry. Typical average premium for a roadway classification worker is around 9 percent; for bridge classifications it is close to 18 percent. Premium for overtime or late shift hours are based on straight time wage rates. Standard rates are used initially; however, contractors with low (accident) experience modification ratings (EMRs) will receive reduced premiums after three years.

EMRs, vary from 0.2 to over 2, are factored on the adjusted worker compensation rate maintained by the Workers Compensation Commission. Because the actual rates are not fully compiled for up to three years, a historically based value can be used to establish the rate. The values should be submitted separately for project overhead staff and direct labor.

d. Contractually Required Insurance and Umbrella Policies

These company insurance policies are not labor burden. The department has chosen to include these in labor burden to simplify compensation procedures and remain consistent with Article 9.5.B. The contractually required insurance is the comprehensive general liability insurance for the minimum limits of liability required by TxDOT contracts. The premium, wholly paid by the employer, is per $1,000 of the onsite payroll or per $1,000 of total construction hard cost. The U.S. Labor Department does not recognize it as a benefit to employee; however Standard Specifications provides for the premium as labor burden.

Umbrella policies are for liability over and above that contractually required and are not an employee benefit. However, for simplicity, both umbrella and contractually required insurance policies are considered permissible for payment as labor burden. Rates for Public Liability Insurance vary from 4 percent to greater than 10 percent of total payroll. Rates for umbrella policies vary from less than 1 percent to over 4 percent.

e. Additional Liability Insurance

Additional liability insurance may be compensable as labor burden provided the policy is not required by special provision for a specific project. Examples are Pollution and Terrorism. Additional liability insurance required by special provisions or for a specific project is considered project overhead, not labor burden, such as: Railroad, Marine, Builders" Risk, etc.

32.3.E.2. Optional (Fringe) Benefits

Costs of optional (fringe) benefits are compensable if they are provided as an established policy and available to all qualified individuals. TxDOT contractors may provide some of these benefits to the hourly labor force; some contractors provide these benefits to their salaried employees only. The US Labor Department classifies the following optional benefits as labor burden. The values are to be submitted separately for project overhead staff and direct labor.

a. Paid Holidays, Vacation, Sick and Other Absences

The cost for these benefits ranges from 0 percent to 9 percent of wages. The burden should be calculated at the rate earned, per hour or per month, and applied as a percentage of base pay rate. Leave hours taken should not be shown on payrolls or used as basis for other adjustments to the contract; this would create duplicate compensation.

b. Employee Insurance (Life, Health, Short and Long-Term Disability)

The cost for these benefits ranges from 0 percent to 12 percent of wages. Premium rates depend on individual plans and are shared by employer and employee. Only the employer's contribution should be considered as burden.

c. Retirement and Savings (such as 401(k))

The cost for these benefits ranges from 0 percent to 10 percent of wages. There are a variety of pension plans and they are mainly contributory. Some companies make contribution to employee's account, some do not. Only employer's contribution should be considered as burden.

d. Employee Stock Ownership Plan (ESOP)

Contributions range from 0 percent to 6 percent. This is a defined contribution plan allowing employees to become owners of the company they work for in proportion to their service, salary or title. An ESOP eligible for reimbursement is not a profit sharing plan. Employer's contribution to the trust proportional to the employee costs included in the pricing is compensable if it is an established plan for all qualified employees. Dividends from ESOPs are not eligible for reimbursement; this is a profit.

e. Bonuses

Bonuses range from 0 percent to 2 percent. Bonuses are compensable as labor burden (direct or indirect cost) if they are distributed as a fringe benefit regardless of company's financial performance and not as dividends. Employee quality and production bonuses are eligible if they are established by company policy or the bonuses are provided routinely regardless of the company's profit.

f. Safety Incentives

Safety incentives range from 0 percent to 1 percent. These incentives are eligible as labor burden. "Tailgate" safety training (short duration meetings before work begins) conducted on the project for project staff and company safety training are not considered labor burden. The short tailgate meetings are billed as direct wages for items of work.

g. Training and Safety Programs

Only those training and safety program costs directly associated with the employee are eligible as labor burden. Overhead for safety staff and their incidentals are not eligible as labor burden.

32.3.E.3. Components Not Eligible for Reimbursement as Labor Burden

The following expenses do not constitute or are not separately compensable as labor burden.

a. Additional Liability Insurance

Additional liability insurance may be required by special provisions for a specific project for an individual contractor, such as: Railroad, Pollution, Marine, Builders, etc. Premiums for these additional liability insurance policies are not an employee benefit, usually purchased project specific, and not compensable under labor burden.

b. Auto Liability Insurance

Auto liability insurance policies are not an employee benefit and therefore not compensable as labor burden. Additionally, liability insurance is a component of the Blue Book Rental Rate. Payment as labor burden or overhead would represent a duplication of payment.

c. Overtime or Premium Rates (weekends/holidays and shift differential)

While overtime or premium rates are employee benefits, they should already be included in the wages.

d. Profit Sharing Plans, Gain Sharing Incentive Plans and Bonuses Distributed as Dividends

These expenses are viewed as a distribution of profits and are not compensable under labor burden.

e. Lodging, Meals, Per Diem

These expenses are viewed as project overhead expenses, not labor burden.

f. State Disability Insurance

Only California and a couple of other states have this insurance. Employers in California are required by law to withhold and remit SDI contributions and to inform their employees of SDI benefits. While this is a required tax, it is not paid by the employer, but is completely funded by the employees. Since there is no cost to the employer, it does not affect labor burden.

g. Union Dues and Small Tools

While these may be allowable expenses in other parts of the project, they are not allowable as labor burden expenses.

h. Markup and Profit

Markup and profit an unallowable as part of the labor burden. Often these percentages are added to the final work cost by the contractor. Adding them into the labor burden would represent double billing.

32.4. Review of Requested Time

In reviewing requested time, determine if the contractor included time for gathering submittal data, adequate time for submittal review, time for material deliveries, etc. If this is a critical path item, it may push out the final Contract date. If the work can be performed concurrently with other ongoing work, then no additional time may be required.

32.5. Review of Delays

Delays require an in depth review. Delays may be caused by the Government, by the contractor, by forces outside of the contractor's control, or by any combination of these. When delays are caused by the Government, they may be compensable to the contractor in time and costs. Government liability is limited only to unreasonable delays.

A contractor has a duty to mitigate delay impact if practical. In determining what mitigation is practical the courts consider:

A. Whether the delay is of a reasonably known length to allow planning.

B. Whether there are other projects, existing or new, that can use these resources effectively during the delay.

C. What the costs of reassigning the resources will be.

D. Whether the delayed project can be partially or totally demobilized or manufacturing space sacrificed.

E. How the subcontractors and suppliers will be affected and how the delays impact on them can most effectively be managed.

F. Whether the remaining work can be resequenced to allow real progress to be made during the delay, and the cost of that resequencing.

32.5.A. Compensable Delay

When the Government is responsible for time and/or cost impacts, it creates a compensable delay. FAR 52.242-14, Suspension of Work, states that the Government may be liable for causing delays to Contract work. Also per this clause no adjustment shall be made "for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the contractor."

For contractors performing fixed-price Contracts, the FAR cost principles guide the negotiation of equitable adjustments (FAR 31.102). Generally, a contractor is entitled to an adjustment if the delay causes the contractor's costs of performance to increase. Indirect

costs must be grouped into pools that can then be allocated to each Contract based on the benefits received as approximated by some allocation base (often labor hours).

The fundamental objective of an equitable adjustment for government-caused delays is to restore the contractor to the same position that it would have been in if there had been no delay (FAR 52.243-4 and FAR 52.242-14). The contractor is entitled to profit on the extra costs but not for any lost-opportunity profit. The price adjustment equals the difference between what it would have cost to perform the work as originally required and what it reasonably cost to perform the work as changed. The contractor's costs must be "reasonable," although costs will not be rejected simply because the work could have been done more cheaply. The contractor has the burden of showing "reasonableness" when challenged by the Government (FAR 31.201-3(a)).

The contractor must show that the Government's actions affected activities on the critical path of the contractor's performance of the Contract[10]. The reason is that only construction work on the critical path has an impact upon the time of project completion[11]. The contractor bears all burden in proving Government caused delays and the affect upon the contractor's critical path. If there is any other reason during this period that may have caused the delay, then it becomes a concurrent delay. Keep with delays and the contractor falling behind schedule when reviewing schedule updates and Form 149 (see 18.2 for more on Form 149)

The contractor must usually prove four items for a compensable delay:[12]

A. The Government's delay was of unreasonable length.

B. The Government was the proximate cause of the contractor's delayed performance.

C. The contractor was injured.

D. There were no concurrent delay on the part of the contractor.

32.5.B. Concurrent Delay

These are delays where both parties have caused delays which have an equal impact on completion and/or it is impossible to apportion or separate the delays. In such cases, the contractor may not recover its increased costs and the Government may not enforce liquidated damages.

It is important to note that to be considered concurrent delays, the delays need not actually take place at the same time. The burden is on the party claiming damages resulting from delay to provide a reasonable basis for apportioning the effects of these concurrent delays between owner and contractor. If the concurrent delays are so intertwined as not to be segregable or if the contractor otherwise fails to provide a reasonable basis for apportionment, then the claim for delay damages will be found insufficient. This is because

[10] *Kinetic Builder's Inc. v. Peters*, 226 F.3d 1307, 1317 (Fed. Cir. 2000) (citing *Essex Electro*, 224 F.3d at 1295-96 and *Sauer Inc. v. Danzig*, 224 F3d 1340, 1345-46 (Fed. Cir. 2000))

[11] *G.M. Shupe, Inc. v. United States*, 5 Cl. Ct 662, 728 (1984)

[12] *P.J. Dick Inc. v. Principi*, 324 F.3d 1364, 1374-75 (Fed. Cir. 2003) and *CEMS, Inc. v. United States*, 59 Fed. Cl. 168, 230 (2003)

the claimant has failed to demonstrate that the other party actually delayed project completion. Put another way, where the effects of concurrent delays are intertwined, it cannot be said that "but for" the other party's delay, the Contract would have been completed earlier.

32.5.C. Excusable Delay

An excusable delay arises from unforeseeable causes that is beyond the control of the contractor and that is not due to fault or negligence of the contractor. The primary purpose of an excusable delay provision is to protect the contractor from sanctions for late performance (e.g., default termination, liquidated damages, and actual delay damages). Whether a delay is excusable depends upon the Contract language.

32.5.D. Non-Excusable Delay

Delays where the contractor bears the risk of both time and cost are non-excusable. These are delays within the contractor's control.

32.5.E. Adverse Weather Days

Adverse weather days are a type of delay whereby the contractor is allowed time only. See 20.7 about Form 161 as well as 18.1 for discussions on how adverse weather days are determined.

32.6. Differing Site Conditions

There are two type of differing site conditions. These are differentiated in 52.236-2, a.1 (Type I) and a.2 (Type II). Type I conditions are subsurface or latent conditions which differ from those on the plans or in the Contract documents. Type II conditions are unusual physical conditions which differ materially from those ordinarily encountered.

This FAR clause also requires the claimant to "promptly and before the conditions are disturbed give written notice to the contracting officer of the conditions encountered." Failure to provide timely notice can be, and often is, cause for denial of a claim.

See whitepaper on geotechnical reports and what should be provided to contractors prior to bid at:

Z:__Templates & Information\White Papers
or
W:__Templates & Information\White Papers
or
P:\COND__Templates & Information\White Papers

32.6.A. Type I Differing Site Conditions

In order to substantiate a claim for Type I differing site condition, the contractor must establish that it encountered subsurface or latent physical conditions differing materially from those indicated in the contract documents. A Type I claim is based on whether the contractor could reasonably have anticipated the conditions encountered from a

knowledgeable interpretation of the contract documents, their inspection of the site, and their general experience as a contractor.

In order to state a Type I differing site condition (DSC) claim, a contractor must plausibly allege: 1) that a reasonable contractor reading the contract documents as a whole would interpret them as making a representation as to the site conditions; 2) that the actual site conditions were not reasonably foreseeable to the contractor, with the information available to the particular contractor outside the contract documents (i.e., that the contractor reasonably relied on the representations); 3) that the contractor in fact relied upon the contract representations; and 4) that the contractor encountered conditions that differed materially from those represented and suffered damages as a result.[13]

32.6.B. Type II Differing Site Conditions

Type II DSC are those physical site conditions which are unusual, unknown, and differ materially from what is ordinarily encountered and generally recognized as involved in the particular item of work or geographic area. Type II DSC are conditions which were not indicated on the contract documents, which the contractor did not have knowledge from any other source, and which would not be reasonably anticipated. The burden of proof is heavy and on the contractor to show that conditions are unusual in nature and differ materially from those ordinarily encountered. contractors can have a basis for recovery even though the contract is silent about the condition because Type II DSC does not involve a comparison between contract indications and actual facts.

A Type II DSC involves comparison between the actual condition and what the contractor would reasonably expect, taking into account all factors that a prudent bidder customarily considers in making a judgement regarding the quantity, quality, and methods for performing the work. Judgements are based on what a reasonably experienced contractor [not a geologist or geotechnical engineer] would have observed during a prebid inspection after a study of the contract documents. The main questions to be answered are, "Was the bidder's judgement and interpretation reasonable at the time of bidding and was the condition unusual for the geographic area?"

When reviewing a Type II claim, consider the following:

A. The adequacy of the contractor's site investigation under its site investigation clause duties.

B. Whether the conditions could have been reasonably anticipated by a reasonable, intelligent contractor looking at the contract documents in conjunction with site inspection and general experience in the field of work and knowledge of the site conditions in the area.

C. Whether the condition is generally recognized as inherent in the work required by the Contract keeping in mind the "wide variety of materials ordinarily encountered when excavating in the earth's crust."

[13] *CCI, Inc. v. McHugh*, 608 F. Apex 937, 939–40 (Fed. Cir. 2015); *Intel Tech. Corp.*, 523 F.3d at 1348–49; *Renda Marine, Inc. v. United States*, 509 F.3d 1372, 1376 (Fed. Cir. 2007)

Soil conditions between borings, which differ materially from those stated in the boring logs, may form the basis for a Type II DSC but not a Type I DSC.

32.6.C. Prompt Notice

When differing site conditions are found, or believe to be found, FAR 52.236-2 requires that "[t]he contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer." If the contractor proceeds with work, thereby disturbing the conditions found, a reasonable interpretation is usually a denial of the DCS claim. Also if the contractor waits until the end of the project to file a DCS claim, then prompt notice was not provided.

32.6.D. Costs

Generally, the standard for recovery of costs is the difference between what it cost the contractor to do the work and what it would have cost if the conditions had never been encountered. It is also recognized that in pricing equitable adjustment claims, the contractor will be reimbursed its reasonable costs incurred (direct and indirect) plus a reasonable profit. Courts have allowed various cost calculation methodologies to be used to determine the amount of an equitable adjustment including:

A. Actual cost method using contemporaneous records recording actual costs (or increased costs) incurred in performing the differing site conditions work including cost associated with inefficiencies and delay.

B. Total cost method.
To show the amount of injury, Servidone presented evidence under the total cost method. Servidone, 19 Cl.Ct. at 384. Under this method, the contractor must show: (1) the impracticability of proving actual losses directly; (2) the reasonableness of its bid; (3) the reasonableness of its actual costs; and (4) lack of responsibility for the added costs.[14]

A trial court must use the total cost method with caution and as a last resort. Under this method, bidding inaccuracies can unjustifiably reduce the contractor's estimated costs. Moreover, performance inefficiencies can inflate a contractor's costs. These inaccuracies and inefficiencies can thus skew accurate computation of damages. Despite this risk, this court's predecessor condoned the total cost method in those extraordinary circumstances where no other way to compute damages was feasible and where the trial court employed proper safeguards.

32.6.E. Disclaimer Clauses

Specific disclaimer clauses can be used as plan notes to define what the agency considers factual data and what is subject to interpretation. The use of specific disclaimer clauses is preferred to the use of a general disclaimer clause which is often unenforceable. An example of a specific disclaimer would be a statement such as:

"*The boring logs for BAF-1 through BAF-4 are representative of the condition at the location where each boring was made but conditions may vary between borings*."

[14] *WRB Corp. v. United States*, 183 Ct.Cl. 409, 426 (1968)

This plan note serves to warrant that the agency used proper techniques to locate, drill, and log the borings which are shown on the contract plans. Soil conditions encountered at the warranted location of these boring which differ materially from those stated on the logs form the basis for a Type I DSC. However, soil conditions which differ materially from those in logs *between* the borings may not form the basis for a Type I DCS.

32.7. Superior Knowledge Doctrine

Simply put the Superior Knowledge Doctrine states that if we know information that may affect the work or costs of the sitework and we don't inform the contractor, we may be liable for any increased costs.

To state a breach of contract claim based upon the Superior Knowledge Doctrine, a contractor must plausibly allege that: 1) it undertook to perform without vital knowledge of a fact that affects performance costs or direction; 2) the Government was aware the contractor had no knowledge of and had no reason to obtain such information; 3) any contract specification supplied misled the contractor, or did not put it on notice to inquire; and 4) the Government failed to provide the relevant information.[15]

See whitepaper on Superior Knowledge Doctrine at:

Z:__Templates & Information\White Papers
or
W:__Templates & Information\White Papers
or
P:\COND__Templates & Information\White Papers

32.8. Objective

FAR 15.405(b) explains the goal of the technical analysis which is a price negotiation.

> *The contracting officer's primary concern is the overall price the Government will actually pay. The contracting officer's objective is to negotiate a contract of a type and with a price providing the contractor the greatest incentive for efficient and economical performance. The negotiation of a contract type and a price are related and should be considered together with the issues of risk and uncertainty to the contractor and the Government. Therefore, the contracting officer should not become preoccupied with any single element and should balance the contract type, cost, and profit or fee negotiated to achieve a total result—a price that is fair and reasonable to both the Government and the contractor.*

Please note that the objective is never to defend the Government's position at all cost and only view the contractor's request through a colored lens. FAR 1.602-2(b) notes that COs, and therefore also CORs, shall ensure "the contractors receive impartial, fair, and equitable

[15] *GAF Corp. v. United States*, 932 F.2d 947, 949 (Fed. Cir. 1991) (citing *Lopez v. A.C. & S. Inc.*, 858 F.2d 712, 717 (Fed. Cir. 1988)); see also *Scott Timber Co. v. United States*, 692 F.3d 1365, 1372–73 (Fed. Cir. 2012)

treatment." Both the Government and the contractor are expected to work in good faith toward an equitable resolution.

32.9. Conclusion of Technical Analysis

The whole point of a technical analysis is to provide the CO with your opinion on the contractor's proposal based upon your best information and judgment. Therefore, conclude your technical analysis with your final recommendation. If you are recommending proceeding with a Contract modification that will cost the Government money, ensure that you have a PR started to cover at least your recommended costs.

Since application of the FAR over time has been decided in the courts (common law), may times a technical analysis refers to court cases. Some people within the Agency have had issues with non-attorneys listing court cases in our memos. Therefore the TA template provides the following paragraph. Ensure that you keep it in your memo.

> This memorandum is a technical recommendation based upon engineering and construction expertise. The CO shall not solely rely upon this technical analysis; per FAR 1.102-4, 1.602-2, and 1.603-2, the CO is responsible for all opinions and contracting actions under this Contract. While the COR is knowledgeable about contract administration, the COR is not a contracting subject matter expert. In addition, this memorandum is not a substitute for the advice of an attorney and the CO shall consult with the Attorney Advisor for a legal opinion on information contained in this memorandum.

If your conclusion is to issue a Contract modification, then it is a good idea to have the contractor release the Government from the possibility of any further modifications based on the same issue. The following text is in the TA template. You should modify it based on the specific items being considered in your Contract modification.

> In consideration of the modification(s) agreed to herein as complete equitable adjustments for the contractor's _____(describe) _____ "proposal(s) for adjustment," the contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to the "proposal(s) for adjustment" (except for _____).

32.10. Files

Store the technical analysis and supporting files in the following directories:

Construction
- xxx\13-Claims, Mods, REA Backup\Mod Name

Design-Build
- xxx\13-Claims, Mods, REA Backup\Mod Name

CM Task Order
- xxx\17-CM Contract\09-CM Claims & Mods Backup

A/E Design Task Order
xxx\13-Claims, Mods, REA Backup
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\05-AE Claims & Mods Backup

Ensure that completed technical analysis is also filed in the following directories:

Construction
xxx\05-Correspondence
Design-Build
xxx\05-Correspondence
CM Task Order
xxx\17-CM Contract\05-CM Correspondence
A/E Design Task Order
xxx\05-Correspondence
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\02-AE Correspondence

33 Contract Negotiations

No one except the CO has the authority to negotiate with the contractor. However, as the people most familiar with the construction work, the Inspector/CI and the COR are extremely important in any Contract negotiations.

33.1. Pre Negotiations

The CO will notify the contractor that items in the proposed Contract modification need to be negotiated. The CO will provide brief details that explain areas that the Government is concerned with. These are often points that were brought up in the technical analysis.

Depending upon your relationship with the contractor, you may feel comfortable discussing your concerns with the items to be negotiated. Sometimes a quick chat that is "off the record" and not binding by either party can bring out misconceptions. Sometimes there is a flat budget and a solution must be found with a limited amount of money; letting the contractor know this may motivate them to suggest other solutions. However, if you are not comfortable with this or if the relationship does not exist for this type of discussion, do not push it; let the CO have all of the direct contact with the contractor about the items to be negotiated.

Whenever possible bring a laptop to Contract negotiations. Make a spreadsheet that lists all of the proposed cost breakouts. With the spreadsheet in front of you, you can make changes to the proposal while talking together. Many times, having the numbers right in front of you makes everyone more comfortable with the changes being discussed. It also allows everyone to come to a general agreement easily. After the negotiations, the spreadsheet can be emailed to everyone for concurrence.

33.2. Post Negotiations

33.2.A. Synopsis of Negotiation

As soon as possible after the negotiations, prepare a memorandum entitled Synopsis of Negotiation. This memo will be based upon your TA that was prepared prior to negotiations. List all attendees, describe any revised data that the contractor provided at negotiations, and then detail each item that was discussed during negotiations as well as the resolution. After each item, either recommend for acceptance or denial. Provide this synopsis to the CO as soon as you can; often the CO will not proceed with any modification until they have your supporting evidence.

33.2.B. Modify PR

If after negotiations it is clear that there will not be enough funding on the PR for the complete Contract modification, modify the PR as soon as possible. Provide the Administrative Assistant with the items that need to be changed and how they need to be changed. If there is excess money on the PR do not worry about it. This money will be released when the CO pulls the remaining funds into the Contract modification.

33.3. Files

Store your TAs, spreadsheets, contractor data, and any other associated information in the following directories:

Construction
xxx\13-Claims, Mods, REA Backup\Mod Name
Design-Build
xxx\13-Claims, Mods, REA Backup\Mod Name
CM Task Order
xxx\17-CM Contract\09-CM Claims & Mods Backup
A/E Design Task Order
xxx\13-Claims, Mods, REA Backup
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\05-AE Claims & Mods Backup

34 Final Inspection

Final inspection shall occur before release of the Construction Contractor. Specifically, the final inspection is to determine if all components of the project have been completed in accordance with the approved plans, specifications and change orders; the facility is capable of functioning as designed; all equipment is operational and performing satisfactorily; and facilities are complete and available to perform as intended.

Prior to final inspection, the contractor shall clean the entire work site. Submittal of all survey field books or electronic survey field book files and record drawings is preferred prior to final inspection, but is often not completed.

34.1. Substantial Completion

Substantial complete causes the Construction Contract clock to stop; it is therefore a very important factor in every Construction Contract. So, what exactly is substantial completion? Simply put, substantial completion occurs when the owner is able to use the project for its intended purpose.

For levees and other flood protect projects, this is easily met when all flood protection structures have been completed (levees, floodgates, sluice gates, etc.). For buildings, this will occur when all structural, HVAC, plumbing, electrical, floor coverings, paint, life safety items have been constructed or installed and the building can be occupied. However, for the Government to take beneficial occupancy of a facility, it must have some notice that the work has been substantially completed[16]; this is the reason that the contractor must submit a request for substantial completion (IBWC Form 255).

If punch list items are able to be completed during Government occupancy, then substantial completion can be assumed. However, if punch list items will cause undo disruption of activities, then substantial completion must wait until after those punch list items are complete.

34.1.A. Form 255 - Certificate of Substantial Completion

A contractor shall request substantial completion on IBWC Form 255.

The CO should be the Government Representative to sign for acceptance of the construction on IBWC Form 255. FAR 46.502 states that "[a]cceptance of supplies or services is the responsibility of the contracting officer." Additionally, the courts have affirmed that since the FAR repeated states "supplies and services (except construction)" that unless the limitation is applied, construction is included in supplies and services.[17] Once the CO signs the Form 255, return a copy to the contractor.

[16] *Seaboard Surety Company, ASBCA No. 43281, 93-1 BCA 25510 (1992)*
[17] *Tyler Construction Group v. U.S., No. 08-94C, August 14, 2008*

34.1.B. Form 244 - Concurrence of Construction Completion

This form provides a signoff from O&M on construction. If an O&M representative attended the final inspection, have an O&M representative sign IBWC Form 244.

34.1.C. Files

Store the closeout forms in the following directories:

Construction
xxx\27-Contract Closeout
Design-Build
xxx\27-Contract Closeout

34.2. Final Cleanup

The contractor shall be responsible for the cleanup and disposal of waste materials and rubbish from the construction site, field office, and staging area. The contractor shall keep record of the types and amount of waste materials produced and of the disposal of all waste materials on or off the jobsite. These record shall be kept current and accurate and shall be available for review by the Government.

In the event of the contractor's failure to perform the work required by this section, the work will be performed by the Government and the contractor shall be responsible for the cost of such work.

Before completing the work, the contractor shall remove from the work area and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the COR. Upon completion of the work and following removal of construction facilities and required cleanup, the contractor shall regrade work areas to conform to the preconstruction conditions.

34.3. Disposal of all Waste And Materials

All hazardous materials or wastes used by the contractor or discovered in work or storage areas defined as hazardous by 40 CFR §261.3 or other Federal, State or local laws or regulations shall be disposed of by the contractor in accordance with the Contract and applicable Federal, State, and local laws and regulations. Unknown waste materials that may be hazardous shall be tested and the test results shall be submitted immediately to the COR for review. A copy of all hazardous waste manifests shall be submitted to the Government.

All non-hazardous materials or wastes used by the contractor to include, but not limited to, refuse, garbage, sanitary wastes, industrial wastes, oil and other petroleum products shall be disposed of by the contractor in accordance with the Contract and applicable Federal, State, and local laws and regulations.

34.4. Final Inspection

The contractor shall conduct an inspection of the work and develop a punch list of those items which do not conform to the requirements of the Contract. Such a list of deficiencies shall be

submitted to the Government for review and compliance confirmation and include the estimated date by which the deficiencies will be corrected. The contractor shall make a second inspection to ascertain that all deficiencies have been corrected and so notify the Government in writing requesting a Final Inspection.

Upon due written notice from the contractor of presumptive completion of the entire project, the COR will make an inspection. If all construction required by the Contract is found completed, that inspection shall constitute the Final Inspection and the COR will make final acceptance. The contractor will be notified in writing of this acceptance as of the date of the Final Inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the COR will give the contractor the necessary instructions for correction of the same, and the contractor shall immediately comply with and execute such instruction. Upon correction of the work, another inspection will be made, which shall constitute the Final Inspection provided the work has been satisfactorily completed. In such event, the COR will make the final acceptance and notify the contractor in writing of his acceptance as of the date of the Final Inspection.

In no case will the final progress payment be prepared until the contractor has completed all the requirements set forth and the COR has made its final inspection of the entire work and is satisfied that the entire work has been completed in general conformance with the Contract requirements.

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35 Closing Out the Contract

This section is written for Contracts, but most of the items also apply to closing out a Task Order (e.g. Construction Management or A/E design).

The following are items required prior to final payment to the contractor:

The COR is responsible for:

A. Ensuring that the contractor turns in all Contract QC and closeout documents. See Construction Closeout Checklist (IBWC Form 253) for a general list of closeout items for construction. IBWC Form 254 covers closeout items for Construction Management Contracts.

B. Certificate of Substantial Completion (IBWC Form 255)

C. Concurrence of Construction Completion (IBWC Form 244), if completed

D. Contract Closeout Synopsis (IBWC Form 246)

E. Certificate of Contract Completion (IBWC Form 247)

F. Performance Evaluation uploaded into CPARS at www.cpars.gov.

G. Memorandum to CO stating that all punch list items have been completed, that all warranties have been submitted, and that the project is considered closed.

The CO is responsible for signing and processing:

A. Contractor's request for Certificate of Substantial Completion (IBWC Form 255)

B. Release of Claims (IBWC Form 243)

IBWC Form 253 (construction) and 254 (CM) are checklists that show the items commonly required from the contractor by the COR. Use these checklists as well as your specifications/SOW as a starting point for your closeout.

35.1. Form 246 - Contract Closeout Synopsis

This form provides an accounting of all monetary changes and time extensions for the Contract. Upon substantial completion of any part of the project, fill out IBWC Form 246. Until the Contract is complete, mark it as provisional and send it to the Chief of Finance and Accounting Division (FAD) and to the Chief of Realty. This form must be provided to them within 30 calendar days of substantial completion.

Once the Contract is complete, fill out the form in its entirety, sign it electronically, and provide it to the CO with the Contract Completion memo. Send the final version to the Chiefs of FAD and Realty.

35.1.A. Files

Store the all version of Form 246 in the following directories:

Construction
xxx\27-Contract Closeout
Design-Build
xxx\27-Contract Closeout

35.2. Form 247 - Certificate of Contract Completion

Whereas Form 246 deals with the paperwork side of the project, Form 247 deals directly with inspections, seeding, warranties, and maintenance periods. As parts of the project are inspected, this form will be filled out. For example, one reach of a levee might be inspected and then two weeks later a flood gate is inspected. Afterwards, the seeding is inspected and the site is completely accepted by the Government. As a reminder, if technical manual, directions, maintenance manuals, etc. are to be provided under the Contract, ensure that they have been received prior to final acceptance. Additionally, while there is a general warranty of construction, some items have a specific warranty with them that is supplied by the manufacturer; ensure that all warranties have been transferred to the Government.

Upon completion of the project, the COR signs Form 247 to certify that all work has been satisfactorily completed. After this form has been completed and signed electronically, provide it to the CO with the Contract Completion memo.

35.2.A. Files

Store the Form 247 in the following directories:

Construction
xxx\27-Contract Closeout
Design-Build
xxx\27-Contract Closeout

35.3. Record Drawings

Go through your Contract requirements and ensure that the as builts meet them. Verify that the AutoCAD files 3D data, that all survey data has been provided, and that AutoCAD files are purged and xrefs are bound.

Ensure IBWC drawing numbers are on all drawings and that supplemental drawings/information have been included as necessary. Please note that it may be up to the COR to "create" or add these supplemental files to ensure that all record drawing is included.

35.3.A. Files

Where final record drawings are officially filed is currently under review. For now just store the record drawings including both pdf and AutoCAD files in the following directories:

Construction
xxx\24-As-Builts
Design-Build
xxx\24-As-Builts

35.4. Past Performance Evaluations

The past performance must be evaluated in all source selections for negotiated competitive acquisitions (FAR 15.304 (c)(3)(i)). The COR is responsible for entering past performance reviews for all construction Contracts and all Task Orders on which you are the delegated COR. Refer to 36-CPARS-Past Performance Evaluations, for detailed information about this process.

35.5. Contract Completion Memo to CO

Once Forms 255, 246, and 247 have been completed and signed, the COR shall complete a memo to the CO stating that all construction work has been completed per the Contract and that the Government has accepted the project. The COR will then recommend final payment be made.

35.5.A. Templates

Templates for the closeout memos, "*Memo for Contract Closeout Template.docx*" or "*Memo for Task Order Closeout Template.docx*," are available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

35.5.B. Files

Store the completed closeout memos in the following directories:

Construction
xxx\27-Contract Closeout
Design-Build
xxx\27-Contract Closeout
CM Task Order
xxx\17-CM Contract\14-CM Closeout Files
A/E Design Task Order
xxx\20-Contract-TO Closeout
A/E Post Design (Construction Services) Task Order
xxx\21-A-E Const Svcs\10-AE Closeout Files

35.6. Providing Files to CO

In lieu of forwarding the CO items like RFIs and submittals, they are kept electronically on the W: drive where the CO can access them at any time. As such, it is imperative that the COR keeps accurate records. At the end of the project, many files are turned over to the CO for recordkeeping.

Except for labor interviews and payrolls, do not turn over hard copies of any documents until they have been scanned and the electronic files saved on the W: drive.

35.7. Providing Files to O&M

The local O&M Office is usually our customer on any construction project. The COR must ensure that the O&M Office receives a complete set of all manuals, product servicing data, parts lists, etc. for any equipment installed during construction. The O&M Office will also receive a copy of the final record drawings.

To document which items have been transferred to an O&M Office, the COR shall complete a memorandum specifically listing which items are being transferred to the O&M Office. This memo should also detail that the O&M Office is responsible for retaining these documents.

The memo(s) to O&M shall also detail that all warranty work will be coordinated through COND. O&M must be made aware that if repairs are required, they shall notify the COR, if available, or COND Chief. Someone from COND will review the work required and forward the request to the CO.

35.8. Closing Out Construction Files

Once the final payment has been made to the contractor, the construction files can be closed.

35.8.A. Physical Files

In our current Contracts, all data should be provided electronically. If any Contract items were provided in hardcopy, ensure that digital versions are added to the Contract files on the W: drive.

To transfer hardcopies to the CO, complete a memo using the template entitled "*Memo Transmittal of Hardcopies.docx*."

35.8.B. Templates

Templates for the hardcopy transfer memo "*Memo Transmittal of Hardcopies.docx*" is available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

35.9. Agency Asset Recordkeeping

USIBWC must correctly account for all work on USIBWC structures. Depending upon the work performed, the funds used will either be determined to be capital expenses or operating expenses.

Capital expenses include:

A. Initial construction

B. Reconstruction

C. Substantially prolong the life of the property

D. Materially increase the value of the property

E. Adapt property to a new or different use

By contrast, operating expenses include:

A. Routine maintenance

B. Incidental repairs

C. Equipment and materials that keep the property in operating condition

Structures include levees, buildings, parking lots, roads, bridges, dams, wastewater treatment plants, etc. Any real property (real estate) purchased as part of construction also needs to be included in the accounting inventory.

35.9.A. Substantial Completion

In compliance with Statement of Federal Financial Accounting Standards (SFFAS) No. 6, Accounting for Property, Plant, and Equipment, when a constructed asset meets the "substantial completion" criteria, the construction work will be recorded. Costs shall include all costs incurred to bring the item to a form and location suitable for its intended use.

Upon substantial completion for all ***or part*** of the project, fill out IBWC Form 246 and send it to the Chief of FAD and Chief of Realty. This form must be provided within 30 calendar days of substantial completion.

35.9.B. Contract Closeout

Once the final payment value is known, finalized copies of IBWC Forms 246 and 247 shall be provided to FAD and Master Planning Division (MPD) so that the assets that were constructed or repaired can be correctly documented.

Send these forms to: FAD
MPD
cc: Chief Financial Officer
cc: Budget Officer
cc: Acquisition Chief
cc: PE Engineering
cc: COND Chief
cc: Realty Officer

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36 CPARS-Past Performance Evaluations

36.1. Past Performance Evaluations

According to FAR 42.1501, past performance information is relevant information for future source selection purposes regarding a contractor's actions under previously awarded Contracts. It includes, for example, the contractor's record of conforming to Contract requirements and to standards of good workmanship; the contractor's record of forecasting and controlling costs; the contractor's adherence to Contract schedules, including the administrative aspects of performance; the contractor's history of reasonable and cooperative behavior and commitment to customer satisfaction; the contractor's reporting into databases; the contractor's record of integrity and business ethics, and generally, the contractor's business-like concern for the interest of the customer.

Past performance evaluations shall be prepared for each Construction Contract of $650,000 or more. Past performance evaluations may also be prepared for Construction Contracts below $650,000. Past performance evaluations shall be prepared for each Architect-Engineer services Contract/Task Order of $30,000 or more. Past performance evaluations may also be prepared for Architect-Engineer services Contracts below $30,000. Any Contract or Task Order that is terminated for default is always rated for past performance regardless of value. (FAR 42.1502)

All evaluations of contractor performance must be completed in the CPARS system within 60 days of Contract/Task Order completion.

36.1.A. CPARS (Contractor Performance Assessment Reporting System)

www.cpars.gov

CPARS is a web-enabled application that collects and manages the library of contractor Performance Assessment Reports (CPAR). A CPAR assesses a contractor's performance and provides a record, both positive and negative, on a given contractor during a specific period of time. Each assessment is based on objective facts and supported by program and Contract management data, such as cost performance reports, customer comments, quality reviews, technical interchange meetings, financial solvency assessments, construction/production management reviews, contractor operations reviews, functional performance evaluations, and earned Contract incentives.

36.1.A.1. Reference Material and User Guides

Reference material and user guides for each module are stored on the network at:

Z:__Templates & Information\CPARS
or
W:__Templates & Information\CPARS
or
P:\COND__Templates & Information\CPARS

36.1.A.2. CPARS

CPARS is a web-enabled application that supports the completion, distribution, and retrieval of Contract performance evaluations. An evaluation assesses a contractor's performance and provides a record, both positive and negative, on a given Contract. Each evaluation is based on objective facts and supported by Contract management data, such as quality of services/performance by discipline, and assessments of the attributes of the engineering services as to accuracy, thoroughness, schedules, cost constraints, technical capability, quality, timely performance, effectiveness of management, and compliance with Contract terms, labor standards, and safety requirements.

36.1.A.3. Accessing CPARS

Each COR must be granted access to the CPARS system. To gain access, fill out the access form located in the directories listed under Reference Materials and User Guides above and send it either to your CO or to the ACD Chief. The ACD Chief is usually the USIBWC Focal Point for CPARS access.

Along with your completed access form, send the ACD Chief a list of your Contract/Task Order numbers for which you are the COR. For each Contract/Task Order number, also list the CO for that Contract. Not only will access need to be established for you on the system, but access to each Contract and Task Order must also be created.

Once access has been granted, you will receive a system generated email providing you with a user ID and instructions for obtaining a password. The user manuals have very good instructions with multiple screen shots for first time access.

36.1.A.4. CPARS Training

There are several courses available which provide an overview and details into using CPARS. The training can be found at www.cpars.gov/allapps/cpartrng/webtrain/webtrain_all.htm.

36.2. Using CPARS

CPARS is located at www.cpars.gov. There is a "System Login" link on the top right hand side of the screen. Once logged into CPARS, "Initiate an Evaluation" or look at your "To-Do List." When an evaluation is opened, you will find six tabs: contractor Name/Address, Contract Information, Misc Information, Small Business Utilization, Ratings, and Assessor.

NOTE: Once logged into CPARS beware that it is very easy to lose data. Always click save and **always logoff** once you are done. If you do not logoff, all of your work could be lost.

36.2.A. Contractor Name/Address

This should have been filled in by the CO.

36.2.B. Contract Information

Ensure that data is correct. Fill out any blank fields.

36.2.B.1. Complexity

The complexity level may have been completed by the CO, but verify that it is correct based upon your technical assessment. Review which category best fits the work on this project: low, medium, or high.

a. Low

The Contract requires mature, proven technology or services of a non-complex nature, such as the production of simple items, or performance of simple operations. Contract requirements are simple, and efforts are routine. Highly skilled labor is not required in order to meet Contract requirements. The Contract may be for a follow-on, repetitive type, or commercial acquisition. Contract requirements can be accomplished with a low degree of management effort, and routine services may be performed with minimal supervision. Examples include: commercial-off-the-shelf supplies or parts (such as transistors), and commercial services (such as grounds keeping).

b. Medium

The Contract requires mature, proven technology or services of a moderately complex nature. While the technology may be moderately complex, and the services require skilled labor, no new technology is being developed, and the technology is being used for proven applications only. No new applications of the technology are being performed. Contract specifications have moderate tolerances, and may have a routine delivery schedule. A moderate degree of management oversight is required to ensure accomplishment of Contract requirements. Examples include: night vision goggles, design and construction services for routine repairs and alterations to real property, and financial support services.

c. High

The Contract requires new technology or services, or a new application of existing technology or services, with a high degree of technical uncertainty. Performance requires state-of-the-art machinery, or highly skilled personnel. Contract specifications include stringent tolerance limits, and services must be performed to exacting standards. The Contract may have an accelerated delivery schedule. A high degree of management effort is required to ensure accomplishment of Contract requirements. Examples include: development of new aircraft, or weapons systems.

36.2.C. Miscellaneous Information

36.2.C.1. Project Title

Copy the title of the Contract directly off of the cover page of the Contract (SF-1442).

36.2.C.2. Contract Effort Description

Provide a detailed description of the Contract or order effort that identifies the key requirements and/or type of effort. Refer to the technical specifications under 01.10.00 or 01.11.00; therefore should be a description of work in this section. You can also pull information from the SAM (sam.gov/content/home) synopsis. The detailed description is of critical importance to future source selection officials. The description should be detailed enough so that it can be used in determining the relevance of this program or

project to future source selections. It is important to address the complexity of the Contract or order effort, and the overall technical risk associated with accomplishing the effort. Ensure acronyms are identified. Provide a complete description of the Contract or order effort that identifies key technologies, components, subsystems, and requirements. For task or delivery order Contracts, state the number of orders issued during the period, the number of orders completed during the period, and the number of orders that remain active. A good source for this description can be found in the SOW, or statement of objectives, requirements document, the acquisition plan, etc. For Interim CPARs reports, a description of key milestone events that occurred in the review period may be beneficial, as well as major Contract or order modifications during the period.

For Contracts or orders that include multiple functional disciplines or activities, separate them into categories to:

1. Reflect the full scope of the Contract or order, and;
2. Allow grouping of similar work efforts within the categories to avoid unnecessary segregation of essentially similar specialties or activities. Each category or area should be separately numbered, titled, and described within the Contract Effort Description to facilitate cross-referencing with the evaluation of the contractor's performance within each evaluation area.

36.2.C.3. Key Subcontractors and Effort Performed

Identify subcontractors, performing either a critical aspect of the contracted effort, or more than 25% of the dollar value of the effort. If possible, include the amount of subcontract costs of the total Contract or order effort. Discussion of the Prime contractor's management of the subcontractor should be included under the Management evaluation area. The total cost of the subcontracts should be listed on Form 154 with each pay estimate.

36.2.C.4. Unique Entity Identifier (UEI)

The Government used to use a contractor's DUNS (Dun and Bradstreet Number) but they have now switched completely to the UEI. To find a contractor's UEI, you can search at SAM (sam.gov).

36.2.D. Small Business Utilization

Unless you know for sure that a Small Business Utilization Plan was required and used, choose "No."

36.2.E. Ratings

There are seven rating areas that must be completed. You are allowed 24,000 characters for each section. You may find it easier to write the details in Word and then copy the text into each section. Anything other than "Satisfactory" requires a written justification.

36.2.E.1. Quality

a. Architect-Engineer Contracts or Orders

Quality reflects the contractor's management of the quality control program, as well as the quality of the work itself. Questions which should be addressed are as follows:

Has a quality product been provided? Specifically, describe the quality, and the contractor's quality control system responsible for it. For example:

- Ability to maintain quality control
- Ability to address and review comments
- Independent Technical Review
- Whether plans are coordinated with specifications
- Coordination between disciplines
- Compliance with design criteria

To support the assigned rating, the Assessing Official Comments should contain sufficient comments, based on supporting documentation, and include successes and failures, as well as specific corrective actions, as appropriate.

b. Construction Contracts or Orders

Quality reflects the contractor's management of the quality control program, as well as the quality of the work itself. Questions which should be addressed are as follows: Has a quality product been provided? Specifically describe the contractor's quality control system responsible for it. For example:

- Ability to maintain quality control
- Performance of accessory testing
- Implementation of 3-phase inspection process
- CQC (contractor Quality Control) documentation
- Identification and correction of deficient work
- Reviews of materials and shop drawings
- Whether there was incorporation of unspecified materials

To support the assigned rating, the Assessing Official Comments should contain sufficient comments, based on supporting documentation, and include successes and failures, as well as specific corrective actions, as appropriate.

36.2.E.2. Schedule

Assess the timeliness of the contractor against the completion of the Contract, task orders, milestones, delivery schedules, and administrative requirements (e.g., efforts that contribute to or affect the schedule variance).

This evaluation of the contractor's adherence to the required delivery schedule should include the contractor's efforts during the evaluation period that contribute to, or affect, the schedule variance. Also, address the significance of scheduled events (e.g., design reviews), discuss causes, and assess the effectiveness of the contractor's corrective actions. This element applies to Contract or order closeout activities, as well as Contract or order performance. Instances of adverse actions, such as the evaluation of liquidated damages or issuance of Cure Notices, Show Cause Notices, and Delinquency Notices, are

indicators of problems which may have resulted in variance to the Contract or order schedule and should, therefore, be noted in the evaluation.

Questions to consider include the following:

1. Is the contractor completing the design/engineering services activities in a timely manner? This includes administrative activities, as well as meeting all scheduled milestones in the design process.
2. Did the contractor adequately schedule the work?
3. Has the contractor met administrative milestone dates?
4. Has the contractor met physical milestone dates specified by Contract, or agreed to, in the project schedule?
5. If the schedule has slipped through the contractor's fault or negligence, has the contractor taken appropriate corrective action of its own volition?
6. Has the contractor furnished all required deliverables on or ahead of schedule?
7. Is the contractor completing the construction activities in a timely manner? This includes administrative activities, as well as physical construction activities, such as submittal of a management response to Request for Proposal (RFPs), etc.
8. Has the contractor furnished updated project schedules on a timely basis?

36.2.E.3. Cost Control

Assess the contractor's effectiveness in forecasting, managing, and controlling Contract or order cost. If the contractor is experiencing cost growth or underrun, discuss the causes and contractor-proposed solutions for the cost overruns or underruns. For Contracts or orders where task or Contract sizing is based upon contractor-provided person hour estimates, the relationship of these estimates to ultimate task cost should be assessed. In addition, the extent to which the contractor demonstrates a sense of cost responsibility, through the efficient use of resources, in each work effort should be assessed. Include, as applicable, the following information:

1. Does the contractor keep within the total estimated cost (what is the relationship of the negotiated costs and budgeted costs to actuals)?
2. Did the contractor do anything innovative that resulted in cost savings?
3. Were billings current, accurate and complete?
4. Are the contractor's budgetary internal controls adequate?
5. Has the contractor provided a design that can be constructed with the available funds?
6. Has the contractor notified the Government and taken necessary corrective actions when the cost exceeds available funds?

36.2.E.4. Management

Assess the integration and coordination of all activities needed to execute the Contract or order, specifically the timeliness, completeness and quality of problem identification, corrective action plans, proposal submittals, the contractor's history of reasonable and cooperative behavior (to include timely identification of issues in controversy), customer

satisfaction, timely award and management of subcontracts. Include, as applicable, information on the following:

1. Is the contractor oriented toward the customer?
2. Is interaction between the contractor and the Government satisfactory, or does it need improvement?
3. Include the adequacy of the contractor's accounting, billing, and estimating systems and the contractor's management of Government Furnished Property (GFP) if a substantial amount of GFP has been provided to the contractor under the Contract or order.
4. Address the timeliness of awards to subcontractors and management of subcontractors, including subcontract costs. Consider efforts taken to ensure early identification of subcontract problems, and the timely application of corporate resources to preclude subcontract problems from impacting overall prime contractor performance.
5. Assess the Prime contractor's effort devoted to managing subcontracts and whether subcontractors were an integral part of the contractor's team. Are the contractor's management, onsite, and home office personnel exhibiting the capacity to adequately plan, schedule, resource, organize, and otherwise manage the work? If not, describe and relate to other rated elements.
6. Consider the following aspects of performance:
   i. Management Responsiveness. Assess the timeliness, completeness, and quality of problem identification, corrective action plans, proposal submittals, the contractor's history of reasonable and cooperative behavior, effective business relations, and customer satisfaction. Consider the contractor's responsiveness to the program as it relates to meeting Contract or order requirements during the period covered by the report.
   ii. Subcontract Management. Assess the contractor's success with timely award and management of subcontracts.
   iii. Assess the Prime contractor's effort devoted to managing subcontracts and whether subcontractors were an integral part of the contractor's team. Consider efforts taken to ensure early identification of subcontract problems, and the timely application of corporate resources to preclude subcontract problems from impacting overall Prime contractor performance.
   iv. Consider efforts taken to ensure prompt subcontractor payment.
   v. Assess the Prime contractor's managing of subcontractors to ensure compliance with labor and safety standards at the subcontract level.
   vi. If the Contract is set-aside for small business, assess the contractor's compliance with any limitations on subcontracting.

Program Management and Other Management. Assess the extent to which the contractor: discharges its responsibility for integration and coordination of all activity needed to execute the Contract or order; identifies and applies resources required to meet

schedule requirements; assigns responsibility for tasks and actions required by Contract or order; communicates appropriate information to affected program elements in a timely manner. Assess the contractor's risk management practices, especially the ability to identify risks, and to formulate and implement risk mitigation plans. If applicable, identify any other areas that are unique to the Contract or order, or that cannot be captured elsewhere under the Management element.

Integration and coordination of activities should reflect those required by the Integrated Master Plan or Schedule. Also consider the adequacy of the contractor's mechanisms for tracking Contract or order compliance, recording changes to planning documentation and management of cost and schedule control system, and internal controls, as well as the contractor's performance relative to management of data collection, recording, and distribution as required by the Contract or order.

Management of Key Personnel (Applicable when the Contract/order contains a Key Personnel clause). Assess the contractor's performance in selecting, retaining, supporting, and replacing, when necessary, key personnel. For example:

1. How well did the contractor match the qualifications of the key position, as described in the Contract/order, with the person who filled the key position?
2. Did the contractor support key personnel so they were able to work effectively?
3. If a key person did not perform well, what action was taken by the contractor to correct this?
4. If a replacement of a key person was necessary, did the replacement meet or exceed the qualifications of the position as described in the Contract or order schedule?

36.2.E.5. Small Business

Utilization of Small Business FAR Subpart 19.7 and 15 USC 637 contains statutory requirements for complying with the Small Business Subcontracting Program. Assess whether the contractor provided maximum practicable opportunity for Small Business (including Alaska Native Corporations (ANCs) and Indian Tribes), Small Disadvantaged Businesses (which also includes ANCs and Indian Tribes), Women Owned Small Businesses, HUBZone, Veteran Owned, Service Disabled Veteran Owned Small Business, and ANCs and Indian Tribes (that are not Small Disadvantaged Businesses or Small Businesses) to participate in Contract or order performance consistent with efficient performance of the Contract or order.

Assess compliance with all terms and conditions in the Contract or order relating to Small Business participation (including FAR 52.219-8 Utilization of Small Businesses, and FAR 52.219-9 Small Business Subcontracting Plan, when required). Assess any small business participation goals which are stated separately in the Contract or order. Assess achievement on each individual goal stated within the Contract or order, or subcontracting plan, including good faith effort if the goal was not achieved.

It may be necessary to seek input from the Contracting Officer in regards to the contractor's compliance with these criteria.

This area must be rated for all Contracts and task orders that contain a small business subcontracting goal.

Ratings will be in accordance with definitions described in Attachment 2 of the Guidance for CPARS document, Evaluation Ratings Definitions for The Small Business Evaluation Factor when 52.219-9 is used.

a. Rating: Exceeds

Exceeded all statutory goals or goals, as negotiated. Had exceptional success with initiatives to assist, promote, and utilize small business (SB), small disadvantaged business (SDB), women-owned small business (WOSB), HUBZone small business, veteran-owned small business (VOSB), and service disabled veteran owned small business (SDVOSB). Complied with FAR 52.219-8, Utilization of Small Business Concerns. Exceeded any other small business participation requirements incorporated in the Contract or order, including the use of small businesses in mission critical aspects of the program. Went above and beyond the required elements of the subcontracting plan, and other small business requirements of the Contract or order. Completed and submitted Individual Subcontract Reports and/or Summary Subcontract Reports in an accurate and timely manner.

Note: To justify an Exceptional rating, identify multiple significant events, and state how these events were of benefit to small business utilization. A singular benefit, however, could be of such magnitude that it constitutes an Exceptional rating. Small businesses should be given meaningful and innovative work directly related to the Contract. Opportunities should not be limited to indirect work such as cleaning offices, supplies, landscaping, etc. Also, there should have been no significant weaknesses identified.

b. Rating: Very Good

Definition: Met all of the statutory goals or goals, as negotiated. Had significant success with initiatives to assist, promote, and utilize SB, SDB, WOSB, HUBZone, VOSB, and SDVOSB. Complied with FAR 52.219-8, Utilization of Small Business Concerns. Met or exceeded any other small business participation requirements incorporated in the Contract or order, including the use of small businesses in mission critical aspects of the program. Endeavored to go above and beyond the required elements of the subcontracting plan. Completed and submitted Individual Subcontract Reports and/or Summary Subcontract Reports in an accurate and timely manner.

Note: To justify a Very Good rating, identify a significant event, and state how it was a benefit to small business utilization. Small businesses should be given meaningful and innovative opportunities to participate as subcontractors for work directly related to the Contract. Opportunities should not be limited to indirect work such as cleaning offices, supplies, landscaping, etc. There should be no significant weaknesses identified.

c. Rating: Satisfactory

Definition: Demonstrated a good faith effort to meet all of the negotiated subcontracting goals in the various socio-economic categories for the current period. Complied with FAR 52.219-8, Utilization of Small Business Concerns. Met any other small business participation requirements included in the Contract or order. Fulfilled the requirements of the subcontracting plan included in the Contract or order. Completed and submitted Individual Subcontract Reports and/or Summary Subcontract Reports in an accurate and timely manner.

Note: To justify a Satisfactory rating, there should have been only minor problems, or major problems that the contractor has addressed, or taken corrective action upon. There should have been no significant weaknesses identified. A fundamental principle of assigning ratings is that contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the Contract or order.

d. Rating: Marginal

Definition: Deficient in meeting key subcontracting plan elements. Deficient in complying with FAR 52.219-8, Utilization of Small Business Concerns, and any other small business participation requirements in the Contract or order. Did not submit Individual Subcontract Reports and/or Summary Subcontract Reports in an accurate or timely manner. Failed to satisfy one or more requirements of a corrective action plan currently in place; however, does show an interest in bringing performance to a satisfactory level, and has demonstrated a commitment to apply the necessary resources to do so. Required a corrective action plan.

Note: To justify Marginal performance, identify a significant event that the contractor had trouble overcoming, and how it impacted small business utilization. A Marginal rating should be supported by referencing the actions taken by the Government that notified the contractor of the Contractual deficiency.

e. Rating: Unsatisfactory

Definition: Noncompliant with FAR 52.219-8 and 52.219-9, and any other small business participation requirements in the Contract or order. Did not submit Individual Subcontract Reports and/or Summary Subcontract Reports in an accurate or timely manner. Showed little interest in bringing performance to a satisfactory level, or was generally uncooperative. Required a corrective action plan.

Note: To justify an Unsatisfactory rating, identify multiple significant events that the contractor had trouble overcoming, and state how these events impacted small business utilization. A singular problem, however, could be of such serious magnitude that it alone constitutes an Unsatisfactory rating. An Unsatisfactory rating should be supported by referencing the actions taken by the Government to notify the contractor of the deficiencies. When an Unsatisfactory rating is justified, the Contracting Officer must consider whether the contractor made a good faith effort to comply with the requirements of the subcontracting plan required by FAR 52.219-9,

and follow the procedures outlined in FAR 52.219-16, Liquidated Damages-Subcontracting Plan.

NOTE 1: Generally, zero percent is not a goal unless the Contracting Officer determined when negotiating the subcontracting plan that no subcontracting opportunities exist in a particular socio-economic category. In such cases, the contractor shall be considered to have met the goal for any socio-economic category where the goal negotiated in the plan was zero.

36.2.E.6. Regulatory

Assess compliance with all terms and conditions in the Contract or order relating to applicable regulations and codes. Consider aspects of performance such as compliance with financial, environmental (example: Clean Air Act, Clean Water Act), safety, and labor regulations, as well as any other reporting requirements in the Contract. Consider questions such as the following:

1. Has the contractor kept up with and met all Davis-Bacon labor requirements?
2. Has the contractor complied with all Contract clauses and reporting requirements (e.g., FAPIIS, FAR Subsection 9.104-6, FAR Clause 52.209-9)?
3. Has the contractor complied with Cost Accounting Standards and disclosure statements (FAR Subpart 30.2, FAR Clauses 52.230-2, 52.230-3, 52.230-4, 52.230-5, 52.230-6)?
4. Has the contractor complied with the reporting requirements relating to recovered material content utilized in Contract performance (Specification 01.74.19)?
5. Has the contractor complied with Contractual safety requirements and labor laws (see FAR Subsection 22.407, FAR Clauses 52.222-4, 52.222-34, 52.222-20)?
6. Has the contractor complied with Hazardous Material Identification and Material Safety Data (see FAR Subpart 23.3, FAR Clauses 52.223-3)?
7. Has the contractor complied with specifications or other Contractual requirements requiring the delivery or use of environmentally preferable products, energy-efficient products, products containing recovered materials, and biobased products (FAR Subparts 23.2, 23.4, 23.7)?
8. Has the contractor implemented an effective safety program; one which minimizes/mitigates potential accidents (FAR Subsection 36.513, FAR Clause 52.236-13)?
9. Is the contractor complying with affirmative action and EEO compliance requirements (see FAR Subpart 22.8, FAR Clauses 52.222-26, 52.222-27)?
10. Has the contractor complied with combating trafficking in persons (see FAR Subpart 22.17, FAR Clause 52.222-50)?

36.2.E.7. Other Areas

Specify additional evaluation areas that are unique to the Contract or order, or that cannot be captured elsewhere in the evaluation. More than one type of entry may be included, but should be separately labeled.

Use the Other Areas block in those instances where an aspect of the contractor's performance does not fit into any of the other blocks on the form. As an example, this block may be used to address security issues, provide an evaluation of provisioning line items, or other areas as appropriate. ***Always specify a "Safety" category.***

a. Safety

Construction requires adherence to safety standards. Relate how the contractor oversaw, maintained, and implemented a safety program. Detail if there were any accidents or injuries.

36.2.F. Assessor

Technically the CO is the Assessing Official, but you, as the COR, are the one writing the past performance evaluation. The Assessing Official Comments may include up to 24,000 characters.

36.2.F.1. Assessing Official Comments

A factual, detailed narrative is required for all evaluations regardless of rating (e.g., even Satisfactory ratings require narrative support). Cross-reference the comments in the Assessing Official Narrative to their corresponding evaluation area. Each detailed narrative statement in support of the area evaluation must contain clear and concise objective information that accurately reflects the contractor's performance under the Contract or order. It is also important for the information reported to include current, accurate, and complete statements about the contractor's performance because this information will be used to assist, inform, and influence future source selection and award decisions. An exceptional cost performance evaluation could, for example, cite the current underrun dollar value and estimate at completion. A marginal evaluation could, for example, be supported by information concerning personnel changes or schedule delinquency rate. Key personnel familiar with the effort may have been replaced by less experienced personnel. Sources of the data used by the Assessing Official for the evaluation may include: operational test and evaluation results; technical interchange meetings; production readiness reviews; earned Contract or order incentives; award fee evaluations; customer or field surveys; or evaluation of contractor reports. The Contracting Officer should be contacted to ensure that all applicable data has been incorporated.

36.2.F.2. Given What I Know Today…

Choose whether you would or would not recommend the contractor for a similar Contract today. This is your opinion.

36.3. Completing CPARS Evaluations

When you are satisfied that you have completed the full evaluation, click the box for "Save Data." After that, click on "Validate and Send to the Assessing Official." If the validation runs without any errors, it will tell you that the evaluation has been sent to the Assessing Official. This should complete your work in CPARS. Return to the Main Menu and logoff.

37 Warranties

The FAR defines a warranty as a promise or affirmation given by a contractor to the Government regarding the nature, usefulness, or condition of the supplies or performance of services furnished under the Contract.

37.1. Determine the Appropriate Warranty

The standard warranty clause in the FAR is 52.246-21 and it offers a one year warranty. We have found that issues don't tend to crop up until 15 to 18 months on our heavy construction projects so we have established a minimum warranty period of two years. Your project may be small and the one year period is sufficient or it may be detailed with critical equipment that requires longer periods.

A general period can be set for the whole project with longer periods set to specific structures or pieces of equipment. For example, work on a wastewater treatment plant may use the general two year period but then detail that pipe meters and butterfly valves have a 10 year warranty. If the project is detailed or deals with technical equipment talk to O&M and see what warranty period they want or expect. When getting a project ready for solicitation, it is up to the COR to determine the applicable period.

While not required to be detailed in the specifications or SOW, identifying the warranty period for specific pieces of equipment or specific structures to highlight this additional requirement is recommended.

37.2. Administering Construction Contract

Inspect your Contract to determine the extent of the warranty on your project. Make sure that these items are identified during Contract closeout. Also during closeout, ensure that all product warranties have been transferred and/or provided to USIBWC.

For any project that has multiple mechanical items installed or for buildings, create a spreadsheet of every item covered under warranty and provide it to O&M for reference.

37.3. Warranty Work

When warranty work is required, the O&M Office should contact COND to request repairs be completed. The original construction COR, if still available, should inspect the site and verify the repairs fall under the warranty clauses in the Contract. If they do, the COR shall complete IBWC Form 248 to detail the repairs and then contact the CO and the contractor to request that the work be completed.

The COR shall manage the warranty work including any required inspections. Upon completion of the work, finish IBWC Form 248 and have the contractor's representative sign. Keep a log of all warranty work required for each construction project using IBWC Form 249. Keep a copy of

the finished Form 248, provide a copy to the requesting O&M Office, and provide the original to the CO.

38 License Reviews

COND is one of the Divisions tasked with reviewing almost all license and permit requests. Do not limit your review to only construction activities. Review with O&M, EMD, and the Agency as a whole in mind. The number one item to remember when performing a review is that we need to ensure that USIBWC's work and property are not negatively affected.

With that in mind, it had been planned to detail all of the construction requirements in an updated directive. The current directive, SD.III.1012 Criteria for Construction Activities within Limits of USIBWC Floodways, is extremely outdated and it does not address any FEMA requirements for flood control. Therefore we have developed seven 'Requirements for Work' files. These files have been written in coordination with ESD and EMD to ensure that work on our property does not negatively impact USIBWC.

The seven files are:

01_USIBWC Req-Work-All YYYYMMDD.pdf
Design and Construction Requirements for All Projects: This document oversees work on any IBWC controlled property.

02_USIBWC Req-Land Boundary YYYYMMDD.pdf
Land Boundary Project Requirements: This document details requirements specific to the land boundary between San Diego and El Paso.

03_USIBWC Req-Levees YYYYMMDD.pdf
Requirements for Projects On or Affecting a USIBWC Flood Control Structure: This document provided requirements in addition to those in "01_USIBWC Req-Work-All 20211021.pdf" to ensure that our flood control structures are protected.

04_USIBWC Req-Levee Minimum Tests YYYYMMDD.pdf
Minimum Levee Testing Requirements: This document outlines the minimum testing required for earthen levee work.

05_USIBWC Req-Design Report YYYYMMDD.pdf
Design Report Requirements for USIBWC Review: This document details critical details that need to be included in design reports for work on our property.

06_USIBWC Req-2D Modeling YYYYMMDD.pdf
Hydraulic Modeling Methodology: This document outlines how to run H&H models and how to present the results.

07_USIBWC Req-Seed Mixes YYYYMMDD.pdf
Reseeding USIBWC Property: This document lists requirements and allowable plant varieties for reseeding after construction. It covers all of USIBWC from San Diego to Brownsville.

08_USIBWC Req-Floodplains YYYYMMDD.pdf
Requirements for Projects On the Rio Grande or Colorado River Floodplains: This document lists requirements to ensure that work meets the 1970 Treaty to Resolve Pending Boundary Difference and Maintain the Rio Grande and Colorado River as the International Boundary.

The dates used in the filenames represent the last time they were updated.

38.1. Files

The files listed above are available at:

Z:__Templates & Information\USIBWC Work Requirements
or
W:__Templates & Information\USIBWC Work Requirements
or
P:\COND__Templates & Information\USIBWC Work Requirements

The eight files that make up IBWC work requirements are available to outside entities under the "*USIBWC's Requirements for Work on or Affecting our Projects*" link at www.ibwc.gov/resources-info/.

38.2. License Review Memo

A memo shall be written that details when COND received the request to review, what items were provided, the Proponent's name, and what specifically is being requested.

Use your engineering judgment when you compare what was submit versus the Requirements for Work. If they are only doing very minor work, then we do not necessarily need to hold them to the highest level noted in the Requirements of Work. Also consider that some levees are significantly higher than they need to be to meet the design flood plus freeboard. If the work is being performed in the top six inches and that is above what we need for levee certification, then requirements can be loosened. Suggest reasonable alternatives to ensure that USIBWC facilities are protected but an undue burden is not placed on the Proponent.

Key items to check are:

A. That USIBWC's ROW is clearly shown. Often our property is not indicated or another licensee is shown instead of USIBWC.

B. That a design report is provided if any structures are or may be affected.

C. That a scour analysis has been performed if work is going under the river, unless the depth is so great to negate the need.

D. That a seepage analysis has been performed for anything proposed to go through or under our levees unless the item is so deep that seepage will not be a concern.

E. That the work will not impede O&M operations.

F. That the work will not cut into or otherwise damage our levees.

38.2.A. Files

The template for a license review memo is available at:

Z:__Templates & Information\Templates-General
or
W:__Templates & Information\Templates-General
or
P:\COND__Templates & Information\Templates-General

39 Drawings

USIBWC does not have many drawing requirements but they are detailed in the file "*Drawing and CAD Standards.*" This document guides users through how to setup and deliver AutoCAD files and final drawings to USIBWC. The document also requires the use of our standard border, specific drawing blocks, and our AutoCAD ctb file.

Some Contractors have issues with our AutoCAD ctb file because it is almost blank. The reason this file is almost blank is that it forces AutoCAD users to put all information in the AutoCAD layers. As AutoCAD files get copied from computer to network to another computer, ctb files are almost never copied. That means years down the road someone goes to print the file and nothing turns out correctly. By forcing all of the information to be detailed within the CAD file, the data is not lost and the AutoCAD file will print correctly.

39.1. USIBWC Standard Drawings

USIBWC currently has the following standard drawings. These drawings can be used directly on projects or may be modified by contractors.

A. 25084 Levee Ramps

B. 26409 URG Vehicle Gates

C. 26422 LRG Vehicle Gates

D. 26424 RGCP Notice Signs

E. 26441 Drawing Layout Colors

F. 26422 Hatch Patterns

G. 26465 Symbols

H. 26741 Chicanes

39.1.A. Files

Standard drawings, AutoCAD settings, and USIBWC's "*Drawing and CAD Standards*" are in the following directories:

Z:__Templates & Information\Std Drawings
or
W:__Templates & Information\Std Drawings
or
P:\COND__Templates & Information\Std Drawings

Standard drawings are available to outside entities under the "*USIBWC's Standard Drawings*" link at www.ibwc.gov/resources-info/.

USIBWC's AutoCAD settings, AutoCAD support files, and USIBWC's "*Drawing and CAD Standards*" are available to outside entities under the "*USIBWC's CAD files and Drawing and CAD Standards*" link at www.ibwc.gov/resources-info/.

39.2. IBWC Drawing Numbers

USIBWC has established a drawing number system to ensure that each version of a drawing has a unique number. The drawing numbers are in the format of #####-###-##.

The first five digits are the base number assigned to the drawing.

The next three digits are the sheet number when multiple sheets have the same drawing number. For example, 05679-001-00, 05679-002-00, and 05679-003-00 would indicate sheets 1, 2, and 3 of drawing number 05679. Alternately, 15763-000-00 and 26412-000-00 indicate that each drawing is a single sheet.

The last two digits indicate the type of drawing and the version number. Only numbers are used to indicate revisions such as 00 for the original drawing, 01 for revision 1, etc.

As built drawings are indicated with an A#. A0 is the original as built drawing. If the as built is revised, then A1 is used.

When a new survey drawing is created that replicates the original drawing, then T# is used. Often these are post construction drawings somewhat separate than the as builts. If multiple surveys are shown over the same original drawing extent, then change the number after the 'T'. For example, the original construction drawing was 12345-000-00. The as built is 12345-000-A0. Two survey drawings were create, one topographic and one showing all utilities. These drawings are indicated as 12345-000-T0 and 12345-000-T1.

Lastly, there are supplemental drawings. For these drawings, a S# is used. Often these have to do with submittals. If multiple supplemental items are associated with the same original drawing extent, then change the number after the 'S'. An example would be a bracing drawings created by a solar panel manufacturer. Using the prior example, two bracing drawings would be provided with numbers 12345-000-S0 and 12345-000-S1.

Using this numbering standard, all drawing versions have a unique number AND when you search on the base drawing number, you get all items associated with it from as builts to surveys to supplemental information.

The current master file of IBWC drawing numbers is maintained by the COND Chief.

39.3. Drawing Revisions

Drawings cannot be revised until they are final. Once they are final, all changes shall be noted in the revision block. If the drawing had a PE stamp on it, the revised version needs a new stamp.

Save all versions of each drawing.

39.4. Files

Final AutoCAD files (design and as built) need the files purged and all xref files bound. That way pieces of the drawing are not lost over time. Ensure image files are placed in the drawing.

While the project pdf drawing files shall be retained in a single file, all of the drawings shall be saved in Agency files individually. You can break the pdf apart by selecting all pages and choosing extract, and extract as separate files. Every version of the final design (used for construction) drawings shall be saved as well as all record drawings.

Ensure that drawings from design reports are also saved as separate files.

39.4.A. Drawing Filenames

Name each drawing as: Drawing Number + Project + Name (70 char limit) + Date

The date format to be used it yyyy-mm-dd while the project name should be an abbreviation as noted in Table 2. Do not repeat names or descriptions in the drawing name. For example review the drawing border information in Figure 7. The drawing sub feature and the drawing name are very similar; there is no reason to repeat it in the drawing name. Following the above guidance, the drawing should be named:
26481-000-00 RGCP Sunland Park Levee Repair Schultz Lateral WW35C P&P 3 2022-04-04

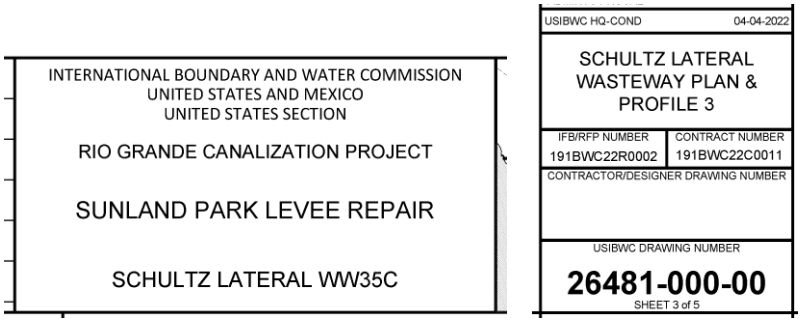


Figure 7 - Drawing Border Example

Table 2-Drawing Name Abbreviations to Use

IBWC Project Names and Other Titles	Use in Drawing Name
International Boundary and Water Commission	IBWC
Amistad Reservoir and Dam	Amistad
Anzalduas Dam	Anzalduas
Chamizal Convention Project	Chamizal
Colorado River Boundary and Capacity Project	CRBCP
Douglas-Aqua Prieta Sanitation Project	DAPSP
El Morillo Drain	Morillo
Falcon Dam and Reservoir	Falcon
IBWC Rio Grande Projects	IBWC
International Outfall Interceptor	IOI
International Salinity Control Project	ISCP
Lower Rio Grande Flood Control Project	LRGFCP
Morelos Dam	Morelos
New River/Mexicali Sanitation Program	New River
Nogales Flood Control Project	NFCP

IBWC Project Names and Other Titles	Use in Drawing Name
Nogales International Wastewater Treatment Plant	NIWTP
Nuevo Laredo International Wastewater Treatment Plant	NLIWTP
Plan and Profile	P&P
Presidio Valley Flood Control Project	PVFCP
Retamal Dam	Retamal
Rio Grande American Canal Extension	RGACE
Rio Grande Bank Protection Project	RGBPP
Rio Grande Border Sanitation Projects	
Rio Grande Boundary Preservation Project	Boundary Preservation
Rio Grande Canalization Project	RGCP
Rio Grande Rectification Project	RGRP
Section(s)	Sec
South Bay International Wastewater Treatment Plant	SBIWTP
South Bay Mexican Wastewater Treatment Plant	SBMxWTP
Station(s)	Sta
Tijuana River Flood Control Project	TRFCP
Wellton-Mohawk Drain	Welton-Mohawk
Western Land Boundary	

39.4.B. Modification of PDF Files

39.4.B.1. Add IBWC Drawing Number

While new Scopes of Work require the use of IBWC drawing numbers, old one did not. If the drawing is missing a IBWC drawing number, it needs to be added.

1. Edit the PDF.
2. In the Adobe Edit tools, chose 'Header & Footer.'
3. Use Arial font.
4. Bates Numbering
   Bates numbering is often used in legal documents and in Adobe it allows the software to change the number based on an established format. When used, successive pages receive a one-up value. To use Bates numbering, place the following codes in the Right Footer Text box. If drawings are as builts, simply change the last "00" to "A0."
   - Change full drawing number: <<Bates Number#5#xxxxx-000-00>> where the xxxxx represents the first drawing number.
   - Change the middle page number: <<Bates Number#3#x#25744-#-00>> where the x represents the first page number.
   - If these field do not work, go to Adobe Edit, More, Bates Numbering, Add and set up what you need.
5. For 8.5"x11" Drawings
   - Font size 16 pt.
   - Start at Bottom: 0.4"
   - Start at Right: 0.5"
6. For Larger Drawings
   - Font size 22 pt.

- Start at Bottom: 0.7"
- Start at Right: 1.2"

7. You may need to adjust drawing number location to it is readable. Do not place the drawing number closer than 0.3" from bottom or right edge.
8. After you have the basic drawing number formats established, you can save the settings and reload in a new file just using the Header & Footer drop down menu.

39.4.B.2. Add Convenience Copy Notice

It happens time and time again that drawings are printed and then the question arises whether the printout is a record document or not. In the case of our drawings, the original electronic AutoCAD file, pdf, or even image is the record copy. All other versions are simply working copies. Adding a watermark that prints with the document ensures that printouts are never confused with record documents.

1. Edit the PDF.
2. In the Adobe Edit tools, chose 'Watermark.'
3. Font: Arial Bold
4. If document size is 8.5"x11" or smaller, use 18 pt otherwise use 24 pt.
5. Color: Red.
6. No rotation.
7. 100% Opacity.
8. Location: Appear on top of page.
9. Appearance Options: Show when printing.
10. Vertical Distance: Top -- If 8.5"x11" or smaller, use 0.3" to start. For larger, use 0.75" to start.
11. Horizontal Distance: Center.
12. Once you have these settings established, you can 'Save Settings' and simply chose them again by using the drop down menu.

39.4.C. Files

Save the final drawings at:

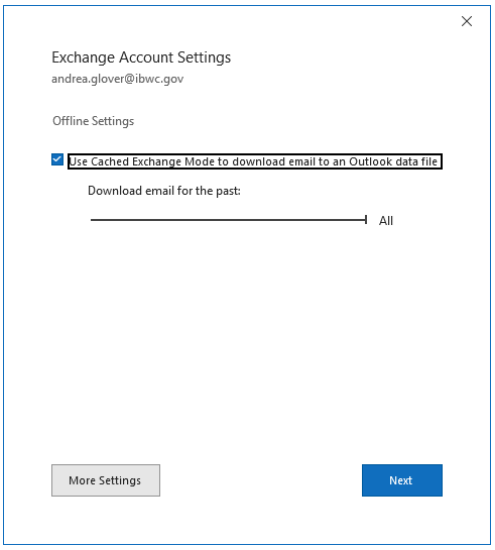
P:\COND\Drawings

This page intentionally left blank to facilitate double sided printing.

40 Software

40.1. Outlook

Many of our projects span years. To ensure that all of your emails are available on your computer, you need to change your mailbox settings. Go to File, Account Settings, Account Settings, then on the Email tab click Change… Check "Use Cached Exchange Mode to download email to an Outlook data file" and slide the email download time to "All." Click Next and Done.



40.1.A. Scheduling Meetings and Performing Busy Searches

In order to determine the best time to schedule meetings, it is important that you perform busy searches before you send out your meeting invite. Please note that the busy searches will only work on USIBWC personnel.

1. In Outlook, click on 'New Meeting." The new window that opens will look like Figure 8.
2. Add the required and optional attendees. Include any Agency resources noted in 40.1.C.
3. In the Meeting Ribbon, click on the tab 'Scheduling Assistant.' The window shown in Figure 9 will open.
4. If you don't want to scan through the many options trying to find an opening for your meeting, you can click on 'AutoPick' button in the Meeting Ribbon.
5. Once you have your chosen date and time, click back over to the 'Meeting' tab and verify that the date and time didn't change.

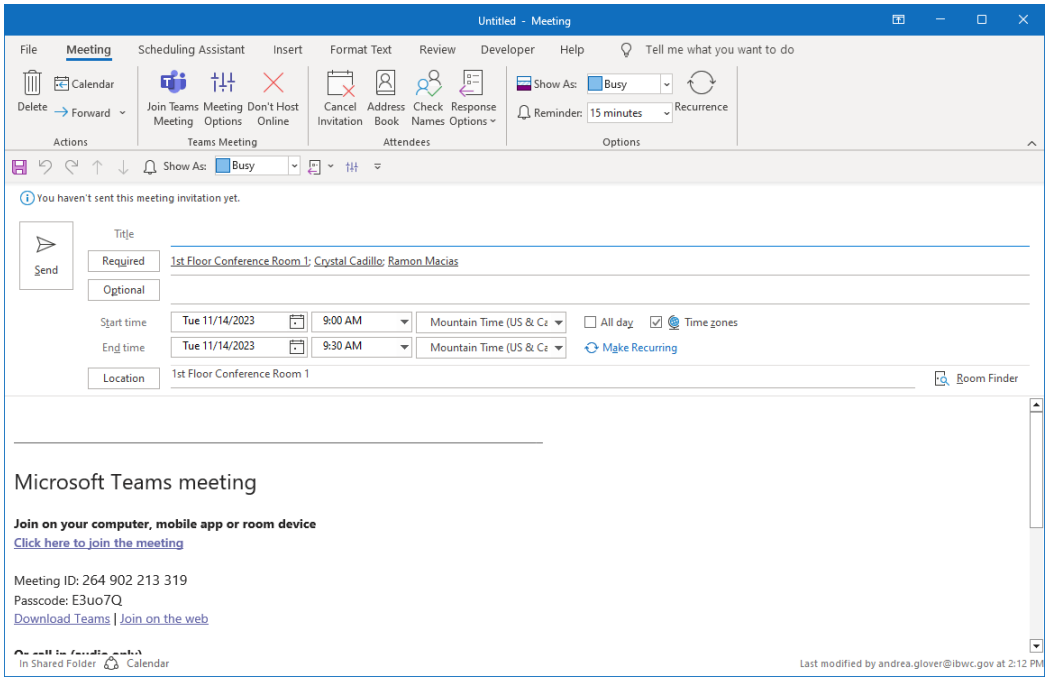


Figure 8 - New Meeting Window

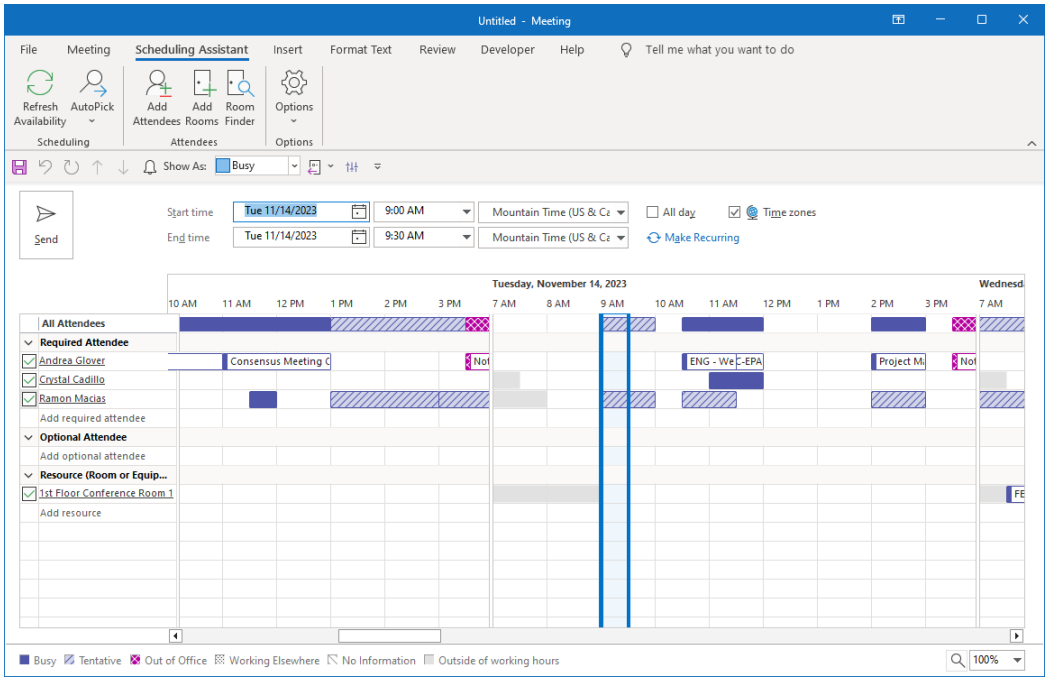


Figure 9 - Example of Scheduling Assistant Window

If you don't want a Teams meeting, then click on the red X that says "Don't Host Online" in the Meeting Ribbon.

40.1.B. Teams Meeting Options

Clicking on 'Meeting Options' in the Meeting Ribbon will open the window shown in Figure 10. This allows people to bypass the lobby meaning that they do not need to be let into the meeting by anyone.

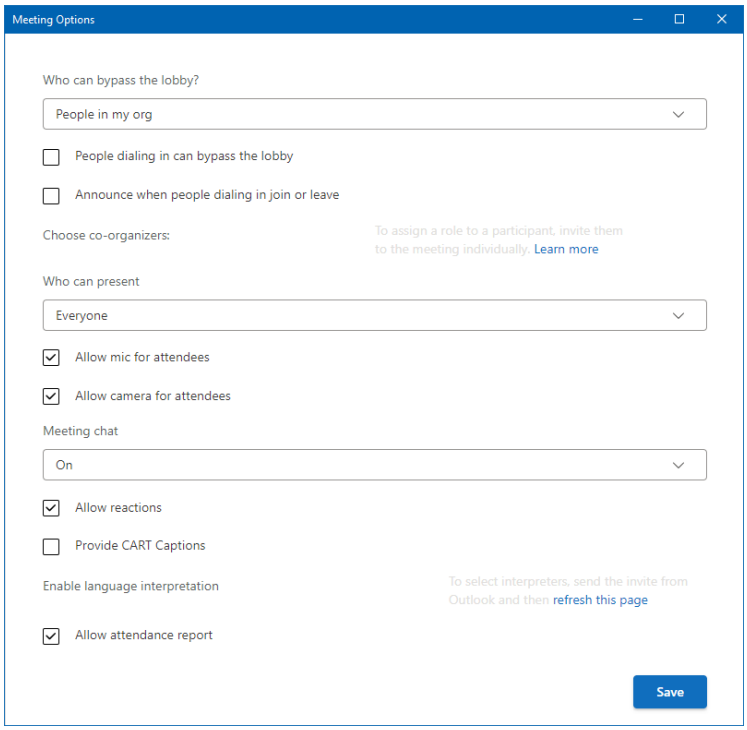


Figure 10 - Teams Options

40.1.C. Reserving Agency Resources

To reserve conference rooms or Headquarter vehicles (COND vehicles are managed directly by our division), you need to add these resources as an attendee to your scheduled meeting. If the resource is available, you will receive a confirmation email that the meeting has been accepted. If you do not receive this email, your resource is probably not reserved.

40.1.C.1. Reserving Conference Rooms

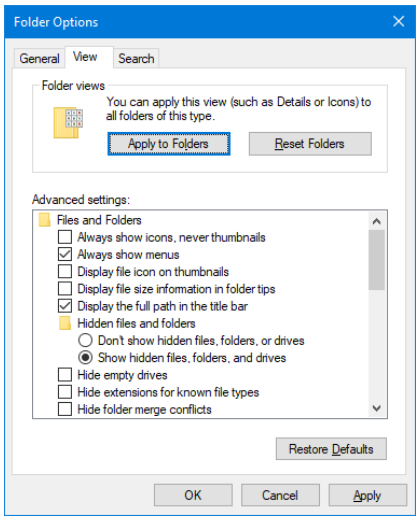
1st Floor Conference Room 1	1stfloorconferenceroom1@ibwc.gov
1st Floor Conference Room 2	1stfloorconferenceroom2@ibwc.gov
1st Floor Conference Room 3	1stfloorconferenceroom3@ibwc.gov
Third Floor Conference Room	3rdfloorconferenceroom@ibwc.gov

40.1.C.2. Reserving Headquarter Vehicles

HQ Explorer G62-2952Z	hqexplorer@ibwc.gov
Sedan	sedan@ibwc.gov
Commissioner Explorer SJX-7284	explorer@ibwc.gov
Passenger Van	passengervan@ibwc.gov

40.2. Windows Explorer

In order to modify pdf stamps or copy over already made stamps as well as to get into other specific project settings, you need to be able to see "hidden" files. By default, Windows hides these files.



Open Windows Explorer and click Tools, Folder Options… This will open the window below. Part of the way down the list are two radio buttons for hidden files. Click on "Show hidden files, folders, and drives" then click OK.

In 40.4.A.-PDF Stamps you will need to have changed this setting so you can see hidden files to get to the data for Adobe Acrobat.

40.3. Making a Signature jpg File and a pdf Signature Stamp

In today's electronic age, having a clean signature that you can use in both Word files and in pdfs makes sense. The instructions here will enable you to create a <u>transparent</u> signature that you can use.

A. Sign your name on a clean sheet of paper. Use a dark ink, but do not use black. Your electronic scan of your signature should appear in color.

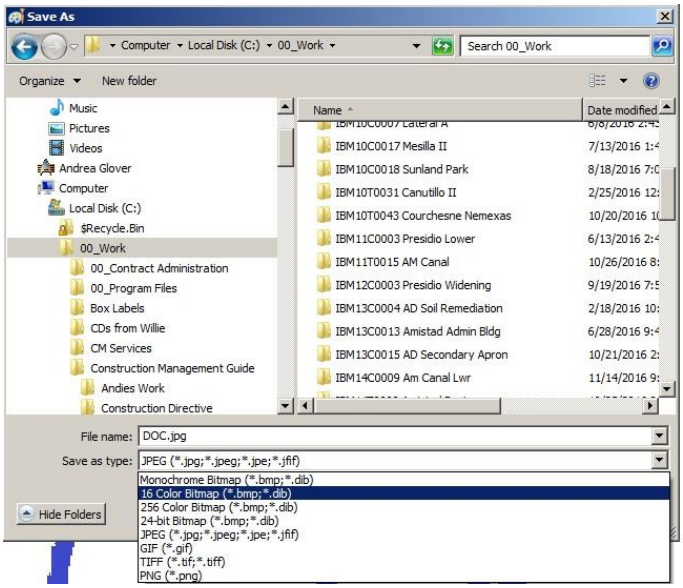
B. Scan your signature at the highest setting on the scanner (usually 600 dpi) or take a clear photo. The scanners available in USIBWC Headquarters output to a pdf file so the instructions that follow assume that you end up with a pdf file. If your scanner/camera produces a png/jpg file, skip to Step E.

C. Open the pdf and crop your file down to just the signature.

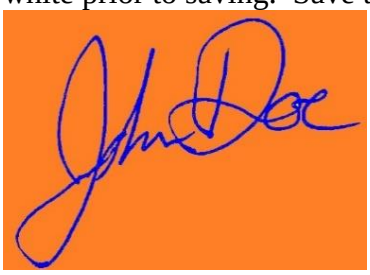
D. Covert this file to a png or jpg by File, Save As…, Image, then choosing png or jpg. Jpgs are more familiar, but png files work just as well and are smaller. Prior to saving, click on "Settings." Set quality to "maximum" and resolution to at least 600 dpi.

E. Since your signature will be transparent, the only color that should be in the image should be in the "ink." To clean up the file, open the png/jpg file with Paint. This is found under Windows Start, All Programs, Accessories, Paint.

F. Save the file as a 16 Color BMP.



H. Fill the white area with a color that sharply contrasts with your ink color. If you are satisfied with how the signature looks, leave the file unsaved. If you wish to make any corrections, including changing ink color, ensure that the background is changed back to white prior to saving. Save the file as a png/jpg.

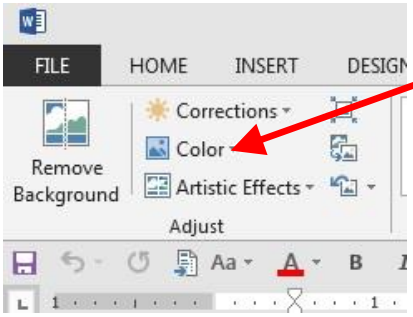


1. Below is an example of exactly the same file, never converted from a png/jpg to a 16 Color bmp, with the white areas filled. Note the difference.

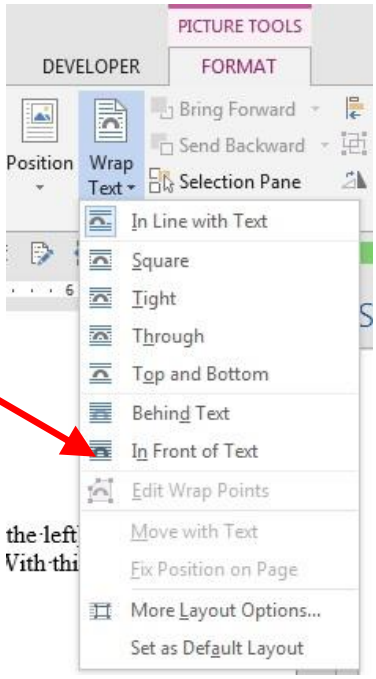
I. Open a new Word file.

J. Insert your png/jpg file from Step H into the Word file.

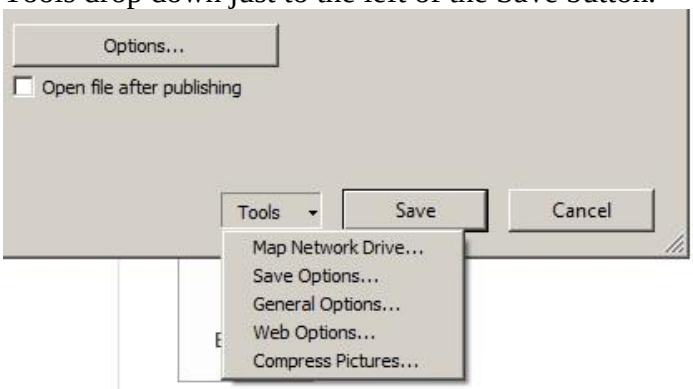
K. Go to Picture Tools on the Ribbon then Format, Color (in the Adjust box to the left), Set Transparent Color. When you chose Set Transparent Color, you get a tool. With this tool, click on the white area around your signature.



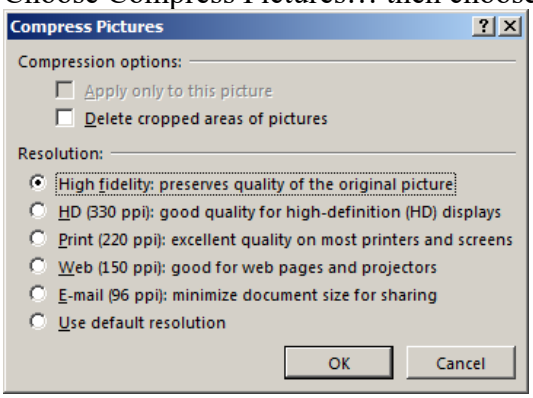
L. Now if you change your signature to Wrap Text, In Front of Text, it looks like you signed over the letter. At this point, you have a png/jpg file that you can use in any Word file as your signature. Go to 40.5.A.-Word Quick Parts below for instructions on how to save this signature as a Word Block. Continue with these instructions to create a pdf stamp of your new signature.



M. Save the file as a pdf. Before clicking Save, choose the Tools drop down just to the left of the Save button.



N. Choose Compress Pictures… then choose "High Fidelity." Click OK then save file.

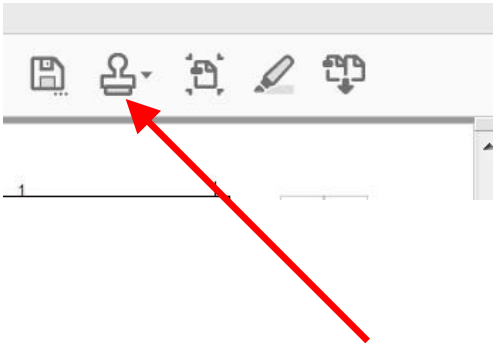


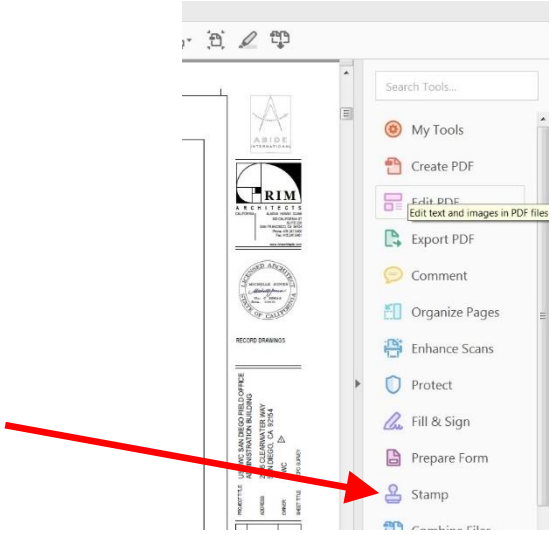
To change default resolution, Go to File, Options, Advanced and then scroll down to "Image Size and Quality." Check "Do not compress images in file."

O. Open the pdf file you just created and crop it to just the signature.

P. Save the cropped pdf file.

Q. Open Adobe Acrobat. Click on the Stamp icon (see below for Adobe Acrobat DC icon examples) and choose Custom Stamps, Create Custom Stamps…
Adobe Acrobat DC





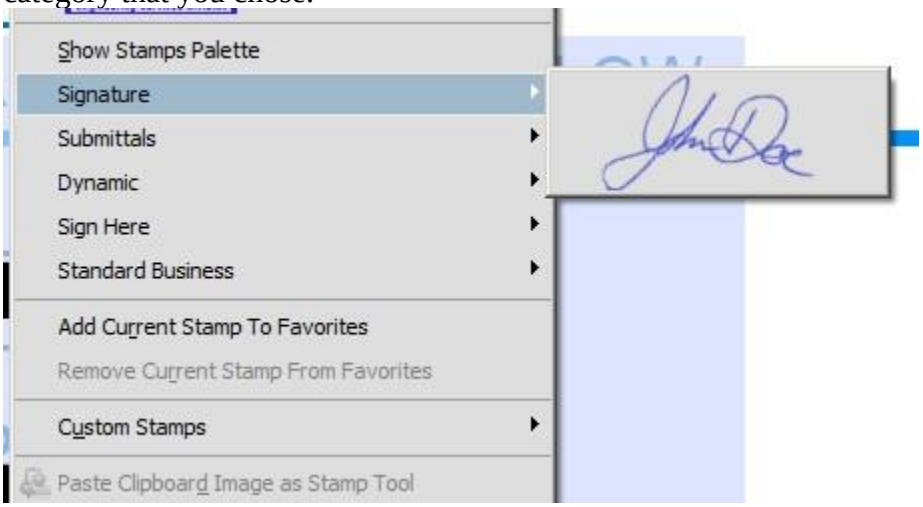
R. Click on Browse and find the pdf file that you just created. Click OK once you have your file loaded.

S. Choose a category or type in a new category name for your stamp.

T. Type in a name for your stamp.

U. Unclick the box for "Down sample stamp to reduce file size."

V. Click OK. Now when you go to the Stamp icon, your stamp will be listed under the category that you chose.



One thing about stamps. When you insert them into a file, they can be moved around or deleted. To ensure that your document does not get changed after you insert your signature, print the file to Adobe (pdf). Make sure "Document and Markups" is chosen when you print. The printed pdf file cannot be changed.

40.4. Adobe Acrobat

40.4.A. PDF Stamps

There are three premade pdf stamp files available.

- *Stamp-Received.pdf* only contains the date received stamp shown in 22.4-Submittal Review A. on 22-Submittal Procedures Page 3.
- *Stamps-Submittals.pdf* contain all of the submittal response stamps shown in Figure 4 on 22-Submittal Procedures Page 6.
- *Stamps-SBU CUI.pdf* provides markings for documents as noted in 43.3-SBU/CUI Files.

NOTE: Windows system files must have been unhidden in Windows Explorer before proceeding.

A. Copy the pdf files to the appropriate directory:

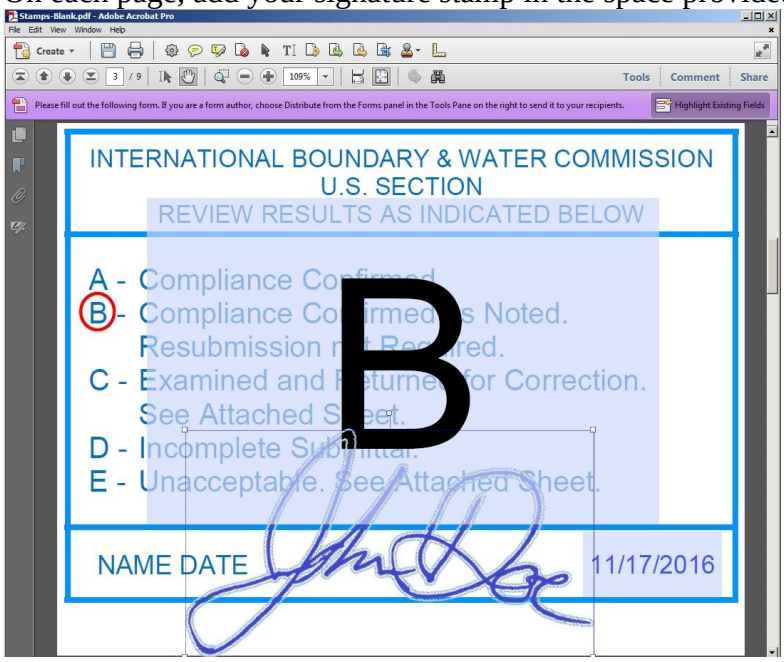
Adobe Acrobat DC
C:\Users\username\AppData\Roaming\Adobe\Acrobat\DC\Stamps

Copy files "*Stamps-Blank.pdf*," "*Stamp-Received COND.pdf*," and "*Stamps-SBU CUI*."

Renaming the files will not affect anything.

B. Open file "*Stamps-Submittals.pdf*" once it is copied to the appropriate directory. You will need to add the signature stamp that you made under the prior section to each submittal review stamp.

C. On each page, add your signature stamp in the space provided.



D. Once your signature is added, save the file and close Adobe.

E. Open any pdf file. Go to the Stamp icon and drop down to Submittals. You should have all of the submittal stamps, with your signature showing. You can now electronically process submittals.

NOTE: The first time that you use the date received stamp, it will probably throw an error. Choose ignore. The error is inconsequential, but we have not figured out how to do away with it.

40.4.A.1. PDF Stamp Files

The pdf stamps are found at:

Z:__Templates & Information\PDF Stamps
or
W:__Templates & Information\PDF Stamps
or
P:\COND__Templates & Information\PDF Stamps

40.4.B. Electronically Signing PDF Files

To sign electronically sign documents in Adobe Acrobat when they do not have a signature box, go to Tools and click on Certificates (Figure 11).

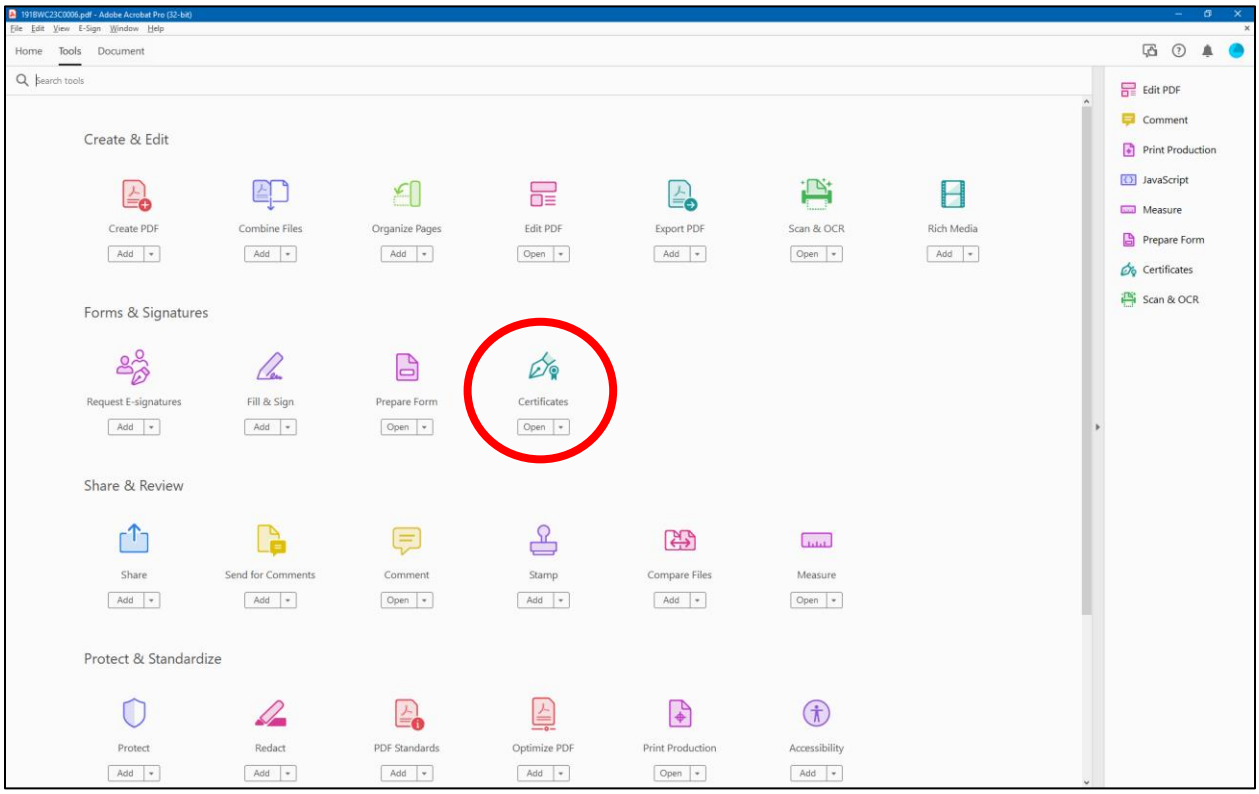
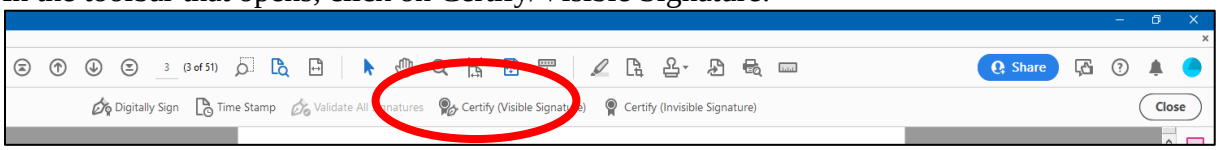
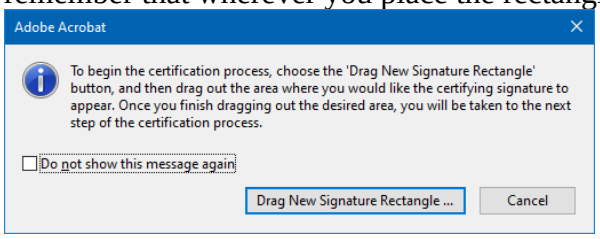


Figure 11 - Adobe Tools

In the toolbar that opens, click on Certify/Visible Signature:



When clicked, it will come up with the following box. Once you click on Drag New Signature Rectangle, it will walk you through placing the electronic signature. Just remember that wherever you place the rectangle, it where the signature will appear.



40.5. Microsoft Word

40.5.A. Word Quick Parts

Steps 40.3.I to 40.3.L. showed you how to insert a png/jpg signature into Word and make it transparent, but whenever you want to use your png/jpg signature, you need to repeat these

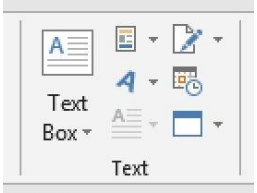
steps. It can get tiring to always insert, set transparency, set size, set in front of text. Too much of the same over and over. Creating a Word quick part will save your signature so you can use it again and again easily.

A. Get your signature the way that you like it. The right size, transparency set. If you like it on top of text, etc.

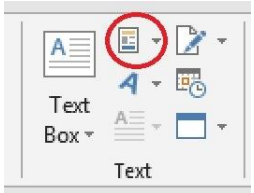
B. Once you have it the way that you like it, click it so that it is highlighted (box around it).

C. Go to Insert tab on main ribbon.

D. Way over on the right you will see:



E. Choose the Explore Quick Parts icon:



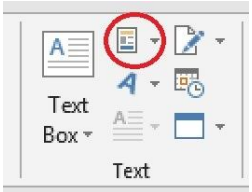
F. At the bottom of the drop down is "Save Selection to Quick Part Gallery." Choose this.

G. Give it a name and choose a category.

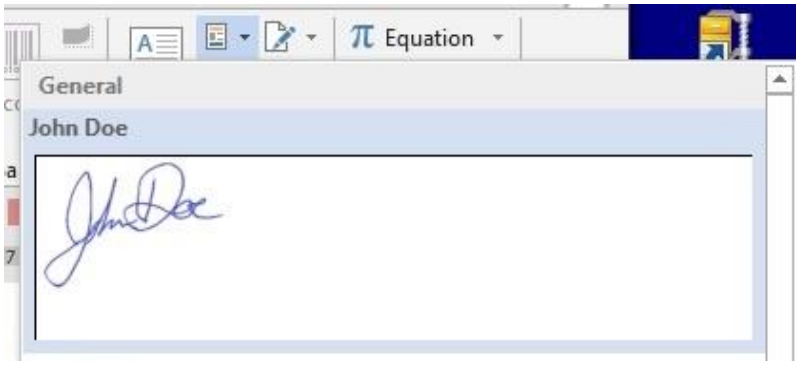
H. Change the Save In: location from Building Blocks.dotx to Normal. If it only has Building Blocks that's fine too.

I. Click OK.

Now whenever you go to…



You will see:



It will bring your signature in exactly as you had it set. No more inserting and changing everything. If the signature gets dropped in the wrong location, just grab it and move it around.

Blocks can also be created for normal submittal responses like:

*This submittal received a "**Code B**," entitled "**Compliance Confirmed as Noted**."*

Please assure and note the following comments:

Just follow the same instructions. You can also add the Explore Quick Parts icon to your Quick Access Toolbar to make this process even easier.

40.5.B. Word Macros

Macros make life easier. Instead of repeating the same command over and over, you can have a macro perform the task for you. Word make it easy to add macros to your Quick Access Toolbar meaning that you just have to click a button to run them.

40.5.B.1. Loading Macros with your Default Windows Template

Whenever you open a file in Word, your default setting are loaded from your default template. Normally, this file is named "Normal.dotx." It is stored at:
C:\Users\your.name\AppData\Roaming\Microsoft\Templates

In order to ensure that macros you want are always available, you need to create a "Normal.dotm" file and save it at the above location. When you do this, delete your "Normal.dotx" file.

In your "Normal.dotm" file, load any macros you want. Some basic ones that aid in editing files are listed in 40.5.B.3., 40.5.B.4., 40.5.B.5., and 40.5.B.6.

40.5.B.2. Adding Default Macros to your Quick Access Toolbar

Not only do macros make life easier, but you can set it up so that you can access your macros with a single click. An example is shown in Figure 12.

After you have set up your default macros, click on 'Customize Quick Access Toolbar."

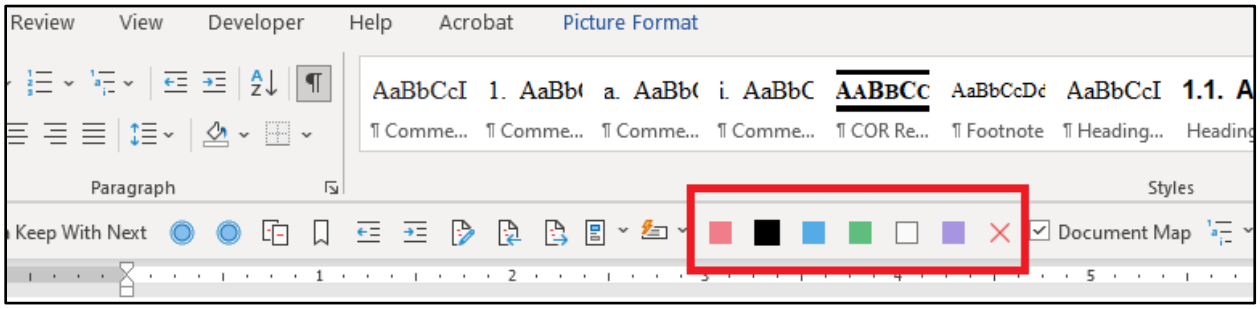


Figure 12 - Example of Custom Macros (in red rectangle) in Quick Access Toolbar

Once in the 'Customize Quick Access Toolbar' window, choose Macros from the 'Choose commands from' drop down window. All of the default macros that you added to your Normal.dotm file should be listed.

Add each macro that you want to appear in your Quick Access Toolbar.

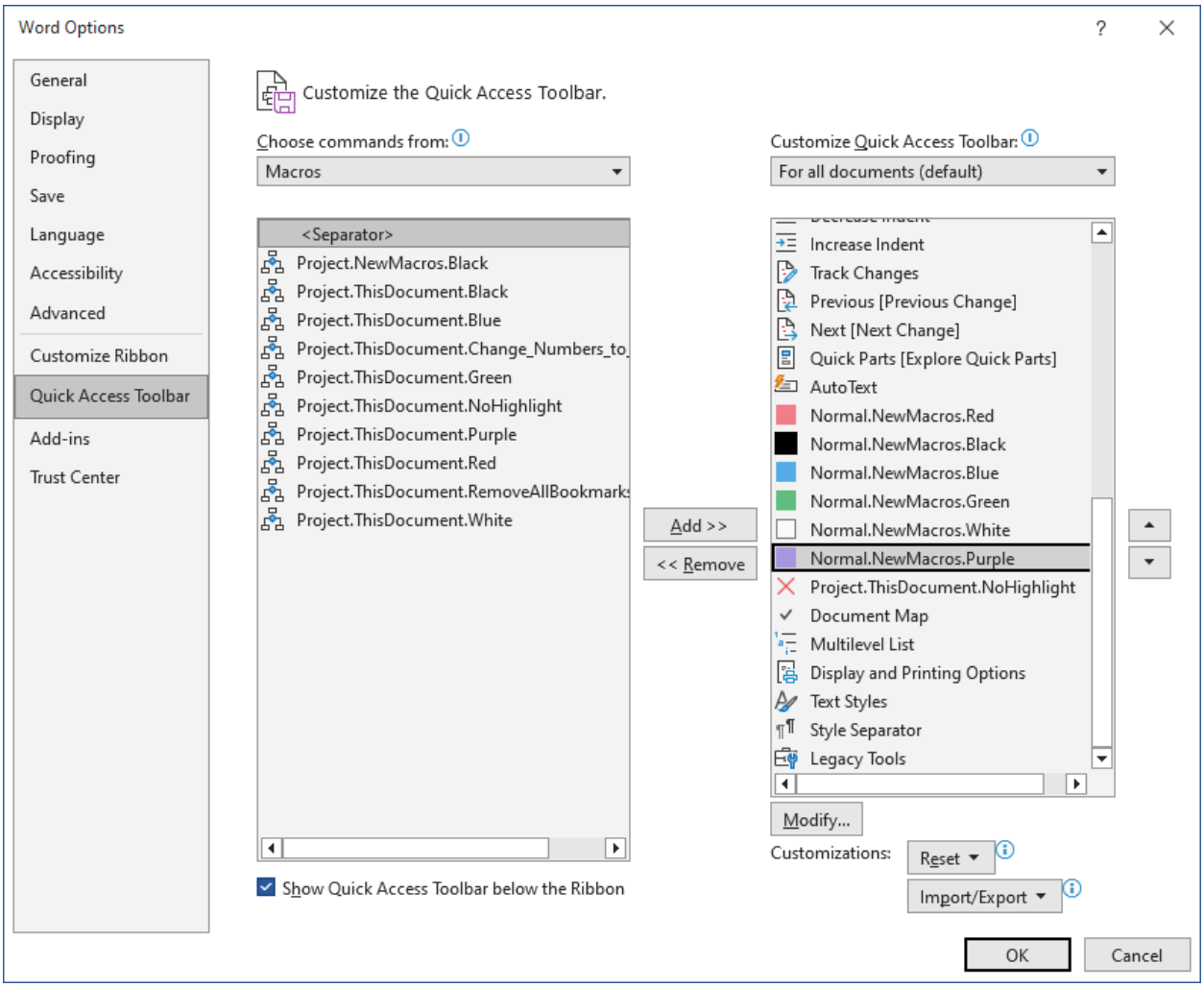


Figure 13 - Quick Access Toolbar Customization Window

After you have added a macro to your Quick Access Toolbar, you can change the icon for the macro so you know what you're clicking on. To do this, highlight the macro in question, and click on the 'Modify' button. The window shown in Figure 14 will pop up.

These icons are not great, but they do offer some versatility. Choose the one you want and click 'OK.' Once you save your Quick Access Toolbar changes, your macros should be readily available for use.

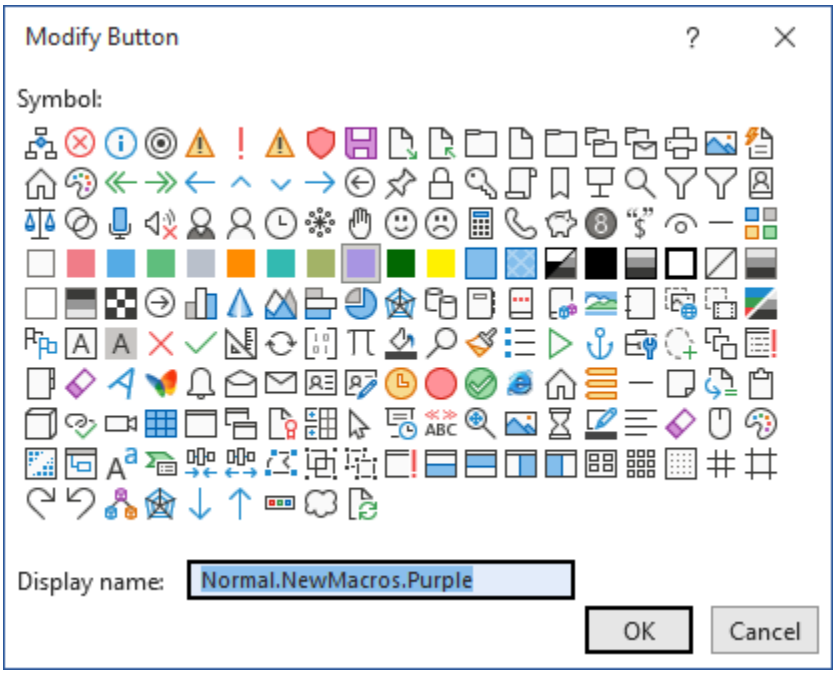


Figure 14 - Quick Access Toolbar Icon Modification Options

40.5.B.3. Set Text Color

```
Sub Red()
Selection.Font.ColorIndex = wdRed
End Sub

Sub White()
Selection.Font.ColorIndex = wdWhite
End Sub

Sub Blue()
Selection.Font.Color = RGB(0, 0, 254)
End Sub

Sub Green()
Selection.Font.Color = RGB(0, 204, 0)
End Sub
```

```
Sub Black()
Selection.Font.ColorIndex = wdBlack
End Sub

Sub Purple()
Selection.Font.Color = RGB(204, 0, 255)
End Sub
```

40.5.B.4. Change Autonumbers to Fixed Text

```
Sub Change_Numbers_to_Text()
Selection.Range.ListFormat.ConvertNumbersToText
End Sub
```

40.5.B.5. Remove all Bookmarks

```
Sub RemoveAllBookmarks()
        Dim objBookmark As Bookmark
        For Each objBookmark In ActiveDocument.Bookmarks
        objBookmark.Delete
        Next
End Sub
```

40.5.B.6. Remove Highlighting

```
Sub NoHighlight()
Selection.Range.HighlightColorIndex = wdNoHighlight
End Sub
```

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41 Abbreviations

Acronyms and abbreviations commonly used in construction and Contract management. Most of the acronyms and abbreviations listed are not used in this document.

TERM	DEFINITION
°F	Degrees Fahrenheit
2D	Two Dimensional
3D	Three Dimensional
8(a)	SBA 8(a) business development program
A	Ampere
A2LA	American Association for Laboratory Accreditation
AA	Aluminum Association
AASHTO	American Association of State Highway and Transportation Officials
ABA	Architectural Barriers Act
ABAAS	Architectural Barriers Act Accessibility Standard
ABC	Aggregate Base Course
ABET	Accreditation Board for Engineering and Technology
AC	Alternating Current
AC	Asphalt Cement (Paving)
ACD	**Acquisition Division (USIBWC)**
ACHP	Advisory Council on Historical Preservation
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
ACSM	American Congress on Surveying and Mapping
AD	**Administration Department (USIBWC)**
ADA	Americans with Disabilities Act
ADEQ	Arizona Department of Environmental Quality
ADF	**Carlos Marin/American Dam Field Office (USIBWC)**
ADFO	**Amistad Dam Field Office (USIBWC)**
ADMI	American Dye Manufacture's Institute
ADOSH	Arizona Division of Occupational Safety and Health
ADOT	Arizona Department of Transportation
A-E or A/E	Architect-Engineer
AE	Asphalt Emulsion (Paving)
AED	Automated External Defibrillator
AE-P	Asphalt Emulsion Prime (Paving)
AF&PA	American Forest & Paper Association
AHA	Activity Hazard Analysis
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Industrial Standards Institute
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction

AMP	Ampere
AMRL	AASHTO Materials Reference Laboratory
ANSI	American National Standards Institute
AO	Area of Operations
AOM	Area Operations Manager
APA	APA - The Engineered Wood Association
API	American Petroleum Institute
APP	Accident Prevention Plan (Safety Plan)
APWA	American Public Works Association
AQMP	Aggregate Quality Monitoring Program (Paving)
A-R	Asphalt-Rubber (Paving)
AR	US Army Regulation
ArcIMS	Arc Internet Mapping Service
ARDF	**Anzalduas/Retamal Dam Facility (USIBWC)**
ARPA	Archaeological Resources Protection Act
ARRA	American Recovery and Reinvestment Act of 2009
ASBCA	Armed Services Board of Contract Appeals
ASCE	American Society of Civil Engineers
ASCII	American Standard Code for Information Interchange
ASDSO	Association of State Dam Safety Officials
ASF	Assignable Square Footage (Feet)
ASFPM	Association of State Floodplain Managers
ASHRAE	American Society of Heating, Refrigeration and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASNT	American Society of Nondestructive Testing
ASPRS	American Society for Photogrammetry and Remote Sensing
ASSE	American Society of Safety Engineers
ASTM	ASTM International
ATFP	Anti Terrorism/Force Protection
ATV	All Terrain Vehicle
AWC	American Wood Council
AWG	American Wire Gauge
AWS	American Welding Society
AWWA	American Water works Association
AZ SHPO	Arizona State Historic Preservation Office
AZ	Arizona
AZPDES	Arizona Pollutant Discharge Elimination System
BFE	Base Flood Elevation
BIM	Building Information Model
BL	Baseline
BM	Benchmark
BMP	Best Management Practices
BNSF	Burlington Northern Santa Fe Railroad
BoD	Basis of Design (Commissioning)
BOD	Biochemical Oxygen Demand
BOP	Beginning of Project

BP	Border Patrol
BPVC	Boiler and Pressure Vessel Code
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
BUD	**Budget Division (USIBWC)**
BWG	Birmingham Wire Gauge
C	Cationic (Paving)
C	Celsius
C:N	Carbon Nitrogen Ratio
CA	California
CAD	Computer Aided Design
CADD	Computer Aided Design and Drafting
CalEPA	California Environmental Protection Agency
CalOSHA	California Division of Occupational Safety and Health
CalTrans	California Department of Transportation
CAS	Cost Accounting Standards
CATEX	Categorical Exemption (NEPA)
CBCA	Civilian Board of Contract Appeals
CBP	Customs and Border Protection
CCASS	Construction Contract Administration Support System
CCS83	California Coordinate System
CCTV	Close Circuit Television
CCxP	contractor's Commissioning Plan (Commissioning)
CCxR	contractor's Commissioning Representative (Commissioning)
CD	Compact Disc (may be used interchangeably with DVD)
CE	Categorical Exemption (NEPA)
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFM	Certified Floodplain Manager
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGP	Comprehensive Procurement Guideline
CGP	Construction General Permit (SWPP)
CH	High Plasticity Clay
CI	Construction Inspector provided by Construction Management contractor
CL	Centerline
CL	Low Plasticity Clay
CLIN	Contract Line Item Number
CLSM	Controlled Low Strength Material
cm	Centimeter
CM	Construction Management contractor
CMP	Corrugated Metal Pipe
CO	Contracting Officer
COB	Close of Business
COC	Cleveland Open Cup for Flash Points (Paving)
CON	City of Nogales

CONC	Concrete
COND	**Construction Management Division (USIBWC)**
CONST	Construction
COR	Contracting Officer's Representative
CORS	Continuously Operating Reference Station (Surveying)
CPA	Composite Panel Association
CPAR	contractor Performance Assessment Report
CPARS	contractor Performance Assessment Report System
CPM	Critical Path Method
CPMB	Concrete Plant Manufacturers Bureau
CPR	Cardiopulmonary Resuscitation
CPWR	The Center for Construction Research and Training
CQC	contractor's Quality Control
CQC	contractor's Quality Control Systems Manager
CRM	Crumb Rubber Modifier Asphalt Polymer (Paving)
CRP	**Clean Rivers Program (USIBWC)**
CRP	contractor's Responsible Person
CRSI	Concrete Reinforcing Steel Institute
CSDGM	Content Standard for Digital Spatial Metadata
CSI	Construction Specifications Institute
CSS83	California Coordinate System (NAD83)
cSt	CentiStokes (Paving)
CWA	Clean Water Act
CWHSSA	Contract Work Hours and Safety Standards Act
CxA	Commissioning Authority (Commissioning)
CY	Cubic Yard
D	Diameter
D&B	Dun & Bradstreet
D&O	Deficiency and Omission
DAR	Durability Absorption Ratio
DB	Design Build
DBA	Davis-Bacon Act
DC	Direct Current
DEM	Digital Elevation Model
DFIRM	Digital Flood Insurance Rage Map
DHS	US Department of Homeland Security
DIA	Diameter
DLC	Direct Labor Costs
DMP	Drilled Micro Piles
DOE	Department of Energy
DOJ	Department of Justice
DOL	Department of Labor
DOQ	Digital Orthophoto Quadrangle
DOQQ	Digital Orthophoto Quarter Quadrangle
DOSHA	California Division of Occupational Safety and Health
DOT	Department of Transportation

dpi	Dots per inch
DPS	Defense Printing Service
DR	Pipe Dimension Ratio
DRG	Digital Raster Graphics
DS	Downstream
DTM	Digital Terrain Model
DUNS	Data Universal Numbering System or a D&B Number
DVD	Digital Video Disc (may be used interchangeably with CD)
EA	Each
EA	Environmental Assessment (NEPA)
EAP&T	Emulsified Asphalt Prime and Tack (Paving)
EBID	Elephant Butte Irrigation District
EC	Engineering Circular (USACE)
ED	**Engineering Department (USIBWC)**
EDWOSB	Economically Disadvantaged Women-Owned Small Business
EEOC	Equal Employment Opportunity Commission
EFT	Electronic Funds Transfer
EIA	Electronics Industries Alliance
EIS	Environmental Impact Statement (NEPA)
ELCOSH	Electronic Library of Construction Occupational Safety & Health
EM	Engineering Manual (USACE)
EMD	**Environmental Management Division (USIBWC)**
EMI	Electromagnetic Interference
EMNRD	New Mexico Energy, Minerals and Natural Resources Department
EMT	Electrical Metallic Tubing
EO	Executive Order
EOF	USIBWC Engineering Office Files (ROW data)
EOP	End of Project
EP	Engineering Pamphlet (USACE)
EP#1	El Paso County Water Improvement District #1
EPA	US Environmental Protection Agency
EPCWID1	El Paso County Water Improvement District #1
EPIC	Environmental Permits, Issues, and Comments
EPWU	El Paso Water Utilities
ER	Engineering Regulation (USACE)
ESA	Endangered Species Act
ESC	Early Start of Construction
ESD	**Engineering Services Division (USIBWC)**
ET	Electromagnetic Testing (Welding)
ETL	Engineering Technical Letter (USACE)
FAD	**Finance and Accounting Division (USIBWC)**
FAO	**Foreign Affairs Office (USIBWC)**
FAPIIS	Federal Awardee Performance and Integrity Information System
FAR	Federal Acquisition Regulations
f'c	Compressive Strength of Concrete

FCAW	Flux Cored Arc Welding
FDC	Fire Department Connection
FDFO	**Falcon Dam Field Office (USIBWC)**
FDFO	Falcon Dam Field Office (USIBWC)
FDGC	Federal Geographic Committee
FEDD	Flood Elevation Determination
FEM	Field Environmental Monitor
FEMA	Federal Emergency Management Agency
FGDC	Federal Geographic Data Committee
FHBM	Flood Hazard Boundary Map
FHF	**Zacarias Dominguez/Fort Hancock Facility (USIBWC)**
FHF	Zacarias Dominguez/Ft Hancock Field Office (USIBWC)
FHWA	Federal Highway Administration
FICA	Federal Insurance Contributions Act (combination of Social Security and Medicare taxes paid by employee)
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FLIS	FEMA Levee Inventory System
FLSA	Fair Labor Standards Act
FOB	Freight on Board
FONSI	Final of No Significant Impact (NEPA)
FPT	Functional Performance Test (Commissioning)
FR	Federal Register
FS	Federal Specifications
FSRIA	Farm Security and Rural Investment Act of 2002
ft	Foot/feet
FUTA	Federal Unemployment Tax Act (combination of Social Security and Medicare taxes paid by employer)
FWS	US Fish and Wildlife Service
FY	Fiscal Year (October 1 through September 30)
G	Gradation Coefficient
g	Gram
G&A	General and Administrative
GAO	US Government Accountability Office
GC	Clayey Gravel
GFMS	Global Financial Management System
GFP	Government Furnished Product(s)
GGBFS	Ground Granulated Blast Furnace Slag (Concrete)
GIP	Government Inspection Personnel
GIS	Geographic Information System
GLONASS	Global Navigation Satellite System
GM	Silty Gravel
GMAW	Gas Metal Arc Welding
GNSS	Global Navigation Satellite System
GP	Poorly Graded Gravel
GPO	Government Printing Office

GPR	Ground Penetrating Radar
GPS	Global Position Satellite
GPS	Global Positioning System
Gr	Grade
GRS	Geodetic Reference System
GSA	Geological Society of America
GSA	US General Services Administration
GSBCA	GSA Board of Contract Appeals
GSF	Gross Square Footage (Feet)
GTAW	Gas Tungsten Arc Welding
GW	Well Graded Gravel
H&H	Hydrologic and Hydraulic
HABS	Historic American Building Survey (NEPA)
HCCRD#1	Hudspeth County Conservation & Reclamation District No. 1
HCDD1	Hidalgo County Drainage District No. 1
HCID#1	Hidalgo County Irrigation District No. 1
HCID#2	Hidalgo County Irrigation District No. 2
HDPE	High Density Polyethylene
HEC	USACE Hydraulic Engineering Center
HF	High Float (Paving)
HHRB	Human Health Risk-Based
HMA	Hot Mix Asphalt (Paving)
HMAC	Hot Mix Asphalt Concrete (Paving)
HPD	Historic Preservation Division
HPS	High Performance Steel
HRO	**Human Resources Office (USIBWC)**
H-suffix	Harder Residue Asphalt (Paving)
HUBzone	Historically Underutilized Business Zone Program (SBA)
HVAC	Heating, Ventilation, and Air Conditioning
Hz	Hertz
IARC	International Agency for Research on Cancer
IAS	International Accreditation Service
IBC	International Building Code
IBWC	International Boundary and Water Commission
ICC	International Code Council
ID	Inside Diameter
IDA	International Dark-Sky Association
IDIQ	Indefinite Delivery, Indefinite Quantity
IDT	Indirect Tensile
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronics Engineers
IESNA	Illuminating Engineering Society of North America
IFB	Invitation for Bid
IFG	International Fire Code
IFGC	International Fuel Gas Code

IGE	Independent Government Estimate
IHSA	Infrastructure Health & Safety Equipment
ILMS	Integrated Logistics Management System
IMC	International Mechanical Code
IMD	**Information Management Division (USIBWC)**
IMD	USIBWC's Information Management Division
in	Inch
IPC	International Plumbing Code
IPP	Invoice Processing Platform
IPSDC	International Private Sewage Disposal Code
ISC	Interagency Security Committee
ISEA	International Safety Equipment Association
IT	Information Technology
ITR	Independent Technical Review
JHA	Job Hazard Analysis
JMF	Job Mix Formula (Paving)
K	Hydraulic Conductivity
kPa	Kilopascals
ksi	Thousand pounds per square inch
L	Styrene-butadiene Rubber Polymer (Latex) or SBR (Paving)
LAG	Lowest Adjacent Grade
LAO	**Legal Affairs Office (USIBWC)**
LBS	Pounds
LCF	**Las Cruces Field Office (USIBWC)**
LDs	Liquidated Damages
LEED	Leadership in Energy and Environmental Design
LEL	Lower Explosive Limit
lf	Linear Feet
LFD	Letter of Final Determination
LFO	**Laredo Field Office (USIBWC)**
LID	Low Impact Development/Design
LiDAR	Light Detection and Ranging
LL	Liquid Limit
LOMA	Letter of Map Amendment
LOMC	Letter of Map Change
LOMR	Letter of Map Revision
LPOE	Land Port of Entry
LRA	Limestone Rock Asphalt (Paving)
LRFD	Load and Resistance Factor Design
LRG	Lower Rio Grande
LRGFCP	**Lower Rio Grande Flood Control Project**
LRGFO	**Lower Rio Grande Field Office-Mercedes (USIBWC)**
LRGV	Lower Rio Grande Valley
LS	Lump Sum
m	Meter
MAG	Maricopa Association of Governments

MAG	Metal Active Gas Welding, a subset of GTAW
MAX	Maximum
MBTA	Migratory Bird Treaty Act
MC	Medium Curing (Paving)
MCE	Maximum Considered Earthquake
MH	High Plasticity Silt
MIG	Metal Insert Gas Welding, a subset of GTAW
MIN	Minimum
MIN	Minute
ML	Low Plasticity Silt
mm	Millimeter
MMA	Manual Metal Arc Welding, also known as SMAW
MOA	Memorandum of Agreement
Mod	Contract modification
MOU	Memorandum of Understanding
MPa	Megapascals
MPD	**Master Planning Division (USIBWC)**
MPEG	Moving Picture Experts Group file format
MPF	Maximum Probable Flood
MPI	Master Painter's Institute
MrSID	Multi-resolution Seamless Image Database
MS	Medium Setting (Paving)
MSC	FEMA Map Service Center
MSDS	Material Safety Data Sheets (has been replaced with SDS)
MSE	Mechanically Stabilized Earth
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.
MT	Magnetic Particle Testing (Welding)
MUTCD	Manual on Uniform Traffic Control Devices
N	Newton
NA	Not Applicable
NAAMM	National Association of Architectural Metal Manufacturers
NAD	North American Datum
NAD27	North American Datum of 1927
NAD83	North American Datum of 1983
NAFSMA	National Association of Flood and Stormwater Management Agencies
NAGPRA	Native American Graves Protection and Repatriation Act
NAICS	North American Industry Classification System
NAPP	National Aerial Photography Program
NAPT	North American Proficiency Testing Program for Soil, Plant, & Water Analysis Laboratories
NAVD	or NAVD 88 North American Vertical Datum of 1988
NCHRP	National Cooperative Highway Research Program
ND1 or ND2	Non-dispersive Soil from ASTM D4647
NDSP	National Dam Safety Program
NDT	Nondestructive Testing (Welding)

NEC	National Electrical Code (also known as NFPA 70)
NED	National Elevation Dataset
NEHRP	National Earthquake Hazards Reduction Program
NELAC	National Environmental Laboratory Accreditation Conference
NELAP	National Environmental Laboratory Accreditation Program
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NFO	**Nogales Field Office (USIBWC)**
NFPA	National Fire Protection Association
NGDA	National Geospatial Data Assets
NGE	Natural Ground Elevation
NGS	National Geodetic Survey
NGVD	National Geodetic Vertical Datum of 1929
NHPA	National Historic Preservation Act
NID	National Inventory of Dams
NIOSH	National Institute for Occupational Safety and Health
NIST	US National Institute of Standards and Technology
NLCD	National Land Cover Dataset
NLD	National Levee Database
NLRA	National Labor Relations Board
NM HPD	New Mexico Historic Preservation Division
NM OSE	New Mexico Office of the State Engineer
NM SHPO	New Mexico State Historic Preservation Officer
NM	New Mexico
NMAC	New Mexico Administrative Code
NMDOT	New Mexico Department of Transportation
NMED	New Mexico Environment Department
NMGRT	New Mexico Gross Receipts Tax
NMSA	New Mexico Statutes Annotated
NMSPC	New Mexico State Plane Coordinate System
NOI	Notice of Intent (SWPP)
NOT	Notice of Termination (SWPP)
NPDES	National Pollutant Discharge Elimination System
NPS	Nominal Pipe Size
NPS	US National Park Service
NRCS	National Resource Conservation Service
NRMCA	National Ready Mixed Concrete Association
NSF	National Science Foundation
NTP	Notice to Proceed
NTS	Not to Scale
NTSC	National Television System Committee
NWS	National Weather Service
O&M	Operations and Maintenance
OASDI	Old Age, Survivor, and Disability Insurance aka Social Security
OC	On Center

OD	**Operations Department (USIBWC)**
OD	Outside Diameter
ODC	Other Direct Costs
OEM	Original Equipment Manufacturer
OFPP	Office of Federal Procurement Policy
OH	High Plasticity Organic Silt
OHP	California Office of Historic Preservation
OIG	Office of Inspector General
OL	Low Plasticity Organic Silt
OMD	**Operations and Maintenance Department (USIBWC)**
OPM	Office of Personnel Management
OSDBU	SBA"s Office of Small and Disadvantaged Business Utilization
OSHA	Occupational Safety and Health Association
OZ	Ounce
P	Polymer Modified (Paving)
P	Styrene-Butadiene-Styrene Block Copolymer Binder (Paving)
PAL	Provisionally Accredited Levee
PBX	Private Branch Exchange Telephone System
PCA	Portland Cement Association
PCE	Prime, Cure, and Erosion Control (Paving)
PCI	Precast/Prestressed Concrete Institute
PCL	Protective Concentration Level
PDF	Portable Document Format
PE	Pay Estimate
PE	Professional Engineer
PEI	Petroleum Equipment Institute
PFO	**Presidio Field Office (USIBWC)**
PG	Performance Grade (Paving)
PI	Plasticity Index
PID	Permanent Identifier
PL	Plastic Limit
PL	Public Law
PLS	Public Land Surveyor
PLS	Pure Live Seed
PMF	Probable Maximum Flood
PMP	Probable Maximum Precipitation
PMS	Probable Maximum Storm
POE	Port of Entry
PPE	Personal Protective Equipment
PPIRS	Past Performance Information Retrieval System
PPK	Post Processed Kinematic (Surveying)
PR	Purchase Request or Requisition
PS	US Department Of Commerce Product Standard
PSI	Pounds Per Square Inch
PSL	Project Specific Locations

PT	Liquid Penetrant Testing (Welding)
PT	Peat
PT&I	Predictive Testing and Inspection
PTO	Power Take-Off
PUB	Public Utilities Board of Brownsville
PVC	Polyvinyl Chloride
QA	Quality Assurance
QC	Quality Control
QCSM	Quality Control System Manager
R/W	Right-of-Way
RAP	Recycled/Reclaimed Asphalt Pavement (Paving)
RAS	Recycled Asphalt Shingles (Paving)
RC	Rapid Curing (Paving)
RCB	Reinforced Concrete Box Culvert
RCP	Reinforced Concrete Pipe
RCRA	Resource Conservation and Recovery Act
RCSC	Research Council on Structural Connections
REA	Request for Equitable Adjustment
RFC	Released for Construction
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications (first stage in Design Build)
RFQ	Request for Quote (same as an RFP)
RGCP	Rio Grande Canalization Project
RMAN	Recovered Materials Advisory Notice
ROD	Record of Decision (NEPA)
ROE	Right of Entry
ROW	USIBWC Right of Way
RPLS	Registered Professional Land Surveyor
RR	Receiving Report
RS	Rapid Setting (Paving)
RT	Radiographic Testing (Welding)
RTFO	Rolling Thin Film Oven (Paving)
RTFOT	Rolling Thin Film Oven Test (Paving)
RTK	Real Time Kinematic (Surveying)
RTN	Real Time Network (Surveying)
s	Second
SAC	Surface Aggregate Classification (Paving)
SAT	Mexican Tax Authority (Servicio de Administracion Tributaria)
SAW	Submerged Arc Welding (Welding)
SB	Small Business
SBA	Small Business Administration
SBIWTP	South Bay International Wastewater Treatment Plant
SBOO	South Bay Ocean Outfall
SBR	Styrene-Butadiene Rubber Polymer (Latex) or L (Paving)
SBS	Styrene-Butadiene-Styrene Block Copolymer (Paving)

SBU	Sensitive But Unclassified
SC	Clayey Sand
SCADA	Supervisory Control and Data Acquisition
SCM	Special Cutback Material (Paving)
SCM	Supplementary Cementing Materials (Paving)
SCT	Mexican Secretary of Communications and Transportation (Secretaria de Communicaciones y Transportes)
SDB	Small Disadvantaged Business
SDD	Sustainable Design and Development
SDFO	**San Diego Field Office (USIBWC)**
SDI	State Disability Insurance tax (California)
SDS	Safety Data Sheets (new name of MSDS)
SDVOSB	Service-Disabled Veteran-Owned Small Business
SDWA	Safe Drinking Water Act
SEC	Second
SF	Square Foot
SF	Standard Form
SFFAS	Statement of Federal Financial Accounting Standards
SFHA	Special Flood Hazard Area
SFS	Schedule for Submittals
SGC	Superpave Gyratory Compactor (Paving)
SHPO	State Historical Preservation Officer/Office
SIC	Standard Industrial Classification System
SM	Silty Sand
SMACNA	Sheet Metal and Air Conditioning contractors" National Association
SMAW	Shielded Metal Arc Welding
SOE	Support of Excavation
SOP	Standard Operating Procedure
SOW	Scope of Work
SP	Poorly Graded Sand or Gravely Sand
SPCC	Spill Prevention Control and Countermeasures
SS	Slow Setting (Paving)
SSD	Saturated Surface Dry
SSD	**Security Services Division (USIBWC)**
SSHO	Site Safety and Health Officer
SSPC	Society for Protective Coatings
S-suffix	Stockpile Usage (Paving)
STA	Station
SUE	Subsurface Utility Engineering
SUTA	State Unemployment Tax Authority
SVOC	Semi-Volatile Organic Compounds
SW	Well Graded Sand
SWEL	Stillwater Flood Elevation
SWFL	Stillwater Flood Level
SWPP	Stormwater Pollution Prevention

SWPPP	Stormwater Pollution Prevention Plan
SY	Square Yards
T&E	Threatened and Endangered
TA	Technical Analysis
TAC	Texas Administrative Code
TBC	Total Building Commissioning (Commissioning)
TBD	To be Determined
TBM	Temporary Benchmark
TCEQ	Texas Commission on Environmental Quality
TCL	Temporary Construction Limits
TCLP	Toxicity Characteristic Leaching Procedure
TCP	Traffic Control Plan
TDS	Total Dissolved Solids
TGC	Texas Gyratory Compactor (Paving)
THC	Texas Historical Commission
THHN	Thermoplastic High Heat-Resistant Nylon-Coated
THWN	Thermoplastic Heat and Water-Resistant Nylon-Coated
TIA	Telecommunications Industry Association
TIA	Tentative Interim Amendments
TIFF	Tagged Image File Format
TIG	Tungsten Insert Gas Welding, more properly known as GTAW
TIN	Triangulated Irregular Networks file format
TMUCTD	Texas Manual on Uniform Traffic Control Devices
TNI	The NELAC Institute
TOC	Tag Open Cup for Flash Point (Paving)
TOLE	Top of Levee Elevation
TOM	Thin Overlay Mixture (Paving)
TPDES	Texas Pollutant Discharge Elimination System
TPEC	Technical Proposal Evaluation Committee
TPH	Total Petroleum Hydrocarbons
TPWD	Texas Parks and Wildlife Department
TR	Tire Rubber Polymer (Paving)
TRB	Transportation Research Board
TRRP	Texas Risk Reduction Program
TSS	Total Suspended Solids
TX	Texas
TxDOT	Texas Department of Transportation
TXSPC	Texas State Plane Coordinate System
TY	Type (Paving)
TY-A	Aggregate: Gravel, crushed slag, crushed stone, or limestone rock asphalt (LRA) (Paving)
TY-B	Aggregate: Crushed gravel, crushed slag, crushed stone, or LRA (Paving)
TY-C	Aggregate: Gravel, crushed slag, or crushed stone (Paving)
TY-D	Aggregate: Crushed gravel, crushed slag, or crushed stone (Paving)
TY-E	Aggregate: Aggregate as shown on plans (Paving)
TY-L	Aggregate: Lightweight Aggregate (Paving)

TYP	Typical
TY-PA	Aggregate: Precoated gravel, crushed slag, crushed stone, or LRA (Paving)
TY-PB	Aggregate: Precoated crushed gravel, crushed slag, crushed stone, or LRA (Paving)
TY-PC	Aggregate: Precoated gravel, crushed slag, or crushed stone (Paving)
TY-PD	Aggregate: Precoated crushed gravel, crushed slag, crushed stone (Paving)
TY-PE	Aggregate: Precoated aggregate as shown on the plans (Paving)
TY-PL	Aggregate: Precoated lightweight aggregate (Paving)
TZ	Tetrazolium Test
UEI	Unique Entity Identifier
UFFA	Ultra Fine Fly Ash (Concrete)
UHMW	Ultra High Molecular Weight Polyethylene
UID	United Irrigation District
UL	Underwriter's Laboratory
UPRR	Union Pacific Railroad
URG	Upper Rio Grande
URGFCP	**Upper Rio Grande Flood Control Project**
URGFO	**Upper Rio Grande Field Office (USIBWC)**
US	United States
US	Upstream
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USC	United States Code
USCS	Unified Soil Classification System
USDA	United States Department of Agriculture
USERRA	Uniformed Services Employment and Reemployment Rights Act
USGBC	United States Green Building Council
USGS	United States Geological Survey
USIBWC	International Boundary and Water Commission, United States Section
UT	Ultrasonic Testing (Welding)
UTM	Universal Transverse Mercator
UTP	Unshielded Twisted Pair (IT)
UTV	Utility Vehicle, Utility Task Vehicle, Utility Type Vehicle
V	Volt
VECP	Value Engineering Change Proposal
VEQ	Variation in Estimated Quantity
VMA	Voids in Mineral Aggregates (Paving)
VOC	Volatile Organic Compounds
VRS	Virtual Reference Station (Surveying)
VT	Visual and Optical Testing (Welding)
VTC	Video-Teleconference
WAD	**Water Accounting Department (USIBWC)**
WAPA	Western Area Power Administration
WH	Wage and Hour Division, Department of Labor
WHD	Wage and Hour Division, Department of Labor

WMA	Warm Mix Asphalt (Paving)
WOSB	Women-Owned Small Business
WPS	Welding Procedure Specifications
WSE	Water Surface Elevation
WSEL	Water Surface Elevation
WWTP	Wastewater Treatment Plant
XOC	**Executive Office of the Commissioner (USIBWC)**
YD	Yard
YFO	**Yuma Field Office (USIBWC)**
YR	Year

42 Construction and Contracting Terms

There is an old adage to write so that you can understood. However in contracting the key is to write so that you cannot be misunderstood.

42.1. Proper Spelling

Listed are the proper spelling for common construction terms.

CORRECT	INCORRECT
borehole	bore hole
daylight	day-light
earthwork	earth work
flap gate	flapgate
floodplain	flood plain
floodwall	flood wall
follow up	follow-up
guardrail	guard rail
headwall	head wall
jobsite	job site
landside	land-side or land side
noncompliance	non-compliance
offsite	off site
onsite	on site
pinhole	pin hole (ASTM D4647)
preapproved	pre-approved
preconstruction	pre-construction
proactive	pro-active
punch list	punchlist
railroad	rail road
riprap	rip rap
riverside	river-side or river side
stoplog	stop log
stormwater	storm water
through	thru
topsoil	top soil
overtime	over-time
wasteway	waste way
wingwall	wing wall
worksite	work site

42.2. Use of Proper Terms

The key to technical or contractual writing to not writing to be understood, but writing so that you cannot be misunderstood. To aid in that endeavor, please follow this guidance.

42.2.A. Closeout vs Close Out

The simple difference between these two items is that one is a noun while the other is a verb. People tend to just write one term over the other regardless of their actual usage in a sentence. Ensure that the proper term is used based upon what the sentence states.

42.2.A.1. Closeout

Closeout is a noun. It is a sale, disposal, or deactivation of business. An end. Like many nouns, closeout can also be used as an adjective. For example, the closeout documents.

42.2.A.2. Close Out

Close out is a verb. In other words, you close out the closeout. Close out means to finish or complete. To terminate business operations.

42.2.B. Nouns vs Verbs

Many other words work the same way. They are a compound word for a noun, but two words for a verb. Never hyphenate verbs. Examples include:

NOUN	VERB
backup	back up
cleanup	clean up
cutoff	cut off
login	log in
makeup	make up
pickup	pick up
setup	set up
shutdown	shut down
shutoff	shut off
startup	start up
takeout	take out
turnout	turn out
workaround	work around
workout	work out

42.2.C. Coarse vs Course

While more often confused due to typographical errors than actual misunderstanding the term, coarse and course are often used incorrectly or interchangeably. So while base course may be coarse, ensure that the proper word is being used.

42.2.C.1. Coarse

Coarse is an adjective. It means rough in texture, composed of large grains, designed for less delicate work (coarse saw blade), or not precise.

42.2.C.2. Course

Course is a noun or a verb. As a noun it means layer (usually gravel or masonry), a route or direction of travel, a normal procedure or action, a class, a series of items in sequence (food, medicine, etc.). As a verb it means to move, to run, or to pursue.

42.2.D. Gage vs Gauge

In science and engineering gage and gauge are often used interchangeably. USGS uses "gage" for water (streamflow and precipitation) measurement. Use of gage in relation to water measurement devices is preferred. Whichever way you choose to spell this item, be consistent across the drawings and specifications.

42.2.D.1. Common "Gauge" Terms

Gauge boson	Gauge group
Gauge invariance	Gauge particle
Gauge theory	Gauge transformation
Pressure gauge	Wire gauge
Steel gauge	

42.2.D.2. Common "Gage" Terms

Gage block	Gage brick
Gage cock	Gage glass
Gage length	Gage loss
Gage penetration	Gage plate
Gage point	Gage pressure
Stream gage	Grind gage
Rain gage	

42.3. Definitions

The following definitions are based on common construction Contracts as well as legal terms common with managing a Contract as a COR and with reviewing Requests for Equitable Adjustments and Claims.

Acceptance	Also referred to as acceptance of work or final acceptance. The act of an authorized representative of the Government by which the Government, for itself or as agent of another, assumes ownership of existing identified supplies tendered or approves specific services rendered as partial or complete performance of the contract. (FAR 46.101) Acceptance is a very important event because it reduces the Government's rights with respect to defective items, (latent vs patent defects) entitles the contractor to final payment, and may affect title and risk of loss.
Activity	A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the

	project. Activities included in a construction schedule consume time and resources.
Actual Cost	contractor's actual cost to provide labor, material, equipment and project overhead necessary for the work.
Addendum	Change in solicitation/proposal forms developed between advertising and bid submittal deadline.
Administrative Change	A unilateral Contract modification, in writing,
Air Temperature	The temperature measured in degrees Fahrenheit (°F) in the shade, not in the direct rays of the sun and away from artificial heat.
Ambiguous	When an item is susceptible to two different, yet reasonable interpretations, each of which is consistent with the Contract terms and conditions.
Amendment	A change in a solicitation prior to Contract award (FAR 14.208 and FAR 15.206).
Anti-Deficiency Act	Requires that no officer or employee of the government may create or authorize an obligation in excess of the funds available, or in advance of appropriations unless otherwise authorized by law (FAR 32.702).
Antiquity	Items associated with archaeological sites and ruins greater than fifty (50) years old. Antiquities are protected by the Antiquities Act of 1906 and 43 CFR 3.
Archaeological Resource	Per ARPA, any material remains of human life or activities which are at least one hundred (100) years of age and which are of archaeological interest.
Archaeological Site	Any place where physical remains of human activities are present which are at least fifty (50) years of age.
Architectural Resource	Buildings and structures, whether functional or collapsed, which are at least fifty (50) years of age and which are of significant, unique, historical, or show architectural significance.
Baseline Schedule	The compliance confirmed schedule used as a basis to judge progress on the project.
Baseline	A control line offset from the existing facility and/or proposed improvement.
Beneficial Occupancy	The project, or portions thereof, are complete in nature to allow the government to utilize the project, or portions thereof, for their intended usage. The mechanical systems, life safety systems, telecommunications systems, and any other systems which are required to properly utilize the

	project, or portions thereof, shall be complete and in good working order. The remaining items to be completed shall be such that the correction does not cause inconvenience to the government or disruption to the government's normal operations. The one year warranty period begins on the date we take beneficial occupancy. If you have more than one date of beneficial occupancy for different systems, or work segments, you will end up with multiple warranty periods.
Best Management Practices	Methods or measures used for stormwater pollution control.
Best Value	Means the expected outcome of an acquisition that, in the Government's estimation, provides the greatest overall benefit in response to the requirement. Best value does not mean lowest price, but instead combines all attributes of a contractor to determine who will perform the best (this could be fastest, highest quality, lowest price, best design, etc.).
Bilateral Modification	A bilateral modification is a Contract modification that is signed by the contractor and the Contracting Officer. Bilateral modifications are used to: (1) Make negotiated equitable adjustments resulting from the issuance of a change order; (2) Definitize letter contracts; and (3) Reflect other agreements of the parties modifying the terms of contracts
Bond	Tools to provide the Government, subcontractors, and suppliers with assurance that should the contractor be financially incapable of making payments, fulfilling contractual obligations, or completing the contract, there will be a financially solvent party (the surety) available to fulfill these obligations.
Bridge	A structure, including supports, erected over a depression or an obstruction (e.g., water, a highway, or a railway) having a roadway or track for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between faces of abutments, spring lines of arches, or extreme ends of the openings for multiple box culverts.
Brittle	Breaking of geological materials from relatively low stress.
Bug Holes	Bug holes, blowholes, or air voids, are small cavities ranging from nearly invisible to approximately one inch that result from the entrapment of air bubbles in the surface of formed concrete.

Building Commissioning	The process of ensuring that systems are designed, installed, functionally tested and capable of being operated and maintained according to the owner's operational needs.
Building or Work	Is a construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing, and landscaping. The manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not "building" or "work" within the meaning of this definition unless conducted in connection with and at the site of such building or work as is described in the foregoing sentence, or under the United States Housing Act of 1937 and the Housing Act of 1949 in the construction or development of the project
Business Day	All days in a month excluding weekends and holidays.
Buy American Act	Any of FAR clauses 52.225-9, 52.225-10, 52.225-11, or 52.225-12 covered by FAR Chapter 25 and 41 USC Chapter 83.
Calendar Day	All days in a month including weekends, holidays, and both work and non-work days.
Canal Turnout	A structure used to divert water from a canal to a smaller water distribution system.
Canal	A man-made waterway used for conveying irrigation water.
Capital Improvement	The construction, installation, or assembly of a new facility, or the alteration, expansion, or extension of an existing facility to accommodate a change of function or unmet programmatic needs.
Cardinal Change	The "cardinal change" doctrine prevents government agencies from circumventing the competitive procurement process by making significant modifications during the course of a project beyond the original scope of a Contract.

	The standard is whether the modified Contract calls for essentially the same performance as that required by the contractor when originally awarded, so that the modification does not materially change the field of competition (see Cray Research, Inc. v. Department of Navy, 556 F. Supp. 201, 203 (D.D.C. 1982)). Thus, a cardinal change describes a change outside the scope of the Contract which is thus not governed by the "Changes Clause" often found in government Contracts. When the government makes a cardinal change, including a cardinal change that results in a delay, it is in breach of Contract. No rule of thumb exists to measure what constitutes a cardinal change. As a result, application of the doctrine depends on the totality of each set of facts and circumstances.
Centerline	The line identified as the geometric center of the alignment of the existing facility or proposed improvement.
Change Order	Means a written order, signed by the Contracting Officer, directing the contractor to make a change that the Changes clause authorizes the Contracting Officer to order without the contractor's consent.
Channel Capacity	The maximum flow that can pass through a channel without overtopping the banks.
Christian Doctrine	G.L. Christian and associates v. US (375 U.S. 954, 84 S.Ct. 444, 11 L. Ed.2d 314 (1963)), is a 1963 United States Federal Acquisition Regulation (FAR) case which has become known as the Christian Doctrine. The case held that standard clauses established by regulations must be considered as being in every Federal Contract. Because the FAR is the law, and government contractors are presumed to be familiar with the FAR, the standard clauses are treated as included in every Contract, even if inadvertently omitted by the government Contracting Officer.
Claim	Is a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. However, a written demand or written assertion by the contractor seeking the payment of money exceeding $100,000 is not a claim under the Contract Disputes Act of 1978 until certified as required by the Act. A voucher, invoice, or other routine request for

	payment that is not in dispute when submitted is not a claim.
Close Out	A verb. To terminate business operations; cease; stop; conclude. (a verb)
Closeout	A noun. The act of closing business operations. A sale intended to dispose of all remaining stock.
Closure Device	Any moveable and essentially watertight barriers, used during flood periods to close openings in levee systems, securing but not increasing the levee systems" design level of protection.
Cold Weather	When the air temperature has fallen to, or is expected to fall below forty degrees Fahrenheit (40°F) during the protection period of concrete which includes placement.
Competent Person	A person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
Competent	In geology, competence refers to the degree of resistance of geological materials to erosion and deformation. High resistance to erosion and deformation is a competent material.
Completed and Accepted Doctrine	This doctrine states that once a contractor completes work that is accepted by the owner, the contractor is not liable to third parties injured as a result of the condition of the work, even if the contractor was negligent in performing the Contract, unless the defect in the work was latent or concealed. The premise holds that a dangerous condition that could be discovered by reasonable inspection ceases to be the contractor's liability. The rationale is that the owner of the property has a duty to inspect the property and, by accepting it after completion of construction, the owner proclaims that the construction is safe. Even if the contractor's negligence created a patent dangerous condition on the property, the owner's failure to correct it after acceptance is considered a superseding cause of someone's injury.
Construction	For Federal contracting, construction includes the construction, alteration, or repair (including dredging, excavating, and painting) of buildings, structures, or other real property. For purposes of this definition, the terms "buildings, structures, or other real property" include, but

	are not limited to, improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, cemeteries, pumping stations, railways, airport facilities, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, and channels. Construction does not include the manufacture, production, furnishing, construction, alteration, repair, processing, or assembling of vessels, aircraft, or other kinds of personal property.
Contract Clause	Is a term or condition used in contracts or in both solicitations and contracts, and applying after contract award or both before and after award.
Contract Documents	Elements of the Contract including but not limited to the plans, construction drawings, scope of work, technical specifications, provisions, Contract bonds, modifications, and supplemental agreements.
Contract Drawings	The construction drawings identified in Technical Specification Section 00.01.15 or produced as part of the Contract.
Contract Modification	Is any written change in the terms of a Contract.
Contract Time	The number of calendar days specified for completion of the work including authorized additional working days.
Contract	The agreement between the USIBWC and the contractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.
Contracting Officer	Authorized representative of the USIBWC with the authority to enter into, administer and/or terminate Contracts and make related determinations and findings.
Contracting Officer's Representative	An individual, designated in writing, by the Contracting Officer authorized to perform specific technical and administrative functions.
Contracting Officer's Final Decision	When a claim by a contractor or a Government claim cannot be satisfied or settled by mutual agreement and a decision upon the claim is necessary, the Contracting Officer shall prepare a Final Decision pursuant to FAR 33.211. This Final Decision is the Government's initial response to a contractor's claim under the Contract Disputes Act. It serves as the Government's opening move in the claim process and sets the stage for future litigation.

	The Final Decision is binding and conclusive unless the contractor appeals it, so it deserves careful consideration.
Contractor	The individual, partnership, limited liability company, corporation, or joint venture and all principals and representatives with which the Contract is made by the USIBWC.
Control Point	An established point shown on the construction drawings to provide vertical and horizontal references for geometric control for construction.
Copeland (Anti-Kickback) Act	Makes it unlawful to induce, by force, intimidation, threat of procuring dismissal from employment, or otherwise, any person employed in the construction or repair of public buildings or public works, financed in whole or in part by the United States, to give up any part of the compensation to which that person is entitled under a contract of employment. The Act also requires each contractor and subcontractor to furnish weekly a statement of compliance with respect to the wages paid each employee during the preceding week. Contracts subject to the Act must contain a clause requiring contractors and subcontractors to comply with the regulations issued by the Secretary of Labor under the Act. (FAR 22.403-2)
Cost Loading	The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract sum, unless otherwise approved by the CO or COR.
Critical Path Method	An activity-oriented scheduling method, where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of the project.
Critical Path	The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
Cross-Sections	Graphic representations of the original ground and the proposed improvement, at right angles to the baseline or centerline.
Crumbly	A material that is easily broken into small fragments or reduced to powder.
Cultural Resources	Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties; specific items include, but are not limited to, human skeletal remains, archaeological artifacts, records, and

	material remains related to such properties. Items are at least fifty (50) years of age.
Culvert	Any buried structure providing an opening under the facility for drainage or other purposes.
Davis-Bacon Act	Provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works within the United States, must contain a clause that no laborer or mechanic employed directly upon the site of the work must receive less than the prevailing wage rates as determined by the Secretary of Labor. (FAR 22.403-1)
De Novo	From the beginning, afresh, considering the matter anew as if it has not been heard before and as if no decision previously had been rendered.
Definable Feature of work	A Definable Feature of work is a task that is separate and distinct from other tasks, has separate control requirements, and is continuous in location of work. It could be identified by different trades or disciplines, or it could be work by the same trade in a different environment, although each section of the specifications may generally be considered as a definable feature of the work, there is frequently more than one definable feature under a particular section. All CLINs are definable features of work. All critical path activities are Definable Features of work. For example, mobilization, geophysical survey, subsurface utility survey, soil and groundwater sampling, surveying, site cleanup/demobilization, concrete forming, concrete reinforcement installation, concrete placement, clearing and grubbing/site preparation, demolition, excavation, loading, hauling, and disposal of excavated soil, backfill, drywall, framing, plumbing, HVAC etc. are all Definable Features of work.
Definitize	To make definite; to clearly define. Usually in Contracts this relates to reaching an agreement with a contractor in relation to costs associated with modifications.
Delay (Compensable)	Those for which the Government is responsible for both time and cost impacts. These are delays for which the Government agrees to be responsible or which are caused by it. The contractor is entitled to compensation, not merely an extension of time.

Delay (Concurrent)	Those for which neither party is responsible to the other. These are delays where both parties have caused delays which have an equal impact on completion and/or it is impossible to apportion or separate the delays. In such cases, the contractor may not recover its increased costs and the Government may not enforce liquidated damages.
Delay (Excusable)	A delay arising from unforeseeable causes that is beyond the control of the contractor and that is not due to fault or negligence of the contractor. The primary purpose of an excusable delay provision is to protect the contractor from sanctions for late performance (e.g., default termination, liquidated damages, and actual delay damages). Whether a delay is excusable depends upon the Contract language.
Delay (Non-Excusable)	Those delays where the contractor bears the risk of both time and cost. These are delays within the contractor's control.
Delay	An event that causes a Contract action to be completed later than planned or anticipated.
Deposition	A proceeding in which a witness or party to a lawsuit is asked to answer questions orally under oath before a court reporter.
Design-Bid-Build	The traditional project delivery method where design and construction are sequential and contracted for separately with two Contracts and two contractors (FAR 36.102).
Design-Build	A method of project delivery, combining design and construction in a single contract with one contractor (FAR 36.102).
Detour	A temporary traffic route around a closed portion of a road.
Digital Orthophoto Quadrangle	Photographic maps distributed by the US Geological Survey. A DOQ is an aerial photograph that is adjusted to remove distortions caused by variations in terrain and the camera lens to produce a photograph that displays features in their planimetrically correct location. This term is sometimes used loosely to mean any photographic map produced by this process.
Direct Costs	Costs identified specifically with a particular final cost objective. Direct costs are not limited to items which are incorporated in the end product as material or labor. Costs identified specifically with a contract are direct costs of that contract. All costs identified specifically with other final cost objectives of the contractor are direct costs of those cost objectives.

Directly Associate Cost	Is any cost that is generated solely as a result of incurring another cost, and that would not have been incurred had the other cost not been incurred.
Discovery	Discovery is a fact-finding process that takes place after a lawsuit has been filed and before trial in the matter, in order to allow the parties in the case to prepare for settlement or trial. It is based upon the belief that a free exchange of information is more likely to help uncover the truth regarding the facts in issue. Court rules and state rules of evidence govern the discovery procedure. Civil discovery is wide-ranging and can involve any material which is "reasonably calculated to lead to admissible evidence."
Drawings	Construction Contract drawings that show the location, character, dimensions and details of the work and are a part of the Contract documents. Plans are the same as drawings.
Easement	A real property right acquired by one party to use land belonging to another party for a specified purpose.
Electronic Commerce	A paperless process including electronic mail, electronic bulletin boards, electronic funds transfer, electronic data interchange, and similar techniques for accomplishing business transactions. The use of terms commonly associated with paper transactions (e.g., copy, document, page, printed, sealed envelope, and stamped) must not be interpreted to restrict the use of electronic commerce. Contracting Officers may supplement electronic transactions by using other media to meet the requirement of any contract action governed by FAR (e.g., transmission of a hard copy of drawings) (FAR 4.502(a)).
Encroachment	An illegal intrusion onto USIBWC's easement or property. Trespass.
Engineer	A professional engineer or engineering firm registered in the state where work is being performed.
Estoppel	Legal rule of evidence (and not a cause of action) which prevents a party from making an allegation or denial that contradicts what it had previously stated, or what has been legally established, as the truth.
Fair Market Price	Is a price based on reasonable costs under normal competitive conditions and not on lowest possible cost.
Flexible Base	One or more layers of specified material thickness placed on a subgrade to support a surface course (usually asphalt).

Float	The measure of leeway in starting and completing an activity in a CPM schedule. Float is not for the exclusive use or benefit of either the Government or the contractor by is jointly owned. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned project completion date.
Flood Insurance Risk Zones	The zones, also referred to as "risk premium rate zones" and "flood insurance rate zones," shown on a FIRM/DFIRM or FHBM that are used to determine flood insurance premium rates for properties in the community covered by the FIRM/DFIRM or FHBM. The flood insurance risk zones include Special Flood Hazard Areas (i.e., Zones A, A1-30, AE, A0, A99, AH, AR, AR/A, AR/A1-30, AR/AE, AR/A99, V, V1-30, VE, V0) and areas outside Special Flood Hazard Areas (i.e., Zones B, X, D, M, N, P, E)
Flood	An overflow of water that submerges land which is usually dry. Flooding can be caused by any source of water including, but not limited to, rain, runoff, river flow, dam releases, and structural failures.
Floodwall	Concrete wall constructed adjacent to streams for the purpose of reducing flooding of property on the landside of the wall. Floodwalls are normally constructed in lieu of or supplement levees where the land required for levee construction is too expensive or not available.
FOB (Freight on Board)	Indicates where the material will start incurring shipping costs. E.g. FOB plant indicates that shipping must be paid from the plant to the jobsite; FOB destination indicates that freight is paid to the final destination. Freight can be a significant cost for many construction items so the point at which freight charges start is very important.
Forb(s)	Any herbaceous flowering plant that is not a grass
Freeboard	The portion of the 1-percent-annual-chance floodplain that is not within the regulatory floodway and in which development and other forms of encroachment may be permitted under certain circumstances.
Friable	Geological material that crumbles very easily in the hand or is reduced to finer particles by small pressure or friction. Friability is the ability of a solid substance to be reduced to smaller pieces with little effort.

Fringe Benefits	Allowances and services provided by the contractor to its employees as compensation in addition to regular wages and salaries. Fringe benefits include, but are not limited to, the costs of vacations, sick leave, holidays, military leave, employee insurance, and supplemental unemployment benefit plans.
Furnish	To supply, deliver, unload, and inspect for damage.
G&A (General & Administrative)	Are any management, financial, or other expenses which are incurred or allocated to a business unit as a whole. G&A costs are different than overhead in that they are costs incurred to support the company overall instead of to support a specific project. Overhead are company costs associated with supporting contracts.
Good and Workmanlike	Per the Texas Supreme Court, this is defined as that quality of work performed by one who has the knowledge, training, or experience necessary for the successful practice of a trade or occupation and performed in a manner generally considered proficient by those capable of judging such work.
Government	Refers to International boundary and Water Commission, United States and Mexico, United States Section.
Ground Disturbing Activities	A ground disturbance is any work or activity that results in a disturbance of the earth including, but not limited to: excavating, digging, trenching, plowing, drilling, tunneling, auguring, backfilling, blasting, topsoil stripping, land leveling, placing embankment, quarrying, clearing and grubbing, hauling, burning, tree removal, fencing, discing, and seeding.
Hard	Geological material that is not friable, is unyielding to pressure, and is impenetrable or almost impenetrable.
Haul Road	A temporary road created or modified to handle construction traffic.
Haul Route	The complete route that will be used to haul materials to and from the jobsite. This includes haul roads and existing roads, both on and off the site.
Hazardous Materials	Hazardous materials or waste include but are not limited to explosives, compressed gas, flammable liquids, flammable solids, combustible liquids, oxidizers, poisons, radioactive materials, corrosives, etiologic agents and other material classified as hazardous by 40 CFR 261, or applicable state and federal regulations.

Heavy Construction	Those projects that are not properly classified as either building, residential, or highway, and is of a catch-all nature. Such heavy projects may sometimes be distinguished on the basis of their individual characteristics, and separate schedules issued (e.g., dredging, water and sewer line, dams, flood control, etc.) (FAR 22.404-2(c)(4)).
Holidays	Holidays recognized by the Federal Government: New Year's Day, Birthday of Martin Luther King, Jr., Washington's Birthday, Memorial Day, Juneteenth, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and Christmas Day. See www.opm.gov/policy-data-oversight/pay-leave/federal-holidays for a complete list for any given year.
Homogeneous	Of uniform structure or composition throughout. Alike in construction.
Honeycomb	Honeycomb is a condition of irregular voids in concrete due to failure of the mortar to effectively fill the spaces between the coarse aggregate particles. Honeycomb is caused by segregation of the concrete during placement.
Hot Weather	One or a combination of the following conditions that tends to impair the quality of freshly mixed or hardened concrete by accelerating the rate of moisture loss and rate of cement hydration, or otherwise causing detrimental results: high ambient temperature, high concrete temperature, low relative humidity and high wind speed.
Hydraulic Analysis	An engineering analysis of a flooding source carried out to provide estimates of the elevations of floods of selected recurrence intervals**.**
Hydrograph	A graph showing stage, flow, velocity, or other properties of water with respect to time.
Hydrologic Analysis	An engineering analysis of a flooding source carried out to establish peak flood discharges and their frequencies of occurrence.
Indefinite-Delivery Contract	A Contract that may be used to acquire supplies and/or services when the exact times and/or exact quantities of future deliveries are not known at the time of contract award. There are three types: definite quantity; requirements; and indefinite quantity. (FAR 16.501-2(a))
Indefinite-Quantity Contract	An indefinite-delivery contract that provides for an indefinite quantity, within stated limits (minimum and maximum), of supplies or services to be furnished during a fixed period, with deliveries or performance to be

	scheduled by placing orders with the contractor. (FAR 16.504(a))
Independent Assurance Tests	Tests used to evaluate the sampling and testing techniques and equipment used in the acceptance program.
Indirect Costs	Any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective.
Inherently Governmental	A function that, as a matter of policy, is so intimately related to the public interest as to mandate performance by Government employees. For more information see Office of Federal Procurement Policy (OFPP) Policy Letter 11-01 at FR 76 23165. The term includes functions that require either the exercise of discretion in applying Federal Government authority or the making of value judgments in making decisions for the Federal Government, including judgments relating to monetary transactions and entitlements. An inherently governmental function involves, among other things, the interpretation and execution of the laws of the United States so as: (1) to bind the United States to take or not to take some action by contract, policy, regulation, authorization, order, or otherwise; (2) to determine, protect, and advance United States economic, political, territorial, property, or other interests by military or diplomatic action, civil or criminal judicial proceedings, contract management, or otherwise; (3) to significantly affect the life, liberty, or property of private persons; (4) to commission, appoint, direct, or control officers or employees of the United States; or (5) to exert ultimate control over the acquisition, use, or disposition of the property, real or personal, tangible or intangible, of the United States, including the collection, control, or disbursement of appropriations and other Federal funds.
Injury	Hurt, damaged, or loss suffered. Usually refers to economic costs incurred in Federal contracting.
Inspection	The act of examining and testing supplies or services (including, when appropriate, raw materials, components, and intermediate assemblies) to determine whether they conform to contract requirements.
Inspector	The firm or person assigned by the USIBWC to inspect for compliance with the Contract any or all parts of the work and the materials used.

Install	To unpack, assemble, erect, apply, place, finish, cure, protect, clean, start up, and mark ready for use.
Interior Drainage	Natural or modified outflow of streams within a levee-impacted area for the conveyance of runoff.
Interrogatories	Part of the pre-trial discovery in which a witness or party to a lawsuit provides written answers to questions under oath. Objections as to relevancy or clarity may be raised either at the time the interrogatories are answered or when they are used in trial.
Invoice	A contractor's bill or written request for payment under the contract for supplies delivered or services performed.
Labor Burden	Labor burden is a total cost of all indirect labor costs. It offers a truer picture of the total labor costs than payroll costs alone. Typical labor burden costs include payroll taxes (FUTA, OASDI, and Medicare), vacation, sick leave, workers" compensation, 401(k), health insurance, etc.
Latent Ambiguity	An ambiguity that does not readily appear on the face of a document but becomes apparent only in the light of knowledge gained from a collateral matter.
Latent Defect	This is a defect that exists at the time of acceptance but that cannot be discovered by a reasonable inspection.
Latent	Present but not visible, apparent, or actualized. Opposite of patent.
LEED	Leadership in Energy and Environmental Design - The United States Green Building Council's LEED™ Green Building Rating System is a proprietary program that evaluates environmental performance from a "whole building" perspective over a building's life cycle, providing a definitive standard for what constitutes a "green building". LEED™ is based on accepted energy and environmental principles and strikes a balance between known effective practices and emerging concepts. LEED™ is a self-certifying system designed for rating new and existing buildings.
Levee	A facility running parallel to a water course that is constructed of an embankment whose primary purpose is to furnish flood protection from seasonal high water and which is therefore subject to water loading for periods of only a few days or weeks a year.

Limits of Construction	An area with established boundaries, identified within the project's right of way and easements, where the contractor is permitted to perform the work.
Liquidated Damages	A stipulation in a contract on monetary amount that must be paid by the contractor if the contractor fails to deliver supplies or perform services as specified in the contract or any modification. Payments are in lieu of actual damages related to the failure. The rate (e.g., dollars per day of delay) is fixed in the contract and must be reasonable considering probable actual (not punitive) damages related to any failure in contract performance. (FAR 11.502(b) and 52.211-11(a))
Lowest Adjacent Grade	The lowest natural elevation of the ground surface next to a structure.
Maintenance Road	A road usually on top of or adjacent to the facility, primarily utilized by the USIBWC and DHS.
Material Fact	One that will make a difference in the outcome of the case.
Materials	The words "material" or "materials" is used in the technical specifications to denote items furnished by the contractor which shall be construed to mean equipment, machinery, product, component, or any other item required to be incorporated in the work
May	May denotes the permissive and is the opposite of shall. However, the words "no person may…" mean that no person is required, authorized, or permitted to do the act described.
Milestone Date	The date that a specific portion of the work is to be completed, before the completion date for all work under the Contract.
Modification	Any written change in the terms of a Contract.
Negligence	The failure to use reasonable care. A person is negligent if they fail to act as an ordinarily prudent person would act under the circumstances. Negligence may consist of action or inaction.
New	Item composed of previously unused components, whether manufactured from virgin material, recovered material in the form of raw material, or materials and by-products generated from, and reused within, an original manufacturing process, provided that the supplies meet Contract requirements, including but not limited to, performance, reliability, and life expectancy.

Notice to Proceed	A written notice to the contractor to begin Contract work.
Overhead	Overhead is the cost that a contractor has for staying in business. A general contractor has expenses not directly related to the construction of a project, but vital to the contractor's business operations. These include fixed overhead (Federal and State Unemployment costs, Social Security Tax, Builder's Risk Insurance and Public Liability Costs) and variable overhead (Worker's Compensation Insurance, Main Office Overhead, etc.).
Patent Ambiguity	An obvious inconsistency in the language of a written instrument. An ambiguity arising from the words themselves.
Patent	Readily open to notice or observation; evident; obvious. Opposite of latent.
Pavement Structure	Combination of surface course, base course, and subgrade to support the traffic load and distribute it to the roadbed:
Pavement Structure	Combination of surface course, base course, and subgrade to support the traffic load and distribute it to the roadbed: (1) Surface Course - Pavement structure layers designed to accommodate the traffic load. The top layer resists skidding, traffic abrasion, and the disintegrating effects of climate and is sometimes called the wearing course; (2) Base Course - One or more layers of specified material thickness placed on a subgrade to support a surface course; (3) Subgrade - The top surface of a roadbed upon which the base and surface courses (and curbs, if applicable) are constructed.
Pay Estimate	A progress payment for the estimated amount and value of work performed. This is used for construction only and it detailed in FAR 52.232-27.
Performance Based Contract	Structuring all aspects of an acquisition around the purpose of the work to be performed as opposed to either the manner by which the work is to be performed or broad and imprecise statements of work (FAR 37.101).
Performance Work Statement	Is a SOW for performance-based acquisitions that describes the required results in clear, specific and objective terms with measurable outcomes.
Pesticide	Any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals, or substances which may be administered

	to animals for the control of insects, arachnids or other pests in or on their bodies.
Plans	Construction Contract drawings that show the location, character, dimensions and details of the work and are a part of the Contract documents. Plans are the same as drawings.
Ponding (FEMA)	The result of runoff or flows collecting in a depression that may have no outlet, subterranean outlets, rim outlets, or manmade outlets such as culverts or pumping stations. Impoundments behind manmade obstructions are included in this type of shallow flooding as long as they are not backwater from a defined channel or do not exceed 3.0 feet in depth.
Privity of Contract	Provides that a Contract cannot confer rights or impose obligations arising under it on any person or agent except the parties to it.
Privity	Close, mutual, or successive relationship to the same right of property or the power to enforce a promise or warranty.
Probative	Tending to prove something.
Product	Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products may be new, never before used, or re-used materials or equipment.
Profit	Profit is the just reward for the effort and risk a contractor undertakes to produce a project. The amount varies depending on the size of the job and yearly in a contractor's annual billing. Typically, construction contractors take more profit on a smaller job and consideration should be given to the fact that the installing contractor(s) (subcontractors) will also charge both overhead and profit on a project.
Project	The facility and its associated appurtenances, that are being constructed under this Contract.
Protection Period	The time required to prevent concrete from being affected by exposure to cold weather.
Protest	Also referred to as a bid protest or protest against award. A written objection by an interested party to any of the following: (1) A solicitation or other request by an agency for offers for a contract for the procurement of property or services; (2) The cancellation of the solicitation or other

	request; (3) An award or proposed award of the contract; or (4) A termination or cancellation of an award of the contract, if the written objection contains an allegation that the termination or cancellation is based in whole or in part on improprieties concerning the award of the contract. (FAR 33.101)
Provide	To furnish and install.
Punch List	An itemized list of construction deficiencies identified during the final inspection that the contractor is required to correct before the client takes possession of the project.
Purview	The purpose or scope of a statute/law or the full scope of any document, statement, subject, etc. Purview means the range of control.
Quadrat	A frame of known area, usually one square foot, that is placed on the ground to measure items within to determine the distribution of an item over a large area.
Quality Assurance	Sampling, testing, inspection and other activities conducted by the Government to assure that the contractor's quality control is being conducted properly
Quality Control	Sampling, testing and other process control activities conducted by the contractor to monitor and adjust production and placement operations in order to maintain required quality.
Reasonable	A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business.
Recondition	To restore to the original normal operating condition by readjustments and material replacement.
Rehabilitate	To restore to original condition, operation, and/or capacity. To make as-new.
Release of Claims	A release a contractor provides to the government after completion of the work under the Contract. In doing so, the contractor releases the government from any claims, debts, liabilities, etc., as a result of the Contract.
Remanufactured	Factory rebuilt to original specifications.
Request for Equitable Adjustment	A contractor's request for changes in the Contract based upon existing Contract clauses.
Resource Loading	The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

Right-of-Way	A general term denoting land or property owned by the USIBWC for the construction, operation and maintenance of the facility.
Road or Street	General terms denoting a public way for purposes of vehicular travel, primarily for access to residence, business, or other abutting property.
Roadway Gravel	Gravel designed as the surface of a gravel roadway; also known as aggregate surface.
Sand Boils	The volcano-like cones of sand that that are formed on the landward side of a levee system when the upward pressure of water flowing through soil pores under a levee (underseepage) exceeds the downward pressure from the weight of the soil above it.
Scarification	Scratching the surface of a compacted layer to facilitate bonding with the next layer and avoid potential lamination between compacted layers.
Scope of Work	Document that defines the project and requirements.
Shall	Shall means the imperative: Shall indicates that the item is absolutely necessary or required.
Signature	Is the discrete, verifiable symbol of an individual that, when affixed to a writing with the knowledge and consent of the individual, indicates a present intention to authenticate the writing. This includes electronic symbols.
Slide Gate	A mechanical apparatus that controls the flow of water (through a pipe at the bottom of the levee) usually from the landside of the levee to the floodway or channel.
Solicitation	Is any request to submit offers or quotations to the Government. Solicitations under sealed bid procedures are called "invitations for bids." Solicitations under negotiated procedures are called "requests for proposals." Solicitations under simplified acquisition procedures may require submission of either a quotation or an offer.
Spearin Doctrine	In 1918 the United Stated Supreme Court decided that the owner impliedly warrants the information, plans, and specification which an owner provides to a contractor. The contractor will not be liable to the owner for loss or damage which results solely from insufficiencies or defects in such information, plans, and specifications. Spearin v. U.S. (248 U.S. 132 (1918)), 135-136.

Special Flood Hazard Area	The area delineated on an NFIP map (FHBM, FIRM, or DFIRM) as being subject to inundation by the 1-percent-annual-chance flood. SFHAs are determined using statistical analyses of records of river flow, storm tides, and rainfall; information obtained through consultation with a community; floodplain topographic surveys; and hydrologic and hydraulic analyses.
Specifications	Requirements issued or made pertaining to the method and manner of performing the work or to quantities and qualities of materials to be furnished under the Contract.
State Plane Coordinates	A system of X,Y coordinates defined by the US Geological Survey for each state. Locations are based on the distance from an origin within each State.
Station	A unit of measurement consisting of 100 horizontal feet.
Stoplogs	Logs, planks, cut timber, steel, or concrete beams fitting into end guides between walls or piers to close openings in levees, floodwalls, dams, or other hydraulic structures.
Subcontract	The agreement between the contractor and subcontractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.
Subcontractor	An individual, partnership, limited liability company, corporation, or any combination thereof that the contractor sublets, or proposes to sublet, any portion of a Contract, excluding a material supplier, truck owner-operator, wholly owned subsidiary, or specialty-type businesses such as security companies and rental companies.
Subgrade	The top surface of a roadbed (in situ soil) upon which the base and surface courses (and curbs, if applicable) are constructed. Also the bottom of the excavation above which backfill or concrete will be placed.
Subsidiary	Materials, labor, or other elements that because of their nature or quantity have not been identified as a separate bid item and are considered included within the items on which they necessarily depend.
Substantial Completion	The condition of the work when major components that make up the project are complete and the project is functional for its intended use. The warranty period begins on the date of substantial completion. If you have more than one date of substantial completion (e.g. multiple buildings) and/or beneficial occupancy for different

	systems, etc., you will end up with multiple warranty periods.
Superintendent	The representative of the contractor who is available at all times and able to receive instructions from the USIBWC CO or COR and is able to act for the contractor.
Superior Knowledge Doctrine	The implied duty for the Government to communicate information that is essential to a contractor's performance. The disclosure of superior knowledge doctrine applies in situations where: (1) a contractor undertakes to perform without vital knowledge of a fact that affects performance costs or duration; (2) the government was aware the contractor had no knowledge of and no reason to obtain such information; (3) any contract specification supplied misled the contractor, or did not put it on notice to inquire; and (4) the government failed to provide the relevant information. Helene Curtis Indus. v. U.S. (Ct.Cl. 1963), 312 F.2d 774.
Supply	To furnish, deliver, unload, and inspect for damage; same as furnish.
Surface Course	Pavement structure layers designed to accommodate the traffic load. The top layer resists skidding, traffic abrasion and the disintegrating effects of climate and is sometimes called the wearing course.
Surplus Materials	Any debris or material related to the Contract not incorporated into the work.
Task Order	An order placed against an existing Contract (usually A/E or IDIQ).
Unallowable Costs	Certain costs that cannot be allowed in prices under Contracts with the Government. They include: bad debts, interest, entertainment, contributions, donations, fines, penalties, lobbying costs, losses on other Contracts, alcoholic beverages, business organization costs (incorporation, reorganization, merge, etc.), most advertising costs, most public relations costs, legal fees for criminal and civil proceedings, claims, appeals, and patent infringements, personal housing, living expenses, insurance to protect against defects in materials or workmanship, membership fees for civic, community, country, social, or dining clubs, pre-Contract costs, excess airfare, automobile costs for personal use, materials for personal use, investment management, goodwill, profit distribution.

Unauthorized Commitment	An agreement that is not binding solely because the Government representative who made it lacked the authority to enter into that agreement on behalf of the Government (FAR 1.602-3(a)).
Undefinitized	Means a unilateral or bilateral Contract modification in which the final price or estimated cost and fee have not been negotiated and mutually agreed to by USIBWC and the contractor.
Unilateral Modification	A unilateral modification is a contract modification that is signed only by the Contracting Officer. They include (1) Make administrative changes; (2) Issue change orders; (3) Make changes authorized by clauses other than a changes clause (e.g., Property clause, Options clause, or Suspension of Work clause); and (4) Issue termination notices.
Utility	Privately, publicly, or cooperatively owned lines, facilities and systems for producing, transmitting, or distributing communications, power, heat, gas, oil, water, waste, or storm or irrigation water; the utility company.
Value Engineering Change Proposal	Is a contractor suggest change to the Contract to implement that results in reducing the overall projected cost to the agency without impairing essential functions or characteristics.
Variation in Estimated Quantity	When FAR 52.211-18 is included, whenever the quantity varies below 85% or above 115% the Contract quantity of a CLIN, the contractor or the Government may request a VEQ. New pricing is determined based upon costs resulting from the change in quantities.
Verification Tests	Tests used to verify accuracy of QC and QA testing.
Warranty	A promise or affirmation given by a contractor to the Government regarding the nature, usefulness, or condition of the supplies or performance of services furnished under the Contract (FAR 46.701).
Weather Advisory	An announcement that hazardous weather or hydrologic event is occurring, imminent, or likely. Advisories are less serious than warnings. Advisories are for events that cause significant inconvenience and if caution is not exercised, could lead to situations that may threaten life or property.
Weather Warning	An announcement that hazardous weather or hydrologic event is occurring, imminent, or likely. A warning means weather conditions pose a threat to life or property. People in the path of the storm need to take protective action.

Weather Watch	An announcement that the risk of a hazardous weather or hydrologic event has increased significantly, but its occurrence, location, or timing is still uncertain. Warnings are intended to provide enough lead time so those who need to set plans in motion can do so. A watch means that hazardous weather is possible. People should have a plan of action in case a storm threatens and they should listen for later information and possible warnings.
Wind Advisory	Sustained winds 25 to 39 mph and/or gusts to 57 mph. Issuance of advisory is normally site specific.
Wind-Blustery	Winds from 15 to 25 mph with cold temperatures and frequent gusts.
Wind-Breezy	Winds from 15 to 25 mph with mild temperatures.
Wind-Brisk	Winds from 15 to 25 mph with cold temperatures.
Wind-Calm	When no wind is detected.
Wind-Gale	Sustained winds of 39 mph to 54 mph.
Wind-Gust	A rapid fluctuation of wind speed with variations of 11.5 mph (10 knots) or more between peaks and lulls.
Wind-Light	Winds of less than 5 mph.
Wind-Very Windy	Winds from 30 to 40 mph.
Wind-Windy	Winds from 20 to 30 mph.
Work Day	contractor's scheduled days of work, whether work is performed or not.
Work Week	Normal, non-overtime, work week accounts for forty (40) hours in four or five work days.
Work	The furnishing of all labor, materials, equipment and other incidentals necessary for the successful completion of the Contract.
Workmanship	The physical evidence of the crafts of a particular culture or people. The techniques and skills necessary to execute or construct a particular detail or feature.

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43 General COND Information

43.1. Immunizations

Immunizations are not mandatory, but due to the work environments in which we operate, OSHA and CDC recommends certain immunizations. The USIBWC's immunization program covers the following:

A. Hepatitis A

B. Hepatitis B

C. Tetanus

D. Typhoid

If you are interested in obtaining any theses shots, please click on the link and complete the online form: forms.office.com/g/NHuUHfGffh.

43.2. USIBWC Projects

USIBWC projects are the name given to a specific region or type of work. For example, all of the Rio Grande work in New Mexico including American Dam plus American Canal in Texas are part of the Rio Grande Canalization Project. Each USIBWC project is established by public law, a IBWC Minute, or some other form of legislation.

Similar to projects are USIBWC programs. The programs are how everything is overseen and funded within the Agency. For example the Rio Grande Canalization Project is part of the Rio Grande Flood Control System Rehabilitation. Common programs include:

A. Reconstruction of American Canal

B. Facility Renovation Project

C. Rio Grande Flood Control System Rehabilitation

D. Safety of Dams

E. Secondary Treatment of Tijuana Sewage

F. Nogales International Outfall Interceptor

G. Critical Infrastructure Protection (CIP)

Many people call programs projects which can cause confusion.

See Table 3 for a list of all USIBWC projects that are used on COND projects.

43.3. SBU/CUI Files

Executive Order 13556 changed SBU (Sensitive but Unclassified) to CUI (Controlled Unclassified Information). NARA (National Archives and Records Administration) controls the CUI registry but NARA clearly notes that "each agency's CUI policy governs specific criteria for when, and by whom, it will allow for the application of limited dissemination controls and control markings." SSD will note that all dams and wastewater treatment plants are CUI critical infrastructure and directives SD.I.01011-M-1 and SD.I.10031 both note to use CUI instead of SBU. However, USIBWC does not have an Agency directive outlining how CUI shall be used which places application of SBU vs CUI in limbo.

Based on this, COND tends to still use SBU unless specific situations call for CUI.

Do not try to classify documents in our files unless the documents will be provided to contractors during solicitation as noted in Subsections 5.1 and 5.2. SBU/CUI documents cannot be placed on sam.gov.

Please note that there are separate versions of Forms 258 and 258A for both SBU and CUI.

43.3.A. SBU Files

1. Clearly mark that files are SBU by using the text "SBU" in the filename.
2. Include both Form 358 (SBU) and 358A (SBU) in the list of provided documents. Contractors are required to complete a Form 358 before they can receive any SBU document. Only one form per contractor is required.
3. Ensure that SBU markings are placed within the files themselves.
   - Follow guidance in SOW or Technical Specifications regarding how to mark documents.
   - A pdf stamp is available for these markings. See 40.4.A-PDF Stamps for details about this file.
4. Password protect your SBU files. Create a text file placed in the same file as these SBU files that contains the password used.
5. Create a "*Document_Notice-SBU*" file that lists all SBU documents available to contractors. Provide this document with the other solicitation attachments to the CO to post.

43.3.B. CUI Files

1. Clearly mark that files are CUI by using the text "CUI" in the filename.
2. Include both Form 358 (CUI) and 358A (CUI) in the list of provided documents. Contractors are required to complete a Form 358 before they can receive any CUI document. Only one form per contractor is required.
3. Ensure that CUI markings are placed within the files themselves.
   - Review NARA requirements for markings and classifications (www.archives.gov/cui).
   - Reach out to SSD for clarification for CUI categories.
   - Determine if dissemination needs to limited and apply the appropriate markings.

- Follow guidance in SOW or Technical Specifications regarding general guidance on how to mark documents.
- A pdf stamp is available for these markings. See 40.4.A-PDF Stamps for details about this file.

4. Password protect your CUI files. Create a text file placed in the same file as these CUI files that contains the password used.
5. Create a "*Document_Notice-CUI*" file that lists all CUI documents available to contractors. Provide this document with the other solicitation attachments to the CO to post.

43.3.C. Template

The current template for the "Document_Notice-xxx" can be found at:

Z:__Templates & Information\Templates-Contracts
or
W:__Templates & Information\Templates-Contracts
or
P:\COND__Templates & Information\Templates-Contracts

43.3.D. Files

Store the referenced documents and "*Document_Notice-SBU*" or "*Document_Notice-CUI*" in the following directories:

Construction
xxx\23-Solicitation Files\Solicitation Files to CO
Design-Build
xxx\03-SOW, IGE & PR\Solicitation Files to CO
CM Task Order
xxx\17-CM Contract\03-CM SOW, IGE & PR\SOW
A/E Design Task Order
xxx\03-SOW, IGE & PR\SOW

Table 3-USIBWC Projects

IBWC Project Name	Abbreviation	State	Minute #	PL #	Act Date	USC	Name	*NOTES*
International Boundary and Water Commission	IBWC	All						*Use only when document covers all of IBWC*
Amistad Reservoir and Dam		TX	207	86-605	1960-07-07	22 USC 277d-13	US-Mexico Storage Dam	
Anzalduas Dam		TX	203 & 265		1955-12-23	22 USC 277b.(c)		
Chamizal Convention Project		TX		88-300	1964-04-29	22 USC 277d-17 to 25	Chamizal Boundary Settlement & Chamizal Convention	
Colorado River Boundary and Capacity Project	CRBCP	CA & AZ					??-Convention of 1884 & 1944 Treaty	
Douglas-Aqua Prieta Sanitation Project	DAPSP	AZ			1950-09-13	22 USC 277d-6	Douglas-Aqua Prieta Sanitation Project	
El Morillo Drain		TX	223	89-584	1966-09-19	22 USC 277d-30	Lower Rio Grande Drainage Conveyance Canal Projects	
Falcon Dam and Reservoir		TX			1941-06-28	22 USC 277f	1944 Treaty & Valley Gravity Canal and Storage Project	
International Outfall Interceptor	IOI	AZ	206, 227 & 326				International Outfall Interceptor (IOI) & Nogales Main Collector Line (International Trunkline)	
International Salinity Control Project	ISCP		218 & 242		1965-03-22		Salinity of the Colorado River	
Lower Rio Grande Flood Control Project	LRGFCP	TX	196 & 238		1950-12-10			

IBWC Project Name	Abbreviation	State	Minute #	PL #	Act Date	USC	Name	*NOTES*
Morelos Dam		AZ	195, 197, 208, 209, 211 & 217		1950-05-06			
Naco Sewage		AZ	273 & 295				Treaty of 1944	
New River/Mexicali Sanitation Program		CA			1950-09-13	22 USC 277d-8	Calexico Mexicali Sanitation Project	
Nogales Sanitation Project		AZ	206, 227 & 276		1953-07-27	22 USC 277d-10	Nogales Sanitation Project	*NIWTP & Mexican Plant*
Presidio Valley Flood Control Project	PVFCP	TX		92-549	1972-10-25	22 USC 277d-41 & 42	Presidio Valley Flood Control Project	
Retamal Dam		TX	254		1976-09-24		Retamal Diversion Dam oR Retamal Heading	
Rio Grande American Canal Extension	RGACE	TX		101-438	1990-10-18		Rio Grande American Canal Extension	
Rio Grande Bank Protection Project	RGBPP	TX		79-40	1945-04-25	22 USC 277b.(b)	Rio Grande Bank Protection Project	*Cameron & Hidalgo Counties*
Rio Grande Boundary Preservation Project		TX	262		1979-12-26			*Cajoncitos to Haciendita*
Rio Grande Border Sanitation Projects			294	100-465	1988-10-03	22 USC 277g	Rio Grande Pollution Correction Act	*Do NOT use for land boundary*
Rio Grande Canalization Project	RGCP	NM & TX		74-392, 88-600 & 93-126	1935-08-29	22 USC 277b.(d) & 277d-29	Rio Grande Canalization Project	

IBWC Project Name	Abbreviation	State	Minute #	PL #	Act Date	USC	Name	*NOTES*
Rio Grande Rectification Project	RGRP	TX					Convention of 1933	
IBWC Rio Grande Projects		NM & TX						*Use only when a combination of projects or where no project exists*
South Bay International Wastewater Treatment Plant	SBIWTP	CA	283 & 311	100-4	1987-02-04	22 USC 277d-43 to 46 & 33 USC 1251	South Bay International Wastewater Treatment Plant	*US plant and works*
South Bay Mexican Wastewater Treatment Plant	SBMxWTP		283 & 311	106-457	2000-11-07	22 USC 277d-43 to 46	Mexican Facility	*Mexican plant and works*
Tijuana River Flood Control Project	TRFCP	CA		89-640, 101-246, 103-236	1966-10-10	22 USC 277d-12 & 32	International Flood Control Project, Tijuana River Basin	
Wellton-Mohawk Drain				93-320	1974-06-24		Colorado River Basin Salinity Control	
Western Land Boundary		CA, AZ, NM					Gadsden Treaty & Convention of 1882	

Appendix A - Directives

For USIBWC directives related to COND, go to:

Z:__Templates & Information\Construction Management Guide\IBWC Directives
or
W:__Templates & Information\Construction Management Guide\IBWC Directives
or
P:\COND__Templates & Information\Construction Management Guide\IBWC Directives

All IBWC directives can be found at V:\Directives.

SD.II.01031, Design and Construction Requirements for Work within USIBWC Jurisdiction (December 6, 2023) with all appendices is available on USIBWC's website at www.ibwc.gov/resources-info/.

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Directive directly related to COND functions include:

1. SD.I.06051, Volume II, Chapter 301, Agency Acquisition Contracting Authority and Responsibility; Procurement Integrity (June 16, 2003)
2. SD.I.06052, Procurement Integrity (June 6, 2016)
3. SD.I.6053, Requisitions (IBWC Form 041) (January 27, 2015)
4. SD.I.06102 Volume II, Chapter 505 Files Maintenance and Records Disposition Manual (Dec 2006)
5. SD.I.6103-M-1, Volume II, Chapter 507, Files Maintenance and Records Disposition Manual – Records Disposal Schedules (Dec 2006)
6. SD.I.7031, Volume II, Chapter 309, Solicitation and/or Acceptance of Gifts, Favors, or Money from contractors, Vendors or Others Doing Business or Seeking Business with the United States Government (April 28, 2003)
7. SD.I.10061, Occupational Safety and Health Program Directive (July 25, 2014)
8. SD.I.10061-M-1, Occupational Safety and Health Manual (January 25, 2011)
9. SD.I.10061-M-1 Appendix A. Accident Notification and Investigation (June 21, 2001)
10. SD.I.10061-M-1 Appendix B. Boat Safety (February 1, 2012)
11. SD.I.10061-M-1 Appendix C. Cableway Safety (February 1, 2012)
12. SD.I.10061-M-1 Appendix D. Safety Requirements for Confined Spaces (March 30, 2011)
13. SD.I.10061-M-1 Appendix E. contractor Safety (February 1, 2012)
14. SD.I.10061-M-1 Appendix F. Cranes and Derricks (July 29, 2012)
15. SD.I.10061-M-1 Appendix G. Chainsaw Safety Program (August 5, 2014)
16. SD.I.10061-M-1 Appendix H. Electrical Safety-Related Practices (May 21, 2012)
17. SD.I.10061-M-1 Appendix I. Excavations and Trenching (February 1, 2012)
18. SD.I.10061-M-1 Appendix J. Exposure Control Plan (June 21, 2001)
19. SD.I.10061-M-1 Appendix L. Forklift Safety (February 1, 2012)
20. SD.I.10061-M-1 Appendix M. General Safety Rules (February 1, 2012)
21. SD.I.10061-M-1 Appendix N. Hazard Communication Program (HAZCOM) (August 8, 2012)
22. SD.I.10061-M-1 Appendix O. Hazardous Energy Control Plan (Lockout-Tagout) (June 21, 2001)
23. SD.I.10061-M-1 Appendix Q. Machinery and Tools (February 1, 2012)
24. SD.I.10061-M-1 Appendix R. Personal Protective Equipment (PPE) (March 30, 2011)
25. SD.I.10061-M-1 Appendix S. Respiratory Protection Program (June 21, 2010)
26. SD.I.10061-M-1 Appendix U. Walking and Work Surfaces (February 1, 2012)

27. SD.I.10061-M-1 Appendix V. Welding, Cutting and Brazing (February 1, 2012)
28. SD.I.10063 Prescription Safety Glass and Protective Footwear Reimbursement Program Directive (May 6, 2015)
29. SD.II.1023, Volume III, Chapter 807, Guidance for the Development of Independent Government Estimates for USIBWC Construction Projects (June 5, 2001)
30. SD.II.3011, Volume III, Chapter 301, Environmental Compliance for Construction Activities (March 14, 2002)
31. SD.II.01031, Design and Construction Requirements for Work within USIBWC Jurisdiction (December 6, 2023)
32. SD.III.1014, Volume IV, Chapter 325, Jurisdiction of Field Office Project Boundaries (April 22, 2008)
33. DRAFT Volume III, Chapter 801, Construction Management Procedures (April 5, 2004)

Appendix B - Forms

Current construction forms (including OSHA, DOL-WH, SF, and IBWC) forms are found at:

Z:__Templates & Information\Forms
or
W:__Templates & Information\Forms
or
P:\COND__Templates & Information\Forms

Forms are available for your contractors at:
www.ibwc.gov/resources-info/

When reviewing the COND forms, you will notice a date in the filename. The date is the last time the form was updated. Ensure that when you use files that you are always using the most recent version.

DO NOT use construction forms found on Sharepoint site or on V: drive.

Other IBWC forms can be found at the Sharepoint site ibwc.sharepoint.com or at V:\Forms.

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Forms created and maintained by the Construction Management Division include:

1. IBWC Form 119, Pay Estimate (pdf) (xlsx)
2. IBWC Form 119A, contractor Pay Estimate Inventory (pdf) (xlsx)
3. IBWC Form 119B, Pay Estimate Breakdown (pdf) (xlsx)
4. IBWC Form 120, Bridge Inspection Form (pdf)
5. IBWC Form 145, Construction Inspector's Report (docx)
6. IBWC Form 145A, Construction Inspector's Report for Contracted Inspector (pdf)
7. IBWC Form 146, Transmittal of Shop Drawings (pdf)
8. IBWC Form 147, Submittal Register (xlsx)
9. IBWC Form 148, Log of Photographic Documentation (pdf) (xlsx)
10. IBWC Form 149, Schedule Analysis (pdf)
11. IBWC Form 150, Log of Deficiencies/Punch List (pdf) (xlsx)
12. IBWC Form 152, Pay Item Breakdown (pdf) (xlsx)
13. IBWC Form 153, Monthly Exposure & First Aid Report (pdf)
14. IBWC Form 154, Subcontractor's Payment Breakdown (pdf)
15. IBWC Form 161, Actual Weather and Working Conditions Report (pdf)
16. IBWC Form 162, Preparatory Inspection Checklist (pdf)
17. IBWC Form 163, Daily Construction Quality Control Report (docx)
18. IBWC Form 163A, Equipment Mobilization/Demobilization (pdf)
19. IBWC Form 164, Weekly Toolbox Safety Meeting (pdf) (docx)
20. IBWC Form 164A, Activity Hazard Analysis (docs)
21. IBWC Form 166, Initial Inspection Checklist (pdf)
22. IBWC Form 202, Deficiency and Omission Report (docx)
23. IBWC Form 203, Field Environmental Monitor's Daily Report (pdf)
24. IBWC Form 204, Use of USIBWC Logo (pdf)
25. IBWC Form 207, Use of AutoCad Files (pdf)
26. IBWC Form 225, Use of USIBWC Key (pdf)
27. IBWC Form 226, Statement of Compliance (pdf)
28. IBWC Form 227, Wage Deduction Authorization (pdf)
29. IBWC Form 228, Nonperformance Payroll Report (pdf)
30. IBWC Form 231, Owner-Operator Certification of Ownership (pdf)

31. IBWC Form 232, Owner-Operator Payroll Listing (pdf)
32. IBWC Form 233, RFI (docx)
33. IBWC Form 233A, RFI Log (pdf) (xlsx)
34. IBWC Form 235, Concrete Test Results Summary (pdf) (xlsx)
35. IBWC Form 237, Nuclear Gauge Results (pdf)
36. IBWC Form 238, Concrete Placement Card (pdf)
37. IBWC Form 239, Schedule of Materials (pdf) (xlsx)
38. IBWC Form 240 Nuclear Gauge Moisture Calibration (pdf)
39. IBWC Form 241 Nuclear Gauge Standard Count (pdf)
40. IBWC Form 242, Pay Item Checklist (pdf)
41. IBWC Form 243 Release of Claims (pdf)
42. IBWC Form 244 Concurrence of Completion (pdf)
43. IBWC Form 245, Minimum Qualifications for Award (docx)
44. IBWC Form 245, Minimum Qualifications for Award JV (docx)
45. IBWC Form 245, Minimum Qualifications Backup Information (pdf)
46. IBWC Form 246, Contract Closeout Synopsis (pdf)
47. IBWC Form 247, Certificate of Contract Completion (pdf)
48. IBWC Form 248, Request for Warranty Service (docx pg1) (docx pg2) (docx pg3)
49. IBWC Form 249, Log of Warranty Calls (xlsx)
50. IBWC Form 253, Construction Closeout Checklist (pdf)
51. IBWC Form 254, CM Closeout Checklist (pdf)
52. IBWC Form 255, Certificate of Substantial Completion (pdf)
53. IBWC Form 256, Acquisition Request Form (docx)
54. IBWC Form 257, Liquidated Damages Calculation (pdf) (xlsx)
55. IBWC Form 264, Safety Inspection for Mechanized Equipment (pdf)
56. IBWC Form 265, Safety Inspection for Cranes (pdf)
57. IBWC Form 266, Safety Inspection for On Highway Vehicles (pdf)
58. IBWC Form 358, Nondisclosure Agreement (pdf)
59. IBWC Form 359A, Nondisclosure Agreement Release (pdf)
60. IBWC Form 359, Hand Receipt (pdf)
61. SF 1413, USIBWC Statement and Acknowledgment Instructions
62. SF-1445, USIBWC Labor Standard Interview with Spanish translation

Other construction forms include:

1. OSHA 300, Log of Work-Related Injuries and Illnesses
2. OSHA 300A, Summary of Work-Related Injuries and Illnesses
3. OSHA 301, Injury and Illness Incident Report
4. SF 1413, Statement and Acknowledgment
5. SF-1445, Labor Standard Interview
6. WH 347, Optional Use Payroll Form under Davis Bacon

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Appendix C - Posters

Current posters are found at:

Z:__Templates & Information\Posters
or
W:__Templates & Information\Posters
or
P:\COND__Templates & Information\Posters

Posters are available for your contractors at:
www.ibwc.gov/resources-info/

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The following posters are required to be posted on job boards on all construction contracts.

A. DHS OIG Fraud Hotline Poster
Required per FAR 3.1004.
Found online at www.oig.dhs.gov/hotline.

B. Know Your Rights
Required per Executive Order 11246.
Found online at www.dol.gov/agencies/ofccp/posters.

C. Employee Rights Under the Fair Labor Standards Act (Minimum Wage) (WH 1088)
Required per 29 CFR 516.4.
Found online at www.dol.gov/agencies/whd/posters/flsa.

D. Paid Sick Leave for Federal contractors (WH 1090)
Required per Executive Order 13706.
Found online at www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh1090.pdf.

E. Federal Minimum Wage (WH 1091)
Required per Executive Order 14026.
Found online at www.dol.gov/agencies/whd/government-contracts/eo14026.

F. Employee Rights under the Davis-Bacon Act (WH 1321)
Required per FAR 22.404-10.
Found online at www.dol.gov/agencies/whd/posters/dbra.

G. Employee Rights and Responsibilities under the Family and Medical Leave Act (WH 1420)
Required per 29 CFR 825.300.
Found online at www.dol.gov/agencies/whd/posters/fmla.

H. Notice: Employee Polygraph Protection Act (WH 1462)
Required per 29 CFR 801.6.
Found online at www.dol.gov/agencies/whd/posters/employee-polygraph-protection-act.

I. It's the Law - Job Safety and Health (OSHA 3165)
Required per 29 USC 657(c) and 29 CFR 1903.2.
Found online at www.osha.gov/publications/poster.

J. Uniformed Services Employment and Reemployment Rights Act
Required per 20 CFR 1002.
Found online at www.dol.gov/agencies/vets/programs/userra/poster.

K. Employee Rights under the National Labor Relations Act
Required per Executive Order 13496.
Found online at www.dol.gov/agencies/olms/poster/labor-rights-federal-contractors.

L. Pay Transparency Nondiscrimination Provision
Required per Executive Order 11246 and 41 CFR 60-1.35.
Found online at www.dol.gov/agencies/ofccp/posters.

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International Boundary and Water Commission

Established in 1889, the International Boundary and Water Commission (IBWC) has responsibility for applying the boundary and water treaties between the United States and Mexico and settling differences that may arise in their application. The IBWC is an international body composed of the United States Section and the Mexican Section, each headed by an Engineer-Commissioner appointed by their respective president. Each Section is administered independently of the other. The United States Section of the International Boundary and Water Commission (USIBWC) is a federal government agency and is headquartered in El Paso, Texas. The IBWC operates under the foreign policy guidance of the Department of State. The Mexican Section is under the administrative supervision of the Mexican Ministry of Foreign Affairs and is headquartered in Ciudad Juarez, Chihuahua, Mexico.

Vision

To be recognized as the premier agency that identifies solutions along the United States - Mexico border through local, state, federal, and binational partnerships.

Mission

Provide binational solutions to issues that arise during the application of United States - Mexico treaties regarding boundary demarcation, national ownership of waters, sanitation, water quality, and flood control in the border region that arise during application of United States-Mexico treaties.

www.ibwc.gov

Questions and comments about this or other IBWC projects can be submitted to: forms.office.com/g/tZNR9Cv0qL

International Boundary and Water Commission

United States Section

Construction Management Division
4191 N Mesa
El Paso, Texas 79902

www.ibwc.gov