

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
1.0	PROJECT IDENTIFICATION AND SCOPE			
1.1	Identify and Document: Formal Project Name, Scope and Purpose of Project, End Result Desired (Study Report, Type/Size/Capacity of Facility, Other), Limits of Project, Phasing, CIP Number	PAM		PM 1100
1.2	Establish active project file. Store Data from Task 1.1 including decisions, memorandums, management directives, et. al. in the Active Project File (APF).	PEM		GA 1038A-B
2.0	PRELIMINARY RESOURCE PLANNING & IDENTIFICATION			
2.1	Identify & Document CIP No., source & amount of project budget, funding distribution by phase, action pending to secure said funds, available material or tangible assets where applicable. File in the PAM File.	PAM CTO		PM 1100
2.2	Identify qualifications of personnel required for the project, Utility support groups needed, determine if RFP process is required.	PAM		
2.3	Identify & Document Schedules for Engineering, Construction, and other phases, including milestones to be met. File in PAM File.	PAM		
3.0	PROJECT TEAM ORGANIZATION			
3.1	Assign in-house Project Engineer Manager (PEM), identify Administrative & Operations support staff. Apprise PEM of Sections 1 and 2.	PAM		
3.2	Initiate Request for Proposal (RFP) Process if required in Task 2.2. Identify the RFP requirements, apprise PEM & delegate development assistance to the PEM.	PAM PEM		
3.2.1	Utilize standard RFP techniques & format to develop the Project specific RFP draft document; include use of a computerized template where available.	PAM PEM	APXA 3.2.1	
3.2.2	Edit preliminary draft for quality and content, revise, forward to Project Administration Secretary (PAS) for action per Sub-Task 3.2.3.	PAM PEM		
3.2.3	Edit RFP, revise, insert RFP mailing list, produce final draft, forward to support staff & management identified in Task 2.2 for review and comment (limit to 2 day turnaround).	PAS		
3.2.4	Produce the final approved RFP document with return comments incorporated.	PAS		
3.2.5	Perform RFP Quality Check.	PEM PAM		
3.2.6	Utilize approved mailing list of consultants and mail the RFP.	PAS	APXA 3.2.6	

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3.2.7	Distribute RFPs including mailing list to internal support staff, including CTO, CA, PEM, and PAM. File one set with the PAS. See APXA 3.2.7 for APF description.	PAS		
3.2.9	Identify and appoint the other attendees for the Selection Committee.	CTO	APXA 3.2.9	
3.2.10	Conduct a Preproposal Meeting, if necessary. Issue Addenda as necessary, Copy to CA.	PAM PEM	APXA 3.2.10	
3.2.11	Await proposals to be received from prospective Consulting Engineers. In the interim, respond to prospects' procedural questions (CA) or technical questions. (CA, PEM)	CA PEM		
3.2.12	Receive and log proposals as they arrive in Contracts office. Reject any late deliveries. Create a departmental pending file.	CA		
3.2.13	Develop an evaluation sheet and forward along with RFP responses to the CTO with memorandum for distribution to the Selection Committee.	CA		
3.2.14	Schedule the Selection Committee meeting.	CEO ES		
3.2.15	Evaluate proposals; consideration given to staffing, experience, project approach, & technical qualifications.	PAM PEM		
3.2.16	From the proposals, build a presentation summary including analysis of all the factors considered in Task 3.2.15 above.	PEM	APXA 3.2.16	
3.2.17	Hold the initial Selection Committee meeting to begin consideration of proposals submitted.	CEO CTO		
3.2.18	From the deliberations of the Selection Committee, select a Consulting Engineer.	SCM	APXA 3.2.9	
3.2.19	Send a draft consultant selection recommendation memo and summary tabulation through the CTO to the CEO for signature and delivery to the PSB. Attach standard Item for PSB Agenda form GA 3219A with necessary information.	PAM		PM 3219A,B GA3219 A,B
3.2.20	Provide the selection recommendation and approvals to the Public Service Board; request their approval at the next regularly scheduled Board meeting.	VP		
3.2.21	Review, discuss, and approve the recommended consultant selection.	PSB		
3.2.22	Prepare notification letters for signature by the CTO, to be sent to those consultants that responded to the RFP.	ELS	APXA 3.2.22	
3.2.23	Send notification letters to the successful Consultant Engineer and the others.	ELS		

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3.2.24	Provide copies of the notification letters to the CA and Project Administration Manager.	ELS		
3.2.25	Receive the official notification letters from the CTO's Secretary. Retain #1 and #2 proposal. Draft the base contract.	CA		
3.2.26	Retain one set of proposals in the Engineering Library for three years (successful consultant) and two years for unsuccessful consultants. Create audit file.	ELS	APXA 3.2.28	
4.0	CONSULTANT CONTRACT NEGOTIATION & TASK ORDER PROCUREMENT			
4.1	Schedule the Engineering Design Services scoping meeting within five working days of the selection notification to the Consulting Engineer. The meeting date is to occur within 12 working days of the date of the notification letter. Timing from baseline date for scheduling the scoping meeting = 5 wkdays.	PEM CE		
4.1.1	Jointly develop Agenda for Engineering Services Scoping meeting. Include Budget, Schedule, and Risk Evaluation as items of discussion in agenda. 5 wk days	PEM CE		
4.2	Conduct the scoping meeting, with the Consulting Engineer and the Project Administration Manager (or his designee) taking the lead. Items to be considered during scoping meeting are found in Tasks 6.2.1 thru 6.2.8 Preliminary Design, or Tasks 7.1 thru 7.1.8 (Design). Timing from previous Task 4.1 = 7 wkdays.	CE PEM	APXA 4.2	
4.3	Generate a Job Request as supporting documentation for the Task Order, in accordance with Section 5 Job Request Process. (see also Task 4.9). 1 wkday	PEM		
4.4	Submit a draft Task Order to the CA thru PEM. The task order contains information on scope, price for the engagement, and schedule of services (re: Task 4.2) 10 working days from scoping meeting (Task 4.2) 20 working days for plant jobs.	CE PEM	APXA 4.4	MS 4400 contract types
4.6	Review Task Order scope, pricing, schedule. Perform cost effort comparison and analysis using established methods and develop counter cost proposal spreadsheet for negotiation meeting. 6 wkdays	PEM	APXA 4.6	
4.7	Meet with PAM to discuss Task Order counterproposal and other Task Order requirements. 1 wkday	PEM		
4.8a	Meet as an internal negotiating team to review the Task Order for technical scope, cost factors, changes, schedule, submittal format, and contractual issues. 2 wkdays	PEM PAM		
4.8b	Schedule negotiation meeting. 1 wkday	PEM		

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4.9	PEM provides approved Job Request (see Section 5.10) and final Task Order Draft for review to CA. 7 wkdays from Task 4.3	PEM CA		
4.10	Subsequent to the internal Task Order review, conduct a negotiating conference. 2 wkdays	PEM CE	APXA 4.10	PM 4100 MS 4101
4.11	Consultant submits two (2) original final Task Order Scope, Schedule, Pricing Exhibits, Subcontracts, and Organization Chart including designation of Engineer of Record to CA with copy to PEM. 2 wkdays	CE CA PEM	APXA 4.4	CM 4111 A to E
4.12	Obtain acceptable required Task Order exhibits from the Consultant, if applicable.	CA		
4.13	Prepare the final base contract and task order, and deliver both to consultant for signature and return.	CA		
4.15	PA signs Task Order as the final signature authority per Administrative Instruction No. 1.	PA		
4.16	Prepare a Notice to Proceed for Task Order services.	PEM	APXA 4.16	
4.17	Record the final due dates for completion of each Engineering milestone. Update Job List Report.	CA	APXA 4.22	
4.17.1	Revise the Task Order Exhibit Schedule with adjusted due dates.	CE	APXA 4.22	
4.17.2	Submit revised schedule exhibit to CM within 5 days of Notice to Proceed.	CE		
4.18	Return the final executed version of the contract to the Consulting Engineer with copy to PEM.	PCS		
4.19	Update Job List Report.	PCS		
4.20	Forward memo to Purchasing Agent requesting that a Purchase Order be issued to consultant for Task Order services agreed to. See related Section 11.2 Payment Prerequisites.	PCS		
4.21	Purchasing Agent issues Purchase Order to the consultant. See related services Section 11.2 Payment Prerequisites.	PA		
4.25	File copy of Base Agreement and corresponding Task Order(s) in PEM's File.	PEM		
4.26	Establish a funds database for the project.	PCS		
4.27	Obtain Insurance Certificate (Professional Liability) from Consultant and set up the insurance database accordingly.	CA	APXA 4.27	

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4.28	Establish a contract file for the project.	CA		
5.0	JOB REQUEST AND ACCOUNTING PROCESS			
5.1	Meet to agree on amount allocation from total budget, encumbrances from current budget, and transfer amounts with origins.	PEM PAM CAM		
5.1.1	Designate Job Purpose, Itemize Project Costs, Identify Fund Source or Special Agency Funding & amounts, assign CIP No. and Engineering No. from ELS.	PEM		
5.1.2	Contact the Accounting Specialist for current balances and budget status. Consult the Peoplesoft Network Data for funds status.	PEM		
5.1.3	Design & Construction PEM's generate Job Request to encumber budgeted funds for new Engineering Services or Construction Work. (re: Tasks 4.3 or 9.2)	PEM	APXA 5.1.3	GA 5100
5.2	Provide draft job request to Project Administration Manager for review and approval.	PEM		
5.2.1	Confirm and approve draft job budget allocation amount, target use, contingencies, and tracking format.	PAM CAM		
5.3	Provide quality check.	PEM		
5.4	Obtain initiating approval signature from Project Administration Manager (Division Mgrs for external jobs).	PEM		
5.5	Route to Capital Improvements Accounts Clerk Specialist (ACS) for processing and assignment of account number.	PAM		
5.6	Verify funds availability, enter into general ledger (peoplesoft), assign 7-digit account number. Forward to Chief Financial Officer for approval.	ACS		
5.7	Job Request receives approval from Chief Financial Officer (CFO) and VP.	CFO VP		
5.8	Approved job is returned to Accounts Clerk Specialist and a copy is retained. The original is forwarded to ELS for distribution to PEM, CA, PAM, CAM. Original is forwarded to Senior Technician for Records File.	ACS ELS		
5.11	Enter job description and account no. of approved job into the database listing of jobs. Replace revised sheets in PAM's record binder.	ELS		
5.13	Maintain weekly updates of computerized database of approved job request listing, for network sharing, P-drive accessible.	ELS		

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6.0	PRELIMINARY DESIGN OR REPORT STUDY PHASE			
6.1	This phase at owner's option. For Special Studies, Master Plans, Technical Memorandums (TMs), or Basis of Design Reports, proceed to Section 7.0 Pre-Design/Design Phase.			
7.0	PRE-DESIGN / DESIGN PHASE			
7.1	Conduct the Preliminary Design/Special Study Report/Design Phase Scoping Meeting. Reference the requirements described in the Task Order agreement. (re: Section 4).	CE PEM		
7.1.1	Define and delineate the Scope of Work clearly, with outline of expected deliverables and other services, i.e. Master Plan Progress Reports, Technical Memorandums, Basis of Design Reports, or other Comprehensive Bound Reports.	CE PEM		
7.1.2	Present the CIP construction budget for this phase effort.	PEM		
7.1.3	Outline the schedule for this phase and how it fits into the entire program schedule.	PEM CE		
7.1.4	Describe and milestone progress meetings.	CE		
7.2	Activities occurring during Preliminary Design, Special Study Report, and Design Phases:			
7.2.1	Coordinate the data gathering process internally. Provide record information to consultants via standard transmittal form. Facilities Maps & Specifications issued to consultants or the general public shall be provided with Notice of Security Requirements Form.	PEM		GA 1010 6310B 9231
7.2.2	Coordinate this phase with the consultant, internal EPWU contacts, and affected agencies.	PEM CE	APXA 7.2.2	GA 6310
7.2.3	Where necessary, assist consultant in design support activities: meet with outside agencies and utilities, resolve land & easement acquisition issues, liaison with funding agencies, perform site visits to meet design objectives.	PAM PEM		
7.2.4	Hold progress review meetings according to agreed schedule per consultant's contract bar chart schedule. Engineer shall provide copies of all correspondence regarding permitting agencies and other utilities to the PEM throughout this phase in sets of 7, for internal distribution and review via transmittal letter.	CE PEM	APXA 7.2.4	
7.2.5	For Design Phase, initiate easement and right-of-way surveys, legal descriptions, metes and bounds, and acquisition as needed. This is generally critical path. See discussion below for subprocess coordination with Land Administration office. Also, see discussion in Task 8.3.	CE PEM	APXA 7.2.5 & 8.3	

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7.3	For Design Phase, refer to preliminary Basis of Design or other pre-design reports as a roadmap for design elements & requirements. For Pre-design and Special Projects, submit draft reports (7) to PEM for distribution.	CE PEM		
7.3.1	For Design Phase, if 30% submittal is not required by task order, skip to Task 7.5 for 60% process.	CE PEM		
7.3.2	For Design Phase, submit 30% (or other % as required) completed plan drawings, generally in sets of seven, via transmittal letter to the PEM, copy transmittal letter to Contracts Administrator.	CE		
7.3.3	Distribute submittals to internal staff via memo. Review and comments are due within 7 working days in order to compile comments.	PEM		
7.3.5	Schedule and conduct review meeting to provide consultant engineer revisions and comments of submittals. PAM, PEM, Operations Personnel, and other support staff attend meeting. 7 days from return of comments.	PEM CE		
7.3.6	For Pre-design & Special Projects, make final revisions & submit 100% TM's or final bound report to PEM for distribution. (7 Copies)	CE		
7.3.7	For Pre-design or Special Projects, distribute final deliverables from 7.3.6 to key players & decision-makers within the Utility.	PEM		
7.4	Forward all periodic progress payment requests to the PCS via e-mail and copy PEM. For Pre-Design & Special Projects, skip to Task 7.17.	CE	APXA 7.4.0	
7.4.1	Receive, review, and approve all progress invoices for engineering services and related project support for this phase, in accordance with Section 11 Payment Process.	PCS PEM		
7.4.2	Prior to the 60% submittal of bid documents, develop special Minimum Project Specific Criteria as per Section 00100 Instructions to Bidders.	CE	APXA 7.4.2	
7.4.3	Submit the Minimum Project Specific Criteria to the PEM along with other 60% submittals indicated in Tasks 7.5 and 7.5.1.	CE PEM		
7.4.4	PEM forwards the Minimum Project Specific Criteria to the Chief Technical Officer or Chief Operations Officer and obtains their approval.	PEM		
7.5	Submit 60% completed plan drawings, technical specs (no front-end), and other requirements (see Appendix ref), generally in sets of seven, via transmittal letter to the PEM, copy letter to CA.	CE	APXA 7.5	
7.5.1	Submit a preliminary cost estimate of construction for the total project, shown broken down by distinct areas of construction, regardless of lump sum contracts. (see also Task 7.7.final estimate). PEM copies to CA.	CE PEM	APXA 7.5 & 8.3	

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7.5.2	Distribute documents from Task 7.5 and Task 7.5.1 to internal staff via memo. Request their review and comments within 7 working days.	PEM		
7.5.3	Where project cost estimates overrun available budget, discuss and agree on modifications, deletions, or deferrals on key design elements to lower the project cost. Adjust design as necessary. Otherwise, consider increasing budget if funds available.	CE PEM		
7.5.4	Compile input and comments returned by reviewers of the 60% draft sets described in Task 7.5 and cost estimate in Task 7.5.1.	PEM		
7.5.5	Compile and distribute documents as necessary to support the process; make any needed changes as required by the process or its participants.	PEM		
7.5.6	Identify and provide to consultant special funding agency requirements to be included in the front-end portion of the Project Manual, to be included in the 95% submittal.	CA PEM		
7.5.7	Identify and provide to consultant special arrangements or construction scheduling constraints between the Utility and City, State, and Federal agencies (highway work, dewatering periods, etc.).	PEM CAM		
7.5.8	If a Contractor Prequalification Process is required, refer to discussion below for instructions. Consultant includes the results of this process (list of prequalified contractors) in the bid documents after PSB approval.	CE	APXA 7.5.8	
7.5.9a	Schedule and conduct 60% review meeting to provide consultant engineer revisions and comments of draft submittals of Tasks 7.5 and 7.5.1. PAM, PEM, Operations Personnel, and other support staff attend meeting. 7 days from Task 7.5.4.	PEM CE		
7.5.9b	Produce minutes, copy all attendees including Contracts Administrator.	CE PEM	APXA 7.5.9b	
7.5.9c	Coordinate a Public Information Meeting regarding the Project, with the Consumer Affairs Manager (CAF) and GAM, if deemed necessary, and with the CTO. Coordinate the development of graphics and other visual aids, information handouts, with the consultant.	PEM CAF GAM CTO		
7.5.9d	Provide copies of media and public information press releases, notices, and pertinent information to the GAM and VP for their review and	GAM PEM		
7.5.9e	Provide press releases and notices to news media as necessary.	GAM		
7.5.9f	Conduct the Public Information Meeting, including a Question & Answer session on Public Concerns on the proposed construction.	CE PEM		
7.5.10	Prior to submittal of 95% bid documents, confirm the most current revisions of the front-end documents to be inserted in the Project Manual. See form PM 7800 checklist for current versions of each section.	CE		PM 7800

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7.5.11	If required, 10 days prior to submittal of 95% documents, draft a letter to EPWID#1 for dewatering permit, for Owner's Project Administration Manager's signature.	CE PAM	APXA 7.5.11	
7.5.12	PEM ensures that the proper review fee is requested from accounting dept, attached to the letter request to EPWID#1, and forwarded timely along with set of plans. A letter of response from the district shall be given to CE as soon as possible, for inclusion in the 95% submittal.	PEM		
7.6	Meet with CA and CE to finalize bid and award schedule, two weeks prior to submittal of 95% documents in accordance with Task 7.8.2.	PEM CE	APXA 8.3	PM 7820
7.7	Forward completed (and corrected) 95% documents to funding agency. Transmittal letter should indicate tentative bid schedule and updated engineers estimate. Copy transmittal letter to PEM. Obtain necessary agency approval via mail or fax. Forward copy to PEM.	CE PEM		PM 7710
7.8	Submit seven sets of 95% completed plans and specs with front-end, along with completed checklist (Form PM 7800), plus other indicated below in Tasks 7.8.1 and 7.8.2, via transmittal letter to the PEM. PEM to forward specs to CA.	CE PEM		PM 7800
7.8.1	Along with Task 7.8, submit two sets of Project Summary Statement (include functional titles of key personnel required for this project, and qualifications definition of each function), Final Engineer's Cost Estimate (ref MS 7810), and Liquidated Damages (ref MS 7811) support letter on Consultant's letterhead, to PEM.	CE	APXA 8.3	MS 7810 A,B,C MS 7811 A,B
7.8.2	Along with Task 7.8, submit updated bid/award schedule with construction milestones, and status of permits and agency contact status (use EPWU standard form PM 7820).	CE		PM 7820
7.9	Utilizing the final cost estimate provided at 95%, generate a Job Request for the proposed construction work, in accordance with Task Section 5 Job Request process.	PEM	APXA 5.1.3 & 8.3	
7.10	Perform a 95% review of the submitted plans and specs. Assure all previous internal comments and requirements have been incorporated. Otherwise, provide CE with a 95% punch list for final revisions.	PEM CA		
7.13	Schedule and conduct 95% review meeting to provide consultant punch list items to be modified or added to the contract documents.	PEM CE		
7.14	Perform final adjustments to the Engineers Cost Estimate if necessary. No further adjustments allowed after 100% submittal.	CE		

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7.15	Based on progress to date & considering the results of the 95% review, make any necessary adjustments to the target bid & award schedule with the CA. Inform PAM of changes.	PEM CE CA		PM 7820
7.16	If required by funding agency, obtain a Site Certificate and General Counsel approval.	PEM		GA 7160
7.17	Submit request for final payment of Design Phase, less Bid Phase, to the PEM. Design Phase services should not include Bid Phase Services Fees. Refer to Section 11 Payment Process.	CE	APXA 6.3.9	
7.18	Submit 100% reproducible plans and original set of Project Manual, including funding agency approval, to the Project Engineer Manager. Include electronic file in Excel format (Bid Form) of Engineer's Estimate.	CE		
7.19	Forward copy of approved Job Request to CA.	PEM		
7.20	Verify that 95% punchlist has been incorporated in 100% bid documents.	PEM		
7.21	Consultant submits Construction Phase Services proposal within 7 working days from the bid opening. Follow same timeline through finalization as shown in Task 4.4.	CE	APXA 4.4 & 9.5	CM 9200 A,B,C
8.0	BID PHASE			
8.2.1	PA to update reports for distribution.	CA PA		
8.3	Prepare the bid package utilizing standard form checklist indicated for Bid Documents and Support Documentation. Attach approved Job Request initiated in Task 7.9.	PEM	APXA 8.3	PM 8300
8.3.1	Denote any special exclusions, deferrals, or notes on checklist items as needed. These may be items that can be addressed by addendum.	PEM		
8.3.2	Obtain joint signatures of PEM and CAM on checklist, prior to forwarding to Contracts Administrator (deferred to Task 8.4).	PEM		
8.3.3	Provide copy of approved checklist with all support documentation, for project filing in the Active Projects Library, to the Engineering Lead Secretary.	PEM ELS		
8.4	Forward 100% sealed original plans and project manual, along with signed checklist form, e-file of Engineer's Estimate, and attached documentation to the CA.	PEM		
8.4.1	Forward electronic files of Project Summary, Engineer's Estimate and Section 00500 to CA.	PEM		
8.5	Perform final quality check on 100% Bid Documents, review the PEM's checklist, including e-file of Engineer's Estimate.	CA		

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8.6	Arrange reproduction and advertising of Bid Documents.	CA		
8.6.1	Reserve a conference room for the Pre-bid meeting.	CA PEM		
8.6.2	Update the Bid Update Report and distribute to Project support staff.	PA CA		
8.6.2.1	PEM provide periodic updates to CA for Bid Schedule update.	PEM CA		
8.6.3	Mail notices to prospective contractors, suppliers, and advertising agencies appearing in the Utility's master mailing list or Engineer's list.	PA		
8.6.4	Arrange handling of the non-refundable charge bid documents.	PA		
8.6.5	Sell and distribute bid sets to potential bidders.	PA		
8.6.6	Reserve bid sets for internal Utility use, in accordance with Bid Document Distribution List provided along with the Bid Check list in Task 8.3 by the PEM.	PA	APXA 8.3	PM 8700
8.6.7	Contact PEM for pickup and distribution of plans and specifications bid sets. PA provides copy to CA. PA makes distribution per PM8700.	PA		PM 8700
8.9	Prepare the Prebid Conference Presentation for the project. Utilize graphics material. (Mandatory)	CE PEM		
8.9.1	Contact and invite key project team members and outside parties, Contracts Administrator, Operations, PCS, and appropriate Engineering personnel to the prebid meeting.	CE PEM		
8.9.2	Conduct the Prebid Conference for prospective bidders. Provide overview of Project and hold Q&A session.	CE PEM		
8.9.3	Record written minutes and specific addenda items to be addressed. Provide copies of the signed attendance list to conference attendees.	CE PEM CA		
8.9.4	Conduct site visits, if necessary. Addendums to follow, if applicable.	CE PEM CA	APXA 7.6.2	
8.10	Issue/Generate Addendum (Draft Addendum should be in Word format)	CE	APXA 8.10	
8.10.1	E-mail the addendum draft to the PEM, who shall copy to CA for joint review and approval. NOTE: If addendum includes drawing specifications, then this type of addendum will be processed.	CE PEM CA		

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8.10.2	CE will be advised of any changes or additions necessary by PEM or CA. CE will update addendum draft & return a Revised/Final Addendum in PDF format to PEM. Final Addenda should be sealed with P.E. signature.	CE CA		
8.10.3	When necessary, acquire written approval of addenda from the appropriate funding agency.	CE		
8.10.4	Ensure that all engineering disciplines involved in the Addendum have signed the Addendum with their respective seals.	PEM		
8.10.5	Provide verbal notification or discussion to the CA of any significant bid procedures impacted by the addenda.	PEM		
8.10.6	Forward final approved addenda, under checklist cover sheet used in 8.3 signed by PEM or PAM, to CA. (Turn-around time to CA is critical - 1 day)	PEM		
8.10.7	PA signs Addendum.	PA		
8.10.8	Retain copies of all addenda. Provide to ELS or clerk for insertion into the Project Manual residing in the APL.	PEM ELS		
8.10.9	Federal Express Mail, e-mail, or FAX addenda to prospective bidders on document pick up list.	PA		
8.12	Conduct Bid Opening. Attended by Utility project and support staff, bidders, & vendors. CE only upon request.	PA		
8.12.1	CE to make arrangements to collect bid documents.	CE		
8.13	Begin three (3) stage evaluation process of the submitted bids: 3 days			
8.13.1	Stage 1: Evaluate responsiveness of bidders relative to bid instructions, submittal format, bid pricing, and minority participation good faith efforts.	CA		
8.13.2	Issue memorandum to CA of findings on compliance or non-compliance with minority participation efforts.	MBS	APXA 8.13.2	
8.13.3	Generate Bid Tabulation with price adjustments/corrections for distribution to CE, PEM, & CA within one working day. Maintain bid security measures and confidentiality of Engineer's estimates and other purchasing	PA		
8.13.4a	If applicable, develop memorandum of Stage 1 evaluation issues and potential roadblocks to award. Distribute to PAM, PEM, and PA.	CA		
8.13.4b	Where bidder submits requests directly to CA to substitute subcontractors, suppliers, or key personnel, or where PEM accepts such substitutions as a pre-award condition, PAM shall immediately inform the CE and CA of such action(s) so that CE can request qualifications backup as required by Section 00100 Qualifications & Financial Disclosure Statement, and for concurrence with CA.	CA CE PEM		

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8.13.6	Provide 2 sets of copies of all submitted bid packages & bid tabulation to the PEM for his review and distribution to CE.	PA PEM		
8.13.7	Monitor and expedite evaluation time frame and recommendation of low bidder, relative to target award date. Otherwise, re-establish PSB meeting date to award.	PEM		
8.13.8	Stage 2: Evaluate responsiveness of low bidder relative to financial information, minimum qualifications and experience, technical merit, et. al. Request back-up data of the apparent low bidder as necessary for evaluation within five days of bid opening. See sample request letter PM 8138. CE shall forward financial information to CA. CA will forward to CFO for Z score.	CE CFO	APXA 8.13.9	MS 8139
8.13.9	Prepare the Bid Recommendation Package (Part 1 documents of a two part document submittal process,) for PSB award as follows:	CE	APXA 8.13.19	
8.13.10	Optional Stage 2B: If low bidder found nonresponsive or nonresponsible, evaluate second low bid relative to criteria as in 8.13.8 above.	CE		
8.13.11	Forward Letter of Recommendation along with other PART 1 documents, including evaluation matrix (MS 8139), financials, et.al. to PEM. PEM copy to CA, CAM, & CTO.	CE PEM	APXA 8.13.9 8.13.19	MS 8139
8.13.12	Stage 3: Review low bids as quality check including consultant's recommendation. Direct consultant to issue final recommendation through PEM. PEM to copy to CAM.	CAM PEM	APXA 8.13.9	MS 8139
8.13.13	Where the recommendation is NOT to award to apparent low bidder, CAM will forward to Legal and CA for review and concurrence.	CAM		
8.13.14	If required, meet with consultant to discuss marginal and possible litigious issues discovered in the evaluation process. CE to address large gaps between low bid amount and his bid estimate.	CAM CA CE		
8.13.15	Optional Stage 3B evaluation is referred to and conducted by the Utility's legal office if the initial evaluations yield unresolvable issues.	LGL		
8.13.19.1	Produce a PSB Agenda Form with the required bid information.	PEM		GA 3219C GA 81319
8.13.19.2	The Public Service Board agenda must be posted for 72 hours prior to the meeting date.	CAF		
8.13.21	Upon a mutually acceptable final recommendation, develop an independent Memo of Concurrence signed by PAM and CAM.	PEM PAM CAM		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
8.13.22	Forward Consultant's Bid Recommendation Package with Part 1 support documents, completed Agenda Form, Bid Tabulation (if available), and Memo of Concurrence to Purchasing Agent's Contracts Office.	PEM		
8.13.23	Review and return comments or corrections if any, to PEM, who finalizes Agenda Form and concurrence memo. PEM returns to Purchasing/Contracts.	CA PEM		
8.14	Purchasing Agent reviews the final recommendation package which includes the Agenda Form, Memo of Concurrence, Consultant's Recommendation and Part 1 support documents, and the Bid Tabulation.	PA		
8.14.1	Purchasing Agent receives recommendation package from PEM, adds the Minority Participation Evaluation, including changes made post-bid pre-award, and forwards to CFO. If CFO, PA or CA believe changes are required on either Agenda Form or Memo of Concurrence, PA shall make necessary changes and return to CFO.	CA CFO PEM	APXA 8.13.9	
8.15	CAF performs final QA/QC and ensures that PEM has obtained signatures from CTO, CFO, VP or Legal, as necessary.	CAF		
8.15.1	CAF copies materials for boardbooks, returns original package to PA.	CAF		
8.16	Place Bid Recommendation of Award on Public Service Board Agenda for next regularly scheduled meeting. Legal Office attaches resolution of award where Commercial Paper Funding requires PSB authorization.	CAF LGL		
8.17	If applicable, issue timely notice to apparent low bidder(s) who will not be recommended for award due to non-responsiveness or non-compliance or non-responsibility. Letter must be in Contractor's possession by the Friday preceding the PSB meeting. Copy to PEM & PA.	LGL		
8.18	Public Service Board awards a contract to the recommended low bidder.	PSB		
8.19	Obtain funding agency's approval of the award, if applicable. Copy to PEM.	PA		
8.20	Provide Notice of Award to awardee with request for bonds, insurance, and other post-award documentation.	PA		GA 8200
8.22	Retain Bonds of the three lowest bidders until issuance of a Notice to Proceed.	PA		
8.24	Begin Construction Contract Process between Utility and Contractor:	PA		
8.24.1	Receive contract documents from the Contractor within 15 days of award.	CA	APXA 8.24.1	
8.24.2	If Contract documents comply, CA sends bonds & insurance documents to Risk Manager (RSM).	CA		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
8.24.3	CA obtains letter from RSM confirming compliance.	CA RSM		
8.24.4	If bid documents do not comply, RSM sends CA information on lacking documents. CA advises contractor by letter. RSM coordinates direct with awardee's insurance agents.	CA RSM		
8.24.5	CA packages all contract documents for review and approval.	CA		
8.24.6	Review final contract documents for errors and omissions.	CA		
8.24.8	PA signs and approves for reproduction and binding.	PA		
8.25	If external funding is involved, send signed contract documents to funding agency.	PA		
8.25.1	Receive approval from agency to issue Notice to Proceed.	PA		
8.26	Notify PEM to schedule preconstruction conference.	PA		
8.28	CA updates all contract and funding databases.	CA		CM 8280
8.28.1	CA establishes bond and insurance databases.	CA		
8.28.2	Obtain all required minority contracts from the prime contractor.	CA		
8.28.3	CA establishes dates, notifies CE & PEM in writing.	CA		
8.28.4	File the required minority participation report with the funding agency, if applicable.	CA		
8.29	CE submits invoice for completion of Bid Services per Section 11 - Payment Process, where applicable.	CE CA	APXA 7.4.0	
9.0	CONSTRUCTION MANAGEMENT PHASE			
9.1	Refer to 7.21 for Contracting Process	PEM		
9.3	Engineering Construction Management and Inspection Services begin on official date of Contractor's Notice to Proceed.			
9.4	Provide <i>Office Engineering Services</i> for Construction Phase activities, as enumerated below and described further in the standard Task Order agreement (see Section 9.18.2 below for Resident Project Representative services):	CE		
9.4.1	The Engineer's Resident Project Representative will observe certain Limitations of Authority as described in the Utility's standard Construction Services Task Order Exhibit A, Section B.aa	RPR		CM 9200A

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.5	Geotechnical Services - see Task 7.21	CE PEM	APXA 9.5	
9.5.1	Where the Owner contracts directly with a qualified geotechnical firm on a rotational basis, the PEM contacts PA for next Geotech on rotational list.	PEM PA		
9.5.2	In the case of 9.5.1 above, the PEM shall obtain quotes from a geotech firm designated by the PA, except that the CAM may designate a firm already retained in the design phase.	PEM CAM		
9.5.3	PEM shall negotiate and obtain least cost unit prices for geotechnical services based on economy of scale for large projects. Forward final proposal to CAM for signature.	PEM		
9.5.4	Forward geotechnical proposal along with Purchase Requisition, signed by the CAM, which indicates final signature authority, to PA for issuance of a Purchase Order in accordance with Task 11.2 Payment Prerequisites process.	PEM		
9.5.5	Ensure that geotech firm attends Pre-construction Conference (see Task 9.10 below).	CE PEM		
9.6	Reserve Conference Room on first floor main office building for the Pre-Con meeting.	CA PEM		
9.7	Develop Pre-Construction Agenda with list of invitees. Copy to PEM for concurrence.	CE		
9.8	PEM provides list of Utility personnel invitees to consultant for inclusion in the agenda. List to include Operations personnel, CA, PCS and GAM, if applicable.	PEM		
9.9	Consultant sends invitation notices to external parties. PEM contacts Utility personnel to attend meeting. Use E-mail notice where possible. See sample Pre-Construction Conference Agenda Form indicated.	CE PEM		PM 9900
9.10	Conduct the Pre-Construction Conference with Contractor, Engineers, representative agencies, and other parties. Standard sign-in sheet to be used.	CE		GA 1050
9.10.1	Utilize standard points of discussion listed in the Appendix Section or per established meeting agenda.	CE PEM		
9.10.2	Address any significant changes made by addenda.	CE PEM		
9.10.3	Provide written minutes of the Conference. Draft due in 3 working days. Final due within 7 days thereafter. Copy to PEM.	CE PEM		
9.10.4	CE copies minutes of meeting to all PAM and PEM.	CE		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.11	PA issues Notice to Proceed to Contractor along with Master Contract and Tax Exempt Certificate. Copy to CA, CE & PEM.	PA		GA 9110
9.12	Begin construction. Also refer to Task 8.23 for official start date.	PEM		
9.13	For purposes of internal Utility quality control and execution of project management objectives, the following project elements* shall be submitted to the PEM within 30 days following a Notice to Proceed to the Contractor.	CE PEM		
9.13.1	* Final Baseline construction schedule indicating key milestones and completion of key elements of the project. (from Contractor)	CE PEM	APXA 9.13.1	
9.13.2	* Final Schedule of Values from the contractor, including unit price or breakdown of lump sum items in the bid proposal. Resubmit any subsequent adjustments as needed. Submit Final Schedule of Submittals.	CE PEM		
9.13.3	* Final list of project personnel for prime contractor, subcontractors, suppliers, and relevant support contacts, with respective phone numbers and addresses.	CE PEM	APXA 9.13.3	
9.13.4	* Master checklist of required contractor submittals by Specification Division as specified in the Project Manual.	CE PEM		
9.13.5	* List of Permits required, by official name and permit number, governing agency, and target dates for submitting or procuring approval.	CE PEM	APXA 7.5.11	
9.13.6	* List of equipment and materials substitutions requested by the contractor to be addressed by the consultant.	CE PEM		
9.13.7	* Other requirements as deemed relevant by the CAM and PEM.	CE		
9.14	Establish and maintain a Project Elements file for submittals in Tasks 9.13.1 to 9.13.7.	PEM	APXA 1.2	GA 1030B
9.15	Provide to PEM relevant correspondence concerning technical or procedural issues between Contractor and Owner, or breaches in construction performance.	CE PEM CA		
9.15.1	Provide to PEM relevant correspondence concerning contractual issues between the Contractor and Owner, and/or requests for clarifications or contractual advice.	CE PEM		
9.15.1a	PEM will confer with CA prior to issuing notice.	PEM CA		
9.15.2	PEM and CA will keep the CAM advised of pending issues and breaches in performance by either Contractor or Consultant.	PEM CA		FC 91520
9.15.3	Provide written correspondence to record and to affected parties regarding key issues and possible impact to critical operations of the Utility, resulting from on-going construction work.	CAM PEM CA		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.16	The Utility's Standard General Conditions and Supplementary General Conditions, available in the Utility's website, and made part of the construction contract, govern, support, and reinforce construction related procedures described in this manual.	CA	APXA 9.16	
9.17.1	Consulting Engineering and Utility Project Support Staff field construction management activities are categorized below into six general areas of performance as a Utility Benchmarking process:		APXA 9.17	
9.18	CONSTRUCTION STARTUP ACTIVITIES:			
9.18.1	Conduct Pre-Construction Meeting as per Tasks 9.10 to 9.10.3. Ensure attendance by PEM, CAM, CA, & Operations Personnel.	CE		
9.18.2	Review and approve the initial & final progress schedule and updates and the schedule of Shop Drawing submittals prepared by the Contractor. Consult with Engineer concerning acceptability. (See Task 9.13)	CE RPR		FC 9182
9.18.3	Record date of receipt of Shop Drawings and sample of materials. Submit to Office Engineer.	RPR		
9.18.4	Review and approve Shop Drawings timely.	CE		
9.18.5	Advise Engineer of the commencement of any work requiring a Shop Drawing or sample if the submittal has not been reviewed and approved by the Engineer. Advise Contractor in writing that he is proceeding at his own risk and will not be paid.	RPR		
9.18.6	Witness videotaping of the project corridor before start of construction and after completion to document pre- and post-construction conditions.	RPR PEM		
9.18.7	Ensure wage rates are posted on site.	RPR		
9.18.8	Verify Contractor has obtained necessary building or site permits.	RPR PEM	APXA 9.18.8 pending	
9.18.9	When applicable, ensure TPDES Permit and SW3P are posted at site and followed by contractor. (Ensure Notice of Termination is included with the close-out package)	RPR PEM		
9.18.10	Establish and maintain for use at the job site, orderly files for correspondence, reports of job conferences, shop drawings & samples, contract documents (addenda, WDCs, Change Orders), RFIs, progress reports, Record Drawings, et. al.	RPR PEM		
9.18.11	Record names, addresses, and telephone numbers of all Contractor, subcontractors, and major suppliers of materials and equipment. Submit as per Task 9.13.3 via CE's Office Engineer. Ensure payrolls for each are tracked in accord w/ time observed on the site.	RPR		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.19	DAILY COORDINATION & RESPONSE:			
9.19.1	Keep daily log, record Contractor's hours on job site, weather conditions, equipment on site, data relative to questions about Work Directive Changes, Change Orders, observations, decisions, et. al. Send copies to CE's Office Engineer.	RPR		FC 9191
9.19.2	Issue instructions from Owner to Contractor, through the RPR, in writing.	CE		
9.19.3	Provide construction administration and supervise field engineering staff for the project as per contract.	CE		
9.19.4	Resolve design related construction problems.	CE		
9.19.5	Attend meetings with Contractor, ie.progress meetings, job conferences, and other project-related meetings, and prepare and circulate copies of minutes thereof. Copy to CE Office Engineer and PEM.	RPR		
9.19.6	Make periodic visits to project site at intervals appropriate to various stages of construction, to observe the quality of the executed work. Report to PEM. Document in progress reports.	CE		
9.19.7	Conduct on-site observations of the Work in progress. Advise CE Office Engineer, if the Work is proceeding in accordance with the Contract Documents.	RPR		
9.19.8	Ensure correctness of record drawing red lines recorded by the Contractor on a daily basis. PEM should spot check at weekly meetings.	RPR PEM	APXA 9.19.8	
9.19.9	Prepare periodic progress photographs and submit one copy set monthly to PEM via CE Office Engineer, along with monthly progress reports.	RPR CE		
9.19.10	Coordinate with State, County, and City Agencies for construction in their jurisdictions.	CE PEM		
9.19.11	Receive and review status reports from testing labs.	RPR		
9.19.12	Schedule field compliance tests and re-tests. Confirm that these tests are conducted in the presence of appropriate personnel.	RPR		
9.19.13	Observe, record, and report the appropriate test results. Maintain records of failed tests and ensure contractor is back-charged for their costs.	RPR		FC 91520
9.19.14	Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project. Record the results of these inspections and report to the PEM.	RPR PEM		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.19.15	Notify the Engineer and PEM whenever Work is believed to be unsatisfactory, faulty, defective, not in conformance with the Contract Documents, damaged, or not meeting the requirements of any inspection, test, or approval required to be made.	RPR		
9.19.16	Review and provide decisions as to the suitability of work to the RPR.	CE		
9.19.17	Advise the Contractor of non-compliance work that Engineer believes should be corrected or rejected; or should be uncovered for observation; or requires special testing, inspection, or approval.	RPR		FC 91917
9.19.18	Serve as Owner's liaison with Contractor, working principally through his superintendent.	RPR		
9.19.19	Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor, clarifications and interpretations as issued by CE Engineer.	RPR		
9.19.20	Engineer will make necessary interpretations and clarifications of Contract Documents and Requests for Information (RFI). Copy to PEM.	CE		
9.19.21	Serve as Owner's liaison with Contractor, when Contractor's operation affects Owner's on-site operations. Obtain from Owner additional details or information when required for proper execution of the work.	RPR		
9.19.22	Coordinate work which affects Owner's system.	RPR PEM		
9.19.23	Notify PEM thru CE Office Engineer immediately upon the observation or notification of any accident.	RPR CE		FC 91922
9.19.24	Coordinate Contractor request for Owner field support work. Keep logs of Utility work. Issue back-charge notice & obtain Contractor's signature.	RPR PEM		FC 91924
9.19.25	Conduct employee interviews for wage compliance verification. Two (2) from Prime and one (1) from each Sub monthly.	?		
9.20	WORK DIRECTIVE CHANGES (WDC) and CHANGE ORDERS:			
9.20.1	Consider and evaluate modifications needed to drawings or specifications and transmit recommendations to CE Office Engineer.	RPR		
9.20.2	Obtain backup material to substantiate WDC. (Coordinate with PEM)	RPR PEM		FC 9202 A,B
9.20.3	Prepare Work Directive Changes . WDCs shall include Engineer's Estimate of Probable Cost, back-up material, the probable impact to time (or lack thereof), Summary of Cumulative WDC & CO costs, and require the signature of the Owner at the level authorized by Owner's Administrative Instruction No. 1, as revised.	CE	APXA 9.20.3	CM 9203A CM 9203B

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.20.4	Utilize standard EPWU Project WDC form and format. Submit 3 sets of the WDC, signed by the Consultant's Engineer of Record, to the CA thru the PEM.	CE	APXA 9.20.3	CM 9203A CM 9203B
9.20.6	Review WDC for technical content, contractual impact, effect on schedule and project costs, and method of pricing. If approved, forward to CAM for signature.	PEM		
9.20.7	If WDC impacts the construction budget, verify availability of funds with the CAM.	PEM		
9.20.8	Return WDC revisions required to the Consultant for revision and resubmittal of the WDC, if any.	CAM PEM		
9.20.9	If the cumulative amount of estimated changes to date is less than 15% of the Original Contract, the CAM signs the WDC as the final signature authority. Proceed to Task 9.20.12.	CAM		
9.20.11	Review Work Directive Changes for content, contractual impact, intent, method of determining change in Contract Price and Time, verify if cumulative amount of estimated changes is less than, equal or greater than 15% of Original Contract. Inform CAM & PEM.	CA		
9.20.12	CA files one copy in the Contract file, forwards two approved copies to the Consultant, and provide copy to PEM.	CA		
9.20.13	Subsequently, negotiate the cost of each WDC and incorporate such changes to a proposed Change Order , with appropriate documentation attached, for Owner's written acceptance.	CE PEM CAM	APXA 9.20.17	CM 92017 A,B
9.20.14	Perform and attach a cost-price analysis to support the recommendation.	CE		
9.20.15	Attach Engineer's summary report on methods used and outcome of negotiations, whether based on unit prices in the contract, lump sum, time and materials, or other, consistent with the WDC method of determining change in Contract Price indicated therein.	CE		
9.20.16	Indicate in the summary report, justification for the change, impact to cost and time extensions or reductions. Categorize the change on the Change Order form.	CE		
9.20.17	Indicate original and adjusted contract amounts, original and adjusted substantial and final completion days and dates in the Change Order.	CE		
9.20.18	Attach all related written communications concerning negotiations between Consultant and Contractor, to the Change Order.	CE		
9.20.19	Change Order shall be signed by the Consultant's Engineer of Record. Submit three (3) signed sets of the complete Change Order package with documentation to the CA thru PEM.	CE		

	TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
	9.20.20	Receive and review Change Orders for compliance with these procedures and other written directives, check for completeness, format, accuracy of information.	CA		
	9.20.21	If incomplete data are evident in the Change Order, notify the PEM, then contact Consultant, or return package, for corrections and resubmittal.	CA PEM		
	9.20.22	Consultant obtains approval of the Change Order from TWDB or other funding agency as may be required. Provide copy of approval to CA along with the packaged documentation thru PEM.	CE		
	9.20.23	CA attaches cover summary sheet to Change Order package, forwards to CAM for signature approvals.	CA		CM 92027
	9.20.24	PEM reviews Change Order for technical merit and accuracy, categorizes each change by memo to CA, acceptability of price and/or contract time changes, checks Substantial and Final adjusted date windows in the Change Order, approves and forwards to CAM for signature with cover sheet.	PEM		
	9.20.25	PEM consults with CAM to verify sufficient funds are available for the Change Order amount. Signature by CAM confirms funds available.	PEM		
	9.20.26	If the cumulative amount of changes to date (including previous C.O.s) is less than 25% of the original contract and does not represent a material change in the scope, the CEO signs the Change Order as the final signature authority. Proceed to Task 9.20.28.	CAM		
	9.20.27	If the cumulative amount of the changes is greater than 25% of the original contract or represents a material change in the scope, forward to Legal & CEO.	CAM		
	9.20.28	CEO returns Change Order to CA, who retains one original in the Contract file, forwards two approved originals to the consultant for delivery of one original to Contractor, and sends one copy to PEM. Order revision to P.O. and Change Order History.	CTO/ COO CA		
	9.20.29	Consultant forwards copy of approved Change Order to Contractor.	CE		
	9.21	PROGRESS AND PAYMENT REQUEST DELIVERABLES			
	9.21.1	Prepare monthly reports of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawings and sample submittals. Submit to Office Engineer reports with invoices and payrolls on a monthly basis.	RPR		MS 9211B
	9.21.2	Provide monthly activities and progress reports of the construction, along with Consultant's monthly invoice for payment of Engineering Services to CA.	CE		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.21.3	Review and recommend to Engineer approval of payment requests made by the Contractor, in accordance with criteria described in Task 11.3.37 of the Payment Process.	RPR		
9.21.4	In accordance with Task 11.3.37 Payment Process, approve amounts of progress payments due to Contractor based on completion of work and recommend issuance of such payments by the Owner. Transmit with Contractor's and Subcontractor's payrolls to CA.	CE		
9.21.5	PCS processes payments in accordance with Task 11.3.48 Payment Process.	PCS		
9.22	ACCEPTANCE TESTING, INSPECTIONS, AND CERTIFICATION			
9.22.1	Verify Certificates, Maintenance & Operation Manuals, and other data applicable to the items actually installed and are in accordance with Contract Documents. Forward to CE for delivery to PEM.	RPR		
9.22.2	Notify Owner in advance of scheduled major tests, inspections, or start of important phases of the Work. Coordinate with Owner's operations staff.	RPR PEM		
9.22.3	Verify that tests, equipment, system start-ups, and operating and maintenance training are conducted in the presence of appropriate personnel, and Contractor maintains adequate records thereof.	RPR PEM		
9.22.4	Observe, record, and report to the Office Engineer appropriate details relative to the test procedures and start-ups.	RPR		
9.22.5	Witness testing of facilities.	RPR CE		
9.22.6	Recommend issuance of Certificate of Substantial Completion by Engineer. Attach a list of observed items (punch list) requiring completion or correction, and a list of closeout documents. Re: Appendix A.	RPR CE	APXA 9.22.6	CM 9220A 9220B
9.22.7	Conduct substantial completion inspection walk-through of the project with Contractor. PEM to be invited.	CE		
9.22.8	Notify the Consulting Engineer of any claims filed against the Contractor.	PCS		
9.22.9	Obtain resolution on SRF non-compliance requirements from the Contractor and outstanding liens prior to issuing the Substantial Completion Certificate.	CE		
9.22.10	Issue 3 originals of Engineer's Certificate of Substantial Completion, including punch list information, to CA for CAM's signature. Contractor's Retainage shall not be reduced below 5% without the consent of the	CE	APXA 9.22.6	CM 9220A
9.22.10a	CAM notifies CEO, VP, CTO/COO, and CFO of Substantial Completion.	CAM		PM 9221

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.22.11	Attend final inspection in the company of the Engineer, Owner, and Contractor and prepare a final list of items to be completed or corrected.	RPR		
9.22.12	Ensure that all items on final list have been completed or corrected and make recommendations to the Engineer to issue the Certificate of Final Completion for Owner's signature.	RPR	APXA 9.22.13	
9.22.13	Perform final inspection of the Project as indicated in 9.22.12. Prepare Engineer's Certificate of Final Completion for the Project recommending acceptance. Do not issue to Owner until all final close-out requirements are met. Attach Verification Form CM 9225B to certificate and submit jointly.	CE	APXA 9.22.13 GC 14.12	CM 9225A CM 9225B
9.23	CLOSE-OUT AND POST-CONSTRUCTION ACTIVITIES			
9.23.1	Compile and organize close-out documents and other requirements as further enumerated below *. Refer to Appendix for definitions and additional discussion on these requirements. Deliver to CM thru PEM.	CE PEM	APXA 9.23.1 pending	
9.23.2	* Engineer's Certificate of <i>Substantial and Final</i> Completion			CM 9220A,B & 9225A,B
9.23.3	* Contractor's <i>Waiver of Lien</i>			CM 9233
9.23.4	* <i>Release of Liens</i> from all subcontractors and suppliers			CM 9234
9.23.5	* <i>Certified Payroll</i> for entire contract period from Contractor and Subcontractors			
9.23.6	* <i>Completed Operations Insurance</i> for at least 2 years after final payment (GC 5.3)			
9.23.7	* <i>Consent of Surety to Final Payment</i> , if any (GC 14.12)			CM 9237
9.23.8	* Operation and Maintenance Manuals & Instructions			
9.23.9	* Warrantees and Guarantees			
9.23.10	* Certificates of Inspection and Building Release or Occupancy Permits			
9.23.11	* Marked-up Record Drawings (red lines) from the Contractor			

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
9.23.12	* Record mylar drawings reviewed for correctness, by the Design Engineer(s) for each discipline, using Contractor's redlines and field observations. Provide minimum 3-mil mylar set and CADD disk. Deliver under letter of transmittal signed by the Engineer. PEM will perform a QA-QC review of record drawings.	CE PEM	APXA 9.23.13	
9.23.13	* Legible copies of inspector daily logs for the total project duration			
9.23.14	* Tools, small equipment, computer programs or accessories, spare parts, keys, touch-up paint, and other requirements defined in the Supplementary General Conditions and/or the Technical Specifications			
9.23.15	Deliver to the CA, 2 originals of the Certificate of Final Completion executed by the Engineer of Record, along with a complete set of close-out documents and other deliverables enumerated above.	CE CAM	APXA 9.22.13	
9.23.16	Review, approve, and forward final Contractor's request for payment to the CA. Refer to Task 11.3.37 Payment Process and Task 11.3.51.	CE	APXA	
9.23.17	Prepare and submit an Evaluation of Contractor's Performance on the project to the CA, copy to PEM.	CE	APXA 9.23.18	PM 9240
9.25	For TWDB funded projects, obtain Resolution of project acceptance from PSB. Forward approved resolution to TWDB agency for approval of final release of payment.	PEM LGL CA	APXA 9.25	
9.27	If applicable, arrange for Texas Water Development Board approval to release retainage.	CAM		
9.29	Following acceptance by the PSB, complete the close-out process in conjunction with the Consulting Engineer, who has primary responsibility for this function.	CA		
9.30	Following completion of the close-out activities, process the Contractor's final invoice for payment (see Section 11 Payment Process).	CA		
9.31	Process final invoice for payment of CE's construction phase services per Section 11 payment process. Verify submittal of Evaluation of Contractor's Performance (Task 9.23.17) as a condition of payment.	CA PEM		
9.33	Move all pertinent information to the Engineering files.	PEM		
9.34	Distribute Project Close-out submittals to applicable internal archives and Operations personnel using standard transmittal form indicated.	PEM		PM 9340

	TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
	10.0	WARRANTY PHASE			
	10.1	Upon distribution of close-out manuals to Operations personnel, forward a copy of Remedy Of Work form to the Facility Manager in charge of the completed facility for future use in addressing malfunctions, defects in equipment or work, and other warranty issues during one year from completion of the project.	PEM		PM 1010
	10.2	Schedule and insert notice flag in computer organizer at 60 and 30 days prior to end of warranty period that will prompt PEM to contact CE and Operations personnel of upcoming warranty walk or to address pending issues affecting any warranty items.	PEM		
	10.3	Upon notice by Operations personnel of a defect or need for Remedy of Work discovered during the one-year warranty period, provide written notice to the Contractor, copy to Consultant and CA, of such need, directing him to repair or correct the defect or malfunction as required under the warranty provisions of the Contract.	PEM		
	10.4	CA along with CAM address warranty issues that may arise.	CA CAM		
	10.4.1	On any TWDB funded project, participate in the warranty certification process one year from the date of substantial completion.	CAM CA		
	10.5	All requests for Remedy of Work shall be investigated and confirmed as justifiable and that warranty conditions have not been inadvertently waived or breached by the actions of Utility personnel, prior to issuing written notice.	PEM CAM		
	10.6	Requests for Remedy of Work that is contested or denied by the responding contractor shall be referred to the Utility's legal department, with a written synopsis of the problem and justification for pursuing such remedy. Copy to CA.	PEM		
	10.7	All issues and legal matters concerning the necessity for remedy under warranty conditions shall be expedited and resolved within a 30 day window. Copy to CA and Facility Manager of written resolution of issue.	LGL PEM		
	10.8	Prompt the Consultant Engineer and Facility Manager to follow up at least thirty (30) days prior to the end of the warranty period.	PEM		
	10.9	Conduct a warranty inspection of the project within 30 days before end of one year from the date of Substantial Completion, and submit a written report to the CA via PEM.	CE		
	10.10	Provide notice to the Facility Manager in charge of the facility of outstanding defective work, equipment, or malfunction disclosed during the warranty inspection, and obtain his or his staff's concurrence of said warranty issues.	PEM		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
10.11	Proceed with notice to Contractor and follow up as provided for in Task 10.3 to 10.7.	PEM		
11.0	PAYMENT PROCESS			
11.1	This section describes the differing actions to be taken for handling and completing payments for services or products as related to the Project Management workflow.			
11.1.1	If Payment Prerequisites indicated below in Task 11.2 have been completed, proceed to processing of Invoices Task 11.3.	PEM		
11.2	PAYMENT PREREQUISITES: Purchase Order and/or Master Contract			
11.2.1	Under certain conditions and Utility purchasing procedures established by the PA, initiate and complete a Purchase Order and/or Master Contract through a Purchase Requisition for goods or services required for the Project. Consult internal procedures (Appendix) for limitations or cases where not required.	PEM		
11.2.2	Forward the Purchase Requisition to the PA through PeopleSoft for action.	PEM		
11.2.3	No requisition is necessary for Bid Contracts or Engineering Services Contracts. Such contracts are in lieu of requisition but require memorandum by CA for Engineering Services, or from CAM for geotechnical or other special services, to the Purchasing Agent via PEM.			
11.2.4	Upon receipt of requisition, or Bid Contract, or Engineering Services memoranda, generate an official Purchase Order/Master Contract that will authorize the recipient provider to render such goods or services.	PA		
11.2.5	The Utility's requester for such goods or services must provide an approved project account number, and other information noted in a purchase requisition if applicable, to the Purchasing Agent as a prerequisite for generating and issuing a Purchase Order/Master Contract.	PEM PA		
11.2.6	The PCS issues a memorandum to the Purchasing Agent requesting a Purchase Order/Master Contract issuance for Engineering Services Task Orders (refer to Task 4.13).	PCS		
11.2.7	The Purchasing Agent generates and issues an internal Master Contract to obligate funds for Bid Construction Contracts, to be issued to the successful low bid contractor awarded the Contract.	PA		
11.2.8	Master Contract shall indicate description of project as shown in the Bid Documents, account number, and other special or standard delivery conditions established in the Contract specifications.	PA		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
11.2.9	The signature authority for Purchase Requisitions, Purchase Orders, and Master Contracts shall be in accordance with the current issue of the Utility's Administrative Instruction No. 1 as incorporated in PeopleSoft.			
11.2.10	Forward Master Contract to recipient provider. Send copies to PCS or PEM via distribution list as may be appropriate.	PA		
11.2.11	Maintain copy of Purchase Orders for Construction Contracts, Engineering Services, or other project related requests in the Contract File.	CA		
11.3	INVOICES, RECEIVING TICKETS, PAYMENT			
11.3.1	Categorize type of invoice per the following (*):	CE PEM CA		
11.3.2	* Type 2: Professional Services			
11.3.3	* Type 3: Construction Contracted Work (includes Contractor's Request for Payment Applications)			
11.3.4	The signature authority for Invoices and Receiving Tickets (Acceptance of Goods & Services) shall be in accordance with the current issue of the Utility's Administrative Instruction No. 1.			
11.3.5	Review all project related invoice types for data completeness, such as origin, date, project name, EPWU account no. where applicable, quantities and values, prior to forwarding to Utility personnel.	CE		
11.3.6	For Type 2 invoice, attach consultant's monthly progress report to the invoice. Progress reports are due by the 10th of each month whether or not an invoice is submitted and only if there is activity on the Project.	CE		
11.3.7	For Type 3 invoice, review and approve Progress Payment Requests in accordance with Task 9.21 deliverables by the Contractor.	CE		
11.3.8	Attach letter of transmittal for all invoice types. See Types 2 & 3 below for other requirements.	CE		
11.3.9	Forward Type 2 and 3 invoices and/or Requests for Payment to the CA.	CE PEM	APXA 11.3.11	
11.3.10	* Type 2 Invoice Process for Professional Engineering or related services (if not applicable, proceed to Task 11.3.37:			
11.3.11	Receive Professional Services invoice(s) and monitor for accuracy and completeness. Refuse payment if information is missing or inaccurate. Contact the responsible party for corrections.	PCS		
11.3.12	Ensure that Progress Reports for Professional Services accompany each monthly Professional Services invoice.	PCS		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
11.3.13	Receive and retain copies of transmittal letters for all deliverables made to the PEM.	PCS		
11.3.14	Calculate and stamp the interest accrual date on application for payment of Professional Services.	PCS		
11.3.15	Review all documents for contractual compliance.	PCS		
11.3.16	Check amounts requested against total contract amount, previous payments, % complete per progress reports.	PCS		
11.3.17	Ensure correctness of wage rates for each consultant's labor classification shown in the Task Order agreement.	PCS		
11.3.18	In cases of non-compliance with the contractual requirements, send the appropriate letter to the consultant, and stop the clock on the prescribed time frames. Copy letter to PEM.	PCS	APXA 11.3.9	
11.3.19	Consultant corrects, revises, and resubmits invoice.	CE		
11.3.20	Date/stamp any resubmittals caused by non-compliance or other factors and events.	PCS		
11.3.21	Based on compliance by the Consulting Engineer, restart the clock on the project when appropriate.	PCS		
11.3.22	Forward invoice for approval, to PEM under cover of a receiving ticket (Acceptance of Goods and Services).	PCS		
11.3.23	Develop, maintain, and forward to PEM an updated Task Order and Payment status spreadsheet accompanying each monthly invoice.	PCS		
11.3.24	PEM reviews invoice, notes the progress, agrees on % completion and amount, approves and signs receiving ticket, returns to Contracts Office.	PEM		
11.3.25	If corrections are required, provide explanation to PCS and direct PCS to return invoice for resubmittal with corrections. (See discussion in Task 11.3.9)	PEM	APXA 11.3.9	
11.3.26	Ensure that the approved invoice is received and properly filed for Contracts Department reference.	PCS		
11.3.27	Update the funds database as necessary.	PCS		
11.3.28	Update the invoice log.	PCS		
11.3.30	Forward original invoice with approvals to accounting section for payment. See Section 11.3.69 for continuation of this process.	PCS		
11.3.31	* Type 3 Invoice Process for Construction Contractor Work.			

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
11.3.32	The Utility's Standard General Conditions (and Supplements) Section 14, residing in the Appendix of this manual, shall govern all procedures for Progress Payment to the Contractor. The procedures herein are intended to reflect the intent of the GC section.			
11.3.33	Review and approve the Contractor's estimate of the amount of work completed to date.	RPR		
11.3.34	Review the Contractor's estimate of stored materials delivered to the job site but not incorporated in the Work completed to date. Ensure that invoice for materials is attached.	RPR		
11.3.35	Ensure receipt in next month's pay application of paid invoice for stored materials approved in previous month's application for payment.	RPR		
11.3.36	Ensure the Contractor and Subcontractor payrolls accompany each request. Check for compliance with Wage Rate Schedule, perform periodic Employee Site Interviews using Record of Employee Interview form indicated. Turn in to Owner monthly via the Office Engineer.	RPR		CM 11342
11.3.37	Consultant receives Contractor's monthly Application for Payment with Contractor's and Subcontractor's certified payroll record and progress schedule.	CE	APXA 11.3.9	CM 11343 A,B
11.3.38	Ensure wage and payroll compliance requirements per Owner's Supplementary Conditions Section 6.14.3.	CE		
11.3.39	Ensure application is submitted on Owner's standard form from Contractor.	CE		
11.3.40	Check payment request for math accuracy and concur with % work completed, stored materials documentation, and ensure stored materials invoices are attached.	CE		
11.3.41	Adjust payment amount to reflect failed testing not payable, or deductions for costs chargeable for Utility assistance, or for claims or liens filed. (See Standard General Conditions, Section 14.7)	CE		
11.3.42	Deduct amounts claimed for change order work completed, where such Change Order has not been approved by the Public Service Board or is pending such approval.	CE		
11.3.43	Obtain Contractor's concurrence on adjustments, or direct him to resubmit.	CE		
11.3.44	Applications denied shall be returned to the Contractor no later than 10 days after its receipt by the RPR.	CE	APXA 11.3.9	

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
11.3.45	Ensure 5% retainage of monthly payment, except if a greater or lesser percentage may be allowed according to State law, subject to approval, for project balances in excess of \$1,000,000, or if a Change Order approval is pending. Zero retainage for final payment.	CE	APXA 11.3.45	
11.3.46	Provide recommendation of payment to Owner, along with documentation as noted above beginning with Tasks 11.3.39 thru 11.3.42, along with transmittal letter signed by the Engineer. Submit 3 sets.	CE	APXA 11.3.46	
11.3.47	Final Application for payment is accepted by Consultant only after close-out procedures described in Task 9.23 are complete.	CE		
11.3.48	Receive Contractor Application for Payment and monitor for accuracy and completeness. Refuse payment if information is missing or inaccurate. Contact the Consulting Engineer to obtain corrections from Contractor.	PCS		
11.3.49	Receive and retain copies of transmittal letters for all deliverables made to the Project Engineer Manager.	PCS		
11.3.51	Calculate and stamp the interest accrual date on application for payment on construction services.	PCS		
11.3.52	Review all documents for contractual compliance.	PCS		
11.3.53	Check amounts requested against total Contract amount & previous payments.	PCS		
11.3.54	Check payroll against the wage determination for the prime contractor and his subcontractors. This function to be transferred to Consultant with specific guidelines established by CAM & CA.	PCS		
11.3.55	Insure stored materials amount does not exceed required amount for stored materials and materials in transit insurance.	PCS	APXA 11.3.46	
11.3.56	Receive and review any materials and billing exceptions from the Consulting Engineer.	PCS		
11.3.57	If no adjustments necessary, forward Pay Request under cover of a receiving ticket to PEM for approval. Proceed to Task 11.3.69.	PCS		
11.3.58	In cases of non-compliance with the contractual requirements, send the payment request back to consultant and advise him to return to contractor for correction. Stop the clock on the prescribed time frames. Inform PEM of this action.	PCS		
11.3.59	Consultant obtains corrected pay request and resubmits.	CE		
11.3.60	Date, stamp, any resubmittals caused by non-compliance or other factors and events.	PCS		

TASK SECTION	TASK DESCRIPTION	RESP PRTY	EXTD REFR	REFR FORM
11.3.61	Based on compliance by the Contractor, restart the clock on the project when appropriate.	PCS		
11.3.62	PEM reviews Application for Payment for project cost monitoring, progress completion, content, value completed, et.al. Signs receiving ticket. Forwards to CAM for signature.	PEM		
11.3.63	CAM reviews payment application for procedural, authorization level conformance, general content, amount of disbursement for budget control.	CAM		
11.3.64	CAM signs application and forwards to Contracts Office.	CAM		
11.3.65	Process payments as they are approved. Ensure approved invoice is received and properly filed for Contracts Department reference.	PCS		
11.3.66	Update the funds database as necessary.	PCS		
11.3.67	Update the invoice log.	PCS		
11.3.69	Forward original Payment Request invoice with approvals to Accounting Section for payment.	PCS		
11.3.70	Accounting Section pays Type 2 invoices no later than 30 days from stamped date of receipt in the Contracts Office. Type 3 invoices are to be paid 30 days from date of receipt by CE. Payment mailed out.	ACS		