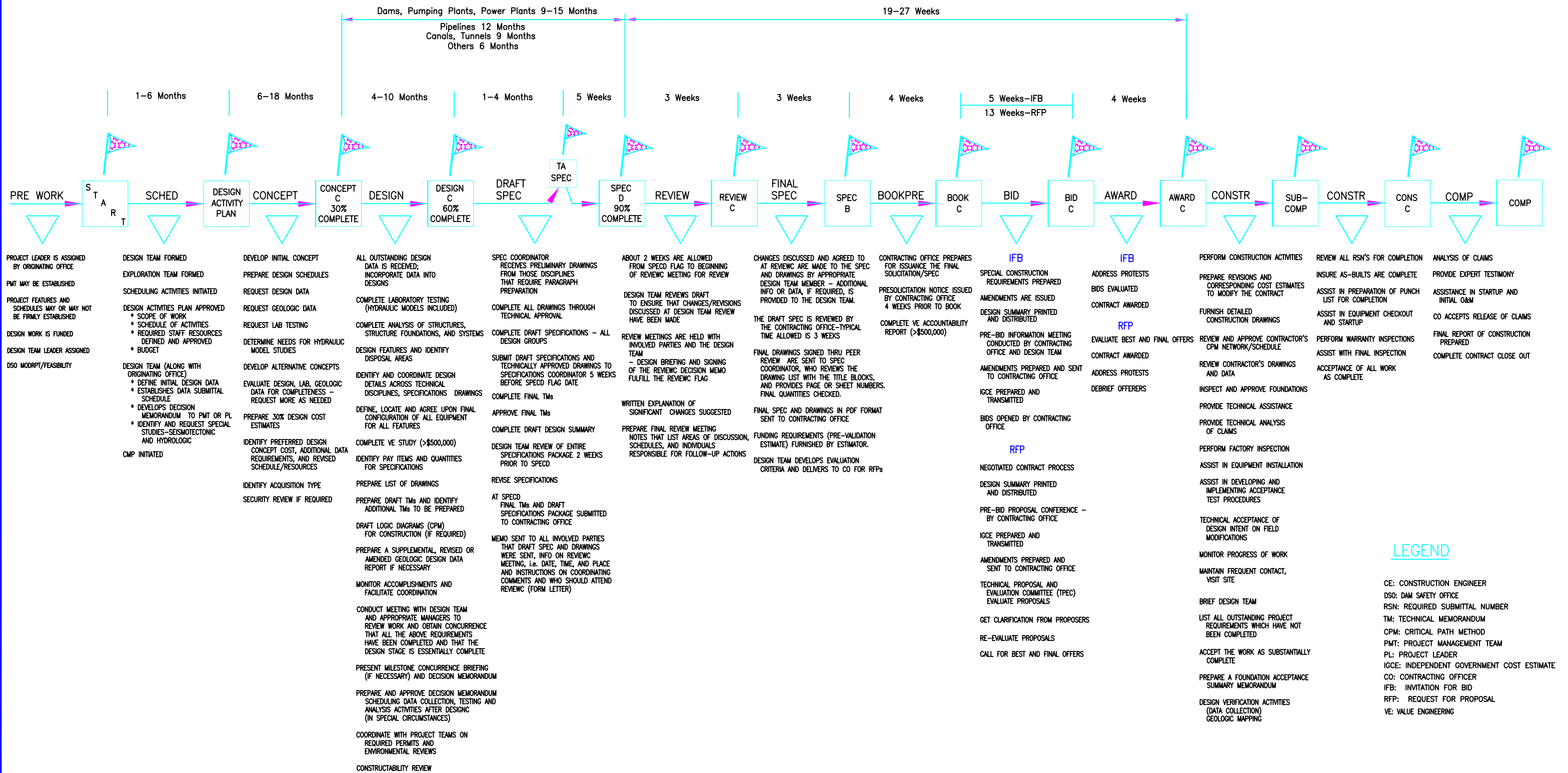


FINAL DESIGN PROCESS GENERAL FLOW CHART

COORDINATION ACTIVITIES



PROJECT LEADER IS ASSIGNED BY ORIGINATING OFFICE
PMT MAY BE ESTABLISHED
PROJECT FEATURES AND SCHEDULES MAY OR MAY NOT BE FIRMLY ESTABLISHED
DESIGN WORK IS FUNDED
DESIGN TEAM LEADER ASSIGNED
DSO MODRPT/FEASIBILITY

DESIGN TEAM FORMED
EXPLORATION TEAM FORMED
SCHEDULING ACTIVITIES INITIATED
DESIGN ACTIVITIES PLAN APPROVED
* SCOPE OF WORK
* SCHEDULE OF ACTIVITIES
* REQUIRED STAFF RESOURCES DEFINED AND APPROVED
* BUDGET
DESIGN TEAM (ALONG WITH ORIGINATING OFFICE)
* DEFINE INITIAL DESIGN DATA
* ESTABLISHES DATA SUBMITTAL SCHEDULE
* DEVELOPS DECISION MEMORANDUM TO PMT OR PL
* IDENTIFY AND REQUEST SPECIAL STUDIES-SEISMOTECTONIC AND HYDROLOGIC
CMP INITIATED

DEVELOP INITIAL CONCEPT
PREPARE DESIGN SCHEDULES
REQUEST DESIGN DATA
REQUEST GEOLOGIC DATA
REQUEST LAB TESTING
DETERMINE NEEDS FOR HYDRAULIC MODEL STUDIES
DEVELOP ALTERNATIVE CONCEPTS
EVALUATE DESIGN, LAB, GEOLOGIC DATA FOR COMPLETENESS - REQUEST MORE AS NEEDED
PREPARE 30% DESIGN COST ESTIMATES
IDENTIFY PREFERRED DESIGN CONCEPT COST, ADDITIONAL DATA REQUIREMENTS, AND REVISED SCHEDULE/RESOURCES
IDENTIFY ACQUISITION TYPE
SECURITY REVIEW IF REQUIRED

ALL OUTSTANDING DESIGN DATA IS RECEIVED; INCORPORATE DATA INTO DESIGNS
COMPLETE LABORATORY TESTING (HYDRAULIC MODELS INCLUDED)
COMPLETE ANALYSIS OF STRUCTURES, STRUCTURE FOUNDATIONS, AND SYSTEMS
DESIGN FEATURES AND IDENTIFY DISPOSAL AREAS
IDENTIFY AND COORDINATE DESIGN DETAILS ACROSS TECHNICAL DISCIPLINES, SPECIFICATIONS DRAWINGS
DEFINE, LOCATE AND AGREE UPON FINAL CONFIGURATION OF ALL EQUIPMENT FOR ALL FEATURES
COMPLETE VE STUDY (>\$500,000)
IDENTIFY PAY ITEMS AND QUANTITIES FOR SPECIFICATIONS
PREPARE LIST OF DRAWINGS
PREPARE DRAFT TMs AND IDENTIFY ADDITIONAL TMs TO BE PREPARED
DRAFT LOGIC DIAGRAMS (CPM) FOR CONSTRUCTION (IF REQUIRED)
PREPARE A SUPPLEMENTAL, REVISED OR AMENDED GEOLOGIC DESIGN DATA REPORT IF NECESSARY
MONITOR ACCOMPLISHMENTS AND FACILITATE COORDINATION
CONDUCT MEETING WITH DESIGN TEAM AND APPROPRIATE MANAGERS TO REVIEW WORK AND OBTAIN CONCURRENCE THAT ALL THE ABOVE REQUIREMENTS HAVE BEEN COMPLETED AND THAT THE DESIGN STAGE IS ESSENTIALLY COMPLETE
PRESENT MILESTONE CONCURRENCE BRIEFING (IF NECESSARY) AND DECISION MEMORANDUM
PREPARE AND APPROVE DECISION MEMORANDUM SCHEDULING DATA COLLECTION, TESTING AND ANALYSIS ACTIVITIES AFTER DESIGNC (IN SPECIAL CIRCUMSTANCES)
COORDINATE WITH PROJECT TEAMS ON REQUIRED PERMITS AND ENVIRONMENTAL REVIEWS
CONSTRUCTABILITY REVIEW

SPEC COORDINATOR RECEIVES PRELIMINARY DRAWINGS FROM THOSE DISCIPLINES THAT REQUIRE PARAGRAPH PREPARATION
COMPLETE ALL DRAWINGS THROUGH TECHNICAL APPROVAL
COMPLETE DRAFT SPECIFICATIONS - ALL DESIGN GROUPS
SUBMIT DRAFT SPECIFICATIONS AND TECHNICALLY APPROVED DRAWINGS TO SPECIFICATIONS COORDINATOR 5 WEEKS BEFORE SPEC D FLAG DATE
COMPLETE FINAL TMs
APPROVE FINAL TMs
COMPLETE DRAFT DESIGN SUMMARY
DESIGN TEAM REVIEW OF ENTIRE SPECIFICATIONS PACKAGE 2 WEEKS PRIOR TO SPEC D
REVISE SPECIFICATIONS
AT SPEC D
FINAL TMs AND DRAFT SPECIFICATIONS PACKAGE SUBMITTED TO CONTRACTING OFFICE
MEMO SENT TO ALL INVOLVED PARTIES THAT DRAFT SPEC AND DRAWINGS WERE SENT, INFO ON REVIEW MEETING, I.E. DATE, TIME, AND PLACE AND INSTRUCTIONS ON COORDINATING COMMENTS AND WHO SHOULD ATTEND REVIEWC (FORM LETTER)

ABOUT 2 WEEKS ARE ALLOWED FROM SPEC D FLAG TO BEGINNING OF REVIEWC MEETING FOR REVIEW
DESIGN TEAM REVIEWS DRAFT TO ENSURE THAT CHANGES/REVISIONS DISCUSSED AT DESIGN TEAM REVIEW HAVE BEEN MADE
REVIEW MEETINGS ARE HELD WITH INVOLVED PARTIES AND THE DESIGN TEAM - DESIGN BRIEFING AND SIGNING OF THE REVIEWC DECISION MEMO FULFILL THE REVIEWC FLAG
WRITTEN EXPLANATION OF SIGNIFICANT CHANGES SUGGESTED
PREPARE FINAL REVIEW MEETING NOTES THAT LIST AREAS OF DISCUSSION, SCHEDULES, AND INDIVIDUALS RESPONSIBLE FOR FOLLOW-UP ACTIONS

CHANGES DISCUSSED AND AGREED TO AT REVIEWC ARE MADE TO THE SPEC AND DRAWINGS BY APPROPRIATE DESIGN TEAM MEMBER - ADDITIONAL INFO OR DATA, IF REQUIRED, IS PROVIDED TO THE DESIGN TEAM.
THE DRAFT SPEC IS REVIEWED BY THE CONTRACTING OFFICE-TYPICAL TIME ALLOWED IS 3 WEEKS
FINAL DRAWINGS SIGNED THRU PEER REVIEW ARE SENT TO SPEC COORDINATOR, WHO REVIEWS THE DRAWING LIST WITH THE TITLE BLOCKS, AND PROVIDES PAGE OR SHEET NUMBERS. FINAL QUANTITIES CHECKED.
FINAL SPEC AND DRAWINGS IN PDF FORMAT SENT TO CONTRACTING OFFICE
FUNDING REQUIREMENTS (PRE-VALIDATION ESTIMATE) FURNISHED BY ESTIMATOR.
DESIGN TEAM DEVELOPS EVALUATION CRITERIA AND DELIVERS TO CO FOR RFPs

CONTRACTING OFFICE PREPARES FOR ISSUANCE THE FINAL SOLICITATION/SPEC
PRESOLICITATION NOTICE ISSUED BY CONTRACTING OFFICE 4 WEEKS PRIOR TO BOOK C
COMPLETE VE ACCOUNTABILITY REPORT (>\$500,000)

IFB
SPECIAL CONSTRUCTION REQUIREMENTS PREPARED
AMENDMENTS ARE ISSUED
DESIGN SUMMARY PRINTED AND DISTRIBUTED
PRE-BID INFORMATION MEETING CONDUCTED BY CONTRACTING OFFICE AND DESIGN TEAM
AMENDMENTS PREPARED AND SENT TO CONTRACTING OFFICE
IGCE PREPARED AND TRANSMITTED
BIDS OPENED BY CONTRACTING OFFICE
RFP
NEGOTIATED CONTRACT PROCESS
DESIGN SUMMARY PRINTED AND DISTRIBUTED
PRE-BID PROPOSAL CONFERENCE - BY CONTRACTING OFFICE
IGCE PREPARED AND TRANSMITTED
AMENDMENTS PREPARED AND SENT TO CONTRACTING OFFICE
TECHNICAL PROPOSAL AND EVALUATION COMMITTEE (TPEC) EVALUATE PROPOSALS
GET CLARIFICATION FROM PROPOSERS
RE-EVALUATE PROPOSALS
CALL FOR BEST AND FINAL OFFERS

IFB
ADDRESS PROTESTS
BIDS EVALUATED
CONTRACT AWARDED
RFP
EVALUATE BEST AND FINAL OFFERS
CONTRACT AWARDED
ADDRESS PROTESTS
DEBRIEF OFFERERS

PERFORM CONSTRUCTION ACTIVITIES
PREPARE REVISIONS AND CORRESPONDING COST ESTIMATES TO MODIFY THE CONTRACT
FURNISH DETAILED CONSTRUCTION DRAWINGS
REVIEW AND APPROVE CONTRACTOR'S CPM NETWORK/SCHEDULE
REVIEW CONTRACTOR'S DRAWINGS AND DATA
INSPECT AND APPROVE FOUNDATIONS
PROVIDE TECHNICAL ASSISTANCE
PROVIDE TECHNICAL ANALYSIS OF CLAIMS
PERFORM FACTORY INSPECTION
ASSIST IN EQUIPMENT INSTALLATION
ASSIST IN DEVELOPING AND IMPLEMENTING ACCEPTANCE TEST PROCEDURES
TECHNICAL ACCEPTANCE OF DESIGN INTENT ON FIELD MODIFICATIONS
MONITOR PROGRESS OF WORK
MAINTAIN FREQUENT CONTACT, VISIT SITE
BRIEF DESIGN TEAM
LIST ALL OUTSTANDING PROJECT REQUIREMENTS WHICH HAVE NOT BEEN COMPLETED
ACCEPT THE WORK AS SUBSTANTIALLY COMPLETE
PREPARE A FOUNDATION ACCEPTANCE SUMMARY MEMORANDUM
DESIGN VERIFICATION ACTIVITIES (DATA COLLECTION) GEOLOGIC MAPPING

REVIEW ALL RSN'S FOR COMPLETION
INSURE AS-BUILTS ARE COMPLETE
ASSIST IN PREPARATION OF PUNCH LIST FOR COMPLETION
ASSIST IN EQUIPMENT CHECKOUT AND STARTUP
PERFORM WARRANTY INSPECTIONS
ASSIST WITH FINAL INSPECTION
ACCEPTANCE OF ALL WORK AS COMPLETE

ANALYSIS OF CLAIMS
PROVIDE EXPERT TESTIMONY
ASSISTANCE IN STARTUP AND INITIAL O&M
CO ACCEPTS RELEASE OF CLAIMS
FINAL REPORT OF CONSTRUCTION PREPARED
COMPLETE CONTRACT CLOSE OUT