

## AGENDA ITEM MEMO

**BOARD MEETING DATE:** January 19, 2023

**TO:** Board Members

**THROUGH:** Jeff Walker, Executive Administrator  
Ashley Harden, General Counsel  
Jessica Peña, Deputy Executive Administrator, Water Supply &  
Infrastructure  
T. Clay Schultz Ph.D., Director, Regional Water Project Development

**FROM:** Jessica Taylor, P.E., Customer Service Liaison, Executive Administration

**SUBJECT:** Use of Alternative Delivery Methods for Texas Water Development Board  
Funded Projects

### **ACTION REQUESTED**

No action is required of the Board. This is a briefing and discussion on the status of the Texas Water Development Board's guidance document related to use of Construction Manager-at-Risk (CMAR) and Design-Build project delivery methods.

### **BACKGROUND**

In October 2020, the TWDB published a guidance document for projects utilizing alternative delivery methods. In Fall 2021, we began re-evaluating the guidance document based on internal staff and external stakeholder feedback. The guidance document has since been renamed the *Use of Alternative Delivery Methods for TWDB Funded Projects*; the document was formerly known as *Guidance for Use of CMAR and DB Project Delivery Methods for Communities Financing Projects through the TWDB Financial Assistance Programs*.

### **KEY ISSUES**

Over the past few months, TWDB has worked extensively with external stakeholders to develop a revised guidance document. The draft guidance document was posted on the TWDB website for public review and comment from November 17 through December 19, 2022. Notice of the posting was sent via broadcast email. Thirteen submissions were received that consisted of 87 comments that were evaluated to determine if revisions to the guidance document were needed. Several comments resulted in revisions to the guidance

document. The public comments received, and TWDB's responses, are shown in Attachment No. 1.

The guidance document better aligns the TWDB review process with the general project flow of alternative delivery projects. Some notable revisions include but are not limited to: (1) the implementation of a staged review process to allow for release of funds for mobilization and procurement of long lead items for both CMAR and Design Build projects, and (2) review of bid package procurement at the prime contractor level and release of funds according to the Guaranteed Maximum Price or contract price.

The finalized guidance document will be posted on the TWDB website by January 19, 2023 and be available for use by entities utilizing alternative delivery methods with TWDB funded projects moving forward.

**SUMMARY**

The Executive Administrator will make the finalized guidance document available on the TWDB website by January 19, 2023. No action is required of the Board at this time.

Attachments:

1. Response to Public Comments Received
2. Use of Alternative Delivery Methods for TWDB Funded Projects  
(TWDB-0570)

| Submitter    | Entity         | Comment   | Proposed Response   | Needed Revision  | Proposed Response By | Status   |
|--------------|----------------|---|---|--|----------------------|----------|
| Matthew Penk | City of Dallas | Is Competitive Sealed Proposals (CSP) considered an Alternative Delivery method? Is CSP an eligible delivery method for TWDB projects?  | CSP is an eligible delivery method for TWDB projects where the basis for award is weighted on qualifications versus bid price. CSP would not be considered Alternative Delivery as the method contains discrete design, bid, and build phases where the design and construction are performed by separate entities. The CSP process is covered in Texas Gov't Code Chapter 2269 Subchapter D. | None.  | MS                   | Complete |
|              |                | CMAR Section B. 5. E. states that if a RP&B package was approved then the IFC package must be approved before construction can start. This is confusing because if a RP&B package is approved up to 75% of GMP will be released until the IFC package is approved. How is 75% released if construction can't start until the IFC package is approved?   | The up to 75% released after the RP&B Design Package is approved is for non-construction activities, such as procurement of long lead items and mobilization. TBPE Sealing requirements found in Texas Administrative Code §137.33 require that an Issued for Construction set cannot contain a disclaimer, so construction cannot begin with the RP&B set.                                   | Restructured CMAR design package review section to make the process clearer.   | JT / MS              | Complete |
|              |                | Is there an avenue for Categorical Exclusion like traditional delivery method TWDB projects? There is no reference to such in the guidance.   | During the environmental review it will be determined if the project is eligible for a Categorical Exclusion. This is outside of the scope of the AD guidance.  | Added link to Categorical Exclusion and Determination of No Effect Request form in Planning sections.  | JT                   | Complete |
|              |                | The legal requirements referenced as must be met in DB Section B. 1 and B. 3. A mention "Entity is a board of trustees governed by Chapter 54, Transportation Code". Would this apply to water utilities and authorities or should the language in these sections be added to say "as applicable"?  | This item contained a typo that has been corrected.   | Revised bullet to correct: "Owner's population is greater than 100,000 within its geographic boundary or service area (Texas Gov't Code § 2269.352(1)); or the Entity is a board of trustees governed by Chapter 54, Transportation" | JT/JR                | Complete |
|              |                | DB Section B. 5. A at the very end mentions up to 95% for Concurrence with Notice to Proceed for Progressive DB. Is this the same for Fixed Price DB since it's not specifically mentioned?   | Yes, if using Fixed Price Notice to Proceed will be for 95% as well.  | Revised bullet to clarify and make more general. Changed to: "The Concurrence with Notice to Proceed will be for up to 95% of the scope of work in the approved Design Package."   | JT                   | Complete |
|              |                | With DB, construction is started before design is 100% complete. How is the release of funding handled in review/approval of design packages if design is not 100% complete? Is TWDB funding only released after design is 100% and well after construction is started and if so doesn't this put the Owner at significant risk if later approval of final design is not granted and changes are made that affect the work? | Comment noted and new "Staged Design Review" section added to the DB section of this guidance.  | Revised DB Design Package section to include a process for staged design review.   | JT/MS                | Complete |
|              |                | Do BABA requirements apply and if so does it depend on the TWDB funding program that is awarded?  | BABA applies to specific funding programs based on commitment date and project stage. This is outside of the scope of the AD guidance.  | None.  | JT                   | Complete |
|              |                | Attachment 2 includes asterisks but there is no footnotes for the asterisks or the form is cut off.   | Comment noted and screenshot updated.   | Updated screenshots to show asterisks.   | JT                   | Complete |
|              |                | Leann Bumpus/Jenna Covington  | North Texas MWD   |  |                      |          |
|              |                | I would like to express my sincere appreciation to TWDB staff for their consideration and proposed changes to the design package review and contract level review process outlines in the AD draft  | Acknowledged.   | None.  |                      | Complete |
| Perry Fowler | TxWIN          |   |   |  |                      |          |

|                           |   |  |   |                 |                 |
|---------------------------|---|--|---|-----------------|-----------------|
|                           | <p>Consider similar processes and language proposed in the CMAR guidance which allow for design review and release of construction funds to convey over to the design-build process. It is important to note that the DB process are also executed in an iterative manner where certain early work packages and activities can commence, and acquisition of long-lead items can occur as GMP and final designs are developed and approved. To the extent that the DB guidance can align with the process provided in Part 1, Section 5 &amp; 6 of the draft CMAR guidance that assist in providing clarity and appropriate flexibility.</p> | <p>Comment noted and new "Staged Design Review" section added to the DB section of this guidance.</p>  | <p>Revised DB Design Package section to include a process for staged design review.</p>   | <p>MS/JT</p>    | <p>Complete</p> |
|                           | <p>In previous iterations of the AD guidance there were provisions for the release of retainage for completed phases of work which is absent in the current proposed draft guidance. We would strongly recommend that TWDB explicitly allow for release of full or partial retainage for complete and accepted phases of work. Please refer to recent changes in state law included in HB 692 - specifically state that a portion or all retainage may be released for "substantially completed, or fully completed and accepted portions or phases of projects in addition to other key policy provisions.</p>                             | <p>TWDB must have an internally consistent project management process for projects and for the ease of external audit. To that end an amount equal to retainage is held at the level of review. Previous iterations of AD guidance proposed review at the subcontractor / vendor level, which allowed for release of funds equal to retainage at the subcontractor level. Public feedback on that level of review led to changes exhibited in this guidance where review will now be performed at the GMP / construction manager level. As such, the funds equal to retainage are proposed to be released at that level. The contractor has full agency in when retainage is released to their subcontractors and vendors, however they also accept liability for missing closeout documentation. Wide latitude is left for the construction manager in how they elect to package their GMPs, such that if the construction manager packages GMPs in phases then funds equal to retainage may be released as the phased GMPs are completed and closeout documents are provided to TWDB for review.</p> | <p>Revised the CMAR and DB COA Sections to include close out and release of retainage for completed phases of work or the project over all.</p> | <p>MS/JT</p>    | <p>Complete</p> |
| <p>David Kinchen DBIA</p> | <p>It will be critically important that the TWDB process aligns with what has been proposed in the guidance.</p>  | <p>Acknowledged</p>  | <p>None.</p>  |                 | <p>Complete</p> |
|                           | <p>Page 21: We recommend referencing the applicable Texas codes <u>in their current version or as amended</u> rather than reciting the applicable code verbatim in the guidance documents. The observation offered is that should TX Gov't Code 2269 related to DB be changed in the future, it may create additional work on behalf of the TWDB to further amend the Guidance Documents if are inconsistent with amended legislation.</p>  | <p>Comment noted. If at such time a rule is amended this guidance will be reviewed for conformance and interim guidance will be provided as necessary.</p>   | <p>None.</p>  | <p>MS/JR/JT</p> | <p>Complete</p> |

|                                    |  |   |   |                 |                 |
|------------------------------------|--|---|---|-----------------|-----------------|
|                                    | <p>Page 24: We recommend referencing the applicable Texas codes in their current version or as amended rather than reciting the applicable code verbatim in the guidance documents related to population, and number of projects. Suggested language as follows: Owner's population within its geographic boundaries or service area complies with the most current or amended version of the Texas Gov't Code 2269 and Owner's service area and number of projects complies with the most current or amended version of the Texas Gov't Code 2269. The observation offered is that should TX Gov't Code 2269 related to DB be changed in the future, it may create additional work on behalf of the TWDB to further amend the Guidance Documents if they are inconsistent with the amended legislation.</p> | <p>Comment noted. If at such time rule is amended this guidance will be reviewed for conformance and interim guidance will be provided as necessary.</p>  | <p>None.</p>  | <p>MS/JR/JT</p> | <p>Complete</p> |
| <p>Ian Alderson Anser Advisory</p> |  |   |   |                 |                 |
|                                    | <p>Page 27: In the paragraph titled a. Design Package Review, we suggest the following addition to the end of the first paragraph: For projects utilizing Progressive Design Build...for each Design Package issued, (added language) similar to the process provided in Part 1, Section 5 and Section 6 of these Guidance Documents. The observation offered is that Progressive Design Build Design Packaging is very similar to that offered in Part 1 for CMAR. For the avoidance of doubt, adding the language that explicitly allows this concept would provide the appropriate guidance and flexibility to Owner's seeking to use TWDB funds for PDB projects.</p>  | <p>Comment noted and new "Staged Design Review" section added to the DB section of this guidance.</p>   | <p>Revised DB Design Package section to include a process for staged design review.</p> | <p>MS/JT</p>    | <p>Complete</p> |
|                                    | <p>Comment 1: Web Portal File Sharing Page - There may be benefit in adopting a tool capable of managing project document review workflow in addition to document storage. Attachment 4 indicates that the portal will be used at all stages of the project lifecycle (planning, procurement, construction, handover), and as such, workflow management may result in efficiencies for TWDB, contractors, and other project-related entities. TWDB may also wish to consider the extent to which access rights to portal content may need to be restricted to maintain confidentiality, particularly during the procurement phase.</p>   | <p>TWDB is currently utilizing web portals which restrict user access and maintain confidentiality. TWDB is also in the process of evaluating other integrated online solutions for future use.</p> | <p>None.</p>  | <p>MS</p>       | <p>Complete</p> |

|   |  |  |  |                 |   |
|---|--|--|--|-----------------|---|
| <p>Carl Woodward</p> <p>HCFC</p>  | <p>Comment 2: Front-End Document Template - There may be benefit in developing a comprehensive programmatic contract template to ensure consistency across TWDB funded projects and reduce the level of effort required to create the project-specific Front-End Documents. The template could define the roles and responsibilities of the contracting parties and any third parties, establish the order of precedence of the various documents incorporated directly or by reference, and ensure appropriate risk allocation. The existing TWDB Supplemental Contract Conditions could form part of this template, in addition to project-specific information.</p> | <p>TWDB utilizes tailored front end documents templates which seek the least amount of requirements as dictated by rule and the various funding programs, and our engineering and fiduciary responsibilities. Development of a comprehensive front end template would enforce the most stringent requirements of each funding program on all funding programs. While this would improve consistency across TWDB funded projects, this method does not appear to be of best service to our borrowers and their communities.</p> | <p>None.</p>   | <p>MS</p>       | <p>Complete</p>   |
|   | <p>Comment 3: Project Risk Register - TWDB may wish to consider to what extent the project risk register is shared with CMAR/DB contractor. The register is a key management tool for TWDB that should be used to inform project risk allocation and contract terms decisions, but it may be appropriate to keep the details of the register confidential to TWDB.</p>   | <p>Comment noted. The guidance recommends the Owner create a risk register, but this is not a requirement. The Owner can share the risk register at their discretion.</p>  | <p>Confirmed guidance clearly states the risk register is a recommended document to be created by the Owner.</p> | <p>MS/JT</p>    | <p>Complete</p>   |
|   |  |  |  |                 |   |
| <p>Page 2 of 3 General Comment: If this is intended to be a guidance document, we would suggest that TWDB enhance the front end portion citing some project examples that fit the better scenario of a Construction Management at Risk (CMAR) vs the Design Build (DB) methods. Possibly some population or dollar amount thresholds or citing the maximum number of alternative delivery methods available to municipalities in a given year.</p>  | <p>TWDB acknowledges the wide variability and utilization of CMAR and DB methods as project delivery vehicles. As such, TWDB does not seek to place limits or expectation outside of those expressed in statute or programmatic requirements.</p>  | <p>None.</p>   | <p>MS</p>  | <p>Complete</p> |   |
|   |  |  |  |                 | <p>Page 2 of 3: Are Project Management Plans or Review Plans also going to be required? May recommend this as setting up the stage early on what the expectation is. Then this document can be attached or posted, as appropriate. Also recommend that these are living documents that are updated quarterly (or sooner depending on reporting or scoping changes). The United States Army Corps of Engineers (USAGE) has several examples.</p> |
| <p>Page 2 of 3: Recommend that the Complete Design be separated like you mention (Design Package Review) and the correspond design submittal stages listed. Issues in the past have been that Issue for Construction (IFC) could be considered an incomplete design, which can create heartache if a federal agency has to be involved. It also can raise a concern about quality, whether that is being sacrificed for speed. If 50% design means different things to different agencies, then that review plan can help resolve. Recommend making sure to use consistent language to avoid any slowdowns.</p> | <p>Per Texas Water Code §17.183(b) plans and specifications submitted to the TWDB must be signed and sealed, by a registered engineer in the State of Texas, affirming they are consistent with current industry standards. The IFC design set is defined within the guidance as the final design set which is issued for construction purposed and cannot include a disclaimer as noted in TBPE Sealing requirements in Texas Administrative Code §137.33. TWDB is allowing submission of a RP&amp;B design set for review, as defined within this guidance. Other complete discipline designs may be considered on a case by case basis.</p>                         | <p>None.</p>   | <p>MS/JT</p>   | <p>Complete</p> |   |

|  |  |  |              |                 |
|--|--|--|--------------|-----------------|
| <p>Page 8 of 35 - Background last paragraph: Since the document states this, does the guidance apply for the Alternative Delivery Method (ADM)? And if they don't, may recommend listing the regulation that does apply. May have teams bidding from out of state.</p>   | <p>This guidance applies to alternative delivery methods outlined in Texas Gov't Code Chapter 2269. TWDB recommends applicants consult with their legal counsel on the applicability of this chapter related to their project and delivery method.</p>   | <p>None.</p>   | <p>MS</p>    | <p>Complete</p> |
| <p>Page 10 of 35 - Risk and Responsibilities last paragraph: Will note that these risk registers have been helpful and not helpful. Just listing out risks are good to be aware, but we haven't seen a plan of how they are actually mitigated. We highly recommend that these risk registers follow USAGE-Walla Walla District I Cost Planning Center of Excellence methods where risks registers are also used to estimate contingency and costs associated with delays.</p>             | <p>Comment Noted. The guidance recommends the Owner create a risk register, but this is not a requirement.</p>   | <p>Confirmed guidance clearly states the risk register is a recommended document to be created by the Owner.</p>                                       | <p>MS/JT</p> | <p>Complete</p> |
| <p>Page 11 of 35- Selection of CMAR Firm: Will negotiations allow for early completion bonus? We assume penalties will be allowed. Will the risk covered by the contractor include changing site conditions (e.g., including excluding force majeure - some agencies include or exclude in their current contracts)?</p>   | <p>TWDB has no opinion on the specifics of contracts between funded Entities and their project delivery firm, so long as the appropriate TWDB Supplemental Contract Conditions are included within the contract and the contract does not conflict with statute or the applicable funding program.</p>   | <p>None.</p>   | <p>MS/JR</p> | <p>Complete</p> |
| <p>Page 12 of 35 - Design Engineer Firm Selection: What about self-performance? No Historically Underutilized Business (HUB)/ Minority Woman Business Enterprise (MWBE) requirements will be tied to this? Will agencies with these HUB/MWBE requirements be excluded?</p>   | <p>TWDB has no opinion on the specifics of contracts between funded Entities and their project delivery firm, so long as the appropriate TWDB Supplemental Contract Conditions are included within the contract and the contract does not conflict with statute or the applicable funding program.</p>   | <p>None.</p>   | <p>MS</p>    | <p>Complete</p> |
| <p>Page 13 of 35 - Draft CMAR Contract Review: For clarity ... what about work packages? What if the project is phased? Will a bond be required for the entire project or just a bond to do each work package under confirm Guaranteed Maximum Price (GMP)? Per Figure 1, this appears to mean per GMP that is negotiated or bid, but we have read this within the guidance to be as the bid for the entire project. May recommend an additional reference below if you mean multiple.</p> | <p>TWDB will be reviewing AD projects at the Prime Contractor level. TWDB acknowledges the wide variability and utilization of CMAR and DB methods as project delivery vehicles, including use and implementation of a GMP. Per our rule, performance and payment bonds must be in place with the appropriate language, as stated in the applicable TWDB Supplemental Contract Conditions, for 100% of the contract price. TWDB recommends the Entity coordinate early with the respective TWDB project manager for specific project scenarios.</p>  | <p>Added statement in the Design Package Review section to indicate that the process outlined will be repeated for each design package in project.</p> | <p>MS/JT</p> | <p>Complete</p> |
| <p>Page 20 of 35 - Ineligible Project Components: Can this be included but not eligible to be cost shared under the grant? For example, a flood control project has a channel facility, and another entity would like to add sidewalks or tree planting to the contract. That entity pays the difference. If simpler as a smaller separate work package or is this entirely restricted?</p>  | <p>The funded Entity may elect to fund additional or ineligible work with non-program funds, so long as the project conforms to statute and programmatic funding requirements. As contrasting examples of funding ineligibility, TWDB does not reimburse for the handling, testing, or disposal of hazardous materials, therefore any asbestos concrete pipe removal must be funded with non-program funds. However, if a project is funded with SRF funds the entire project must conform to AIS such that the entity <b>may not</b> use any funds -- program, local, or otherwise -- to purchase and install non-AIS compliant materials. It is recommended the Entity coordinate with TWDB project management staff early in the project to determine work eligibility.</p> | <p>None.</p>   | <p>MS</p>    | <p>Complete</p> |

|  |   |   |       |          |
|--|---|---|-------|----------|
| Page 20 of 35 - Releasing Final Retainage: For clarity - is the expectation that CMAR will also handle inspections under their contract (Owner Verification Testing and Inspection (OVTI)? Or would TWDB prefer the inspections separate from CMAR?  | TWDB has no preference on inspections beyond what is stated within the programmatic guidance and supplemental contract conditions as applicable to the project and its funding program.   | None  | MS    | Complete |
| Page 20 of 35 - Releasing Final Retainage: Date of completion or from the date of the contract package is complete? For example) 12 months from Guaranteed Maximum Price 1,2,3.# or the date of overall project completion?  | The guidance has been revised to include close out and release of retainage for completed phases of work or the overall project. Depending on the contract language and if the retainage request is for a complete phase or the overall project this may be the date of the contract package is complete or the overall project is complete. The items has been updated to read: "[The] Warranty statement (from engineer or Owner) with a duration of at least 12 months from the date of project (or completed phases of work) completion."   | Revised the CMAR and DB COA Sections to include close out and release of retainage for completed phases of work or the project over all.        | MS/JT | Complete |
| Page 21 of 35 - Design Build (DB) Delivery Method: For clarity, does TWDB take the position that DB code allows for the variations under the DB umbrella? For example, Progressive Design Build(PDB)?  | TWDB acknowledges the wide variability and utilization of CMAR and DB methods as project delivery vehicles. As such, TWDB does not seek to place limits or expectation outside of those expressed in statute or programmatic requirement.   | None.   | MS    | Complete |
| Page 21 of 35- DB Delivery Method: Is TWDB allowing this to fall under the Owner Advisor (OA) umbrella or are you wanting separate contracts for each of these oversight elements?   | This guidance applies to alternative delivery methods outlined in Texas Gov't Code Chapter 2269. TWDB recommends applicants consult with their legal counsel on the applicability of this chapter with their project and delivery method.   | None.   | MS    | Complete |
| Page 21 of 35- Project Pre-Planning: Same comment above about risk registers.  | Comment Noted. The guidance recommends the Owner create a risk register, but this is not a requirement.   | Confirmed guidance clearly states the risk register is a recommended document to be created by the Owner.                                       | MS/JT | Complete |
| Page 25 of 35 - Draft Design Build (DB) Contract Review: We know many agencies have not had experience with developing DB contracts. We recommend offering copies of DB templates used under this program as go-by, available upon request. Noting clauses as you go which term was not so successful and need to change. That way we can learn from each contracting community. | TWDB has no opinion on the specifics of contracts between funded Entities and their project delivery firm, so long as the appropriate TWDB Supplemental Contract Conditions are included within the contract and the contract does not conflict with statute or the applicable funding program. As noted in the guidance document, a comprehensive list of items to consider when preparing a DB contract can be found in the Water/Wastewater Sector, Design-Build Done Right 2015 publication from the Design-Build institute of America. A link to this document can be found in the Resources section and throughout the guidance document. | None.   | MS/JT | Complete |
| Page 26 of 35 - Executed Design Build (DB) Contract Review: Same comment as page 13 of 35.   | TWDB will be reviewing AD projects at the Prime Contractor level. TWDB acknowledges the wide variability and utilization of CMAR and DB methods as project delivery vehicles, including use and implementation of a GMP. Per our rule, performance and payment bonds must be in place with the appropriate language, as stated in the applicable TWDB Supplemental Contract Conditions, for 100% of the contract price. TWDB recommends the Entity coordinate early with the respective TWDB project manager for specific project scenarios.  | Added statement in the Design Package Review section to indicate that the process outlined will be repeated for each design package in project. | MS/JT | Complete |



|                                    |  |  |   |              |                 |
|------------------------------------|--|--|---|--------------|-----------------|
| <p>Mark Evans</p> <p>FNI, Inc.</p> | <p>Page 28 of 35- Other Construction Phase Activities: Same comment as page 20 of 35.</p>  | <p>The funded Entity may elect to fund additional or ineligible work with non-program funds, so long as the project conforms to statute and programmatic funding requirements. As contrasting examples of funding ineligibility, TWDB does not reimburse for the handling, testing, or disposal of hazardous materials, therefore any asbestos concrete pipe removal must be funded with non-program funds. However, if a project is funded with SRF funds the entire project must conform to AIS such that the entity <b>may not</b> use any funds -- program, local, or otherwise -- to purchase and install non-AIS compliant materials. It is recommended the Entity coordinate with TWDB project management staff early in the project to determine work eligibility.</p> | <p>None.</p>  | <p>MS</p>    | <p>Complete</p> |
|                                    | <p>Page 30 of 35- Releasing Final Retainage: Same comment as page 20 of 35.</p>  | <p>The guidance has been revised to include close out and release of retainage for completed phases of work or the overall project. Depending on the contract language and if the retainage request is for a complete phase or the overall project this may be the date of the contract package is complete or the overall project is complete. The items has been updated to read: "[The] Warranty statement (from engineer or Owner) with a duration of at least 12 months from the date of project (or completed phases of work) completion."</p>   | <p>Revised the CMAR and DB COA Sections to include close out and release of retainage for completed phases of work or the project over all.</p> | <p>MS/JT</p> | <p>Complete</p> |
|                                    | <p>Page 32 of 35 - Attachment 2: If Progressive Design Build (PDB), is bidding in the case of failed negotiations with the PDB team? Or are you requiring the construction bid be held no matter what if it is not done at beginning?</p>  | <p>Legal negotiations between the entity and their consultants is outside the scope of the guidance. TWDB recommends the entity consult with their legal counsel.</p>  | <p>None.</p>  | <p>MS/JT</p> | <p>Complete</p> |
| <p>Mark Evans</p> <p>FNI, Inc.</p> | <p>Summary of Proposed Revisions, re: Web Portal File Sharing Page: One thing our reviewer always asked for was hyperlinked, tabbed, etc. documents. If this is going to be a requirement, it may be worth getting some guidance on details of that requirement and write it into the 0552 document that gets included in the front ends for CMARs/DBs. We also ran into issues with SharePoint not being able to navigate to hyperlinks and he had to download the documents. just something to think about.</p>        | <p>Comment noted, TWDB will look into bookmarked PDFs on SharePoint and any additional details needed.</p>   | <p>None.</p>  | <p>MS/JT</p> | <p>Complete</p> |
|                                    | <p>Summary of Proposed Revisions, re: CMAR COA: Not really sure this should be the CMAR firm submitting. It should be the Owner or the Engineer of Record certifying that all work has been completed. If too big a change, suggest Engineer of Record be included so there is a confirmation that the project has been completed to the intended design. -- (Other FNI Engineer) Agree that this should be submitted by the Owner or Owner's representative (i.e. program manager, design firm, owners agent, etc.)</p> | <p>Comment noted, the section will be revised to indicate the Owner will submit the documentation with reference to the Engineer of Record.</p>  | <p>Revised to have Owner submit the documentation with reference to the Engineer of Record.</p>   | <p>MS/JT</p> | <p>Complete</p> |

|  |   |   |       |          |
|--|---|---|-------|----------|
| Page 11, re: submittal requirements: We found that this was a hang-up. I think as long as they are okay with the index/links/etc. we should be good which it sounds like they are. Note that use of SharePoint limited the effectiveness of bookmarks and links....the files had to be downloaded. Something to consider with the development of their portal.   | Comment noted, TWDB will look into bookmarked PDFs on SharePoint and any additional details needed.   | None.   | MS/JT | Complete |
| Page 13, re: CMAR draft contract self-performed: Per current 2269 requirements, this would be very difficult to do at the time of contracting as the CMAR has to bid against the market to self-perform. -- Anything known at this time is just "intent" to self-perform.  | Comment noted. The information should be included at in the draft contract if known. If not known at the time draft contract stage, that is acceptable.   | None.   | MS/JT | Complete |
| Page 15, re: Figure 1: This could still be a timing and documentation management issue. Would TWDB review these packages in a typical DBB project? -- What would cause the EA to review at package level? Like Chuck said, this could slow things down and revert back to what we were dealing with on BDL with hundreds of packages.  | In a typical DBB project the TWDB reviews documentation at the Prime Contractor level. An in depth review or audit could be initiated when notable issues arise. Some examples of notable issues are, inconsistencies with programmatic guidance, performance issues identified by involved party, funding requests for ineligible expenses, public information requests, etc. TWDB review ability is noted in the Supplemental Contract Conditions under the "Review by Owner and TWDB" section. | None.   | MS/JT | Complete |
| Page 18, re: GMP or CMAR Contract Amendments: Shouldn't this be the Owner? Most EJCDC contracts will have the CMAR providing the Owner with the request for change order and the Owner settling the CO. Having the CMAR submit directly to TWDB puts TWDB in the contract review cycle. The other way this could be interpreted is that the CMAR is supposed to submit all subcontractor claims to TWDB. This is something you don't want. It would be better to have negotiated change orders between the owner and the CMAR submitted to TWDB by the applicant (owner). --- General Comment related to Chuck's - this document references the "CMAR submitting" often. In my experience, everything goes through the Owner or Engineer (Owner's Agent). I would think that the CMAR submitting directly could happen but it is not common for the Client's I have dealt with since it is their \$\$\$. | Comment noted, the section will be revised to indicate the Owner will submit the documentation.   | Revised to have Owner submit the documentation. | MS/JT | Complete |
| Page 18, re: Allowances: Any examples of "clearly outlined". Is a general allowance for "unforeseen site conditions" like cultural resource impacts okay?  | Revised to remove "clearly" in statement. Examples of reasonably acceptable allowance include utility connection allowance, USACE coordination allowance, etc. Consult with TWDB project manager on project specific instances.   | Revised to remove "clearly" from statement.     | MS/JT | Complete |
| Page 19, re: Design and Construction Costs: Should there be a bullet for Program Management Services?. Getting some of those reviewed/approved by TWDB was difficult at times with BDL.  | Project Management (by engineer) and Construction Engineering are eligible budget line items in TWDB funded projects.   | None.   | MS/JT | Complete |
| Page 20, re: Ineligible Components, bullet d: "Contractor" ?   | Statement is referring to an allowance on the contract as a whole. However, this would be applicable to a contractor's allowance.   | None.   | MS/JT | Complete |

|                    |   |   |   |              |                 |
|--------------------|---|---|---|--------------|-----------------|
|                    | <p>In Flatiron's CMAR experience, other agencies establish self-performance thresholds for the CMAR, either maximum or minimum percentages rather than requiring the CMAR to bid on portions of work it seeks to self-perform. There is an efficiency in allowing the selected CMAR to determine which portions of work the CMAR will self-perform which benefits both the owner and the project. By allowing the CMAR to determine the amount and types of self-performance to best accomplish the work, the CMAR has a greater ability to control or minimize construction costs, through procurement of qualified vendors and subcontractors and innovative construction means and methods, To maximize potential value to owners by achieving the full benefit of this collaborative delivery model, Flatiron recommends agencies instead require the CMAR describe which components of the project the CMAR proposes to self-perform and the CMAR's plan to demonstrate best value to the owner for any work self-performed.</p> | <p>TWDB funded projects must conform the procurement and performance requirements outlined in Texas Gov't Code Chapter 2269. Texas Gov't Code Chapter 2269 outlines specific criteria under which a CMAR may self-perform work. This guidance conforms to the requirements set forth in Texas Gov't Code Chapter 2269.</p>  | <p>None.</p>  | <p>MS/JT</p> | <p>Complete</p> |
|                    | <p>Document Part II – Design Build Method, this section does not clearly specify whether Progressive Design Build is included as a permissible AD method or if the terminology 'Design-Build' is inclusive of both traditional and progressive methods. In Flatiron's experience in AD methods, traditional Design Build does not allow for the truly collaborative approach that can be realized through the iterative design process and preconstruction period inherent in the Progressive Design Build delivery method.</p>   | <p>TWDB acknowledges the wide variability and utilization of CMAR and DB methods as project delivery vehicles. As such, TWDB does not seek to place limits or expectation outside of those expressed in statute or programmatic requirement.</p>  | <p>Revised DB Delivery Method section to note that the guidance is written to ensure Texas Gov't Code Chapter 2269 compliance whether utilizing a traditional or progressive DB method.</p> | <p>MS/JT</p> | <p>Complete</p> |
|                    | <p>Second, this section does not clearly specify whether a pricing component will be a requirement for evaluation and award of projects. It is our recommendation that a pricing component be included in the evaluation and scoring during procurements. Under the Progressive Design Build AD methodology, this can be comparison pricing of preconstruction scope items or inclusion of rates for Key Personnel.</p>   | <p>Selection of evaluation criteria is left up to the Owner and their representative, if delegated. TWDB does not specify evaluation criteria as long as the procurement conforms to statute and TWDB programmatic requirements.</p>  | <p>None.</p>  | <p>MS/JT</p> | <p>Complete</p> |
| <p>Ronna Hartt</p> | <p>Upper Trinity RWD</p>  |   |   |              |                 |
|                    | <p>Part I - Construction Manager-at-Risk (CMAR) Method. Section C.4. If distinct Project A is included as a part of a large CMAR contract that has a single Guaranteed Maximum Price (GMP), can the retainage associated with Project A be released if it is complete and meets all TWDB requirements before the other projects associated with the larger CMAR GMP are complete? If not, suggest modifying Section C.4 to allow partial release of retainage.</p>  | <p>TWDB must have an internally consistent project management process for projects and for the ease of external audit. To that end an amount equal to retainage is held at the level of review. The contractor has full agency in when retainage is released to their subcontractors and vendors, however they also accept liability for missing closeout documentation. Wide latitude is left for the construction manager in how they elect to package their GMPs, such that if the construction manager packages GMPs in phases then funds equal to retainage may be released as the phased GMPs are completed and closeout documents are provided to TWDB for review.</p> | <p>Revised the CMAR and DB COA Sections to include close out and release of retainage for completed phases of work or the project over all.</p>   | <p>MS/JT</p> | <p>Complete</p> |

|                 |                             |   |  |  |       |          |
|-----------------|-----------------------------|---|--|--|-------|----------|
|                 |                             | Part II - Design-Build Method. Section C.4. If distinct Project A is included as a part of a large CMAR Contract that has a single GMP, can the retainage associated with Project A be released if it is complete and meets all TWDB requirements before the other projects associated with the larger CMAR GMP are complete? If not suggest modifying Section C.4 to allow partial release of retainage.                           | TWDB must have an internally consistent project management process for projects and for the ease of external audit. To that end an amount equal to retainage is held at the level of review. The contractor has full agency in when retainage is released to their subcontractors and vendors, however they also accept liability for missing closeout documentation. Wide latitude is left for the DB in how they elect to package their GMPs, such that if the DB packages GMPs in phases then funds equal to retainage may be released as the phased GMPs are completed and closeout documents are provided to TWDB for review. | Revised the CMAR and DB COA Sections to include close out and release of retainage for completed phases of work or the project over all. | MS/JT | Complete |
| Heather Harward | Texas Water Supply Partners |   |  |  |       |          |
|                 |                             | TWSP commends the TWDB for its collaboration and highly effective stakeholder process of reviewing and drafting the proposed revisions to the AD guidance document.   | Acknowledged.  | None.  |       | Complete |
| Blaire Parker   | San Antonio Water System    |   |  |  |       |          |
|                 |                             | SAWS recommends limiting reviews for Alternative Delivery (AD) projects to better accommodate project schedules, as a longer timeline factors in the decision whether to apply for funding through the TWDB. In addition, TWDB should consider committing to review service levels that owners can rely on for schedule purposes.   | Comment noted. The TWDB is required to complete the reviews noted within the guidance document per statute and programmatic requirements. Every effort to streamline has been made where possible.   | None.  | JT    | Complete |
|                 |                             | Also, please consider reviewing and revising the requirements related to DBE and the TWDB-0210. As these are both AD types of contracts, requirements can be inserted, but the CMAR and DB team will not know at the time who their subcontractors will be until the packages are advertised. They will know who is assisting on the design portion initially. If TWDB is aware of this, it is not stated clearly in this document. | Details related to DBE and TWDB-0210 are outside the scope of this guidance document. DBE is a requirement for some, but not all, TWDB funding programs. The guidance document covers general requirements for all funding programs. Project specifics can be determined when working with the assigned TWDB regional team and project reviewer.   | None.  | JT    | Complete |
|                 |                             | Definitions d. Bid Package - Bid packages are not advertised together. Recommend removing that  | Comment noted. Bid Package is defined as, with emphasis added: "A set of <b>work packages</b> selected by the CMAR to be advertised together in association with a GMP and TWDB reviewed and approved Design Package and Front-End Document Template."   | None.  | MS    | Complete |
|                 |                             | Recommend adding a definition for supplemental contract conditions  | Definition added for Supplemental Contract Conditions.   | Definition for Supplemental Contract Conditions added.   | MS    | Complete |
|                 |                             | A. 1. Project Pre-Planning, Paragraph 4 - Please provide more guidance on this step to arrange a meeting or provide POCs as one of the attachments to this document. (Same issue under Design Build Method, Project Pre-Planning)   | The pre-application meeting will be scheduled by the TWDB regional team administrative assistant after the Invitation to Apply is sent to the entity. Specific points of contact are not included in the guidance document to reduce updates if staff changes occur.   | None.  | JT    | Complete |

|   |   |   |              |                 |
|---|---|---|--------------|-----------------|
| <p>A. 3. Selection of a CMAR, Paragraph 2 - This step says the Owner must receive approval of the "Procurement of the CMAR firm prior to contract execution". The title of this section is "Selection of a CMAR firm". In addition, there are not any steps identifying how this occurs in this section or subsequent sections. The most similar section would be B.3.a, but that section concludes with approval of the contract and asks for copies of the RFQ and/or RFP as though that has already occurred. (Same issue under Design Build Method, Selection of DB Firm)</p> | <p>Part I.A is a short list of items for the Owner to keep in mind when funding an AD project through the TWDB. Section A.3 includes recommendations of items to be included in the CMAR contract. Part I.B.3 includes details about the CMAR contract review process required by the TWDB. The purpose of the review of the draft is to ensure all required TWDB documents and language are included so that changes are not needed after execution. The TWDB can review draft advertisements, but will not direct the Owner on procurement of the CMAR. The Owner shall procure the CMAR in accordance with state procurement laws and Texas Gov't Code Chapter 2269.</p> | <p>None.</p>  | <p>JT</p>    | <p>Complete</p> |
| <p>B. TWDB Project Implementation Process Using CMAR, Paragraph 1 – Please provide more guidance on this step to arrange a meeting or provide POCs as one of the attachments to this document Also, is this a different meeting from the one in A.1 Part I?</p>   | <p>The TWDB encourages frequent and proactive discussion between the Owner and TWDB Regional Team throughout the project life. A point of contact will be assigned to each entity upon submission of a funding application. Specific points of contact are not included in the guidance document to reduce updates if staff changes occur.</p>  | <p>None.</p>  | <p>JT</p>    | <p>Complete</p> |
| <p>B. 1. Application Phase d., third bullet - Recommend referencing 2254.</p>   | <p>Comment noted and bullet point updated.</p>  | <p>Revised to omit the reference to the Tex. Occupations Code and insert a reference to Tex. Gov. Code Ch. 2254 and keep the reference to Tex. Gov't Code § 2269.057.</p> | <p>JT/JR</p> | <p>Complete</p> |
| <p>B.3. CMAR Firm Selection, Documentation and Contract Review, Paragraph 1 – It is not clear when this step takes place. The contract is typically included in the advertisement so we would not be able to change the terms and conditions this late in the process.</p>  | <p>Part I.B.3 Paragraph 1 is to note that the TWDB Supplement Contract Conditions and all other pertinent language and forms must be included in the CMAR contract. Additional details are in the following sections.</p>   | <p>None.</p>  | <p>JT</p>    | <p>Complete</p> |
| <p>B.3.b Executed CMAR Contract Acceptance - This step seems redundant. If TWDB approved the contract in B3a, wouldn't they just need a copy of the executed contract if they already approved the award in B.3.a. (last bullet) These steps seem to be treating AD delivery similar to DBB. In addition, once it is executed the Owner can't make changes based on TWDBs comments at that point. (Same issue under Design Build Method, Document and Contract Review)</p>  | <p>Part I.B.3.a is review of the draft CMAR contract before it is executed. The TWDB will provide comments on the draft but not accept the contract at that time. Once all comments in the draft contract are addressed, the TWDB will concur with award of the CMAR contract. After the contract is executed, a copy will be provided to the TWDB which will be accepted. The purpose of the review of the draft is to ensure all required TWDB documents and language are included so that changes are not needed after execution.</p>  | <p>None.</p>  | <p>JT</p>    | <p>Complete</p> |
| <p>5. Preparation of Design and Bid Packages c. and d. – There are multiple references to review at "a GMP level". Recommend additional clarification of what TWDB means by this.</p>   | <p>GMP is defined within the definitions sections as: "An approach to pricing services in an alternative delivery proposal and contract. The GMP is a price cap for an agreed upon scope of work on which the Owner is liable for reimbursement costs, including materials, labor, and profit. This pricing approach includes an inherent risk for the delivery team to not exceed the contract maximum price."</p>   | <p>None</p>   | <p>MS</p>    | <p>Complete</p> |

|                     |   |   |   |              |                 |
|---------------------|---|---|---|--------------|-----------------|
|                     | <p>5. Preparation of Design and Bid Packages d. and e. - These steps are not clear. It seems as though this step is optional to submit the RP&amp;B for review. And if the Owner does submit the document, it creates another level of review. Consider rewording/streamlining these steps.</p>   | <p>The Owner and CMAR can choose to submit the RP&amp;B set which includes complete design of all TCEQ Design Criteria components found in Texas Administrative Code Chapter 290 or Chapter 217 if final design of all project components are not complete. If the RP&amp;B set is submitted, the final design set must be submitted at a later date as TWDB is required to approve the final design. The Owner is not required to utilize the staged design review, it is presented as an option to provide access to funds for non-construction activities such as procurement of long-lead items and mobilization, which are included in the approved design.</p>          | <p>The design package review section has been restructured to make more clear.</p>  | <p>JT</p>    | <p>Complete</p> |
|                     | <p>Part 2, Design Build Method 2 Independent Engineer Firm Selection - Recommend stating this is optional if the Owner does not wish to pursue funding for the Program Manager services. And what does this certification look like in 2.d.?</p>  | <p>The TWDB requires submission of the contract for the Independent Engineer Firm even if not being funded with TWDB funds to ensure the scope of the contract aligns with the funded project. The TWDB does not prescribe the format of the certification requested in Part II.2.d.</p>  | <p>None.</p>  | <p>JT/JR</p> | <p>Complete</p> |
| <p>Kevin Jaegar</p> | <p>City of Pflugerville</p>   |   |   |              |                 |
|                     | <p>First, to achieve the full potential of the design-build delivery method, we request that TWDB consider a similar processes and language as proposed in the CMAR guidance which allows for design reviews and release of construction funds at various stages in the design-build process.</p>   | <p>Comment noted and staged review process has been added to the Design Build section.</p>  | <p>Staged design review has been added to DB section.</p>   | <p>JT/MS</p> | <p>Complete</p> |
|                     | <p>Second, to achieve a timely resolution to project completion and start of the close out process is the release of retainage and the Certificate of Acceptance. This process formally ends the construction of the project, as it is related to completed and accepted phases of work. For the CMAR process, it is important to allow each phase or milestone be treated as a phase that can be substantially approved and granted its portion of the retainage.</p>  | <p>TWDB must have an internally consistent project management process for projects and for the ease of external audit. To that end an amount equal to retainage is held at the level of review. The contractor has full agency in when retainage is released to their subcontractors and vendors, however they also accept liability for missing closeout documentation. Wide latitude is left for the construction manager in how they elect to package their GMPs, such that if the construction manager packages GMPs in phases then funds equal to retainage may be released as the phased GMPs are completed and closeout documents are provided to TWDB for review.</p> | <p>Revised the CMAR and DB COA Sections to include close out and release of retainage for completed phases of work or the project over all.</p> | <p>JT/MS</p> | <p>Complete</p> |
| <p>Kyle Kruger</p>  | <p>Garver</p>   |   |   |              |                 |
|                     | <p>Summary Item 3 – I like the idea of TWDB providing standard required language. One concern is how are they addressing different types of bid packages (e.g. materials only vs work and materials)? This is somewhat addressed in the subsequent guidance documents, but just want to make sure the front ends for work and material only procurement will be significantly different. Also need to make sure the Owner delineates who is responsible for this scope – no issue with putting this on the CMAR</p> | <p>The Owner and/or their representative will work with the TWDB project manager to create a template for both materials only and work and materials. This collaborative process will allow the front end documents to be structured and include all the items the Owner needs, but ensure all required TWDB language and forms are included.</p>   | <p>None.</p>  | <p>JT</p>    | <p>Complete</p> |

|   |   |  |       |          |
|---|---|--|-------|----------|
| Summary Item 4 -- this should be helpful for breaking up the work into packages and expediting regulatory review. This does not address whether clouds should remain, but it does confirm the only stamp required is for change log. Duplicate drawing/spec coordination will need to take place, especially if there are any revisions to these common items between bid packages. | As outlined in the draft guidance document, the following documents must be signed and sealed when submitted to the TWDB: the RB&P set must be signed and sealed with a disclaimer indicating that the set is not for construction, the change log submitted with the Issued for Construction set, and the Issued for Construction set which cannot include a disclaimer per Texas Administrative Code §137.33. | None.  | JT    | Complete |
| Summary Item 5 - need to confirm if the expectation is to make submittal reviews readily available.   | As noted in the Supplemental Contract Conditions in the "Review by Owner and TWDB" section, the TWDB can request additional documentation for review at any point during the project. An in depth review or audit could be initiated when notable issues arise. The documentation should be kept on file by the Owner and does not to be made available unless requested by the TWDB.                           | None.  | JT    | Complete |
| Summary Item 6 - as long as the 75% release of funds is not pushed to an individual item level, this should be ok, but in some cases, equipment may be delivered with expectation of 95% payment prior to issuance of IFC documents.  | The Concurrence of Notice to Proceed and Partial Release of Funds will be for 75% of the GMP or bid package price, not for individual work items.   | None.  | JT    | Complete |
| GENERAL -- there are several elements requiring review/comment/approval by TWDB throughout the guidance document. Unless I missed it, there is no commitment from TWDB on the expected timeframe for them to review and provide comments. There are always exceptions, but it would be good to have a range of what to expect to help keep project schedules realistic.             | Several performance measures related to TWDB review times were included in TWDB's Legislative Appropriations Request for 2024-2025, which can be found on the TWDB website.   | None.  | JT    | Complete |
| Definitions - Bid Package and Design Package are a little hard to differentiate. Confirm the intent is for Design Packages to be ready for review and Bid Packages add the required front ends/TWDB template.   | Correct, the design package is the specifications and drawings that will be reviewed for conformance with TCEQ design criteria. Bid Packages are the design package separated into specific packages and paired with the front-end documents to be bid.   | None.  | JT    | Complete |
| Definitions - GMP -- I believe adding language indicating the GMP is tied to an agreed upon scope of work is worthwhile. This helps the Owner know if the scope gets changed, the amount they are liable for would be the GMP plus out of scope work (once it is approved).   | Comment noted and definition updated.   | Definition updated to include language "an agreed upon scope of work". | JT    | Complete |
| Definitions - Independent Engineer - confirm for DB, Code requires the Owner to hire a 3rd party; cannot use in-house staff.  | Texas Gov't Code §2269.355(a) states "The governmental entity shall select or designate an engineer who is independent of the design-build firm to act as its representative for the procurement process and for the duration of the work on the civil works project."  | None.  | JT    | Complete |
| Definitions - Preconstruction Services -- consider adding these are intended to address/further define unknown elements.  | Comment noted.  | None.  | JT    | Complete |
| Definitions - Work Package -- is this not applicable to DB. Current definition specifies for CMAR.  | This definition is specifically referencing the requirement in Texas Administrative Code §2269.255 which requires CMAR to publicly advertise all major elements of work. The TWDB recognizes that certain types of Design Build firms may package work, such as in early work packages, but Design Build firms do not have a requirement to publicly advertise all major work elements.                         | None.  | JT/JR | Complete |

|   |   |  |                |          |
|---|---|--|----------------|----------|
| Resources – I'm sure they are aware, they newest edition of the WDBC/WCDA handbook will be available at the end of Q1 2023.   | Acknowledged.   | None.  | JT             | Complete |
| CMAR Delivery Phases – Owner needs to establish if they want to impose any self-performance requirements.   | This is a recommended item to be included in the CMAR contract in Part I.A.3 Bullet No. 4.  | None.  | JT             | Complete |
| Selection of a CMAR Firm, CMAR Contract Elements – would it be possible for TWDB to delineate any of the listed items they cover in their templates?  | The TWDB Supplemental Contract Conditions can be found via hyperlink within the guidance document or on the TWDB. Other TWDB guidance documents on requirements such as DBE or American Iron and Steel provide additional details about program requirements. TWDB has no opinion on the specifics of contracts between funded Entities and their project delivery firm, so long as the appropriate TWDB Supplemental Contract Conditions are included within the contract and the contract does not conflict with statute or the applicable funding program. | None.  | JT             | Complete |
| B.2 – Does TWDB Require design contracts for DBB be submitted for review and funding eligibility? Or, is this only a requirement for CMAR projects? (I understand DB projects would also show design scope(s))  | The TWDB requires engineering contracts both submitted and on file for all TWDB funded projects, even when TWDB is not funding the professional services. The TWDB will review the contract to ensure the scope of work aligns with the project.  | None.  | JT             | Complete |
| B.5.f – Preparation of packages – Does the CMAR procurement process adequately address obtaining approval for funding related to preconstruction/minor services a CMAR may perform before developing the GMP? (e.g. Would CMAR SUE work be eligible for funding without having to submit detailed plans to TWDB for review and approval)? | The CMAR process allows for the CMAR to perform services within the scope of the contract between the CMAR and the Entity. Service such as, but not limited to, surveying, utility locates, site inspection, planning and design assistance, and others are eligible for reimbursement under most TWDB funding programs.  | None   | MS             | Complete |
| P 16 c, bullet 2 – addendum should be addenda.  | Acknowledged.   | Revised to "addenda".  | JT             | Complete |
| Unallocated funds (contingencies/allowances) – these appear to be ineligible for TWDB funding; what if the agreement includes shared savings for unused elements? Is the Owner 100% responsible for these funds or are they considered reallocated as part of the shared savings agreement?   | The funds would be eligible under the shared savings agreement in the alternative delivery contract approved by TWDB. The shared savings clause will be reviewed for conformance with programmatic requirements during the contract review phase.   | None.  | JT/JR/CS/JP/MW | Complete |
| Does ineligible funding include asbestos abatement (or portions of it)?   | TWDB may not fund testing, remediation, removal, disposal, or related works for contaminated or potentially contaminated materials. However, the Entity should ensure that, if found, such materials are tested, removed, and disposed of in accordance with applicable state and federal laws  | None.  | JT             | Complete |
| DESIGN BUILD GUIDANCE - Communication with the Engineer of Record – the DB team can have varying agreements in place. Is there a desire for TWDB to have direct lines of communication with the EOR, even if they are a sub to the DB contractor? Seems like communication should be routed through the prime listed on the DB agreement. | In general, TWDB communication is through the Entity/Owner which whom TWDB has a funding commitment with. In practice, TWDB staff may communicate directly with the Owner's representative to expedite questions and answers, while copying the Owner on the communication. If TWDB would have questions for a subconsultant it is anticipated the questions would be directed to the Owner or their representative.  | Confirmed references throughout the Design Build section to Owner/DB Firm when submitting documents. | MS/JT          | Complete |



# **Use of Alternative Delivery Methods for Texas Water Development Board Funded Projects**

# Contents

|  |    |
|--|----|
| Definitions .....  | 4  |
| Resources: .....   | 7  |
| Alternative Delivery (AD) Guidance .....                         | 8  |
| Background .....   | 8  |
| Enabling Legislation in Texas .....                              | 8  |
| TWDB Programs & Alternative Delivery Eligibility.....            | 8  |
| Part I – Construction Manager-at-Risk Method .....               | 9  |
| A. Project Pre-Planning when Seeking TWDB Funding.....           | 9  |
| B. TWDB Project Implementation Processes using CMAR.....         | 11 |
| 1. Application Phase.....  | 11 |
| 2. Design Engineer Firm Selection .....                          | 12 |
| 3. CMAR Firm Selection, Documentation, and Contract Review ..... | 12 |
| 4. Planning and Acquisition for CMAR Projects.....               | 13 |
| 5. Preparation of Design and Bid Packages.....                   | 14 |
| <i>Staged Design Package Review:</i> .....                       | 15 |
| <i>Single Design Package Review:</i> .....                       | 16 |
| 6. Other Construction Phase Activities.....                      | 18 |
| C. Availability of Funds for CMAR Projects.....                  | 19 |
| 1. Closing, Planning, and Land Acquisition Costs: .....          | 19 |
| 2. Design and Construction Costs:.....                           | 19 |
| 3. Ineligible Project Components: .....                          | 20 |
| 4. Releasing Final Retainage:.....                               | 20 |
| Part II – Design-Build Method .....                              | 22 |
| A. Project Pre-Planning when Seeking TWDB Funding.....           | 22 |
| B. TWDB Project Implementation Processes using DB .....          | 24 |
| 1. Application Phase.....  | 24 |
| 2. Independent Engineer Firm Selection.....                      | 25 |
| 3. DB Firm Selection, Documentation, and Contract Review .....   | 25 |
| 4. Planning and Acquisition for DB Projects .....                | 27 |
| 5. Preparation of Design Packages.....                           | 27 |

*Staged Design Package Review:* .....28

*Single Design Package Review:*.....29

6. Other Construction Phase Activities.....30

C. Availability of Funds for DB Projects.....31

    1. Closing, Planning, and Land Acquisition Costs: .....31

    2. Design and Construction Costs:.....31

    3. Ineligible Project Components: .....31

    4. Releasing Final Retainage.....32

Attachment No. 1:.....34

    Alternative Delivery Contract Submittal Form .....34

Attachment No. 2:.....35

    Design Package Submittal Form.....35

Attachment No. 3:.....36

    Bid Package Procurement Submittal Form.....36

Attachment No. 4:.....37

    Alternative Delivery Document Naming Convention .....37

Attachment No. 5:.....38

    Disadvantaged Business Enterprise Process for CMAR and DB Projects.....38

# Definitions

---

In this guidance, the following terms are used:<sup>1</sup>

- a. *Alternative Delivery (also known as Collaborative Delivery, herein referred to as Alternative Delivery, or AD)*: In accordance with Texas Gov't Code 2269, a method for procuring contracts and delivering a capital project that involve close collaboration among the project owner, designer, and contractor from design through project completion. Design Build and Construction Manager-at-Risk are AD project delivery methods that will be discussed in this document.
- b. *Applicant*: The governmental entity seeking funding from the Texas Water Development Board. Generally, the Applicant and the Owner are the same entity.
- c. *Board*: The Texas Water Development Board's three-member governing body.
- d. *Bid Package*: A set of work packages selected by the CMAR to be advertised together in association with a GMP and TWDB reviewed and approved Design Package and Front-End Document Template.
- e. *Construction Manager-at-Risk (CMAR)*: An AD project-delivery method in which the Owner retains an engineering firm and a construction manager (or General Contractor) under two separate contracts, one for design and the other for construction, respectively. The construction manager is responsible for construction performance and commits to delivering the project within a defined schedule and price, either a fixed lump sum or a guaranteed maximum price (GMP). The construction manager provides construction input to the owner and design engineer during the design phase and operates as the general contractor during the construction phase. In this guidance, the CMAR firm may be referred to as "the CMAR".
- f. *Design-Bid-Build (DBB)*: A traditional project-delivery method in which the Owner first procures and contracts with an engineer to prepare detailed design plans and specifications for a project. The Owner then procures and contracts with one or more separate construction companies to construct the project, based on the plans prepared by the Design Engineer. In DBB, the contractor does not have input during the design phase.
- g. *Design-Build (DB)*: An AD project-delivery method in which the Owner enters into a single contract with a Design-Builder to design, permit, construct, test, and commission a capital project.
- h. *Design-Builder*: A partnership, corporation, or other legal entity or team that includes an engineer and a construction contractor qualified to engage in civil work construction in Texas.<sup>2</sup>
- i. *Design Engineer*: On a DBB or CMAR project, this is the consulting engineer (engineering firm) procured by the Owner to provide planning, design, and construction phase engineering services. In this capacity, the Design Engineer is also the Engineer of Record.

---

<sup>1</sup> Except when noted, definitions are taken from the Water and Wastewater Design-Build Handbook (Fifth Edition), Water Design-Build Council and Design Build-Institute of America (2019)

<sup>2</sup> Texas Gov't Code § 2269.351(2)

- j. *Design Package*: Design-only documents consisting of engineered drawings and technical specifications which may be issued for construction (IFC) or for regulatory, programmatic, and bid (RP&B) purposes.
- k. *Engineer of Record*: A Design Engineer properly licensed in the State of Texas who seals drawings, reports, or documents for a project and is professionally responsible for those drawings, reports, and documents.
- l. *Entity*: In this guidance, the term may be used to refer in general to a distinct and independent organization.
- m. *Front-End Document Template*: In this guidance, the term refers to the set of contract front-end documents to be used with all Bid Packages on a CMAR project. The template will include the overall project scope, the template sub-contract agreement and/or purchase order agreement that will be used on all Work Packages, the appropriate sections of the TWDB Standard Contract Conditions, any special environmental conditions, and all project-relevant forms.
- n. *Guaranteed Maximum Price (GMP)*: An approach to pricing services in an alternative delivery proposal and contract. The GMP is a price cap for an agreed upon scope of work on which the Owner is liable for reimbursement costs, including materials, labor, and profit. This pricing approach includes an inherent risk for the delivery team to not exceed the contract maximum price.
- o. *Independent Engineer (IE)*:<sup>3</sup> Engineer who is independent of the DB firm. This engineer may be in-house staff, or a consultant hired according to applicable procurement laws. The IE acts as the Owner's representative for the procurement process and for the duration of the work.
- p. *Issued for Construction (IFC) Design Package*: When all components of the Design Package are signed and sealed by one or more engineers licensed in the State of Texas and are issued for construction. The IFC set may not include a disclaimer, as may be found in the RP&B set.
- q. *Owner*: The Entity in charge of developing the project. Normally the Owner and Applicant are one and the same.
- r. *Owner Advisor (OA)*: A third party individual or firm retained by an owner to provide identified services such as technical, procurement, and management services related to a project. The OA can serve as the owner's representative and advisor during procurement, contracting, and management of the project, but does not make an owner's decisions during the delivery of a project unless authorized to do so.
- s. *Plans and Specification (P&S)*: Set of construction drawings that show details of the design of a project, and standards of performance for construction works, materials, and manufactured products.<sup>4</sup>
- t. *Preconstruction Services*: Services performed by the AD firm prior to the completion of design activities. Preconstruction services typically include tasks such as constructability and value engineering reviews, cost estimating, scheduling, and bidding activities.

---

<sup>3</sup> Texas Gov' Code §2269.355(a)

<sup>4</sup> 30 Texas Administrative Code Chapter 217.2(54) and 217.2(68)

- u. *Project Implementation Plan*: Document developed by the Applicant in the planning phase of a project, to serve as a roadmap for successfully completing the project. The Project Implementation Plan defines the owner's capabilities and goals, priorities and drivers, and management oversight for the project, along with its process for selecting a delivery method and procuring an alternative-delivery firm.
- v. *Regulatory, Programmatic, and Bid (RP&B) Design Package*: A Design Package issued for regulatory, programmatic, and bid purposes, that includes a sealed design for all project components within TCEQ regulated design criteria for the scope of work in the Design Package. The set may include a disclaimer indicating the purpose of the documents.
- w. *Supplemental Contract Conditions (SCC)*: Texas Water Development Board Supplemental Contract Conditions contain provisions that are worded to comply with certain statutes and regulations which specifically relate to projects and the program under which they are funded. Provisions that are applicable to the project's funding source or dollar value of the contract are so noted within the provisions.
- x. *Texas Water Development Board (TWDB)*: The TWDB is the state agency primarily responsible for water planning and administering water financing for the state.<sup>5</sup>
- y. *Work Package*:<sup>6</sup> Any major elements of work within a CMAR contract.

---

<sup>5</sup> Texas Water Code §6.011

<sup>6</sup> Texas Gov't Code §2269.255

## Resources:

### ***Applicable Rules:***

[Texas Government Code \(Texas Gov't Code\), Chapter 2269](#): Contracting and Delivery Procedures for Construction Projects

[Texas Government Code \(Texas Gov't Code\), Chapter 2254](#): Professional and Consulting Services

[Texas Water Code \(TWC\), Chapter 17](#): Water Development Public Funding General Provisions

[30 Texas Administrative Code \(TAC\) Chapter 290, Subchapter D](#): Rules and Regulations for Public Water Systems

[30 Texas Administrative Code \(TAC\) Chapter 217](#): Design Criteria for Domestic Wastewater Systems

TWDB Program Administrative Rules found in 31 Texas Administrative Code:

[31 TAC Chapter 363](#): State Funded Projects (Water Development Fund (DFund), State Water Implementation Fund for Texas (SWIFT), Flood Infrastructure Fund (FIF), and Economically Distressed Area Program (EDAP)

[31 TAC Chapter 371](#): Drinking Water State Revolving Fund (DWSRF)

[31 TAC Chapter 375](#): Clean Water State Revolving Fund (CWSRF)

or on the [TWDB Administrative Rules webpage](#).

### ***Guidance Documents:***

TWDB guidance documents can be found on the [TWDB Guidance and Forms Library](#).

Related TWDB guidance documents include the following:

|   |                           |
|---|---------------------------|
| CWSRF Loan Program Guidance:                      | <a href="#">TWDB-0100</a> |
| SWIFT Program Guidance:                           | <a href="#">TWDB-0900</a> |
| FIF Program Guidance:                             | <a href="#">TWDB-0104</a> |
| American Iron and Steel (AIS) Guidance:           | <a href="#">TWDB-1106</a> |
| United States Iron and Steel (U.S. I&S) Guidance: | <a href="#">TWDB-1105</a> |
| Disadvantaged Business Enterprise (DBE) Guidance: | <a href="#">TWDB-0210</a> |
| Davis Bacon Guidance:                             | <a href="#">DB-0156</a>   |
| Guidance on Procuring Architects and Engineers:   | <a href="#">TWDB-1108</a> |
| TWDB Supplemental Contract Conditions (SCC):      |                           |
| • CWSRF & DWSRF - Equivalency Projects:           | <a href="#">TWDB-0550</a> |
| • CWSRF and DWSRF - Non-Equivalency Projects:     | <a href="#">TWDB-0551</a> |
| • State Funded Projects:                          | <a href="#">TWDB-0552</a> |

### ***Other Resources:***

**Note:** These resources are for reference to provide insight on industry standards. They have not been approved by and do not necessarily represent the position of the TWDB.

*Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association, originally published under the Water Design-Build Council, and Design-Build Institute of America, 2019.* A copy of the handbook may be obtained by visiting the Water Collaborative Delivery Association website (<https://watercollaboratedelivery.org/handbook/>), formerly the Water Design-Build Council.

*[Water/Wastewater Sector, Design-Build Done Right™](#), Design-Build Practices, 2015 Publication from the Design-Build Institute of America*

# Alternative Delivery (AD) Guidance

---

## Background

This document has been prepared, based on industry standards, to help guide the Owners and their consultants in understanding how TWDB funding can be used to finance an AD project. Alternative Delivery eligibility, steps necessary to secure funding from the TWDB, requirements for contract approvals, and the release of funds processes will be discussed. Owners must ensure that they comply with all the requirements of Texas Government Code (Texas Gov't Code) Chapter 2269 with regards to hiring and implementing any alternative delivery project as well as state and federal statutes and rules governing TWDB financing programs.

Not every project can (or will) benefit from using an AD method. The Owner must consider the benefits, limitations, cost, schedule, funding program requirements, and other aspects of the project when deciding whether the project would benefit from using an AD approach, especially when using TWDB's CWSRF or DWSRF programs, which include the federal crosscutter requirements.

## Enabling Legislation in Texas

In 2007, the 80<sup>th</sup> Texas Legislature amended the Texas Gov't Code to allow the use of alternative project delivery methods for the construction of water and wastewater projects. The 82<sup>nd</sup> Legislature placed this material in Texas Gov't Code Chapter 2267. The 83<sup>rd</sup> Legislature removed these provisions from Chapter 2267 and placed them in Chapter 2269 of the Texas Gov't Code.

- Construction Manager-at-Risk (CMAR) procedures are described in Texas Gov't Code Chapter 2269, Subchapter F.
- Design-Build (DB) procedures are described in Texas Gov't Code Chapter 2269, Subchapter H.

## TWDB Programs & Alternative Delivery Eligibility

Regardless of the project delivery method employed, all Applicants must meet general TWDB program funding requirements and requirements unique to each funding program. It is important that the Owner understand and comply with these requirements and provide documentation requested during the application, planning, design, construction, and post-construction phases of the project. In addition, once a funding request is approved by the Board, release of funds for project-specific tasks is governed by the applicable Texas Administrative Code (TAC) rules, as well as by TWDB operating procedures and best business practices. The TWDB Program Administrative Rules applicable to the various TWDB funding programs can be found in 31 Texas Administrative Code Chapters [363](#), [371](#), and [375](#) or on the [TWDB Administrative Rules webpage](#).

**NOTE:** The following recent SRF Programmatic Eligibility Clarifications were provided by the Environmental Protection Agency (EPA) (Headquarters), and are reflected through this guidance:

- Design-Build projects are eligible for CWSRF – Equivalency funding when the construction cost is predominant (i.e., 51 percent or more of the total project cost).
- Procurement standards in 2 CFR Part 200 do not apply to CWSRF or DWSRF loans.



# Part I – Construction Manager-at-Risk Method

---

## Requirements when using the CMAR Delivery Method

### CMAR Delivery Method

Construction Manager-at-Risk is a delivery method by which an Owner contracts with an architect or engineer for design and construction phase services, and contracts separately with a construction manager-at-risk (CMAR) to serve as the general contractor and to provide consultation during the design and construction, rehabilitation, alteration, or repair of a facility. The CMAR (also referred to as the CMAR firm) is responsible for procuring equipment, subcontracts, and delivering the project within an agreed upon schedule and price. The CMAR must bid the work in accordance with local, state, federal, and programmatic requirements. Minor work, as determined by the Owner, may be included in the general conditions of the contract, and performed by the CMAR.

#### *CMAR Phases:*

- The Owner procures the design engineer and the CMAR separately in accordance with applicable procurement laws and program funding requirements. A guaranteed maximum price (GMP) for the CMAR contract may be set at this time, or the CMAR contract may be amended at a pre-determined stage of the project to set a GMP.
- The Owner's selection of a CMAR firm, as well as process deadlines, are outlined in [Texas Gov't Code § 2269.253](#) and [§ 2269.254](#). These statutes allow for procurement of the CMAR firm in either a one-step process (via a request for proposals (RFP)) or a two-step process (via a request for qualifications (RFQ) followed by an RFP). The Owner shall state the selection criteria in the RFQ and/or RFP.
  - In the two-step process, per the above referenced Code, the Owner is not allowed to request fees or prices during the RFQ phase. In addition, the Owner has 45 days from the day on which the final proposals are opened, to evaluate and rank the submitted proposals.
- During the design phase, the CMAR firm becomes actively involved, providing construction-related advice on preconstruction aspects of the project such as site layout, constructability, early cost and schedule factors, and preparation of bid packages which will be bid in association with a GMP.
- The CMAR will advertise Bid Packages, review the bids, and recommend award of each work package. The cost of the CMAR contract will be the cumulative award for all work packages, CMAR fees, and profit, not to exceed the GMP.
- During the construction phase, the CMAR firm assumes the role of general contractor, and is responsible for full construction and commissioning.

### A. Project Pre-Planning when Seeking TWDB Funding

The Owner should keep the following steps in mind when seeking funding from the TWDB for the development of a project using the CMAR method.

#### 1. *Project Pre-Planning*

The Owner should begin to plan its project and evaluate the appropriate delivery method to use based on criteria such as project complexity, size, cost, schedule, and risk. The Owner should also begin to evaluate potential financing options that would be compatible with the

delivery method chosen.

TWDB staff strongly recommends that the project Owner consider engaging an in-house Project Management Team, consisting of representatives from engineering, operations and maintenance, finance, procurement, legal, and communications, to assist in the project definition, procurement of consultants and contractors, and implementation aspects of the CMAR method.

See Chapter One of the Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association (originally published under the Water Design-Build Council), and Design Build-Institute of America (2019) for additional information on the owner's project implementation team membership and roles, as well as an example Organization Positions and Responsibilities table.

The TWDB recommends the Owner request an informational meeting with TWDB Regional staff at this phase to discuss potential funding options and TWDB funding requirements.

## **2. *Risks and Responsibilities***

As part of the *Project Implementation Plan*, the TWDB recommends that the Owner develop a detailed risk and responsibilities matrix, to be included in the procurement documents. As described in the *Water and Wastewater Design-Build Handbook*, a risk and responsibilities matrix "identifies foreseeable risks, the probability that each risk will occur, the potential impact of each risk, the party responsible for the risk, and how each risk will be managed if realized." Once the CMAR firm is selected, the matrix becomes fundamental in the preparation and negotiation of the agreement.

Additionally, the TWDB recommends that a preliminary risk register be developed by the Owner for the project. A risk register catalogs risks and identifies the party responsible for mitigating them. More on the benefits of a risk and responsibilities matrix and risk register concepts, as well as examples of a risks and responsibilities matrix and a risk register, can also be found in the *Water and Wastewater Design Build Handbook* (See Table 3.2 – Examples of Allocated Risks and Responsibilities in Collaborative-Delivery Approaches, and Figure 3.2 – Sample Project Risk Register.)

## **3. *Selection of a CMAR firm:***

The Owner shall select the CMAR firm in compliance with all the requirements of [Texas Gov't Code Chapter 2269](#). All contracts to be funded by the TWDB shall include the applicable TWDB Supplemental Contract Conditions (SCC) in their entirety (or as modified with agreement and prior written approval of the TWDB) and all applicable TWDB programmatic forms (see "*Resources*" section above).

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the CMAR firm must be approved **prior** to contract execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and CMAR firm can be found in Attachment No. 5.

*CMAR contract* – The TWDB recommends that the CMAR contract include:

- a clearly defined scope of work;
- clearly defined responsibilities and relationship between the design engineer and the CMAR;

- clearly defined DBE requirements for all sub-contracts, supplies, services, and equipment for DWSRF and CWSRF Equivalency funding;
- documentation to address work that may be self-performed by the CMAR, in accordance with [Texas Gov't Code § 2269.255](#) (see Part I.B.5.f – CMAR Bidding on Bid Packages);
- clearly define elements of work that may be considered “minor work” (see Part I.B.3.a) along with the defined minor work criteria;
- clearly identified proposed early work to be procured, as applicable;
- documentation to address responsibilities for testing, and inspection, and quality control during construction;
- documentation to address responsibilities for completing buildability and constructability review and certification; and,
- appropriate TWDB SCC and forms as discussed in Part I.C of this guidance.

## B. TWDB Project Implementation Processes using CMAR

The sections below outline the general TWDB project process when using the CMAR delivery method. The Owner should discuss the process below, with the Regional Water Project Development (RWPD) Team assigned to its project and clarify any questions early in the process.

The Alternative Delivery Contract Submittal Form (Attachment No. 1 – TWDB-0250) and the Design Package Submittal Form (Attachment No. 2 – TWDB-0300A) provide an overview of the requirements applicable to each funding program. **All submittals must be in a high quality, fully searchable, PDF format, contain the correct TWDB project identifier, be bookmarked, or indexed, and address all required submittal items. Submittals not meeting these requirements will not be accepted for review.**

### 1. Application Phase

- a. A pre-application meeting must be held prior to submittal of an application for funding to discuss the proposed project and the alternative delivery method being considered. For CWSRF, DWSRF, SWIFT, and FIF projects, this meeting may be scheduled after the Owner receives an invitation to apply.
- b. The Owner submits a complete application. See [TWDB application form](#) or the [online application \(OLA\)](#).
- c. If the Owner is only requesting funds for the design and construction phases, then an Engineering Feasibility Report (EFR) and a [Federal Environmental Review Form](#) (for Federal Programs) or an [Environmental Data Form](#) (for State Programs) will be required as part of the application.
- d. The Owner will provide a formal letter outlining the implementation of the CMAR method in the proposed project. The Owner shall ensure that the following are addressed in their letter:
  - document the proposed benefits of using an AD method in accordance with requirements of [Texas Gov't Code § 2269.056](#);
  - certify the Design Engineer, or an entity related to the Design Engineer, will not serve, alone or in combination with another person, as the CMAR for the project ([Texas Gov't Code § 2269.252\(b\) and \(c\)](#)); and,
  - certify the Design Engineer will be selected based on demonstrated competence and qualifications as provided by [Texas Gov't Cod Chapter 2254 \(Texas Gov't Code § 2269.057\(b\)\)](#).

## 2. Design Engineer Firm Selection

- a. Contracts for engineering services must be submitted for review prior to execution. Note that this review by the TWDB is not to determine the legal validity of the contract, but to evaluate scope of work and eligibility for funding through the TWDB funding programs.
- b. For DWSRF and CWSRF Equivalency funding, all professional services must follow the DBE requirements set forth in [TWDB-0210](#). All DBE forms must be submitted for review and approval, prior to execution of the contract to ensure funding eligibility.
- c. For CWSRF Equivalency funding, the Owner must certify that the consulting engineer services were procured in accordance with the requirements of the Federal Water Pollution Control Act as interpreted by the Environmental Protection Agency (See [TWDB-1108](#))

## 3. CMAR Firm Selection, Documentation, and Contract Review

The Owner's contract with the CMAR firm, as well as the advertisement for proposals, must include all program specific language and bonding requirements as found in the TWDB SCC:

CWSRF & DWSRF Equivalency projects ([TWDB-0550](#))  
CWSRF & DWSRF Non-Equivalency projects ([TWDB-0551](#))  
State loan projects ([TWDB-0552](#))

Please note, the TWDB SCC should be included in the contract documents and will not be accepted if added as an appendix.

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the CMAR firm must be approved prior to contract execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and CMAR firm can be found in Attachment No. 5.

### ***a. Draft CMAR Contract Review:***

- The Owner shall provide documentation to demonstrate compliance with [Texas Gov't Code § 2269.253](#) and [§ 2269.254](#) (see Attachment No. 1 – Alternative Delivery Contract Submittal Form). Documentation shall include:
  - A copy of the RFP for a one-step process or RFP and RFQ for a two-step process ([Texas Gov't Code § 2269.253](#)), and
  - If DWSRF or CWSRF Equivalency funding, the applicable set of DBE forms (see [TWDB-0210](#)) and appropriate supporting documentation.
- The Owner shall submit a copy of the draft Owner/CMAR contract for review for compliance with TWDB funding program requirements. The submittals shall be in a high quality, fully searchable PDF format.
- All TWDB programmatic requirements as provided in the appropriate version of the TWDB SCC ([TWDB-0550](#), [TWDB-0551](#), or [TWDB-0552](#)) must be included in the CMAR contract. Any modifications to the SCC must receive prior written approval by the TWDB project manager.
  - The TWDB recommends that the Owner consider adding a discussion to the CMAR contract regarding the factors identified below. These are recommended as Best Management Practice (BMP) additions to the CMAR contract, intended to help prevent or reduce problems and conflicts that may arise due to ambiguity between roles and responsibilities of the CMAR firm

and the Design Engineer, as well as to avoid confusion regarding when the CMAR firm may self-perform or perform minor work.

- Clearly define the responsibilities and relationships between the Design Engineer and the CMAR. This is especially important if a Risks and Responsibilities Matrix (or similar type of documents) has not been prepared;
- If known at the time of preparation of the contract, address work to be self-performed by the CMAR. See also Part I.B.5.f of this guidance.
- Address testing and inspection during construction; and,
- See also Part I.A.3 of this guidance.
- Any proposed minor work must be clearly defined and included in the general conditions of the contract ([Texas Gov't Code § 2269.001\(4\)](#) and [§ 2269.255 \(a\)](#)). The Owner and its legal counsel are responsible for defining what type of work constitutes "minor work". The Owner and its legal counsel shall provide a certification that the proposed method of procurement meets the regulations applicable to the Owner.
- TWDB will provide a comment letter, if necessary, to communicate any concerns with the draft contract.
- Once all concerns have been addressed, the TWDB will concur in the award of the contract.

***b. Executed CMAR Contract Acceptance:***

- The Owner will execute the CMAR contract and submit a copy of the executed contract to the TWDB. (See Attachment No. 1 – Alternative Delivery Contract Submittal Form)
  - Note: The CMAR will provide the payment and performance bonds in an amount not less than 100-percent of the construction contract price (GMP or fixed price amount) and meet the requirement of [Texas Water Code § 17.183\(2\)\(A\) and \(B\)](#). If a price has not been agreed upon, the CMAR may provide a bid bond, or other financial security acceptable to the Owner, in accordance with [Texas Gov't Code § 2269.258](#).
- The TWDB will provide a comment letter, if necessary, to communicate any concerns with the executed contract.
- Once all comments have been addressed, the TWDB will accept the CMAR contract. For details on when work elements are eligible for funding see Part I.C Availability of Funds for CMAR Projects.

**4. Planning and Acquisition for CMAR Projects**

Planning phase submittals include (1) an Environmental Document, and (2) an Engineering Feasibility Report (EFR). Guidance for these submittals is discussed in the following documents, which can be found at the TWDB website:

- Engineering Feasibility Report Guidance:
  - [Water Projects](#)
  - [Wastewater Projects](#)
  - [Flood Projects](#)
- [Federal Environmental Review \(EID\)](#)
- [Environmental Data Form for State Programs](#)
- [Categorical Exclusion/Determination of No Effect Request Form](#)

The Planning phase is complete upon issuance of an Environmental Determination and

approval of the EFR.

If land acquisition is a project component, the environmental review related to the land acquisition must be completed and an environmental determination issued by the TWDB, prior to the release of funds for land acquisition. Requirements for release of funds are outlined in [TAC § 363.43\(c\) and \(d\)](#), [§ 371.73\(c\)](#) (DWSRF), and [§ 375.93\(c\)](#) (CWSRF).

## 5. Preparation of Design and Bid Packages

This section discusses the process to submit Design and Bid Packages for review and approval. Prior to submitting documents for review, please ensure that the following items are addressed:

- a. The TWDB will provide a web portal file sharing page where all project documents will be stored and accessible to the TWDB for the life of the project. Documents must be named following the Naming Convention found in Attachment No. 4.
- b. [Texas Water Code § 17.183\(b\)](#) requires plans and specifications submitted to the Board in connection with an application for financial assistance must include a seal by a licensed engineer affirming that the plans and specifications are consistent with and conform to current industry design and construction standards.
- c. The applicable Document Submittal Checklist is completed including page references to all review items.
  - Design Package Submittal Form (TWDB-0300A)
  - Bid Package Procurement Submittal Form (TWDB-0400A)
- d. Bookmark or index all submittals to reduce review time and potential comments. Submittals that are not bookmarked will not be accepted.
- e. Submittals shall be in a high quality, fully searchable PDF format. Submittals that are not searchable will not be accepted.
- f. The Owner shall perform a Quality Assurance and Quality Control (QA/QC) review on documents submitted to TWDB for review or approval. The Owner shall ensure:
  - The correct TWDB project identifier is used on all documents.
  - Documents are properly signed and notarized, as applicable.
  - All project elements the Owner is seeking TWDB funding for must receive TWDB approval prior to construction.
  - The submittal is complete (bookmarked, searchable, no missing pages or information), concise, and accurate
  - There is no duplication of attachments, guidance, or forms within a document.

CMAR projects can take on many different structures. When planning the structure of Design and Bid Packages please discuss with the TWDB project manager as early as possible. As shown in Figure 1 below, the project can include one or multiple Design Packages.

It is the responsibility of the CMAR, working in coordination with the Design Engineer, to split the Design Package into Bid Packages that include individual Work Packages combined for advertisement. In general, a Bid Package contains multiple Work Packages with either similar delivery schedules or related scopes of work. The CMAR contract may be amended to include a partial GMP after procurement of each Bid Package.



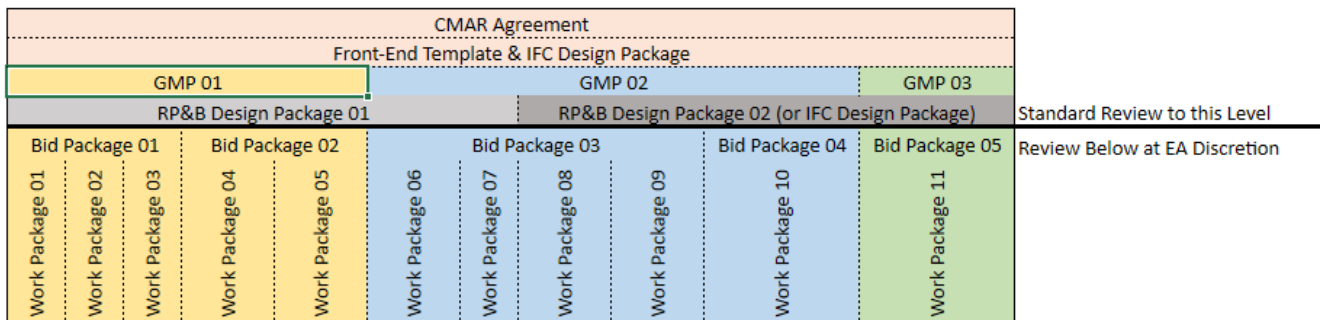


Figure 1: CMAR Project Structure

**a. Front-End Document Template:**

- The Owner or CMAR firm shall submit for review a template set of contract front-end documents to be used with all Bid Packages on the project. The template must include the overall project scope, the template sub-contract agreement and/or purchase order agreement that will be used on all Work Packages, the appropriate sections of the TWDB SCC, any special environmental conditions, and all project-relevant forms (see Attachment No. 2 – TWDB-0300A, Section 2.00).
- The TWDB will review this template and provide comments. Once all comments have been appropriately addressed, the TWDB will issue a front-end document template approval letter.
- The resulting preapproved set of front-end template documents will only need to be re-reviewed if there are any changes to the template or if the included documents are updated. Any changes to the SCC or template front-end documents must be discussed with and approved by TWDB staff prior to any revisions.

**b. Design Package Review:**

- The Owner or Design Engineer will submit for review a complete Design Package which may be a single review or staged into incremental review phases. Each Design Package will need to be reviewed for compliance with TCEQ Design Criteria, as applicable.
- The process outlined below will be repeated for each Design Package in the project.

**Staged Design Package Review:**

- For a staged review, the Design Engineer shall submit a Regulatory, Programmatic, and Bid (RP&B) Design Package.
  - The RP&B Design Package must include complete design for all project components within TCEQ regulated design criteria for the scope of work included in the Design Package.
  - The RP&B Design Package must be sealed per [TAC §137.33](#), and clearly marked as “This document is released for the purposes of regulatory and programmatic review, and bidding only. It is not to be used for construction purposes.”.
  - The Design Package submittal must include a completed copy of the **Design Package Submittal Form (Attachment No. 2 – TWDB-0300A)**. If you have

questions, please discuss with the TWDB project manager.

- **Note:** per LOA between the TWDB and TCEQ ([Texas Administrative Code \(TAC\) § 354.5](#)), TCEQ retains review authority over certain water projects. For these projects, TWDB will rely on TCEQ's technical review and approval of the design package.
- **Note:** Exceptions and variances to TCEQ rules must be approved by the TCEQ ([TAC § 290.39\(1\)](#) and [§ 217.2\(78\)](#) and [§ 217.4](#)). The consultant shall contact TCEQ to obtain approval of any variance or exception and submit a copy of TCEQ's approval to the TWDB.
- The TWDB will conduct a review of the RP&B Design Package for compliance with TCEQ and programmatic rules. A comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been addressed, the RP&B Design Package will be stamped approved by the TWDB, and a Design Package approval letter will be issued.
  - **Note:** Any substantial or material alteration to the approved Design Package must be approved by TWDB per [Texas Water Code 17.186](#).

***Single Design Package Review:***

- For projects not utilizing a staged review, the Design Engineer shall submit a Design Package issued for construction purposes.
  - The Issued for Construction (IFC) Design Package must include complete design for all project components within the scope of work included in the Design Package.
  - The IFC Design Package must be sealed per [TAC §137.33](#), and cannot include a disclaimer limiting the set to a specific use.
  - The Design Package submittal must include a completed copy of the **Design Package Submittal Form (Attachment No. 2 – TWDB-0300A)**. If you have questions, please discuss with the TWDB project manager.
    - **Note:** per LOA between the TWDB and TCEQ ([Texas Administrative Code \(TAC\) § 354.5](#)), TCEQ retains review authority over certain water projects. For these projects, TWDB will rely on TCEQ's technical review and approval of the design package.
    - **Note:** Exceptions and variances to TCEQ rules must be approved by the TCEQ ([TAC § 290.39\(1\)](#) and [§ 217.2\(78\)](#) and [§ 217.4](#)). The consultant shall contact TCEQ to obtain approval of any variance or exception and submit a copy of TCEQ's approval to the TWDB.
- The TWDB will conduct a review of the IFC Design Package for compliance with TCEQ and programmatic rules. A comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been addressed, the IFC Design Package will be stamped approved by the TWDB, and a Design Package approval letter will be issued.
  - **Note:** Any substantial or material alteration to the approved Design Package must be approved by TWDB per [Texas Water Code 17.186](#).

***c. Bid Package Procurement Concurrence with Award:***

- The CMAR shall submit the required documents for the Bid Package Procurement to TWDB for review and concurrence of award at the GMP level. Please see **Attachment No. 3 – Bid Package Procurement Submittal Form (Section 4.0)** ([TAC §](#)



[363.43\(c\)\(1\)](#); [§ 371.63\(c\)\(2\) and \(d\)](#); [§ 375.83\(c\)\(2\) and \(d\)](#).

- The CMAR shall upload all required documentation for each Bid Package to the project web portal. The documents must follow the TWDB Naming Convention (Attachment No. 4) and remain accessible for the duration of the project.
- Any addenda including design changes that are issued on an approved Design Package during the bidding process must be signed and sealed by a professional engineer licensed in the State of Texas as required by this guidance and outlined in [TAC § 137.33\(f\)\(3\)](#). Addenda must be provided to TWDB for review as part of the Bid Package award submittal.
- The TWDB will conduct a review of the Bid Procurement Package Award documents at the GMP level for compliance with funding and procurement requirements. A comment letter will be provided, if necessary, to communicate any needed revisions.
  - **Note:** At any time, the TWDB may request, and review, documentation related to specific Work Packages approved in a Bid Package.
- Once all comments have been appropriately addressed, the TWDB will concur with award of the Bid Package.

***d. Bid Package Concurrence with Notice to Proceed Review:***

- The CMAR (or the Owner, if the CMAR bids on the package), shall submit the required executed contract documents to TWDB for review and concurrence with notice to proceed. Please see **Attachment No. 3 - Bid Package Procurement Submittal Form (Section 5.0)**.
  - The CMAR shall upload all required documentation for each Bid Package to the project web portal. The documents must follow the TWDB naming convention (Attachment No. 4) and remain accessible for the duration of the project.
- The TWDB will review the executed Bid Package documents at the GMP level. A comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been appropriately addressed, the TWDB will issue a Concurrence with Notice to Proceed and Partial Eligible Release of Award Letter.
  - If the staged review process is being utilized and a RP&B Design Package was approved during the Design Package review, the letter will allow for release of up to 75% of the GMP or bid package award amount for non-construction activities such as procurement of long-lead items and mobilization, which are included in the approved design.
    - The remaining amount of the GMP will not be eligible for release until the IFC Design Package is reviewed and approved by the TWDB (see Part I.B.5.e).
  - If the single design package review process is being utilized and the IFC Design Package was reviewed and approved, the letter will allow for release of up to 95% of the GMP or bid package award amount at that time (excluding unallocated contingencies or allowances, and not exceeding the GMP).
- **Note:** At any time during the construction phase, the TWDB may request, and review, documentation related to Work Packages approved in a Bid Package.

***e. Issued for Construction Set and Concurrence with Notice to Proceed for Projects Utilizing Staged Design Package Review:***

This section covers further steps for projects utilizing the staged review process on Design Packages. If the RP&B Design Package was reviewed and approved during the Design

Package review, the IFC Design Package must be provided to, and approved by, the TWDB before the start of any construction.

- Once the IFC Design Package is issued by the design engineer, the set must be submitted to the TWDB with a transmittal letter and a signed and sealed change log listing all changes between the approved RP&B Design Package and the IFC Design Package.
- The TWDB will review the IFC Design Package and corresponding change log. A comment letter will be provided, if necessary, to communicate any questions.
- When all comments have been appropriately addressed, the IFC Design Package will be stamped approved by the TWDB, and the TWDB will issue combined letter that includes (1) approval of the IFC Design Package and (2) Concurrence with Notice to Proceed and Eligible Release of Award Letter.
  - This letter will allow for release of up to 95% of the GMP or bid package award amount (excluding unallocated contingencies or allowances, and not to exceed the GMP).).
- **Note:** At any time during the construction phase, the TWDB may request, and review, documentation related to Work Packages approved in Bid Package

***f. CMAR Bidding on Bid Packages (Self-Performance)***

[Texas Gov't Code § 2269.255\(b\)](#) provides that the CMAR may seek to perform a portion of the work itself if the CMAR submits its bid or proposal for a portion of the work in the same manner as all other contractors or subcontractors. If the CMAR chooses to submit a bid, then the Owner will have the responsibility to determine if the CMAR's bid provides the best value for the Owner.

If the CMAR seeks to self-perform a portion of the work, then the Owner shall provide a description of the bid process and a certification that:

- the CMAR submitted its bid or proposal for that Bid Package in the same manner as all other trade contractors or subcontractors; and
- the Owner determined that the CMAR's bid proposal provided the best value.

## **6. Other Construction Phase Activities**

***a. GMP or CMAR Contract Amendments:***

- The Owner shall submit all GMP or CMAR contract amendments throughout the construction phase.
- The TWDB will conduct a review of the amendment and a comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been appropriately addressed, a GMP amendment approval letter will be issued.

***b. Use of Contingency Funds:***

- The Owner shall submit change requests from the CMAR, per the terms of the CMAR contract, to reallocate funds from contingency throughout the construction phase.
- The TWDB will conduct a review of the change request and a comment letter will be provided, if necessary, to communicate any needed revisions.

- Once all comments have been appropriately addressed, a change request approval letter will be issued, and contingency funds will be reallocated to eligible change request work items.

**c. Use of Allowance Funds:**

- Requirements related to material, equipment, and other allowances must be outlined in the CMAR contract.
- During review of a Design Package, allowances must be clearly outlined in the bid form, if applicable. The TWDB will review the included allowances and determine if they are eligible costs.
- The TWDB will note eligible allowance costs as part of the Design Package approval and Concurrence with Notice to Proceed letters.

## C. Availability of Funds for CMAR Projects

Funds for planning, land acquisition, design, and construction activities are made available according to the funding program's specific rules and requirements; and upon receipt of sufficient documentation, approval by TWDB, and completion of all required milestones.

The general progression for the availability of funds is as follows:

### 1. Closing, Planning, and Land Acquisition Costs:

- a. *Fiscal Services funds*: Are released after Board commitment and completion of all closing prerequisites.
- b. *Planning Phase funds* (Permitting, Environmental, Engineering-Planning, and applicable special engineering): Are released after receipt of executed professional services contracts for the planning or permitting phase and upon completion of all closing-phase prerequisites.
- c. *Land Acquisition funds*: Are released after completion of applicable State or Federal land acquisition and appraisal rules (based on funding program). Land Acquisition funds may only be released after the issuance of the environmental determination.

### 2. Design and Construction Costs:

- a. *Design Phase funds*: Engineering design tasks (performed by the Owner's Design Engineer), are eligible for funding once the project's planning phase (including issuance of an environmental determination) has been approved and upon completion of all design-phase prerequisites.
- b. *CMAR Preconstruction Services*: Preconstruction services are eligible for funding after receipt of executed contracts for preconstruction services and upon approval of an engineering feasibility report, and issuance of an environmental determination for the project. CMAR contracts must be approved by TWDB prior to eligibility for funding of any preconstruction services by the CMAR (see Part I.B.3.a-b above). Any special fees included in the CMAR contract (such as design phase service fees), will be made available in accordance with the terms of the contract and after all applicable requirements as described above have been met.
  - **Note:** For projects utilizing CWSRF or DWSRF equivalency programs, all sub-contracts for construction, supplies, services, and equipment must meet DBE procurement requirements to be eligible for funding.
- c. *Construction Phase funds*: Construction phase costs are eligible for funding after the

Owner and CMAR execute a GMP or agree on a Fixed Price, the CMAR has provided the required performance and payment bonds, and TWDB has issued concurrence in NTP for each of the approved Bid Package (see Part No. I.B.5.d-e above).

- Up to 75% of the approved and eligible construction costs are available when the Concurrence with NTP and Partial Eligible Release of GMP letter is issued (if following staged review process).
- Up to ninety-five percent of the approved and eligible construction costs are available when a Concurrence with NTP and Eligible Release of GMP Letter is issued. Funds for construction costs will be made available as they are approved. Note that funds are released according to program guidelines.
- The final five percent of construction costs is available contingent upon TWDB's issuance of a Certificate of Approval (COA) for the project as a whole or completed phases of work. A list of documents needed to issue a COA can be found in Section 4 – Releasing Final Retainage below. The TWDB project manager will be able to provide clarification at the beginning of the construction project regarding any variances to the required documentation.
- Any construction phase service fees included in the Owner/CMAR contract will be available in accordance with the terms of the contract.
  - i. **Note:** For projects utilizing CWSRF or DWSRF equivalency programs, all sub-contracts for construction, supplies, services, and equipment must meet DBE procurement requirements to be eligible for funding.

### 3. Ineligible Project Components:

In general, the following are not eligible for TWDB funding (note this is not an exhaustive list):

- a. Testing, remediation, or disposal of contaminated, potentially contaminated, or hazardous materials.
- b. Street paving beyond what is required to bring a street to the condition it was before the work began (for line work and other projects within roadways).
- c. Release of unallocated contingencies. Any contingency funds must be reallocated to an approved budget line item or specified and eligible task before release (see Part No. 1.B.6.b above).
- d. Release of unallocated expenses such as Owner's or Contract Allowance.

### 4. Releasing Final Retainage:

Prior to approval for the release of final retainage for a GMP or the overall project, the TWDB's Executive Administrator must issue a Certificate of Approval (COA). The process outlined below may be used iteratively to close out GMPs during the project for completed phases of work or may be used at the end of a project to close out the project as whole.

- The Owner shall submit a COA Request to the TWDB for the CMAR contract, associated GMP(s), or overall project. A complete COA Request submittal must include:
  1. A letter from the CMAR (or Owner, when appropriate) certifying that all work has been completed and that all close out documents have been received.
  2. CMAR firm affidavit that all bills, except for retainage, for the completed phases of work have been paid.

3. Owner's project acceptance letter including the language "the project (or completed phases of work) has been completed according to the approved plans and specifications."
  4. Engineer's project acceptance letter including the language "the project (or completed phases of work) has been completed according to the approved plans and specifications."
  5. CMAR's project acceptance letter including the language "the project (or completed phases of work) has been completed according to the approved plans and specifications."
  6. Request for release of any eligible funds that have not yet been released, following the procedures discussed above.
  7. Confirmation by the Owner of the receipt of a complete set of "as-built" drawings (if applicable).
  8. Any remaining final pay requests.
  9. Warranty statement (from engineer or Owner) with a duration of at least 12 months from the date of project (or completed phases of work) completion.
  10. Responsible Engineer's certification of contract (or completed phases of work) completion date.
  11. Certification by the Owner and CMAR firm that the project (or completed phases of work) was completed in compliance with the U.S. Iron and Steel Requirements ([TWDB-1105-A](#)) (if applicable).
  12. Final American Iron and Steel Certification ([TWDB-1106-C](#)) from the Owner and CMAR firm for the project (or completed phases of work) (if applicable).
  13. All change orders not previously submitted/approved.
  14. Project Public Awareness Certification ([TWDB-1109-A](#)) (if applicable)
  15. Fiscal Sustainability Plan (if applicable)
- The TWDB will conduct a review of the close out documents. A comment letter will be provided, if necessary, to communicate any needed revisions.
  - After all comments have been appropriately addressed, the TWDB will issue a COA for the project or the completed phases of work.
  - If applicable, after the COA is issued, a final outlay may be submitted for the retainage amount of the project or the completed phases of work.

# Part II – Design-Build Method

## Requirements when using the DB Delivery Method

### DB Delivery Method

Design-Build is a project delivery method that provides single-point accountability for both design and construction. In DB, the Owner contracts with a single entity to provide both design and construction services for the construction, rehabilitation, alteration, or repair of a facility.

This guidance is written to ensure compliance with [Texas Gov't Code Chapter 2269 Subchapter H](#), and programmatic requirements whether utilizing a traditional or progressive DB method. The industry currently identifies a variety of DB processes, such as Progressive Design-Build and Fixed-Price Design Build. The Owner should consult the *Water and Wastewater Design-Build Handbook* (Fifth Edition), from the Water Collaborative Delivery Association (originally published under the Water Design-Build Council) and Design-Build Institute of America (2019), or other relevant literature, for further details on DB options available and consideration on how to structure its DB capital project. It is the Owner's responsibility to identify and ensure the DB process chosen is compliant with all applicable Texas Gov't Code requirements.

#### **DB Phases:**

- The Owner designates an engineer, independent of the DB firm, to serve as the Owner's representative throughout the project.
  - The selection of a DB firm is a two-step process, that begins with an RFQ prepared by the Owner. The RFQ shall include the criteria for selection of the DB firm as well as a design criteria package ([Texas Gov't Code § 2269.357](#)).
    - Each firm responding to the RFQ must be ready to certify to the Owner that each member of the DB firm's team was selected based on demonstrated competence and qualifications ([Texas Gov't Code § 2254.004](#)).
    - The Owner shall evaluate each DB's response, cost-related or price-related evaluation factors are not permitted at this stage ([Texas Gov't Code § 2269.359](#)).
    - The Owner will then request an additional proposal from qualified DB firms and shall select a DB firm using a combination of technical and cost proposals ([Texas Gov't Code § 2269.361](#)).
  - Additionally, the Owner shall procure an Independent Engineer (if not in-house), based on demonstrated competence and qualifications ([Texas Gov't Code § 2254.004](#) & [Texas Gov't Code § 2269.355](#)).
  - The Owner shall contract for other professional services, such as inspection services, materials testing, and verification of testing services ([Texas Gov't Code § 2269.356](#)).
    - The DB firm submits the design to the Owner to ensure scope compliance.
    - The DB proceeds to construct the project.

### **A. Project Pre-Planning when Seeking TWDB Funding**

The Owner should keep the following steps in mind when seeking funding from the TWDB for the development of a project using the DB method.

#### **1. Project Pre-Planning**

The Owner should begin to plan its project and evaluate the appropriate delivery method to



use based on criteria such as project complexity, size, cost, schedule, and risk. The Owner should also begin to evaluate potential financing options that would be compatible with the delivery method chosen.

TWDB staff strongly recommends that the project Owner consider engaging an in-house Project Management Team, consisting of representatives from engineering, operations and maintenance, finance, procurement, legal, and communications, to assist in the project definition, procurement of consultants and contractors, and implementation aspects of the DB method.

See Chapter One of the Water and Wastewater Design-Build Handbook (Fifth Edition), Water Collaborative Delivery Association (originally published under the Water Design-Build Council), and Design Build-Institute of America (2019) for additional information on the owner's project implementation team membership and roles, as well as an example Organization Positions and Responsibilities table.

The TWDB recommends the Owner request an informational meeting with TWDB Regional staff at this phase to discuss potential funding options and TWDB funding requirements.

## **2. *Risks and Responsibilities***

As part of the *Project Implementation Plan*, the TWDB recommends that the Owner develop a detailed risk and responsibilities matrix, to be included in the procurement documents. As described in the *Water and Wastewater Design-Build Handbook*, a risk and responsibilities matrix "identifies foreseeable risks, the probability that each risk will occur, the potential impact of each risk, the party responsible for the risk, and how each risk will be managed if realized." Once the DB firm is selected, the matrix becomes fundamental in the preparation and negotiation of the agreement.

Additionally, the TWDB recommends that a preliminary risk register be developed by the Owner for the project. A risk register catalogs risks and identifies the party responsible for mitigating them. More on the benefits of a risk and responsibilities matrix and risk register concepts, as well as examples of a risks and responsibilities matrix and a risk register, can also be found in the *Water and Wastewater Design Build Handbook* (See Table 3.2 – Examples of Allocated Risks and Responsibilities in Collaborative-Delivery Approaches, and Figure 3.2 – Sample Project Risk Register.)

## **3. *Selection of a DB firm:***

The Owner shall select the DB firm in compliance with all the requirements of [Texas Gov't Code Chapter 2269](#). All contracts to be funded by the TWDB shall include the applicable TWDB Supplemental Contract Conditions (SCC) in their entirety (or as modified with agreement and prior written approval of the TWDB) and all applicable TWDB programmatic forms (see "*Resources*" section).

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the DB firm must be approved **prior** to contract execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and AD firm can be found in Attachment No. 5.

*DB contract* – A comprehensive list of items to consider when preparing a DB contract can be found in the [Water/Wastewater Sector, Design-Build Done Right™](#) 2015 publication from

the Design-Build Institute of America<sup>7</sup>. TWDB staff recommends that the Owner refers to this resource when preparing its DB contract.

The TWDB recommends that the DB contract include:

- identification of significant project-specific risks and a clear identification of how those risks will be handled;
- fair (and clear) process for review and resolution of potential changes to the contract and adjustments in contract price and time;
- dispute resolution process;
- the contract should clearly specify the owner's role during project execution, including acting upon design and other submittals, and role in quality assurance/quality control (QA/QC);
- define the role of the engineer of record and how they will communicate with the owner; and,
- documentation to address responsibilities for testing, and inspection, and quality control during construction must be provided.

## B. TWDB Project Implementation Processes using DB

The sections below outline the general TWDB project process when using the DB delivery method. The Owner should discuss the process below with the Regional Water Project Development (RWPD) Team assigned to its project and clarify any questions early in the process.

The Alternative Delivery Contract Submittal Form (Attachment No. 1 – TWDB-0250) and the Design Package Submittal Form (Attachment No. 2 – TWDB-0300A), provide an overview of the requirements applicable to each funding program. **All submittals must be in a high quality, fully searchable, PDF format, contain the correct TWDB project identifier, be bookmarked, or indexed, and address all required submittal items. Submittals not meeting these requirements will not be accepted for review.**

### 1. Application Phase

- a. A pre-application meeting must be held prior to submittal of an application for funding to discuss the proposed project and the alternative delivery method being considered. For CWSRF, DWSRF, SWIFT, and FIF projects, this meeting may be scheduled after the Owner receives an invitation to apply.
- b. The Owner submits a complete application. See [TWDB application form](#) or the [online application \(OLA\)](#).
- c. If the Owner is only requesting funds for the design and construction phases, then an Engineering Feasibility Report (EFR) and a [Federal Environmental Review Form](#) (for Federal Programs) or an [Environmental Data Form](#) (for State Programs) will be required as part of the application.
- d. The Owner will provide a formal letter outlining the implementation of the DB method. The Owner shall ensure that the following are addressed in their letter:
  - document the benefits of using an AD method in accordance with the requirements of [Texas Gov't Code § 2269.056](#);
  - reference the appropriate section of [Texas Gov't Code Chapter 2269, Subchapter H](#), including (but not limited to)

---

<sup>7</sup> *Water/Wastewater Sector, Design-Build Done Right™, Design-Build Practices, Design-Build Institute of America. December 2015.*



- Owner has used the minimum criteria as a minimum basis for determining the design-build method is appropriate for the project ([Texas Gov't Code § 2269.353\(c\)](#)):
  - The extent to which the entity can adequately define the project requirements;
  - The time constraints for the delivery of the project;
  - The ability to ensure that a competitive procurement can be held; and
  - The capability of the entity to manage and oversee the project, including the availability of experienced personnel or outside consultants who are familiar with the design-build method of project delivery.
- Project is a single integrated project ([Texas Gov't Code § 2269.353\(b\)](#));
- Per Texas Gov't Code § 2269.352 either:
  - The Owner's population is greater than 100,000 within its geographic boundary or service area ([Texas Gov't Code § 2269.352\(1\)](#)); or the Entity is a board of trustees governed by Chapter 54, Transportation Code ([Texas Gov't Code § 2269.352\(2\)](#));
- Owner's service area and number of DB projects ([Texas Gov't Code § 2269.354](#)); and,
- Independence of the Owner's Engineer from the DB firm ([Texas Gov't Code § 2269.355\(a\)](#)).

## 2. Independent Engineer Firm Selection

- a. Contracts for engineering services shall be submitted for review prior to execution. Note that this review by the TWDB is not to determine the legal validity of the contract, but to evaluate scope of work and eligibility for funding through the TWDB funding programs.
- b. For DWSRF and CWSRF Equivalency funding, all professional services must follow the DBE requirements set forth in [TWDB-0210](#). All DBE forms must be submitted for review and approval, prior to execution of the contract to ensure eligibility of funding.
- c. For CWSRF Equivalency funding, the Owner must certify that the consulting engineer services were procured in accordance with the requirements of the Federal Water Pollution Control Act as interpreted by the Environmental Protection Agency (See [TWDB-1108](#))
- d. The Owner shall provide a certification regarding independence of its representative engineer (Independent Engineer) per [Texas Gov't Code § 2269.355](#).

## 3. DB Firm Selection, Documentation, and Contract Review

The Owner's contract with the DB firm, as well as the advertisement for proposals, must include all program specific language and bonding requirements as found in the TWDB SCC:

CWSRF & DWSRF Equivalency projects ([TWDB-0550](#))  
CWSRF & DWSRF Non-Equivalency projects ([TWDB-0551](#))  
State loan projects ([TWDB-0552](#))

Please note, the TWDB SCC should be included in the contract documents and will not be accepted if added as an appendix.

For DWSRF and CWSRF Equivalency funding, all services must follow the DBE requirements set forth in [TWDB-0210](#). Procurement of the DB firm must be approved **prior** to contract execution to ensure funding eligibility. A summary of the DBE forms required from the Owner and DB firm can be found in Attachment No. 5.

**a. Draft DB Contract Review**

- The Owner shall provide documentation that the Owner meets the legal requirements to use the DB delivery method to construct the project, including:
  - Owner has used the minimum criteria as a minimum basis for determining the design-build method is appropriate for the project ([Texas Gov't Code § 2269.353\(c\)](#)):
    - The extent to which the entity can adequately define the project requirements;
    - The time constraints for the delivery of the project;
    - The ability to ensure that a competitive procurement can be held; and
    - The capability of the entity to manage and oversee the project, including the availability of experienced personnel or outside consultants who are familiar with the design-build method of project delivery.
  - Project is a single integrated project ([Texas Gov't Code § 2269.353\(b\)](#));
  - Owner's population is greater than 100,000 within its geographic boundary or service area ([Texas Gov't Code § 2269.352\(1\)](#)); or the Entity is a board of trustees governed by Chapter 54, Transportation Code ([Texas Gov't Code § 2269.352\(2\)](#));
  - Owner's service area and number of DB projects ([Texas Gov't Code § 2269.354](#)); and,
  - Independence of the Owner's Engineer from the DB firm ([Texas Gov't Code § 2269.355\(a\)](#)).
- Owner shall provide documentation to demonstrate compliance with [Texas Gov't Code § 2269.357](#) through [§ 2269.362](#). All submittals shall be in a high quality, fully searchable PDF format (see Attachment No. 1 – Alternative Delivery Contract Submittal Form). Documentation shall include:
  - Copy of the Request for Qualifications ([Texas Gov't Code § 2269.357](#));
  - Design Criteria Package ([Texas Gov't Code § 2269.358](#));
  - Evaluation of DB Firms ([Texas Gov't Code § 2269.359](#)). Including DB certification that its designated or selected engineer was procured based on demonstrated competence and qualifications as required in [Texas Gov't Code § 2254.004](#) ([Texas Gov't Code § 2269.359](#)); and
  - If DWSRF or CWSRF Equivalency funding, the applicable set of Disadvantaged Business Enterprise forms (see [TWDB-0210](#)) and appropriate supporting documentation.
- The Owner submits a copy of the draft DB contract, for review for compliance with TWDB funding program requirements:
  - All TWDB programmatic requirements as provided in the appropriate version of the TWDB SCC ([TWDB-0550](#), [TWDB-0551](#) or [TWDB-0552](#)) must be included in the DB contract. Any modifications to the SCC must receive prior written approval by the TWDB project manager.
- The contract should clearly identify the Owner's and the DB firm's expectations on issues such as role of the Owner's representative (if applicable), expectations on performance guarantees, role of the designer(s) of record (Design Engineer or Engineer of Record), commissioning, acceptance, testing, inspection, project close out,

etc.

- TWDB will provide a comment letter, if necessary, to communicate any concerns with the draft contract.
- Once all concerns have been addressed, the TWDB will concur in the award of the contract.

***b. Executed DB Contract Review***

- The Owner will execute the DB contract and submit a copy of the executed contract to the TWDB (see Attachment No. 1 – Alternative Delivery Contract Submittal Form).
  - Note that the DB will provide the performance and payment bonds in an amount not less than 100-percent of the construction amount and meet the requirements [of Texas Water Code §17.183\(2\)\(A\) and \(B\)](#). Per [Texas Gov't Code § 2269.367\(c\)](#), if at this time the DB cannot provide performance and payment bonds, it shall provide a bid bond or other financial security acceptable to the Owner, to ensure that the performance and payment bonds will be provided before beginning of construction activities, as provided in [Texas Gov't Code § 2269.311](#).
- The TWDB will provide a comment letter, if necessary, to communicate any concerns with the executed contract.
- Once all comments have been addressed the TWDB will accept the DB contract. For details on when work elements are eligible for funding see Part II.C Availability of Funds for DB Projects.

**4. Planning and Acquisition for DB Projects**

Planning phase submittals include (1) an Environmental Document, and (2) an Engineering Feasibility Report (EFR). Guidance for these submittals is discussed in the following documents, which can be found at the TWDB website:

- Engineering Feasibility Report Guidance:
  - [Water Projects](#)
  - [Wastewater Projects](#)
  - [Flood Projects](#)
- [Federal Environmental Review \(EID\)](#)
- [Environmental Data Form for State Programs](#)
- [Categorical Exclusion/Determination of No Effect Request Form](#)

The Planning phase is complete upon issuance of an Environmental Determination and subsequent approval of the EFR.

If land acquisition is a project component, the environmental review related to the land acquisition must be completed and an environmental determination issued by the TWDB, prior to the release of funds for land acquisition. Requirements for release of funds for design and construction activities are outlined in [TAC § 363.43\(c\) and \(d\) and \(d\)](#), [§ 371.73\(c\)](#) (DWSRF), and [§ 375.93\(c\)](#) (CWSRF).

**5. Preparation of Design Packages**

This section discusses DB Design Package submittals that will be reviewed for TWDB program funding requirements and TCEQ Design Criteria. For a TWDB funded project, approval of the Design Packages must be obtained in order to ensure the project maintains

its eligibility for TWDB funding.

This section discusses the process to submit Design Packages for review and approval. Prior to submitting documents for review, please ensure that the following items are addressed:

- a. The TWDB will provide a web portal file sharing page where all project documents will be stored and accessible to the TWDB for the life of the project. Documents must be named following the Naming Convention found in Attachment No. 4.
- b. [Texas Water Code § 17.183\(b\)](#) requires plans and specifications submitted to the board in connection with an application for financial assistance must include a seal by a licensed engineer affirming that the plans and specifications are consistent with and conform to current industry design and construction standards.
- c. The applicable Document Submittal Checklist is completed including page references to all review items.
  - Design Package Submittal Form (TWDB-0300)
- d. Bookmark or index all submittals to reduce review time and potential comments. Submittals that are not bookmarked will not be accepted.
- e. Submittals shall be in a high quality, fully searchable PDF format. Submittals that are not searchable will not be accepted.
- f. The Owner shall perform a Quality Assurance and Quality Control (QA/QC) review on the documents submitted to TWDB for review or approval. The Owner shall ensure:
  - The correct TWDB project identifier is used on all documents.
  - Documents are properly signed and notarized, as applicable.
  - If the Owner is seeking funding from TWDB for all project elements, then all project elements should receive approval from TWDB prior to construction.
  - The submittal is complete (bookmarked, searchable, no missing pages or information), concise, and accurate
  - There is no duplication of attachments, guidance, or forms within a document.

***a. Design Package Review:***

This section outlines the procedure for Design Package review. For projects with an agreed fixed price, the process will be followed for the construction set. For projects utilizing Progressive Design Build, the process will be followed iteratively for each Design Package issued.

- The Owner or DB Firm will submit for review a complete Design Package which may be a single review or staged into incremental review phases. Each submitted Design Package will need to be reviewed for compliance with TCEQ Design Criteria, as applicable.
- The process outlined below will be repeated for each Design Package in the project.

***Staged Design Package Review:***

- For a staged review, the Owner or DB Firm shall submit a Regulatory, Programmatic, and Bid (RP&B) Design Package.
  - The RP&B Design Package must include complete design for all project components within TCEQ regulated design criteria for the scope of work included in the Design Package.
  - The RP&B Design Package must be sealed per [TAC §137.33](#), and clearly

marked as “*This document is released for the purposes of regulatory and programmatic review, and bidding only. It is not to be used for construction purposes.*”.

- The Design Package submittal must include a completed copy of the **Design Package Submittal Form (Attachment No. 2 – TWDB-0300A)**. If you have questions, please discuss with the TWDB project manager.
  - **Note:** per LOA between the TWDB and TCEQ ([Texas Administrative Code \(TAC\) § 354.5](#)), TCEQ retains review authority over certain water projects. For these projects, TWDB will rely on TCEQ’s technical review and approval of the complete Design Package.
  - **Note:** Exceptions and variances to TCEQ rules must be approved by the TCEQ ([TAC § 290.39\(1\)](#) and [§ 217.2\(78\)](#) and [§ 217.4](#)). The consultant shall contact TCEQ to obtain approval of any variance or exception and submit a copy of TCEQ’s approval to the TWDB.
- The TWDB will conduct a review of the RP&B Design Package for compliance with TCEQ rules. A comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been addressed, the RP&B Design Package will be stamped approved by the TWDB, and the TWDB will issue a Concurrence with Notice to Proceed and Partial Eligible Release letter.
  - If an RP&B Design Package was approved, the letter will allow for release of up to 75% of the contract price for non-construction activities such as procurement of long-lead items and mobilization, which are included in the approved design package. The remaining amount of the contract price will not be eligible for release until the IFC Design Package is reviewed and approved by the TWDB.
  - **Note:** Any substantial or material alteration to the approved Design Package must be approved by TWDB per [Texas Water Code 17.186](#).
- Once the Issued for Construction (IFC) Design Package is issued by the design engineer, the Owner or DB firm must submit the set to the TWDB with a transmittal letter and a signed and sealed change log listing all changes between the approved RP&B Design Package and the IFC Design Package.
- The TWDB will review the IFC Design Package and corresponding change log. A comment letter will be provided, if necessary, to communicate any questions.
- When all comments have been appropriately addressed, the IFC Design Package will be stamped approved by the TWDB, and the TWDB will issue combined letter that includes (1) approval of the IFC Design Package and (2) Concurrence with Notice to Proceed and Eligible Release of Award Letter.
  - This letter will allow for release of up to 95% of the contract price (excluding unallocated contingencies or allowances).

#### ***Single Design Package Review:***

- For projects not utilizing a staged review, the Owner or DB Firm will submit for review a complete Design Package, signed and sealed by a licensed professional engineer registered in the State of Texas, issued for construction purposes.
  - The Issued for Construction (IFC) Design Package must include complete design for all project components within the scope of work included in the Design Package.

- The IFC Design Package must be sealed per [TAC §137.33](#), and cannot include a disclaimer limiting the set to a specific use.
- The Design Package submittal must include a completed copy of the **Design Package Submittal Form (Attachment No. 2 – TWDB-0300A)**. If you have questions, please discuss with the TWDB project manager.
  - **Note:** per LOA between the TWDB and TCEQ ([Texas Administrative Code \(TAC\) § 354.5](#)), TCEQ retains review authority over certain water projects. For these projects, TWDB will rely on TCEQ’s technical review and approval of the complete Design Package.
  - **Note:** Exceptions and variances to TCEQ rules must be approved by the TCEQ ([TAC § 290.39\(1\)](#) and [§ 217.2\(78\)](#) and [§ 217.4](#)). The consultant shall contact TCEQ to obtain approval of any variance or exception and submit a copy of TCEQ’s approval to the TWDB.
- The TWDB will conduct a review of the IFC Design Package for compliance with TCEQ rules. A comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been addressed, the IFC Design Package will be stamped approved by the TWDB, and the TWDB will issue a Concurrence with Notice to Proceed and Partial Eligible Release letter.
  - If the IFC Design Package was reviewed and approved during the Design Package review, the letter will allow for release of up to 95% of the contract price at that time (excluding unallocated contingencies or allowances).
  - **Note:** Any substantial or material alteration to the approved Design Package must be approved by TWDB per [Texas Water Code 17.186](#).

## 6. Other Construction Phase Activities

### *a. Contract Amendments:*

- The Owner shall submit contract amendments throughout the construction phase.
- The TWDB will conduct a review of the amendment and a comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been appropriately addressed, an amendment approval letter will be issued.

### *b. Use of Contingency Funds:*

- The Owner shall submit change requests from the DB, per the terms of the DB contract, to reallocate funds from contingency throughout the construction phase.
- The TWDB will conduct a review of the change request and a comment letter will be provided, if necessary, to communicate any needed revisions.
- Once all comments have been appropriately addressed, a change request approval letter will be issued, and ineligible contingency funds will be reallocated to eligible change request work items.

### *c. Use of Allowance Funds:*

- Requirements related to material, equipment, and other allowances must be outlined in the DB contract.
- During review of a Design Package, allowances must be clearly outlined in the bid form, if applicable. The TWDB will review the included allowances and determine if they are



- eligible costs.
- The TWDB will note eligible allowance costs as part of the Design Package approval and Concurrence with Notice to Proceed letters.

### C. Availability of Funds for DB Projects

Funds for planning, land acquisition, design, and construction are made available according to the funding program's specific rules and requirements; and upon receipt of sufficient documentation, approval by TWDB, and completion of all required milestones.

The general progression for the availability of funds is as follows:

#### 1. Closing, Planning, and Land Acquisition Costs:

- Fiscal Services funds*: Are released after Board commitment and completion of all closing prerequisites.
- Planning Phase funds* (Permitting, Environmental, Engineering-Planning, and applicable special engineering): Are released after receipt of executed professional services contracts for the planning or permitting phase and upon completion of all planning-phase prerequisites.
- Land Acquisition funds*: Are released after completion of applicable State or Federal land acquisition and appraisal rules (based on funding program). Land Acquisition funds may only be released after the issuance of the environmental determination.

#### 2. Design and Construction Costs:

- Design Phase funds*: Engineering design tasks are eligible for funding after receipt of executed contracts for the design phase and upon approval of an engineering feasibility report and issuance of an environmental determination. DB contracts must be accepted by TWDB prior to eligibility for design funding (see Part II.B.4 above). Any special fees included in this contract will be made available in accordance with the terms of the contract and after all applicable requirements as described above have been met.
- Construction Phase funds*: Construction phase costs are eligible for funding after issuance of any applicable permits and after design package approval and issuance of concurrence with NTP (see Part II.B.5. above).
  - Ninety-five percent of the design package cost are available when a NTP is issued. Note that funds are released according to program guidelines.
  - Availability of the remaining five percent will be contingent upon TWDB's issuance of a Certificate of Approval (COA) for work associated with the approved Design Package. A list of documents needed to issue a COA for a DB Design Package can be found in Section 4 – Releasing Final Retainage. There may be a few exceptions to the required documents, about which the TWDB project manager will be able to provide clarification at the beginning of the construction project.
  - All contract amendments and change requests must be submitted to TWDB for review and approval prior to execution.

#### 3. Ineligible Project Components:

In general, the following are not eligible for TWDB funding (note this is not an exhaustive list):

- a. Testing, remediation, or disposal of contaminated, potentially contaminated, or

- hazardous materials.
- b. Street paving beyond what is required to bring a street to the condition it was before the work began (for line work and other projects within roadways).
  - c. Release of unallocated contingencies. Any contingency funds must be reallocated to an approved budget line item or specified and eligible task before release (see Part No. II.B.6.b).
  - d. Release of unallocated expenses such as Owner's or Contract Allowance.

#### **4. Releasing Final Retainage**

Prior to approval for the release of final retainage on the project, the TWDB's Executive Administrator must issue a Certificate of Approval (COA). The process outlined below may be used iteratively to close out completed phases of work or may be used at the end of a project to close out the project as whole.

- Once all work has been completed, the Owner will provide a copy of the following documentation:
  1. A letter from the DB (or Owner, when appropriate) certifying that all work on the project (or completed phases of work) has been completed and that all close out documents have been received.
  2. DB firm affidavit that all bills, except for retainage, for the project (or completed phases of work) have been paid.
  3. Owner's project acceptance letter including the language "the project (or completed phases of work) has been completed according to the approved plans and specifications."
  4. DB's project acceptance letter including the language "the project (or completed phases of work) has been completed according to the approved plans and specifications."
  5. Request for release of any eligible funds that have not yet been released, following the procedures discussed above.
  6. Confirmation by the Owner of the receipt of a complete set of "as-built" drawings (if applicable).
  7. Any remaining final pay requests.
  8. Warranty statement (from engineer or Owner) with a duration of at least 12 months from the date of project (or completed phases of work) completion.
  9. Responsible Engineer's certification of contract completion date.
  10. Certification by the Owner and DB firm that the project (or completed phases of work) was completed in compliance with the U.S. Iron and Steel Requirements ([TWDB-1105-A](#)) (if applicable).
  11. Final American Iron and Steel Certification ([TWDB-1106-C](#)) from the Owner and DB firm for the project (or completed phases of work) (if applicable).
  12. All change orders not previously submitted/approved.
  13. Project Public Awareness Certification ([TWDB-1109-A](#)) (if applicable)
  14. Fiscal Sustainability Plan (if applicable)
- The TWDB will conduct a review of the close out documents. A comment letter will be provided, if necessary, to communicate any needed revisions.



- After all comments have been appropriately addressed, the TWDB will issue a COA for the project (or completed phases of work).
- If applicable, after the COA is issued, a final outlay may be submitted for the retainage amount of the project or the completed phases of work.

# Attachment No. 1:

## Alternative Delivery Contract Submittal Form

The Alternative Delivery Contract Submittal Form (TWDB-0250) must be included with a contract review submittal for TWDB review and approval. If there are any questions about the required documentation or language, please contact the project's TWDB Review Engineer.

|   |   | CONTRACT (a Y in the columns below means the completed document IS REQUIRED) |  | Location (Section, page, etc.) |
|---|---|--|--|--------------------------------|
|   |   | CMAR   | DB   |                                |
| 4.00  | The following Items are required for TWDB issuance of Concurrence of Award:   | Owner-CMAR   | Owner-DB   |                                |
| 4.01  | TWDB Draft Contract Review Comments Addressed   | Y  | Y  |                                |
| 4.02  | A copy of the RFP for a one-step process or RFP and RFQ for a two-step process (Texas Gov't Code § 2269.253 and 2269.357)   | Y  | Y  |                                |
| 4.03  | Bid Advertisement and Publisher's Affidavit   |  |  |                                |
| 4.04  | Bid Tabulation showing all bids received. Including certification that its designated or selected engineer was procured based on demonstrated competence and qualifications as required in Texas Gov't Code § 2254.004  | For CMAR procurement requirements see guidance (TWDB-0570)                   | For DB procurement requirements see guidance (TWDB-0570) |                                |
| 4.05  | Recommended Alternative Delivery contractor's complete and signed bid proposal  |  |  |                                |
| 4.06  | Bid Bond (required if the AD firm is not able to furnish payment and performance bonds within ten (10) days after the AD firm executes the contract)  | Y  | Y  |                                |
| 4.07  | Entity's letter of recommendation to award contact to AD firm   | Y  | Y  |                                |
| 4.08  | Statement outlining any bidding irregularities  | Y  | Y  |                                |
| 4.09  | Debarment/Suspension Certification (SRF-404) – by Owner for AD Firm (if funding through DWSRF Equivalency or CWSRF Equivalency)   | Y  | Y  |                                |
| 4.10  | Vendor compliance with Reciprocity of Non-Resident Bidder (TWDB-0459) (if funded through state programs)  | Y  | Y  |                                |
| 4.11  | DBE – TWDB-0216 with Supporting Documentation (if funding through DWSRF Equivalency or CWSRF Equivalency)   | Y  | Y  |                                |
| 4.12  | DBE – TWDB-0217 (if funding through DWSRF Equivalency or CWSRF Equivalency)   | Y  | Y  |                                |
| 4.13  | DBE – TWDB-0373 (if funding through DWSRF Equivalency or CWSRF Equivalency)   | Y  | Y  |                                |
| 5.00  | The following Items are required for TWDB issuance of Concurrence in Notice to Proceed:   | Owner-CMAR   | Owner-DB   |                                |
| 5.01  | Fully Executed Contract Agreement   | Y  | Y  |                                |
| 5.02  | Appropriate and up to date TWDB Supplemental Contract Conditions for the funding source (in the body of the contract, not as an appendix)   | Y  | Y  |                                |
| 5.03  | Contractor's Act of Assurance (ED-103)  | Y  | Y  |                                |
| 5.04  | Contractor's Act of Assurance Resolution (ED-104)   | Y  | Y  |                                |
| 5.05  | Executed Payment Bond (Water Code Sec 17.183: bond in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the engineer of the political subdivision) This language must be included in the body of the Bond.        | Y  | Y  |                                |
| 5.06  | Executed Performance Bond (Water Code Sec 17.183: bond is in a penal sum of not less than 100 percent of the contract price and remain in effect for one year beyond the date of approval by the engineer of the political subdivision) This language must be included in the body of the Bond. | Y  | Y  |                                |
| 5.07  | Bidder's Certification (WRD-255) - Required for both, subcontracts and purchase orders and for the provision of services and materials (OGC-Ref.41 CFR 60-1.1) (If funding through DWSRF or CWSRF)  | Y  | Y  |                                |
| 5.08  | Workman's Compensation and other insurance coverage   | Y  | Y  |                                |
| 5.09  | Plan for EPA's Public Awareness Program TWDB-1109-A with supporting documentation   | Y  | Y  |                                |
| Acronym Definitions:<br>AD: Alternative Delivery (as in Alternative Delivery Firm). |   |  |  |                                |
| Y = Yes, please submit<br>10/24/2022  |   |  |  | TWDB-0250                      |

# Attachment No. 2:

## Design Package Submittal Form

The Alternative Delivery Design Package Submittal Form (TWDB-0300A) must be included with a Design Package submittal for TWDB review and approval. If there are any questions about the required documentation or language, please contact the project's TWDB Review Engineer.

| 1.00   | To be included in the Notice to Bidders, and Instructions to Bidders (refer to the most recent version of the appropriate Supplemental Contract Conditions under Item 2.00 below):   | CWSR<br>F EQ | CWSRF<br>NEQ | DWSR<br>F EQ | DWSRF<br>NEQ   | SWIF<br>T | EDA<br>P | All<br>Other<br>State<br>Funded | Location (Section, page, etc.) |
|--|--|--------------|--------------|--------------|----------------|-----------|----------|---------------------------------|--------------------------------|
| 1.01   | Contingent Award of Contract   | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 1.02   | U.S. Iron and Steel and Manufactured Goods *   |              |              |              |                | Y         | Y        | Y                               |                                |
| 1.03   | American Iron and Steel  | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 1.04   | Award of Contract to Nonresident Bidder (see form TWDB-0459)   |              | Y            |              | Y              | Y         | Y        | Y                               |                                |
| 1.05   | Davis-Bacon Wage Act   | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 1.06   | Disadvantaged Business Enterprise  | Y            |              | Y            |                |           |          |                                 |                                |
| 1.07   | Funded by TWDB Language  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 1.08   | Equal Employment Opportunity and Affirmative Action  | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 1.09   | Debarment and Suspension Certification   | Y            |              | Y            |                |           |          |                                 |                                |
| <b>Applicable Programs</b>   |  |              |              |              |                |           |          |                                 |                                |
| 2.00   | TWDB Documents/Forms To be included in the Front-End Document Template (refer to TWDB-0570 Part No. 1.5.a):  | CWSR<br>F EQ | CWSRF<br>NEQ | DWSR<br>F EQ | DWSRF<br>NEQ   | SWIF<br>T | EDA<br>P | All<br>Other<br>State<br>Funded | Location (Section, page, etc.) |
| 2.01   | Supplemental Contract Conditions for State Loan Projects (TWDB-0552)   |              |              |              |                | Y         | Y        | Y                               |                                |
| 2.02   | Supplemental Contract Conditions for CWSRF & DWSRF Equiv. Projects (TWDB-0550)   | Y            |              | Y            |                |           |          |                                 |                                |
| 2.03   | Supplemental Contract Conditions for CWSRF & DWSRF Non-Equiv. Projects (TWDB-0551)**   |              | Y            |              | Y              |           |          |                                 |                                |
| 2.04   | Vendor Compliance with Reciprocity of Non-Resident Bidders (TWDB-0459)   |              | Y            |              | Y              | Y         | Y        | Y                               |                                |
| 2.05   | Bidder's Certifications Form (WRD-255)   | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 2.06   | Debarment / Suspension Certification (SRF-404)   | Y            |              | Y            |                |           |          |                                 |                                |
| 2.07   | Monthly Davis Bacon Wage Rates   | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 2.08   | Bid Proposal   | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 2.09   | Separate eligible and ineligible bid items (if applicable)   | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 2.10   | Trench Safety as separate bid item, and priced per linear foot (if applicable)   | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 2.11   | Green components as separate bid items (if applicable)   | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 2.12   | Notice to Bidders  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 2.13   | Contract Agreement Template  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 2.14   | Equipment Purchase Order Template (if applicable)  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| <b>Applicable Programs</b>   |  |              |              |              |                |           |          |                                 |                                |
| 3.00   | To be included in the Specifications (refer to TWDB-0570 Part No. 1.5.b):  | CWSR<br>F EQ | CWSRF<br>NEQ | DWSR<br>F EQ | DWSRF<br>NEQ   | SWIF<br>T | EDA<br>P | All<br>Other<br>State<br>Funded | Location (Section, page, etc.) |
| 3.01   | Monthly American Iron and Steel Certificate (TWDB-1106-A)  | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 3.02   | American Iron and Steel (AIS) De Minimis Log (TWDB-1106-B)   | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 3.03   | United States (U.S.) Iron and Steel Certificate (TWDB-1105-A)  |              |              |              |                | Y         | Y        | Y                               |                                |
| 3.04   | Monthly Davis Bacon Wage Rate Certificate of Compliance Submittal by Owner (Sub-Recipient) (DB-0154)   | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 3.05   | Special Environmental Conditions   | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| <b>Applicable Programs</b>   |  |              |              |              |                |           |          |                                 |                                |
| 4.00   | To be Mentioned in Plans:  | CWSR<br>F EQ | CWSRF<br>NEQ | DWSR<br>F EQ | DWSRF<br>F NEQ | SWIF<br>T | EDA<br>P | All<br>Other<br>State<br>Funded | Location (Section, page, etc.) |
| 4.01   | U.S. Iron and Steel and Manufactured Goods*  |              |              |              |                | Y         | Y        | Y                               |                                |
| 4.02   | American Iron and Steel  | Y            | Y            | Y            | Y              |           |          |                                 |                                |
| 4.03   | Special Environmental Conditions   | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| <b>Applicable Programs</b>   |  |              |              |              |                |           |          |                                 |                                |
| 5.00   | Additional Information:  | CWSR<br>F EQ | CWSRF<br>NEQ | DWSR<br>F EQ | DWSRF<br>F NEQ | SWIF<br>T | EDA<br>P | All<br>Other<br>State<br>Funded | Location (Section, page, etc.) |
| 5.01   | Construction inspection provisions****   | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 5.02   | Site Certificate (ED-101)**  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 5.03   | Materials associated with environmental special conditions included in the environmental finding, such as USACE or floodplain permits  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 5.04   | Any permits required for the operation of the project (such as wastewater discharge permit and water rights permit)  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 5.05   | TCEQ Acceptance:<br>Variances, waivers or exceptions to the state design criteria must be reviewed and approved by TCEQ.<br>For new construction or improvements to surface water treatment plants, public water supply wells, new interconnections, disinfection and treatment projects, the project has been reviewed and has received approval from TCEQ. | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 5.06   | Final Design Report as required by Texas Administrative Code § 290.39(e)(1) and §  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| 5.07   | Biddability and Constructability Certification:<br>I _____ (engineer name and PE number) certify that I have reviewed the construction drawings and specification to provide adequate information so that a contractor can bid and construction the project without additional details or  | Y            | Y            | Y            | Y              | Y         | Y        | Y                               |                                |
| <b>Applicable Programs</b>   |  |              |              |              |                |           |          |                                 |                                |
| Guidance Documents - For Information Purposes ONLY (available online at <a href="http://www.twdb.texas.gov/financial/instructions">www.twdb.texas.gov/financial/instructions</a> ) |  | CWSR<br>F EQ | CWSRF<br>NEQ | DWSR<br>F EQ | DWSRF<br>F NEQ | SWIF<br>T | EDA<br>P | All<br>Other<br>State<br>Funded | Location (Section, page, etc.) |
| Disadvantaged Business Enterprise Guidance (TWDB-0210)   |  | Y            |              | Y            |                |           |          |                                 |                                |
| U.S. Iron and Steel and Manufactured Goods (TWDB-1105)*  |  |              |              |              |                | Y         | Y        | Y                               |                                |
| Requirements for American Iron and Steel (AIS) Guidance (TWDB-1106)  |  | Y            | Y            | Y            | Y              |           |          |                                 |                                |

\*Consult guidance TWDB-1105 or discuss with your TWDB engineer or team manager for exceptions to some SWIFT projects.  
\*\* TWDB-0551 is currently under revision to add requirements for the new Non-Equivalency funding option under the DWSRF program.  
\*\*\* To be submitted by project Owner  
\*\*\*\* To be submitted by Alternative Delivery Firm, as applicable

# Attachment No. 3:

## Bid Package Procurement Submittal Form

Based on the funding program, the following language and forms must be included in the Bid Package contracts. These documents must be provided to the TWDB for all Bid Packages and remain available for the life of the project. Please submit the Bid Package Procurement Submittal Form (TWDB-0400A) for each Bid Package.

|      |  | CONTRACT (a Y in the columns below means the completed document IS REQUIRED) |                     | Location (Section, page, etc.) |
|------|--|--|---------------------|--------------------------------|
|      |  | CMAR   | DB                  |                                |
| 4.00 | The following Items are required for TWDB issuance of Concurrence of Award:  | CMAR – GMP Package   | DB – Design Package |                                |
| 4.01 | TWDB Design Package Approval Letter(s) for scope of work in GMP Package  | Y  | Y                   |                                |
| 4.02 | Bid Advertisement and Publisher's Affidavit  | Y  |                     |                                |
| 4.03 | Bid Tabulation or Market Information showing all bids received   | Y  |                     |                                |
| 4.04 | Alternative Delivery firm's Recommendation to Award Letter   |  |                     |                                |
| 4.05 | Recommended sub-contractor's complete and signed bid proposal  | Y  |                     |                                |
| 4.06 | All Addenda issued   | Y  |                     |                                |
| 4.07 | Debarment/Suspension Certification (SRF-404) – AD firm certify for all sub-contractors (if funding through DWSRF Equivalency or CWSRF Equivalency)   | Y  |                     |                                |
| 4.08 | Vendor compliance with Reciprocity of Non-Resident Bidder for all sub-contractors (TWDB-0459) (if funded through state programs)   | Y  |                     |                                |
| 4.09 | Statement from Alternative Delivery firm describing any bidding irregularities on the GMP Package (from Owner or Engineer if AD firm bids on package)  | Y  |                     |                                |
| 4.10 | Alternative Delivery firm's Inspection proposal including resumes.   | Y  |                     |                                |
| 4.11 | Certification from Alternative Delivery firm of compliance with the Davis Bacon Wage Requirements (if funding through DWSRF or CWSRF) or Prevailing Wage Rate (State Programs)   | Y  |                     |                                |
| 4.12 | If the CMAR seeks to self-perform a portion of the work, the Owner shall provide a description of the bid process and certification that: (1) the CMAR submitted its bid or proposal for the Bid Package in the same manner as all other trade contractors or subcontractors, and (2) the Owner determined that the CMAR's bid proposal provided the best value. |  |                     |                                |
| 4.13 | DBE – TWDB-0216 with Supporting Documentation (if funding through DWSRF Equivalency or CWSRF Equivalency)  | Y  | Y                   |                                |
| 4.14 | DBE – TWDB-0217 (if funding through DWSRF Equivalency or CWSRF Equivalency)  | Y  | Y                   |                                |
| 4.15 | DBE – TWDB-0373 (if funding through DWSRF Equivalency or CWSRF Equivalency)  | Y  | Y                   |                                |
| 5.00 | The following Items are required for TWDB issuance of Concurrence in Notice to Proceed:  | CMAR – GMP Package   | DB – Design Package |                                |
| 5.01 | Fully Executed GMP Amendment   | Y  |                     |                                |
| 5.02 | Bidder's Certification (WRD-255) from all sub-contractors - Required for both, subcontracts and purchase orders and for the provision of services and materials (OGC-Ref.41 CFR 60-1.1) (if funding through DWSRF or CWSRF)  | Y  |                     |                                |
| 5.03 | Plan for EPA's Public Awareness Program TWDB-1109-A with supporting documentation  | Y  |                     |                                |
| 5.04 | TWDB issued Water Rights Certification (When project develops water)   | Y  |                     |                                |

## Attachment No. 4:

### Alternative Delivery Document Naming Convention

The CMAR shall upload all required documentation to the project web portal. The documents must follow the TWDB naming convention below and remain accessible for the duration of the project.

| <b>Alternative Delivery Document Naming Convention</b> |                     |   |                     |
|--|---------------------|---|---------------------|
| <b>Document Type</b>                                   | <b>Abbreviation</b> | <b>Document Type</b>                    | <b>Abbreviation</b> |
| AD Work Package Award Submittal Form                   | TWDB-0400A          | Engineering Feasibility Report Comments | EFRC                |
| Addenda  | AA                  | Final Engineering Report                | ER                  |
| Award Documents  | AC                  | Green Project Reserve Review Documents  | GPR                 |
| Bid Bond   | B-BID               | Guaranteed Maximum Price                | GMP                 |
| Bid Documents  | BID-D               | Invitation to Bid                       | ITB                 |
| Bid Package  | BP                  | Issued for Bid                          | IFB                 |
| Bid Recommendation                                     | BR                  | Issued for Construction                 | IFC                 |
| Bid Tab  | BID-T               | Monthly Progress Report                 | MPR                 |
| Certificate of Insurance                               | COI                 | Payment Bond                            | B-PAY               |
| Change Log   | CL                  | Performance Bond                        | B-PER               |
| Change Order   | CO                  | Plans and Specs Approval                | PSA                 |
| Close Out Document                                     | COA                 | Plans and Specs Review Comments         | PSRC                |
| CMAR Agreement   | CMAR-AGR            | Preconstruction Conference              | PCC                 |
| CMAR Agreement Amendment                               | CMAR-AGR-A          | Preliminary Engineering Report          | PER                 |
| DB Agreement   | DB-AGR              | Purchase Order                          | PO                  |
| DB Agreement Amendment                                 | DB-AGR-A            | Recommendation of Award                 | ROA                 |
| Design Package   | DP                  | Recommended Bid Proposal                | RBP                 |
| Design Package Submittal Form                          | TWDB-0300A          | Reduction in Retainage                  | RR                  |
| EFR Submittal Form                                     | TWDB-0200           | Subcontract Agreement                   | SA                  |
| Engineering Agreements                                 | ENG-AGR             | TCEQ Design Approval                    | TCEQ-DA             |
| Engineering Agreements Amendments                      | ENG-AGR-A           | Technical Review Comment Response       | TRCR                |
| Engineering Feasibility Report Approval                | EFRA                | Work Package                            | WP                  |

# Attachment No. 5:

---

## Disadvantaged Business Enterprise Process for CMAR and DB Projects

### Construction Manager at Risk (CMAR) Projects:

1. Approval of loan recipient's procurement of the CMAR:
  - a. Forms needed from loan recipient: [TWDB-0216](#) with supporting documentation and [TWDB-0373](#).
  - b. Forms needed from CMAR: [TWDB-0217](#).
2. CMAR procurement of sub-contractors:
  - a. *If Using a One-Step Procurement Process:*

As the CMAR procures sub-contractors, the CMAR submits form [TWDB-0216](#) with supporting documentation and form [TWDB-0373](#) for each sub-contractor.
  - b. *If Using a Two-Step Procurement Process:*
    - i. The two-step process includes the CMAR issuing a Request for Qualifications (RFQ), creating a pre-qualification list, then issuing a Request for Proposal (RFP).
      1. Goal of the RFQ: to compile a list of sub-contractors that are interested in performing work on the project. The RFQ informs all interested contractors of the TWDB and other requirements on the project.
      2. Goal of the RFP: a selected scope of work from the overall RFQ scope of work for the smaller Work Package. Please note that during the RFP additional solicitation may be done to ensure the bid is competitive if not enough sub-contractors in that line of work responded to the RFQ.
    - ii. DBE forms to be submitted to the TWDB:
      1. If the Recommended Contractor is on the RFQ Pre-Qualification List, then the CMAR submits [TWDB-0216](#) with supporting documentation from RFQ; and [TWDB-0373](#).
      2. If the Recommended Contractor is not on the RFQ Pre-Qualification List, then the CMAR submits [TWDB-0216](#) with supporting documentation for the additional solicitation done during the RFP and revised [TWDB-0373](#).

### Design-Build Projects:

1. Approval of loan recipient's procurement of the DB Firm:
  - a. Forms needed from loan recipient: [TWDB-0216](#) with supporting documentation; and [TWDB-0373](#).
  - b. Forms needed from DB Firm: [TWDB-0217](#)
2. Design-Builder procurement of sub-contractors:
  - a. As the Design-Builder procures sub-contractors, the DB firm submits, for each sub-contractor form [TWDB-0216](#) with supporting documentation and form [TWDB-0373](#).