



TXWIN Recommendations for Public Owners to Mitigate Price and Schedule Uncertainty Due to Current Market Conditions Driven by Inflation and Supply Chain Uncertainty

The Texas Water Infrastructure Network (TXWIN) is a 501-C6 trade association founded in 2013 by general contractors and other businesses involved in the Texas water construction market to promote sound public policy with a specific emphasis on the promotion of fair, transparent and competitive procurement processes, construction law and market development. TXWIN members include some of the state's top general and specialty contractors, suppliers, fabricators, construction law firms involved in the water infrastructure construction industry.

TXWIN member companies range from small closely held family, employee-owned businesses to large national and multi-national private and publicly traded and integrated design and construction firms. TXWIN members represent some of the most respected contractors in Texas specializing in the construction of water and wastewater treatment plants, pump stations and large diameter pipelines.

It is an interesting and challenging time in the water infrastructure construction market. Industry is facing unprecedented challenges with respect to supply chain constraints, inflation, and price volatility. Since early 2021 TXWIN members indicated that they were experiencing significant cost escalation and delays for project inputs which were largely driven by pandemic market forces. Many projects initiated in early 2021 had been previously awarded under more stable market conditions with budgets that reflected pricing under less volatile circumstances.

Unforeseen supply chain disruptions began affecting availability of key commodity driven project inputs from conduit and PVC to structural steel and diesel. The cost of project inputs had increased significantly between the time projects were awarded and when projects were given notices to proceed with construction. Certain items became more difficult to acquire, including items which generally have never required long lead times or experienced significant shortages. While many of the initial impacts being felt

on projects in 2021 were unforeseen conditions, we are now in a situation where steps can be mitigated to address “unknowns” as we navigate current market conditions.

As an industry we are now in a situation where we have consistently documented costs inflation for commodity driven items from 20 to 100%. In some instances, pricing for material and equipment cannot be guaranteed until purchase orders are submitted placing great financial risk on our all parties to construction projects. Estimates generated for projects using data prior to present market conditions are likely no longer valid creating consternation for public owners and engineers struggling to generate accurate estimates based on the current market, inflation, supply chain issues and associated risk factors.

As these market conditions persist in our “new normal”, we have seen a variety of approaches being implemented to mitigate cost and project risk. Owners are electing to add significant contingency to mitigate price uncertainty. There is an increased emphasis on value engineering, pre-purchase, or early purchase of key critical path items. In some cases, owners are electing to forgo some procurement and project delivery strategies to mitigate price uncertainty and risk.

We have also seen projects being delayed with the hope that market conditions would improve, costs would decrease, or more bidders will show up to create a more competitive environment which generally has not been the case.

We now find ourselves in a position where uncertainty driven by inflation supply chain issues and pricing volatility is in fact the “norm”. This volatility has resulted in significant cost increases across the board as we all work to mitigate financial risk and uncertainty in the construction sector. Economic and geopolitical instability have only further exacerbated the market conditions we are presently experiencing.

In 2021, TXWIN participated in a series of meetings with and communicated our concerns to the Texas Water Development Board. These discussions resulted in a [March 3, 2022, Work Session hosted by TWDB](#) to assist in facilitating a dialogue with the broader water community. Invited participants included TXWIN, ACEC of Texas, ASCE Texas Section, the Water Environment Association of Texas (WEAT) and the Texas Rural Water Association.

One of the most significant takeaways from this meeting was a shared sense of urgency and the need for awareness and open dialogue to weather the unique market conditions we as the Texas water community are experiencing.

There are things we as the Texas water community can do together to mitigate cost and project risk, but delaying projects also means they will likely be more expensive down the road. When water utilities elect to shelf or delay projects which are designed, or substantially designed, and ready to go to market for bids and proposals, history has shown us that prices rarely go back down. For most communities delaying important water projects in communities is not an option.

After several internal discussions with Texas Water Infrastructure Network members, the Texas Water Development Board, representatives of the engineering profession, and representatives of the public owner community, TXWIN would like to provide the following recommendations for consideration to mitigate risk in current market conditions which will likely persist well into 2023 according to leading economists.

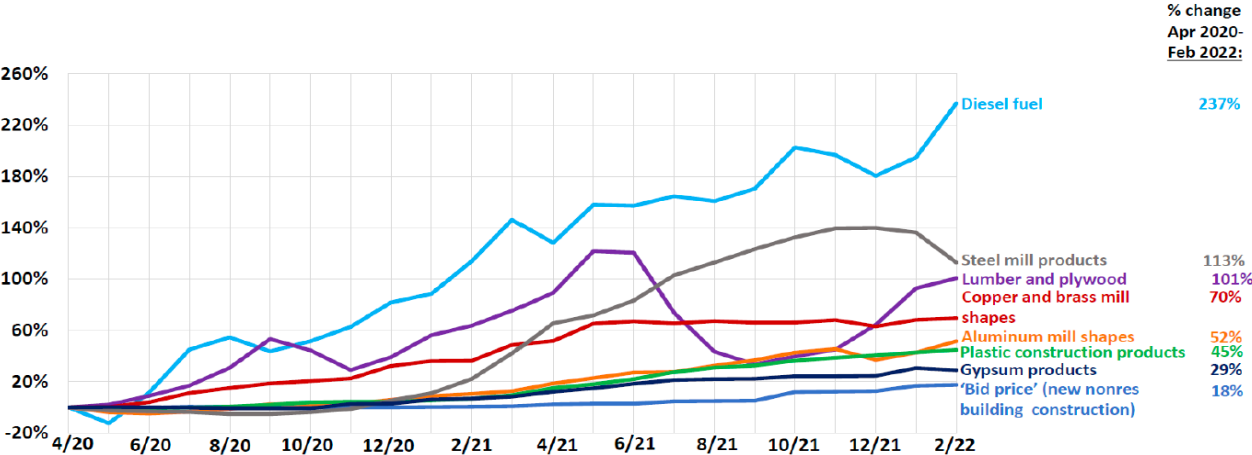
Background:

- In these unprecedented times the Texas water stakeholder community should strive to promote an open dialogue to seek solutions to keep projects moving forward.
- Our shared goal as an organization and partner is to work collaboratively to promote successful projects, flexibility taking steps together with the design and owner community to avoid project delays, claims and litigation.
- Volatility in commodities pricing and allocation is one of the key challenges industry is presently experiencing. This presents increased risk for all parties to construction projects.
- Estimates generated on projects prior to these conditions are likely no longer valid.
- Prices for commodities are fluctuating rapidly.
- Cost escalation and availability of commodities has impacted practically every input from aggregate to brass, concrete, diesel fuel, nickel, stainless steel, to microchips, PVC, and everything else in between.
- Manufacturers are demanding that contracts include escalation clauses in contracts for purchase orders sometimes in an undetermined amount.
- Many owners are not willing to place escalation language in their standard general conditions to share risk thus shouldering contractors with significant financial risk.
- Freight increases and fuel surcharges are being added to contracts and purchase orders to account for increased fuel costs and uncertainty about availability of trucking.
- Suppliers are stating that manufacturers either cannot or will not commit to pricing on bid day.

- Some manufacturers and suppliers are not able to guarantee prices on bid day, in some cases not until purchase orders are signed and executed.
- Contractors can no longer issue letters of intent to lock in pricing and they cannot issue subcontracts or purchase orders until they have an executed contract with the owner.
- Suppliers and manufacturers are having great difficulty holding pricing, refusing to guaranty delivery dates, requiring substantial or all payment for certain items sometimes without the ability to even guarantee pricing at delivery in some cases.
- Lead times are doubling if not taking longer for many long lead critical path items.
- When the project bids come in much higher than anticipated some owners are choosing to reject all bids, reduce scope, and rebid projects in the future after contractors have spent countless hours and large sums of money preparing estimates and proposals.
- Owners are asking contractors to hold bid day pricing for 60, 90 and even 120 days to allow them to select contractor, present to their boards or councils for approval, and issue notice of award leading to increased cost due to risk of escalation prior to award.
- Texas law caps change orders for public works construction projects at 25% of the original contract value potentially limiting this avenue for relief in the event of significant and unanticipated price increases during construction.

PPIs for Construction Bid Prices and Selected Inputs

Cumulative Change in PPIs, April 2020 – February 2022



Bureau of Labor Statistics Data December 2020-2021

Inputs to Construction Materials	+21.0%
Steel Products	+74.4%
Steel Pipe	+71.8%
PVC Pipe	+89.2%
PVC Conduit	+73.8%
Copper Mill Shapes	+24.4%
Aluminum Mill Shapes	+37.3%
Fabricate Structural Metal	+48.2%
Fabricated Rebar	+49.8%
Prefabricated Metal Buildings	+32.1%
Stainless Steel Pipe	+35.9%
Ductile Iron Pipe	+14.5%
Diesel Fuel	+57.5%
Asphalt	+8.6%
Truck Transportation of Freight	+19.1%

Solutions Posed and Currently Being Utilized to Mitigate Market Conditions

Pre-construction

- Solicit contractor feedback in the procurement and pre-construction phase. Conduct market research and revise project estimates and contract durations immediately prior to bid. Reach out to contractors, subcontractors, and suppliers. They know the market better than anyone.
- Review timing of solicitations with other owners in the local area and beyond. Contractors are a good resource as they know what is bidding in their respective regions.
- Prioritize complex projects that address the most significant public need and capital outlays.
- Consider use of procurement and project delivery methods that will attract qualified bidders and most appropriately address project risk.
- Procurement processes should encourage the use of stable qualified contractors with a demonstrated history of quality and performance in Texas.

- Utilize and seek feedback on contract terms & conditions to allow for reasonable risk allocation and fair treatment of contractors to encourage competition by reputable stable and qualified contractors.
- Create an allowance bid item for material escalation so contractors can seek reasonable reimbursement for increases. Doing so will decrease the need to inflate bids in anticipation of costs when procurement of materials and equipment commences, and purchase orders are generated.
- Many owners have elected to set-aside or allocate contingency funds (20-40%) separate from contract awards for this specific purpose.
- Avoid sole-sourcing and afford contractors flexibility in sourcing equipment, materials, and manufactured goods as necessary and appropriate. This will help reduce costs and schedule impacts.
- Consider the importance and potential use of waivers for state and federal categorical and project specific "Buy American" requirements as a matter of public interest or availability when applicable and necessary. This is particularly important when utilizing funding from the Texas Water Development Board and processes can be initiated in pre-construction and construction project phases.

Construction:

- Encourage value engineering to provide alternative means and methods to assist in mitigating potential project issues.
- Review and modify your processes for reviewing, selecting, and issuing notice of award to contractors with a goal of streamlining the process to avoid impacts of holding pricing for more than 30 days.
- Encourage and allow early acquisition of long lead time items and pre-purchase of equipment and materials to assist contractors to mitigate price increases and instability.
- Include contract provisions to allow and encourage access to shared contingency funds as necessary to mitigate unforeseen escalation for key critical path items.
- Promote open dialogues with design and construction teams to minimize risk.
- Consider and make allowances for potential schedule impacts.
- Identify long lead-time items and allow early purchase. Re-negotiate warranty provisions as needed.
- To the extent possible, work to expedite approvals, submittals, and green light construction in an expedient manner. This is particularly important for projects utilizing Texas Water Development Board.

For additional information or to schedule a discussion with TXWIN staff or members to discuss these issues please contact TXWIN Executive Director Perry L. Fowler at (512) 810-3969 or plf@txwin.org .