



Lake Granbury Low Flow Project

***Presented by
Michael McClendon
Upper Basin Regional Manager***

Meeting Date: April 19, 2022

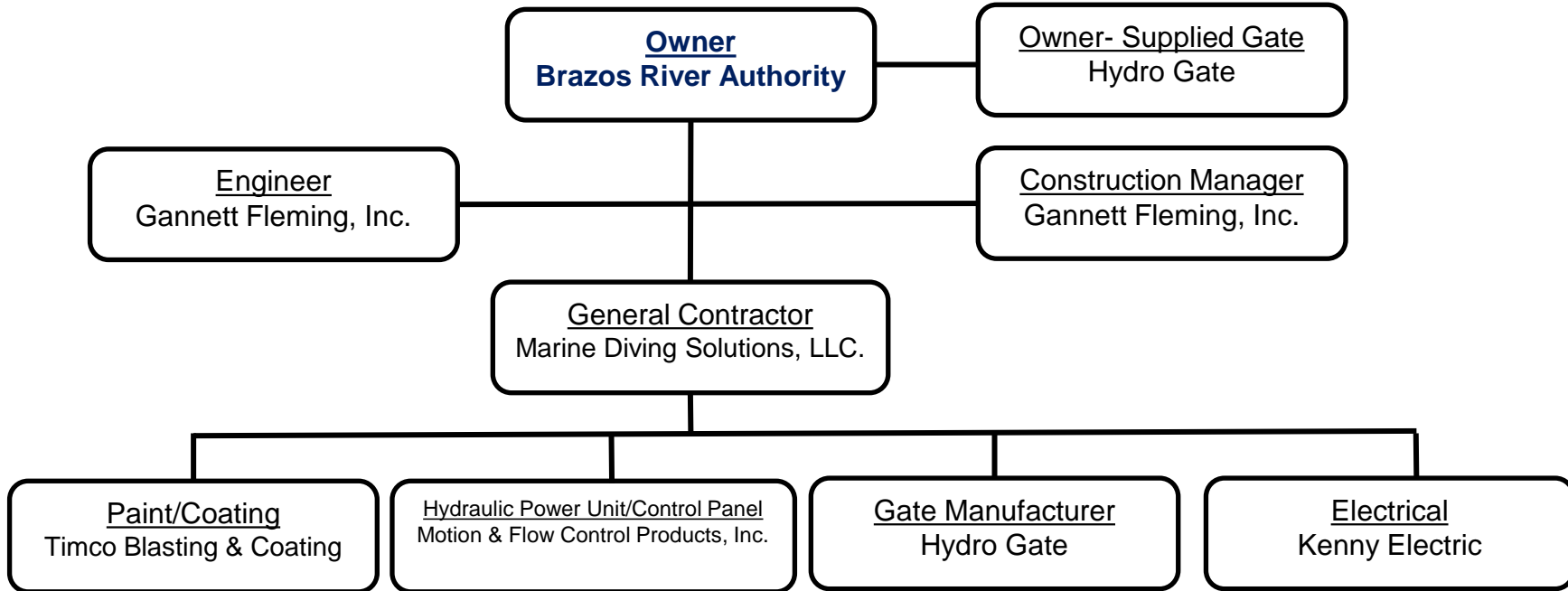


Downstream view (backside of dam)





Project Team Organizational Chart





Project Progression







Original Contract NTE	\$1,990,750
Change Order #1	(\$53,600)
Adjusted Contract Amt.	\$1,937,150
Proposed CO #2 (\$214K + 84,614)	\$298,615
Revised NTE Amount (15% of original NTE):	\$2,289,365



“WHEREAS, the Brazos River Authority entered into a contract with Marine Diving Solutions for a not-to-exceed cost of \$1,990,750 to perform construction services for the De Cordova Bend Low Flow Facilities Project, which price was decreased by change order to \$1,937,150;

WHEREAS, a recent site inspection discovered additional issues related to the project that must be corrected and Marine Diving is amenable to execution of a change order to perform the work;

WHEREAS, Brazos River Authority policy provides that the aggregate of all change orders entered into on a contract may not exceed ten percent of the original contract value without the express authorization of the Board of Directors and shall only exceed twenty-five percent on aggregate change orders in specific limited circumstances;

WHEREAS, the cost to perform the work will likely exceed the aggregate ten percent change order threshold, and it is possible other change orders on the project may be necessary; and

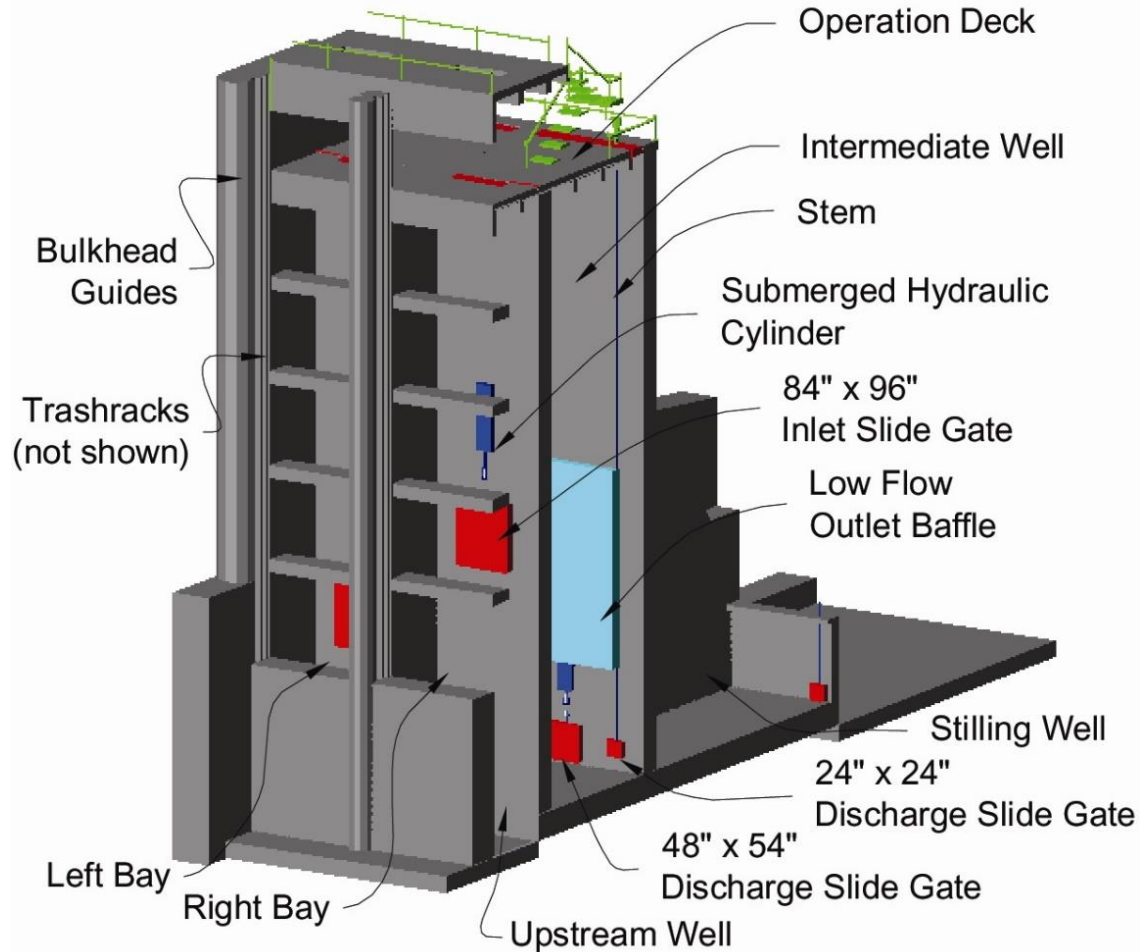


WHEREAS, staff is seeking authorization to execute a change order to perform the aforementioned work and any additional change orders as needed up to an aggregate change order limit of fifteen percent above the original contract price.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to execute Change Order #2 with Marine Diving Solutions LLC to perform additional construction services at De Cordova Bend Dam as referenced above, and enter into such additional change orders on the project as may be necessary; provided, however, the aggregate amount of all change orders entered into on the project, including Change Order #1, Change Order #2, and any additional change orders shall not exceed fifteen percent of the original contract price without the express authorization of the Board of Directors.



**Brazos
River
Authority**





Settlement

- Demand Prior to Mediation: **\$1,095,300**

- Mediated Settlement: **\$1,062,643**
 - AUI: **\$562,643** (\$350,000 + retainage)
 - HyrdoGate: **\$375,000** (\$225,000 + value of gates)
 - FNI: **\$125,000** (Cash recovery)
 - After Mediation **\$1,062,643**

- FNI: Waiver of Claim **\$422,688**

The Bid



Brazos River Authority

Respondent		Marine Diving Solutions			
Item #	Description	Quantity	Original Bid Amount	Revised Bid Amount	Change in Bid
1	Mobilization	1	\$150,000.00	\$145,000	(\$5,000)
2	Demobilization	1	\$50,000.00	\$50,000	\$0
3	Bonds and Insurance	1	\$62,500.00	\$46,250	(\$16,250)
4	Temporary Facilities and Control	1	\$75,000.00	\$75,000	\$0
5	Video Monitoring	1	\$20,000.00	\$22,500	\$2,500
6	Seal Stoplogs	1	\$100,000.00	\$30,000	(\$70,000)
7	Dewatering	1	\$80,000.00	\$25,000	(\$55,000)
8	Temperature and Humidity Monitoring	1	\$40,000.00	\$40,000	\$0
9	Demolition/ Salvage of Gates 5 & 6	1	\$300,000.00	\$300,000	\$0
10	Recoating Thimbles and Frames	1	\$207,000.00	\$207,000	\$0
11	Demolition/ Salvage of Exiting HPU	1	\$50,000.00	\$30,000	(\$20,000)
12	New HPU and Control Panel Installed	1	\$850,000.00	\$400,000	(\$450,000)
13	Reconnect Power, Network and Position Transducer Cables	1	\$100,000.00	\$50,000	(\$50,000)
14	Installation of Owner Provided Gates	1	\$300,000.00	\$300,000	\$0
15	Replace Gate 5 & 6 Ladder Center Safety Rail	1	\$25,000.00	\$25,000	\$0
16	Replace Gate 3 Seal System	1	\$50,000.00	\$25,000	(\$25,000)
17	Flush & Vent Existing Hydraulic Lines	1	\$125,000.00	\$100,000	(\$25,000)
18	Field Operational Testing - Gates	1	\$25,000.00	\$25,000	\$0
19	Field Operational Testing & Training SMCS	1	\$20,000.00	\$20,000	\$0
20	Clean and Passivate Existing Stems and Guides	1	\$100,000.00	\$75,000	(\$25,000)
			\$2,729,500.00	\$1,990,750	(\$738,750)



Project Purpose

- **Remediate LG Low Flow Outlet Works to fully operational**
- **Replace two 84"x96" cast iron head gates with stainless steel gates – Provided by Hydrogate**
- **Remove and replace existing Hydraulic Power Unit**
- **Replace or recoat various components**
 - **Thimbles**
 - **Guides**
 - **Seals**
 - **Ladder Safety Rails**



Project Approach

- **Gannett Fleming Inc. Contract Executed October 2019**
 - Provide Design and Bid Services
 - Provide Construction Phase Services
 - Provide Resident Project Representative (RPR)
- **Marine Diving Solutions, Inc**
 - Construction Prime Contractor
 - Will install gates provided by Hydro Gate
 - Install post installed concrete anchors as needed for construction
 - Subs – HPU, coating and electrical



BRA Factors:

1. Project has been bid multiple times; prior project contractor required settlement due to performance issues.
2. Project doesn't attract big firms; not big enough to put forward resources to it.
3. Construction contractors have ability to choose projects in current market.
4. Availability of construction laborers has been an issue.
5. Would we receive multiple bidders if rebid? Depending upon best and final bid from contractor; after vetting, BRA and consultant believe we are obtaining a qualified contractor at this time and we can move a project that has been on the books for over a decade?
6. What factors does supply chain problems affect existing and/or rebid. Contractors having to protect themselves against schedule deadlines and lack of parts to complete the job. Most will not hold parts over 30 days.
7. What are the costs associated with rebid and how does that impact budget and other planned projects on the dam?



Previous Board Action



Brazos River Authority
RESOLUTION OF THE BOARD OF DIRECTORS OF
THE BRAZOS RIVER AUTHORITY
OCTOBER 21, 2017

Agenda Item No. 11
DeCordova Bend Dam Low Flow Facility

"BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to enter into a contract with AJD Contractors, LLC, for an amount not to exceed \$2,584,000, to perform construction modifications to the low flow facilities at DeCordova Bend Dam."

The aforementioned resolution was approved by the Board of Directors of the Brazos River Authority on October 20, 2017, to certify which witness my hand and official seal.

[Signature]
Christy Ann DeCordova
Presiding Officer

SUBSCRIBED AND SWORN TO BEFORE ME on this the 21st day of OCTOBER, 2017, to certify which witness my hand and official seal.



Brazos River Authority
RESOLUTION OF THE BOARD OF DIRECTORS OF
THE BRAZOS RIVER AUTHORITY
JANUARY 30, 2017

Agenda Item No. 11
Lake Granbury Low Flow Facilities Project

"BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to negotiate and execute contracts for engineering and legal services to renovate the Lake Granbury Low Flow Facilities Project in a total not to exceed amount of \$550,000; and

BE IT FURTHER RESOLVED that the Board of Directors hereby authorizes and approves amending the Fiscal Year 2017 Budget, Lake Granbury Low Flow Facilities Project from \$356,645 to \$496,645."

The aforementioned resolution was approved by the Board of Directors of the Brazos River Authority on January 30, 2017, to certify which witness my hand and seal.

[Signature]
G. Dave Scott
Presiding Officer

SUBSCRIBED AND SWORN TO BEFORE ME on this the 30 day of JANUARY, 2017, to certify which witness my hand and official seal.



[Signature]
Notary Public in and for the
State of Texas



Brazos River Authority
RESOLUTION OF THE BOARD OF DIRECTORS OF
THE BRAZOS RIVER AUTHORITY
APRIL 20, 2018

Agenda Item No. 6
Brazos River Authority's Low Flow Project at Lake Granbury

"BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to pursue and take any and all actions necessary to initiate and effect resolution of the Lake Granbury Low Flow Facilities Project either through a reasonable settlement or through litigation."

The aforementioned resolution was approved by the Board of Directors of the Brazos River Authority on April 20, 2018, to certify which witness my hand and seal.

[Signature]
G. Dave Scott
Presiding Officer

SUBSCRIBED AND SWORN TO BEFORE ME on this the 20 day of APRIL, 2018, to certify which witness my hand and official seal.



[Signature]
Notary Public in and for the
State of Texas



Brazos River Authority
RESOLUTION OF THE BOARD OF DIRECTORS OF
THE BRAZOS RIVER AUTHORITY
OCTOBER 29, 2018

Agenda Item No. 6A
Lake Granbury Low Flow Project

"BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to negotiate and execute a contract with Garrett Farming Inc. to perform engineering and construction oversight services at DeCordova Bend Dam to effectuate resolution of the Lake Granbury Low Flow Facilities Project in an amount not to exceed \$200,000.

The aforementioned resolution was approved by the Board of Directors of the Brazos River Authority on October 29, 2018, to certify which witness my hand and seal.

[Signature]
Dave Scott
Presiding Officer

SUBSCRIBED AND SWORN TO BEFORE ME on this the 29 day of OCTOBER, 2018, to certify which witness my hand and official seal.



[Signature]
Notary Public in and for the
State of Texas



Brazos River Authority
RESOLUTION OF THE BOARD OF DIRECTORS OF
THE BRAZOS RIVER AUTHORITY
JULY 29, 2019

Agenda Item No. 6
Lake Granbury Project Remediation

"BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to negotiate and execute a contract with Garrett Farming Inc. to perform engineering, construction oversight and consultant services to effectuate resolution of the DeCordova Bend Dam Low Flow Facilities in an amount not to exceed \$700,000."

The aforementioned resolution was approved by the Board of Directors of the Brazos River Authority on July 29, 2019, to certify which witness my hand and seal.

[Signature]
Cynthia A. Flores
Presiding Officer

SUBSCRIBED AND SWORN TO BEFORE ME on this the 29 day of JULY, 2019, to certify which witness my hand and official seal.



[Signature]
Notary Public in and for the
State of Texas