



Kansas SRF Design Build Experience

2021 CIFA SRF Workshop | September 29, 2021

Guaranteed Maximum Price Basics



- Contract with a firm to design and construct a project for a set price.
- More than one path!
- Basic preliminary engineering defined parameters
- Municipality motivated to be more involved
- Evaluation plan for candidates

Guaranteed Maximum Price Basics Continued

- Pick a design build team(s)
 - Design firm lead
 - Construction contractor firm lead
 - Joint venture
- Usually 2 phase/contract process
 - Preliminary design to establish price (30% design)
 - Construction and final design

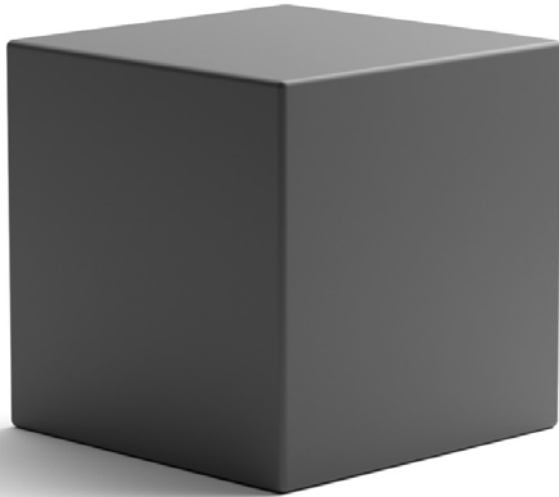


In The Beginning - Fear

- Consultants and contractors were circumventing regulatory requirements
- “No bid” construction contracts
- Municipality not understanding what they are getting into
- DW and CW regulatory review processes were different



Design Build Guideline Elements



- DB interest in 2002 inspired guidance development
 - Preliminary engineering report to define scope of project
 - Program manager requirement – professional engineer not on the DB team
 - Can use RFQ or RFP selection process
 - Attorney certification that procurement procedure is not in violation with state laws or local ordinances
 - Requires SRF approval of D/B and Program Manager contracts.

Best Management Practices

- Communication is key
 - SRF & permitting
 - SRF, permitting, municipality, & DB Team
- Design memorandum should be reviewed prior to phase 2 execution
- Understand flow of the project from the contract
- Know when construction starts and what kind
- Determine how many design submittals to review up front



Leavenworth Water Works Board



- WTP rehabilitation at 2 different plants
- Time was a major concern
- 30%, 60%, 90%, 100% plan and specification submittals
- Substituted bid build provision docs in contracts
- Lots of lessons learned
- Relationship and communication with municipality and D/B team made it successful.

Olathe – Treatment Plant Expansion

Adding membrane treatment

- 30% design done without SRF reimbursement or approval
- 40%, 80%, 100% design reviews
- Had to use SRF disbursements to leverage desired regulatory design details



Salina Ground Water Treatment Plant



- Early fluff leads to confusing design
- First estimate was 100% design before construction
- Design packages submitted for regulatory review were endless

Arkansas City - Wastewater Treatment Plant

- A little too light on preliminary design – no PER
- No regulatory review of design memorandum
- Regulatory side is pushing for nutrient removal
- Municipality just wants rehab of existing treatment process



Bonner Springs

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
5.75	56	8.25	3.25	3.40	8.39	1.7	0.04	1.16			
9	3	10	25.6	12.59	17.98	15.26	129.85	74.42			
7.02	18.44	20.77	5.86	3.96	4.4	1	0	11.2			
0	3	1.5	4	0.37	0	0.5	11	3.5			
3.11	0	0.5	0	0.3	1.71	0	0	11.5			
3.13	2.7	53.32	2.39	0.3	1.71	0	22.06	2.24			
3.81	9964.9	9964.76	1106	13945.79	14851.18	1761	19138.99	20234.06			
9.96	149.89	211.18	54.91	453.65	229.93	59.97	138.98	298.83			
Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov			
2.65	13359.77	14016.76	194.89	12901.21	12625.01	13686.73	213.05	12941.58			
5.57	925.61	1232.46	1046.6	1152.52	1210.19	2180.86	2100	1938.61			
1.89	2990.29	3406.59	445.21	3400	2956.12	3779.39	325.32	3003.2			
2.52	340.83	445.02	491.75	442.9	443.92	603	774.39	696.84			
4.23	8853.85	8323.28	826.76	5744.81	4654.11	6468.39	3983.6	6088.4			
92.9	1875.85	1859.25	178.12	1914.77	1830.85	2268.69	165.45	2480.94			
1.67	911.7	860.27	13.35	979.59	847.94	1067.62	1163.01	1107.32			
7.45	482.46	561	5.83	515.79	558.06	645.75	549	589.88			
5.55	419.47	390.96	39.02	403.78	402.73	329.75	387.56	313.65			
59.8	57.72	80.8	4	87.88	35.36	74	85.28	56.98			
4.05	1.24	0.99	17.86	1.86	1.86	1.3	1.3	0.71			
2.73	1	0.75	0.25	3.70	2.5	0	0	2.5			
1.74	196.66	313.82	14	710.8	794.06	738.56					
1.24	173.81	308	22.03	191.87	172.88	153.71	119.41	121.48			
0.2	0.2		14.44	0	20.7	0.19	0	7.47			
1.35	30.8		16.55	23.4	30.25	28.35	45.7	28.85			
13.3	20.33		15.4	15.92	29.29	18.99	44.92	88.48			
1.98	7		1.26	0.62	1.72	35.5	238.59	205.46			

- Sense of urgency
- Preliminary engineering report needed revision
- 6 months into phase 1 and the GMP was too high

Wichita

- Joint funded with WIFIA
- Solid communication
- Dedicated KDHE reviewing Engineer
- 4 year project
- So far so good



SRF Program Alterations



- Provisions language - bidding
- Contract review checklists
 - Attorney Cert
 - Submittal package estimate
 - Construction Activity Approval
- Phase 1 contract provisions – Consultant Packet
- Phase 2 contract provisions – Construction Packet

Thank You / Questions

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