



SPANISH FORK AND MAPLETON WATER RECLAMATION FACILITY DESIGN

Guaranteed Maximum Price
City Council Meeting
September 20, 2022



J-U-B ENGINEERS, INC.



THE
LANGDON
GROUP



GATEWAY
MAPPING
INC.

OTHER J-U-B COMPANIES

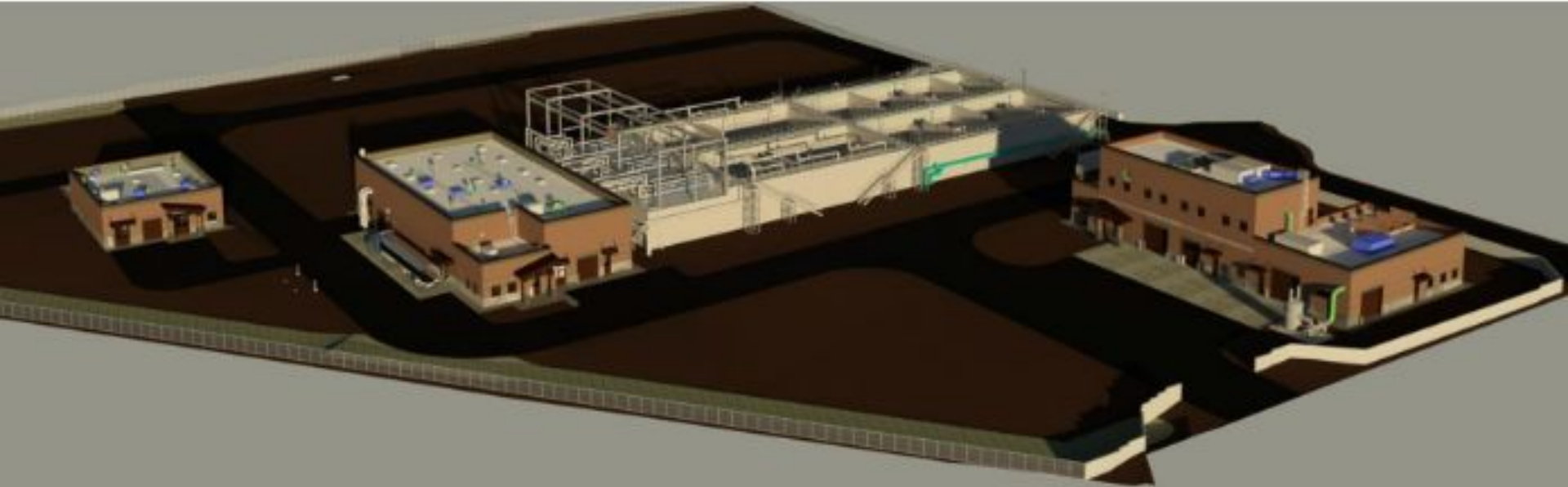
Agenda

- Project Overview
- Project Schedule
- GMP Review
- GMP & OPCC Comparison
- Pre-Procured Equipment Cost
- Overall Project Cost

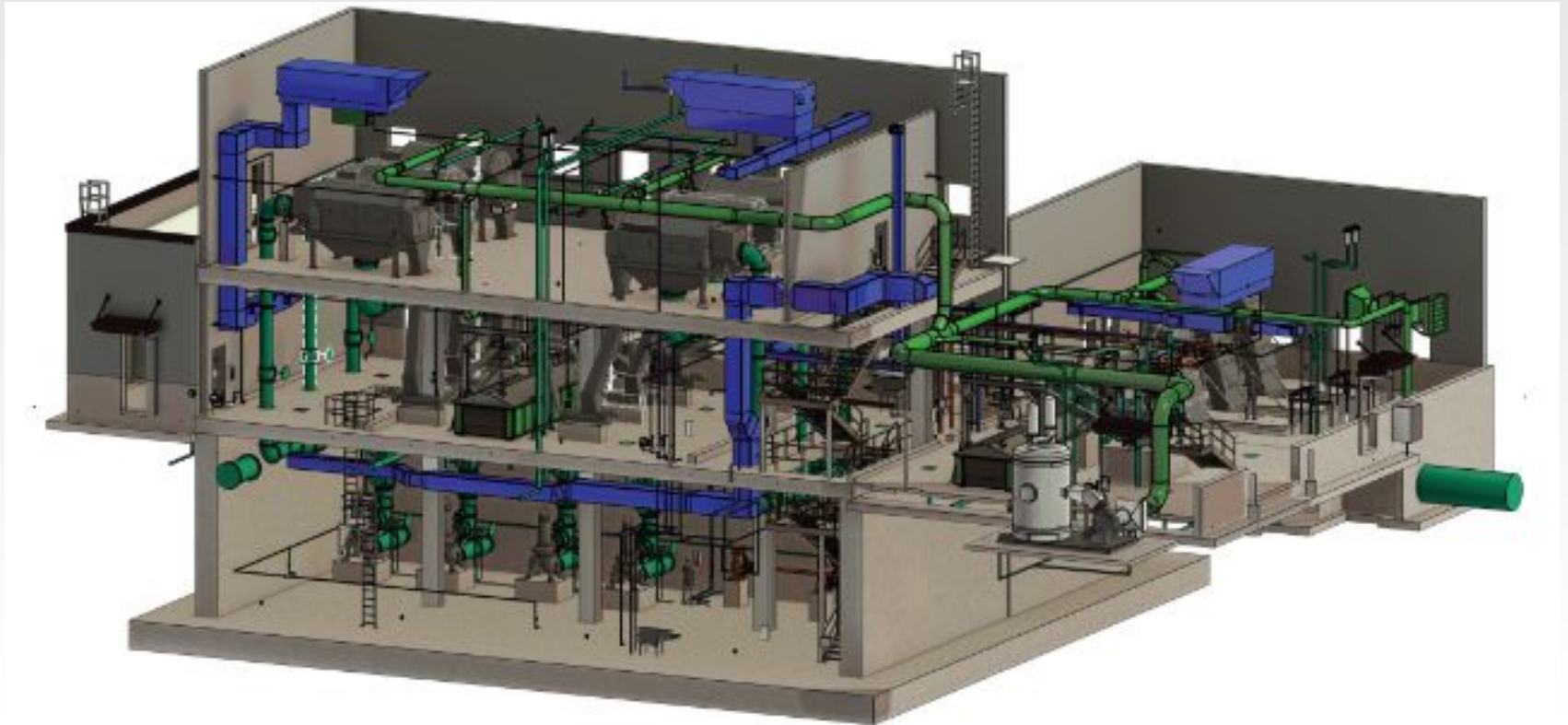
Water Reclamation Facility



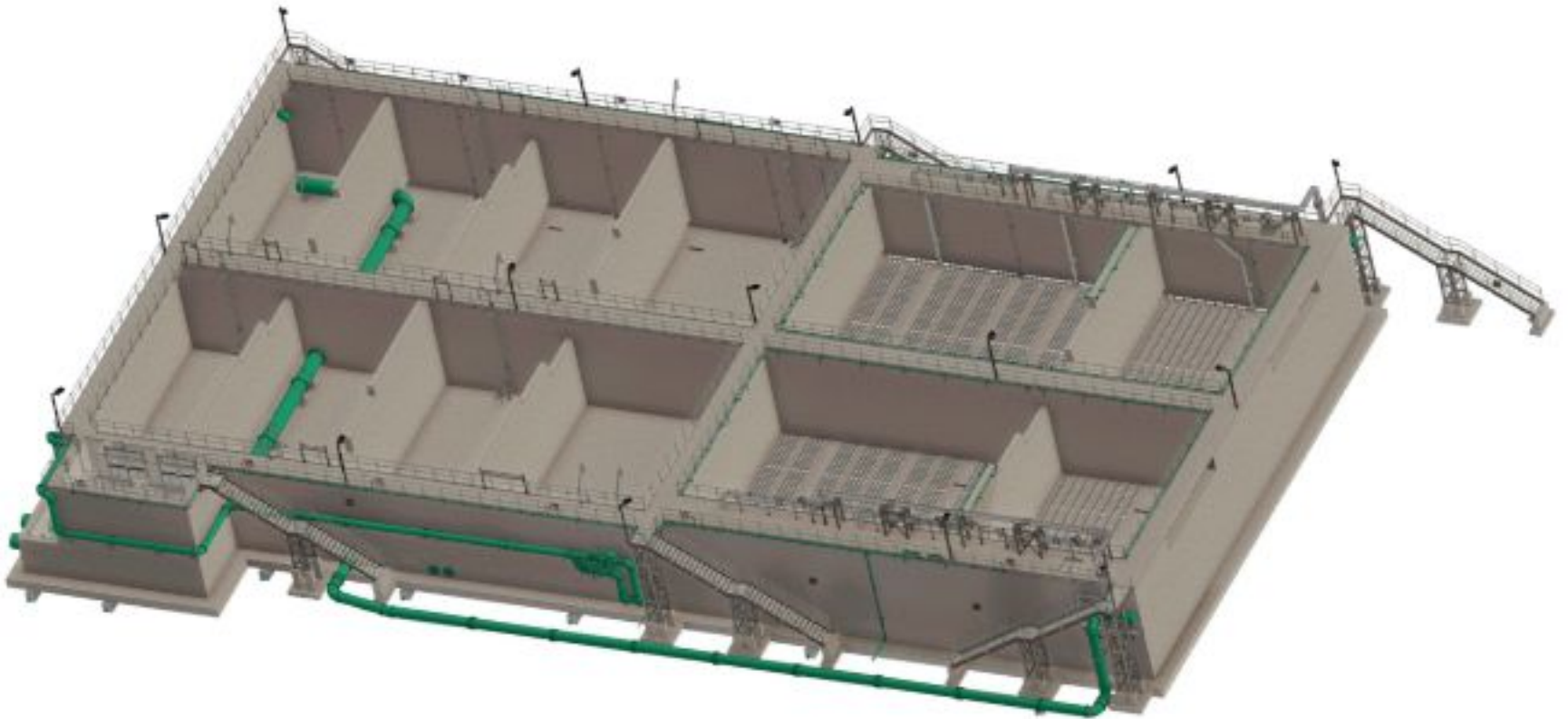
Water Reclamation Facility



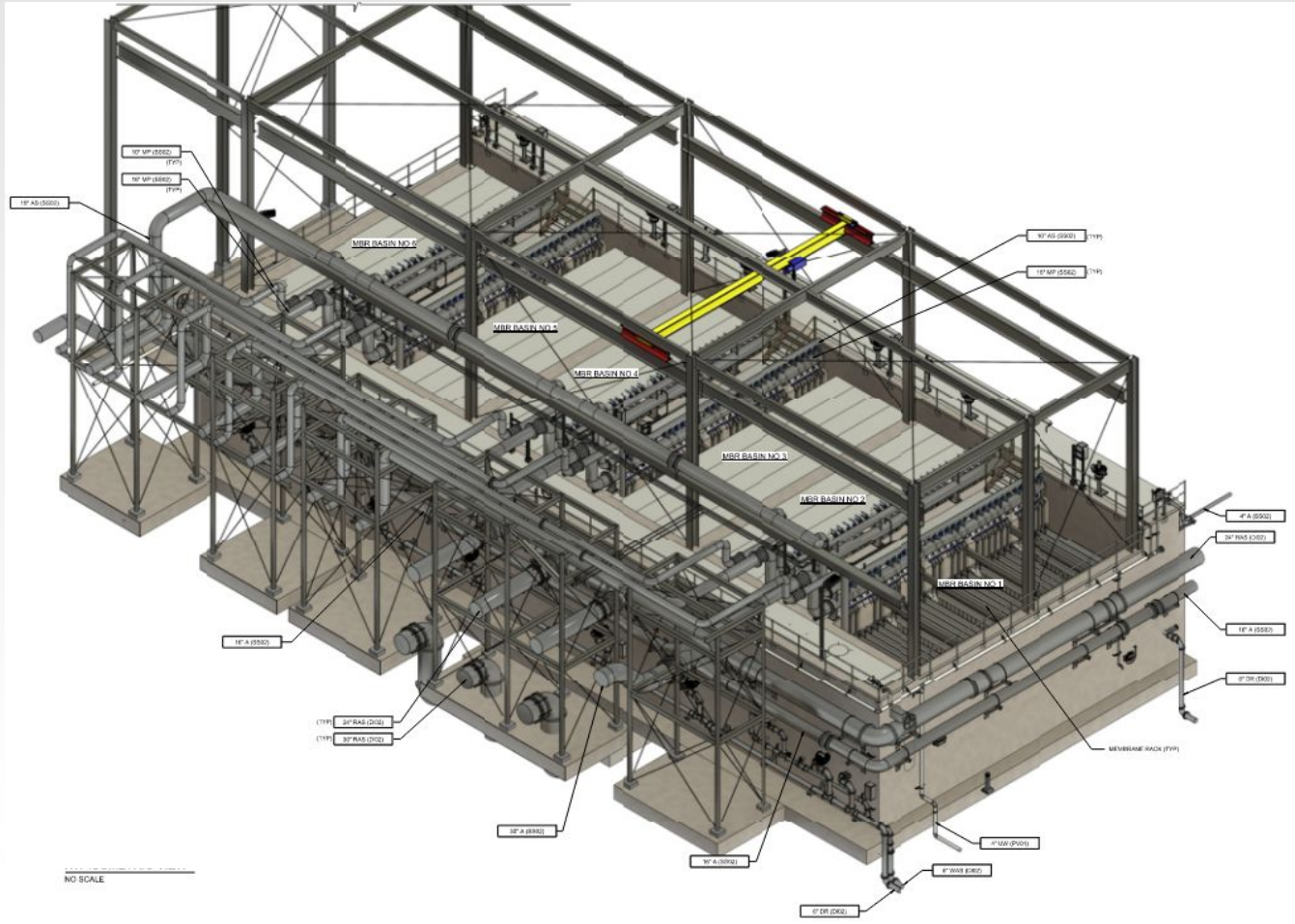
Headworks Building



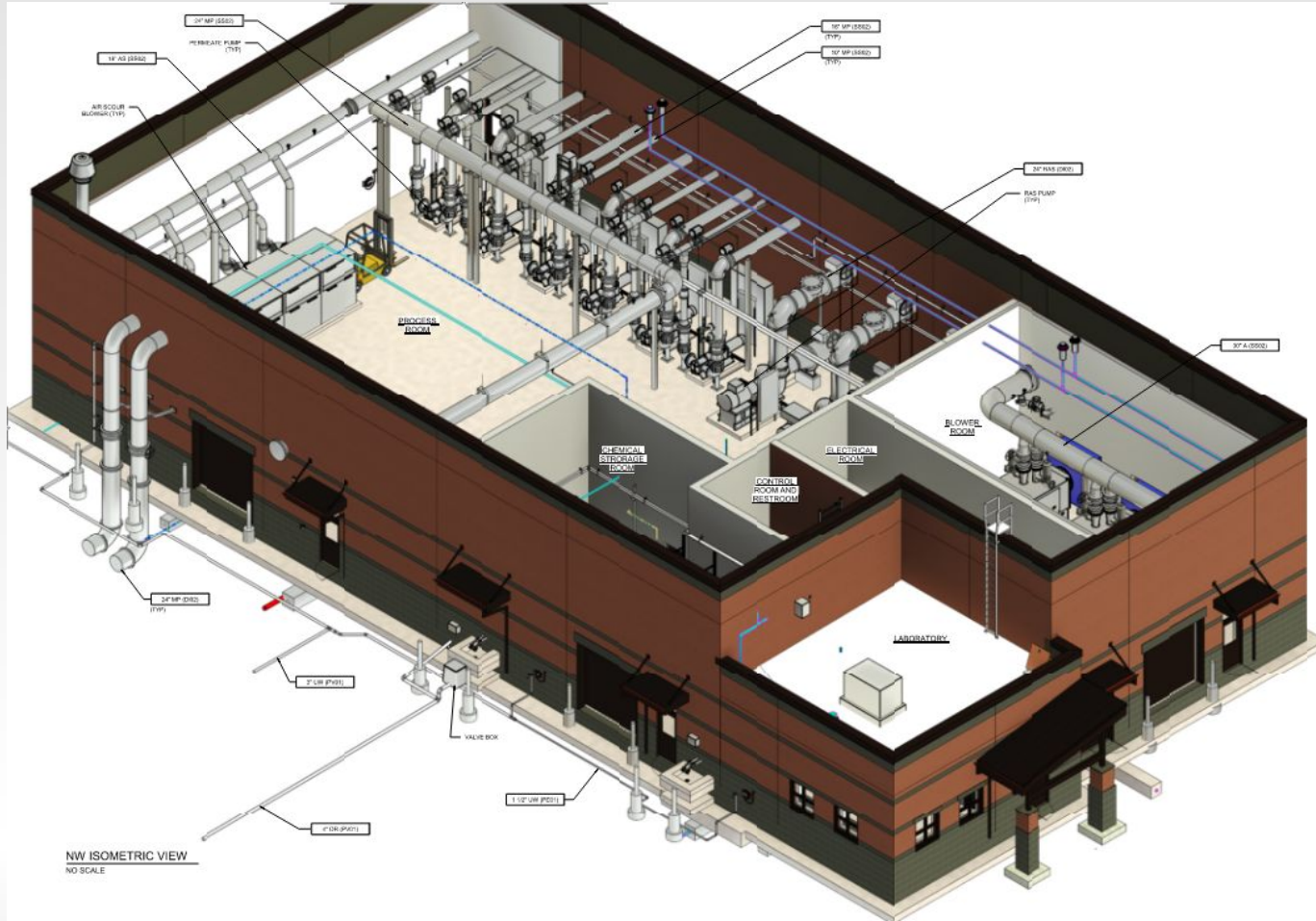
BNR Basins



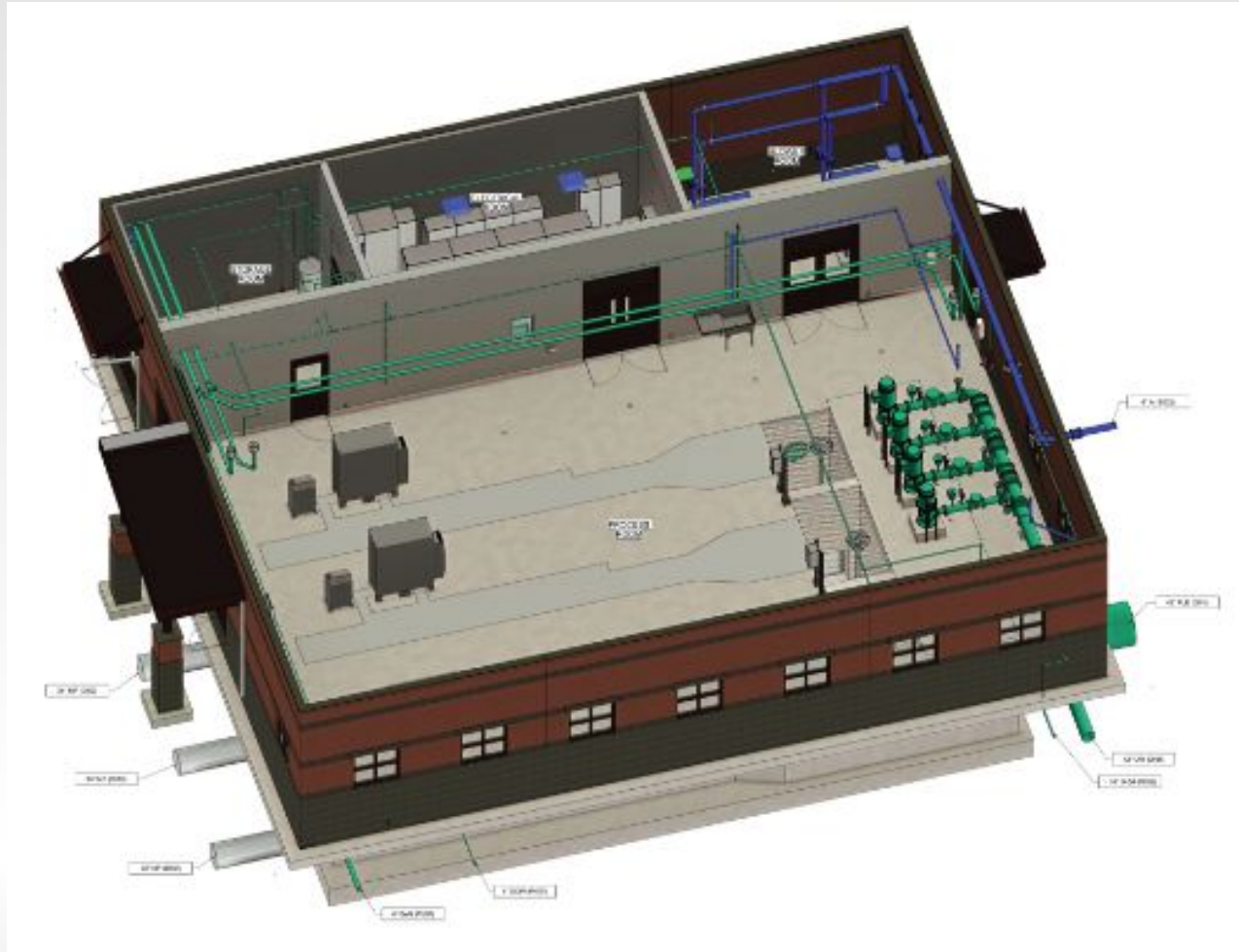
MBR Process Tanks



MBR Support Building



UV Disinfection



Project Schedule

- Early Out Packages
 - Solids Handling – estimated completion November 2022
 - Offsite Piping – estimated completion November 2022
 - WRF Ground Improvements – estimated completion February 2023
- WRF Construction
 - Substantial completion – May 2025
 - Final completion – August 2025

Alder GMP

	SPANISH FORK 90% COST			SPANISH FORK 60% COST
WORK ITEM/FACILITY	COST	Contingency % of Bid	Delta 90 v 60%	COST
DIVISION 1 -SITE OVERHEAD/EQUIPMENT/FUEL	\$10,037,824.08		\$981,246.76	\$9,056,577.32
GROUND IMPROVEMENTS Early Work	\$0.00			
EXCAVATION/DEWATERING/SHORING	\$3,908,344.09		-\$468,072.20	\$4,376,416.29
YARD PIPE/SITE CONCRETE PAVING/LANDSCAPE	\$4,917,437.72		\$873,429.64	\$4,044,008.08
10-HEADWORKS	\$15,098,217.45		\$1,534,742.48	\$13,563,474.97
10- ODOR CONTROL	\$379,257.51		-\$18,962.33	\$398,219.84
20-BNR	\$8,533,813.40		\$836,385.90	\$7,697,427.51
30-MBR	\$12,077,594.06		\$820,952.05	\$11,256,642.01
35-MBR SUPPORT BUILDING	\$8,563,801.30		\$638,358.87	\$7,925,442.43
50-UV STRUCTURE	\$2,992,153.41		\$164,464.55	\$2,827,688.86
60-RE-AERATION BASIN	\$945,217.46		-\$10,768.33	\$955,985.79
ELECTRICAL & I&C/Duct Bank	\$16,202,221.85		-\$2,908,938.15	\$19,111,160.00
95-Existing Plant	\$721,216.48		-\$140,937.14	\$862,153.62
SUB TOTAL	\$84,377,098.82		\$2,301,902.10	\$82,075,196.72
PROFIT & OFFICE OH 10%	\$8,437,709.88		-\$181,311.54	\$8,619,021.42
INSURANCE	\$84,377.10		-\$1,813.12	\$86,190.21
BONDS	\$651,794.30		-\$13,973.68	\$665,767.98
Total As Shown Cost	\$93,550,980.10		\$2,104,803.76	\$91,446,176.34
Design Contingency 5%	\$4,677,549.00	5.00%	-\$14,434,689.76	\$19,112,238.77
Material/Equipment Escalation 2%	\$776,775.30	1%	\$43,440.86	\$733,334.44
Wage Rate Escalation 5% (of Wages)		0.00%	-\$378,408.43	\$378,408.43
TOTAL	\$99,005,304.40		-\$16,779,871.08	\$115,785,175.48

Area	Alder GMP	Engineer OPCC
Division 1 – Site Overhead/Equipment/Fuel	\$10,037,824	\$9,007,458
Excavation/Dewatering/Shoring	\$3,908,344	\$1,638,886
Yard Piping/Site Concrete/Paving/Landscape	\$4,917,438	\$6,130,738
10 – Headworks	\$15,098,217	\$13,876,291
10 – Odor Control	\$379,258	\$485,358
20 - BNR	\$8,533,813	\$11,798,916
30 - MBR	\$12,077,594	\$5,722,235
35 – MBR Support Building	\$8,563,801	\$13,377,205
50 – UV Disinfection	\$2,992,153	\$2,550,178
60 – Reaeration Basin	\$945,217	\$812,625
Electrical, I&C/Duct Bank	\$16,202,222	\$22,738,929
95 – Existing WRF	\$721,216	\$747,341
Permits and Startup	(already included)	\$2,555,245
Profit and Office OH/Insurance/Bonds	\$9,173,881	\$5,858,076
<i>Contingency (Owner-controlled)</i>	<i>\$5,454,324</i>	<i>\$5,454,324</i>
Cost-of-Work Total	\$99,005,304	\$102,753,805

Pre-Procured Equipment

Equipment	Vendor Equipment Cost	Special Engineering Services (5%)	Alder Contract (95%)
Coarse Screens	\$607,514	\$30,376	\$577,138
Grit Removal	\$643,673	\$32,184	\$611,489
Fine Screens	\$1,317,056	\$65,853	\$1,251,203
Aeration Blowers	\$1,190,364	\$59,518	\$1,130,846
Membranes	\$5,176,061	\$250,034	\$4,750,649
UV Disinfection	\$472,125	\$23,606	\$448,519
Total	\$9,406,793	\$461,571	\$8,945,222

Cost Item	Contract Price	GMP*
Greenfield WRF	\$93.6M	\$99.0M
Solids Handling “Early Out” Package	\$4.2M	\$4.5M
Offsite Piping “Early Out” Package	\$4.0M	\$4.3M
Soil Improvements “Early Out” Package	\$6.9M	\$9.0M
Engineering Design and Construction	\$14.4M	\$14.4M
Pre-Construction Fee (CM/GC)	\$0.5M	\$0.5M
Total Project Costs	\$123.6M	\$131.7M
Spanish Fork City Cost (80%)	\$98.9M	\$105.4M
Mapleton City Cost (20%)	\$24.7M	\$26.3M

* GMP = Contract Price plus Owner-Controlled Contingency