KC WATER

Blue River Biosolids Facility Project

Pre-SOQ Meeting

August 30, 2019

Mandatory Meeting

- All Design-Builders
- All Members of a Joint Venture

Name	Title	Company	
Phone	**E-Mail**		**DB or JV Member**
			Yes/ No

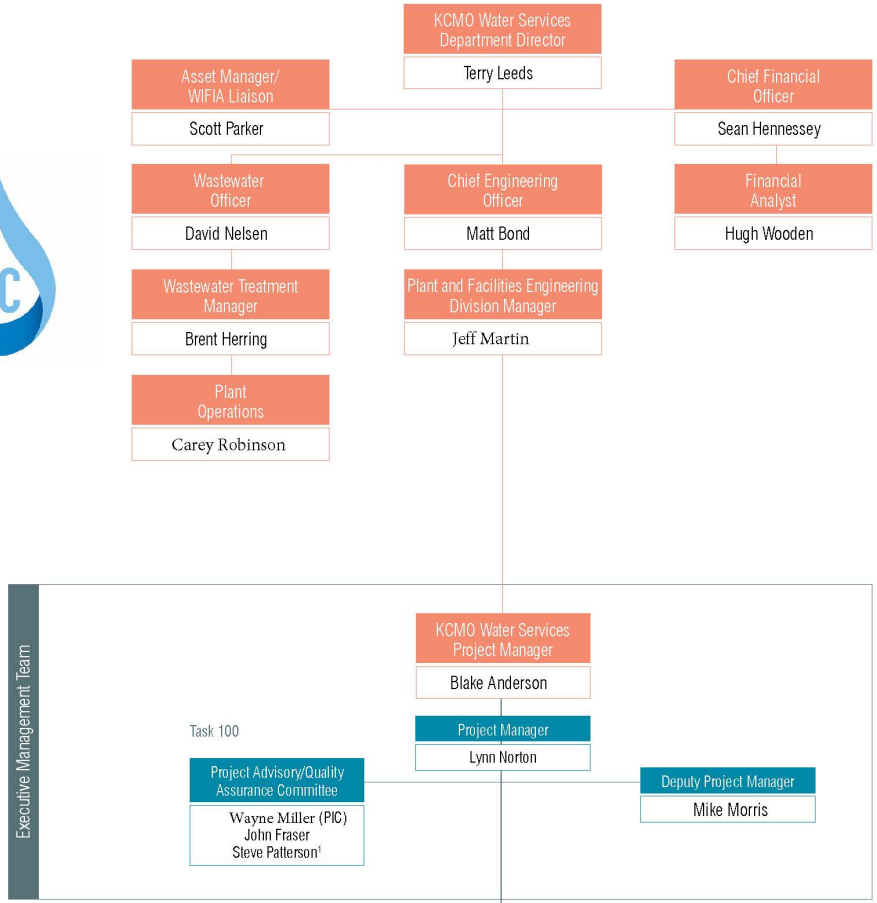
PROGRAM MANAGEMENT TEAM

Owner's Advisor Team Currently

Owner's Advisor (Procurement)

carollo JACOBS PARSON + ASSOCIATES PA

Project Organization Chart



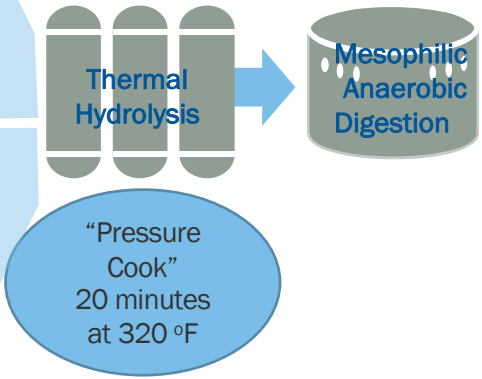
STABALIZATION OPTION SELECTED

SUSTAINABLE DECISIONS PROCESSES

Positive Impacts of Thermal Hydrolysis on Digester Biology, Rheology, Capacity and Up/Downstream Processes

Rheological Properties
- Reduced viscosity (easier to pump)
- 10 percent sludge readily flows
- Reduced pumping and mixing requirements

Increase Digester Capacity
- > 2 times the loading of conventional digestion
- Reduced tankage install



Hygienization
- Class A sterilization
- Makes mesophilic digestion more robust

Biosolids Characteristics
- >30 percent TS cake typical
- Stackable cake
- Low odor product

Biogas Production
- Increased yield
- Higher methane content in gas

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BENEFITS

Elimination of incineration and emissions

All solids processed through existing digesters

Class A product, beneficial use of biosolids

Energy recovery

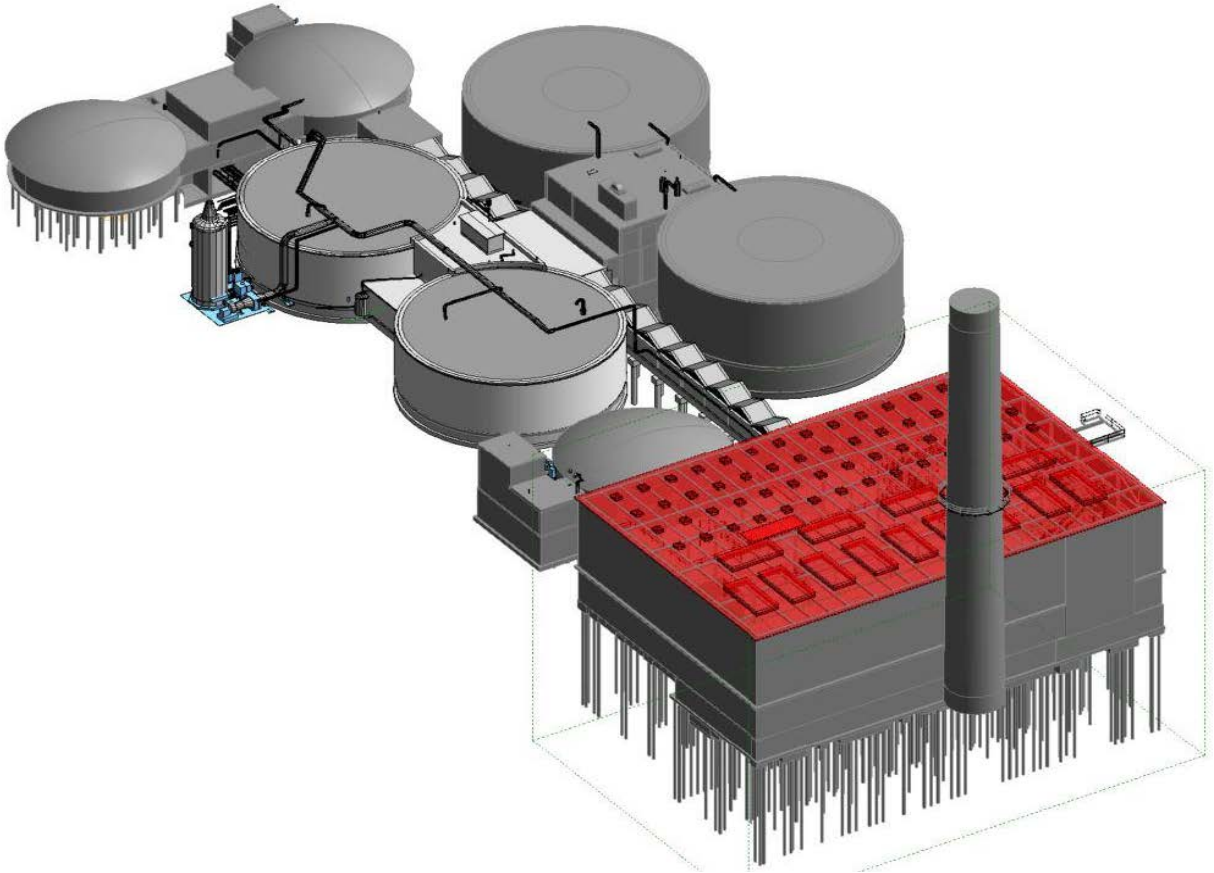
Odor reduction

PROJECT GOALS AND OBJECTIVES

1. Safety
2. Quality
3. Cost
4. Collaboration
5. Schedule
6. Risk
7. Operations and Maintenance
8. Accountability
9. Smooth Transition

REFERENCE DESIGN OVERVIEW

BIM of Existing Plant



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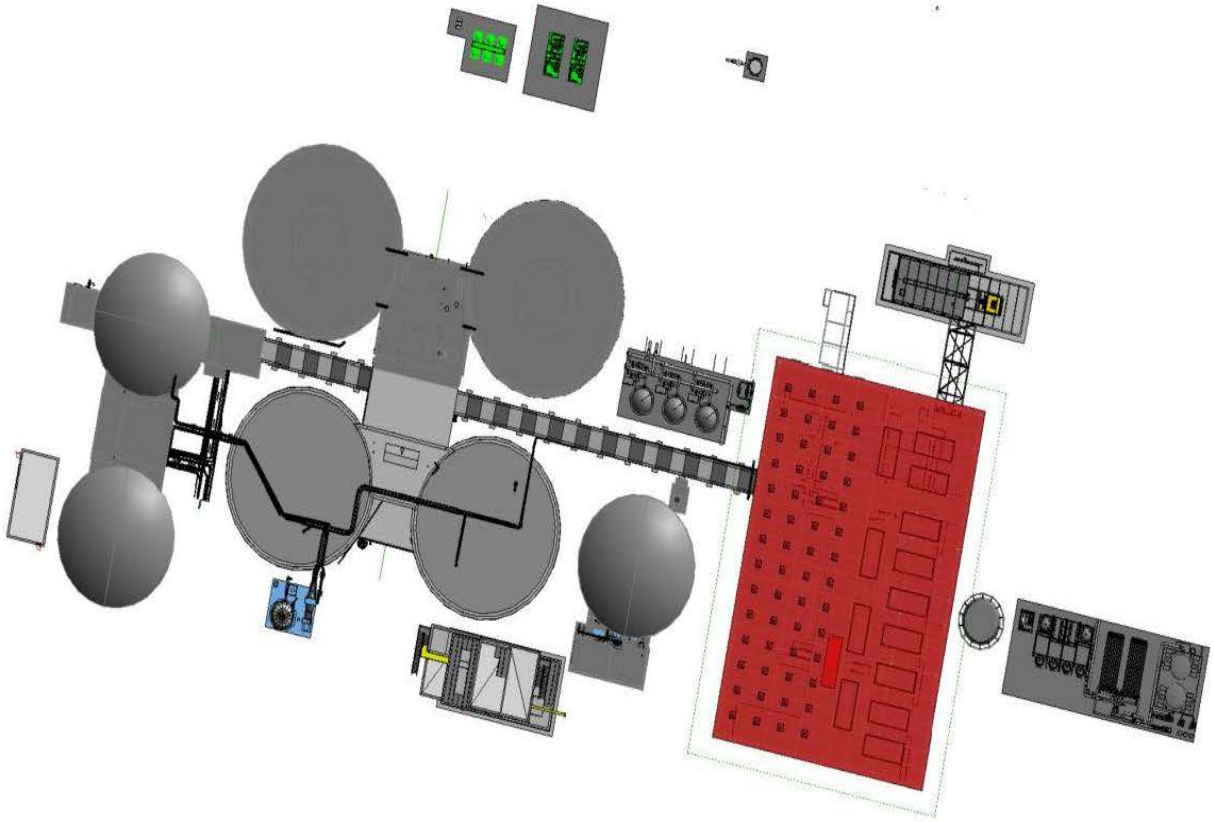
Draft Preliminary Design BIM



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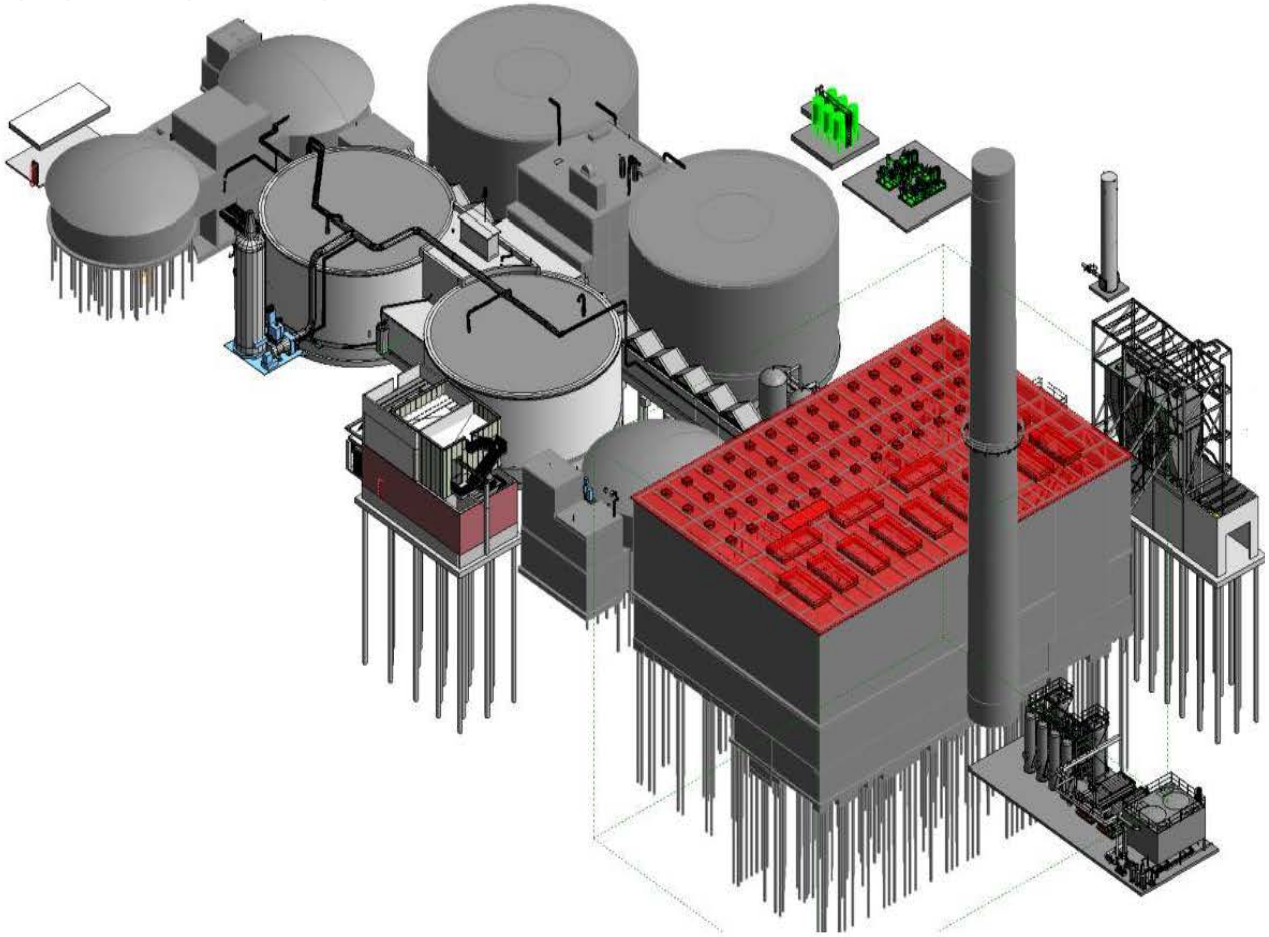
Draft BIM Isometric



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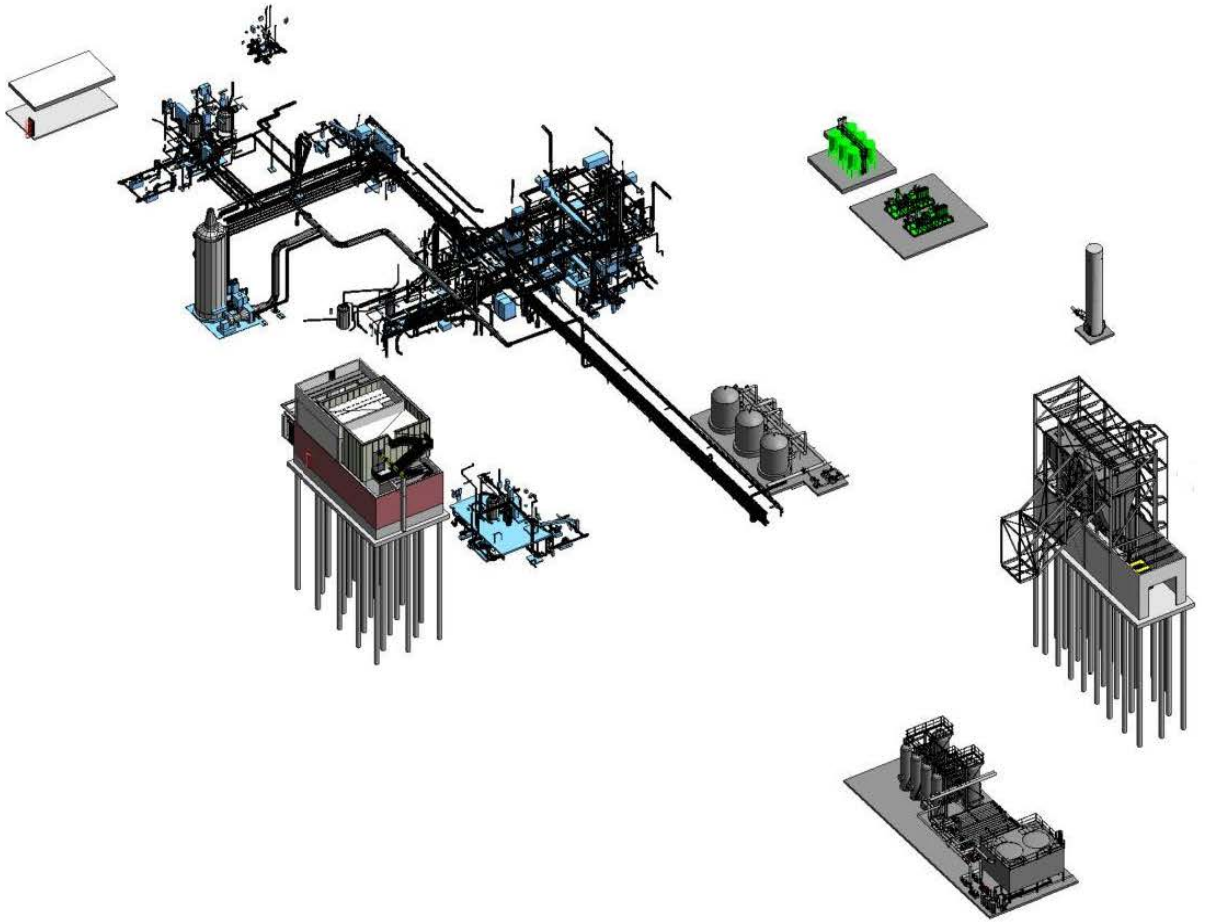
Draft BIM New Assets



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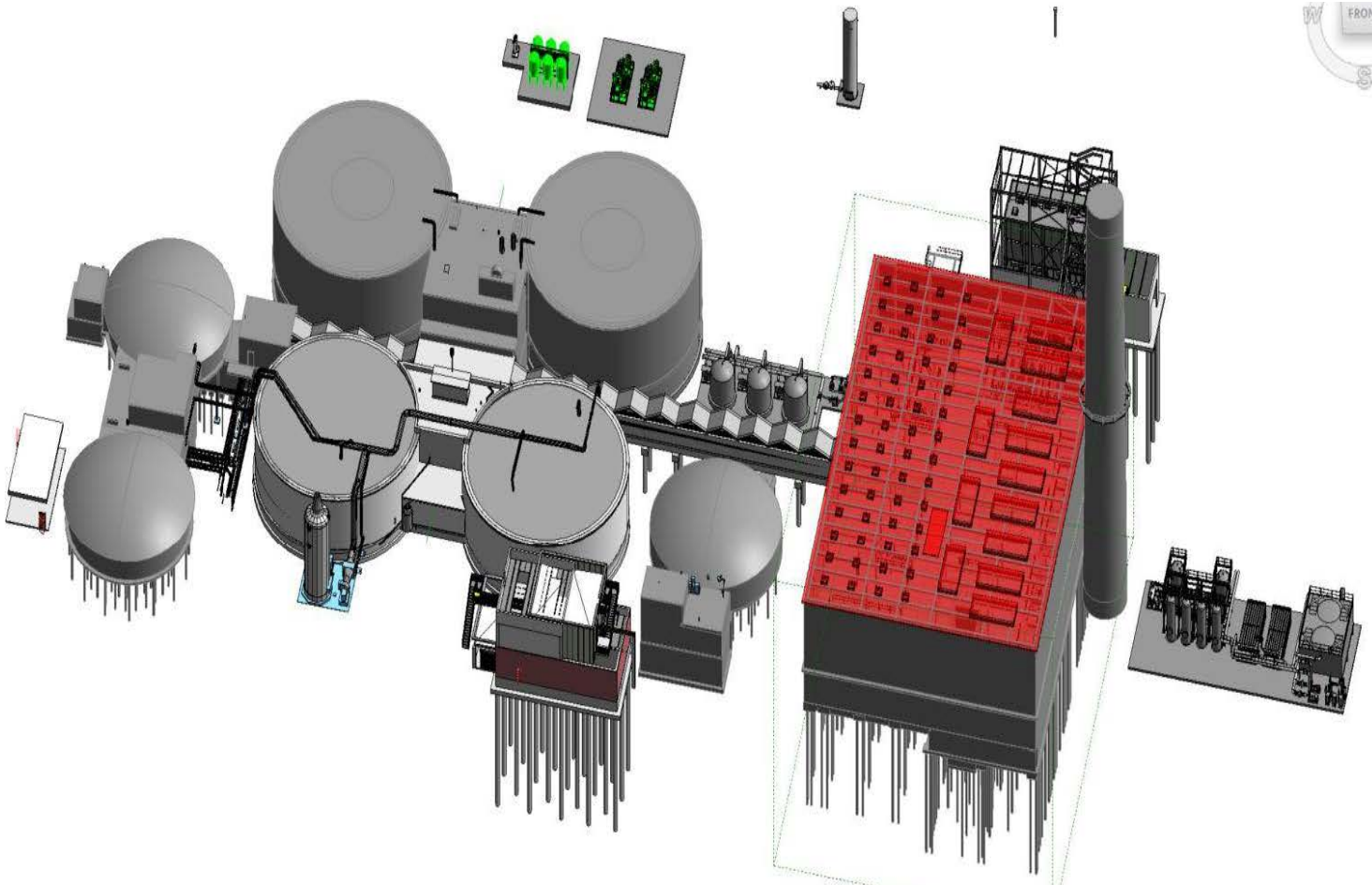
Draft BIM Isometric 2



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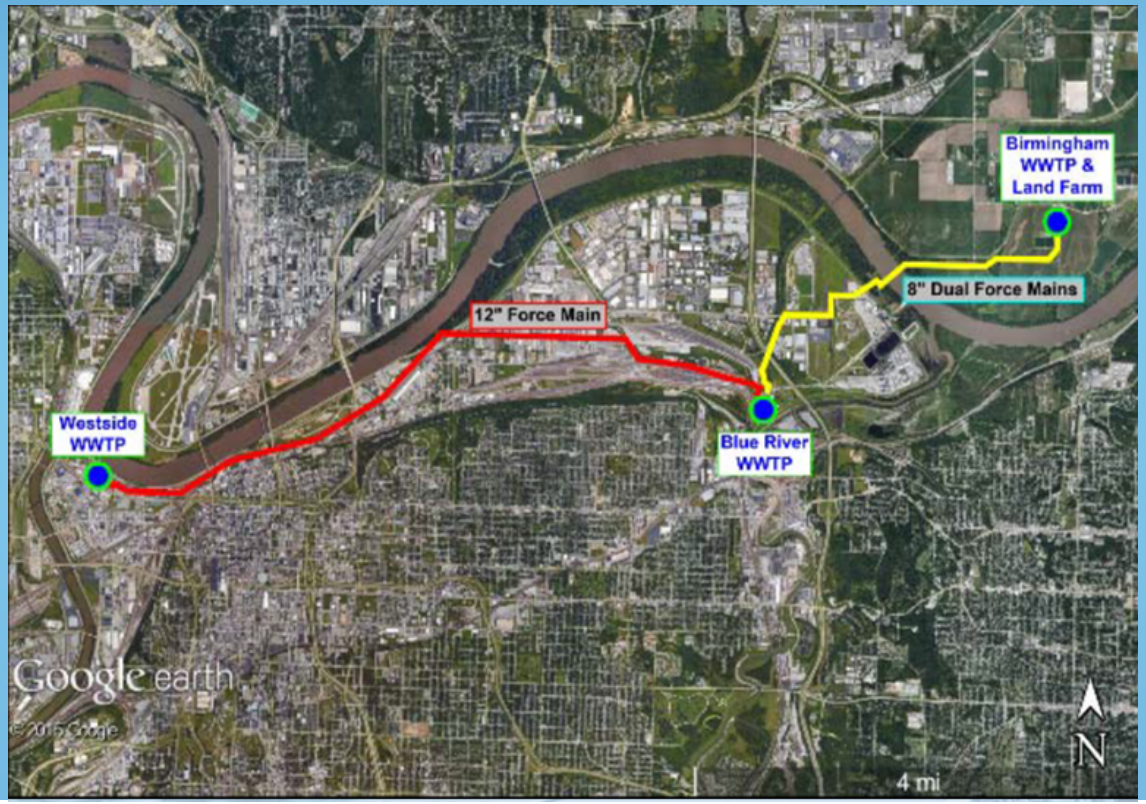
Scope of Work (Rehabilitation)

- Demolition of existing incinerator systems
- Rehabilitation of the Blue River Solids Building
- Rehabilitation of the East & West Holding Tanks
- Upgrading and replacing obsolete electrical systems
- New Electrical Sub Station No. 1
- Boilers for steam generation (Provisional)
- Treatment of digester biogas
- Biogas flare

Scope of Work (New Processes)

- THP for processing approximately 94 dry tons of wastewater sludge
- Sludge screening
- Pre-dewatering centrifuges
- Final dewatering centrifuges
- Sludge heat exchangers
- Side-stream ammonia treatment.
- Blue River WWTP
- New Electrical Sub Station No. 1
- Boilers for steam generation. (Provisional)
- Dewatered and Pre-THP Dewatered sludge storage
- Side-stream ammonia treatment

Biosolids Conveyance

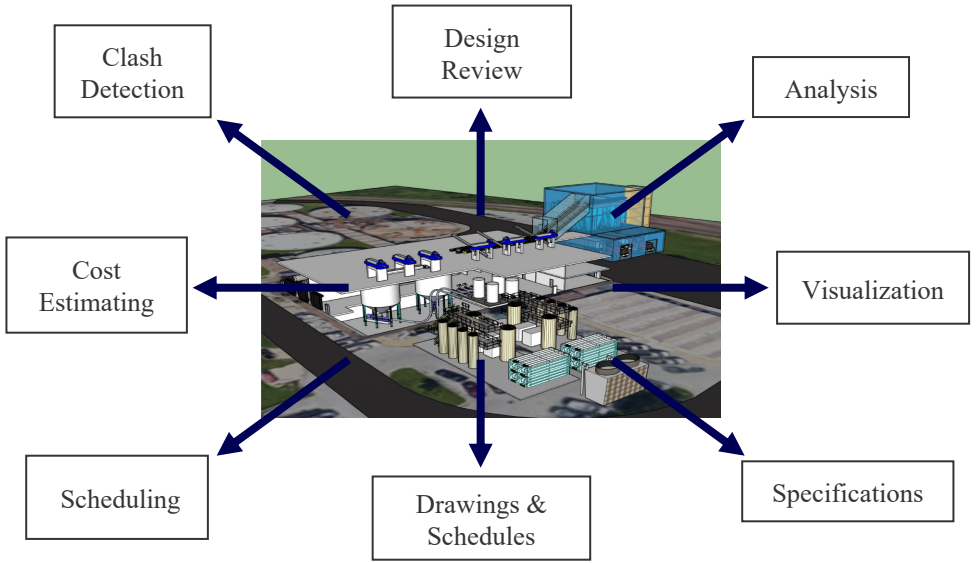


Solids Loadings

Parameter	2025		2035	
Loading Condition	Annual Average	Max Month	Annual Average	Max Month
Primary Sludge, Tons DS/day	46	59	45	59
Secondary Sludge, Tons DS/day	23	29	28	37
Total Sludge, Tons DS/day	68	88	74	96
Pre-dewatered Sludge, % TS (diluted < 18% before AD)	20% - 24%	20% - 24%	20% - 24%	20% - 24%
Total Sludge to THP, Tons DS/day	67	86	72	94
Volatile Solids, % VS/TS	72% - 76%	72% - 76%	72% - 76%	72% - 76%

Defining KC Water's BIM Program

- 3D based design
- Automated interference detection
- Design and constructability reviews
- Design-Builder schedule/budget management, phasing scenarios
- Whole-life asset management
- Defined protocols for future BIM



BIM—Building Information Model

SOQ REQUIREMENTS

Design-Builder Pass Fails

1. Bonding

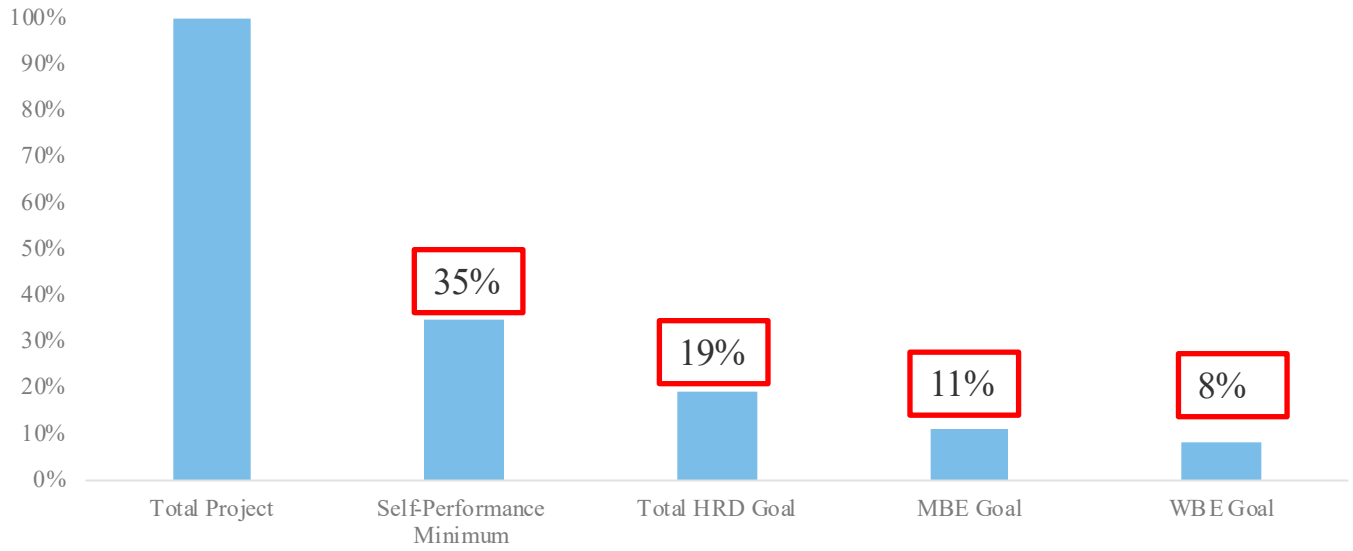
2. Insurance

3. Licensing and Registration

HRD Programs

1. Kansas City Minority/Women Owned Business Enterprise
    1. MBE 11%
    2. WBE 8%
2. Prevailing Wage (Jackson County, MO)
3. Workforce Participation (Prime Boots on the Ground)

Self-Performance Requirement



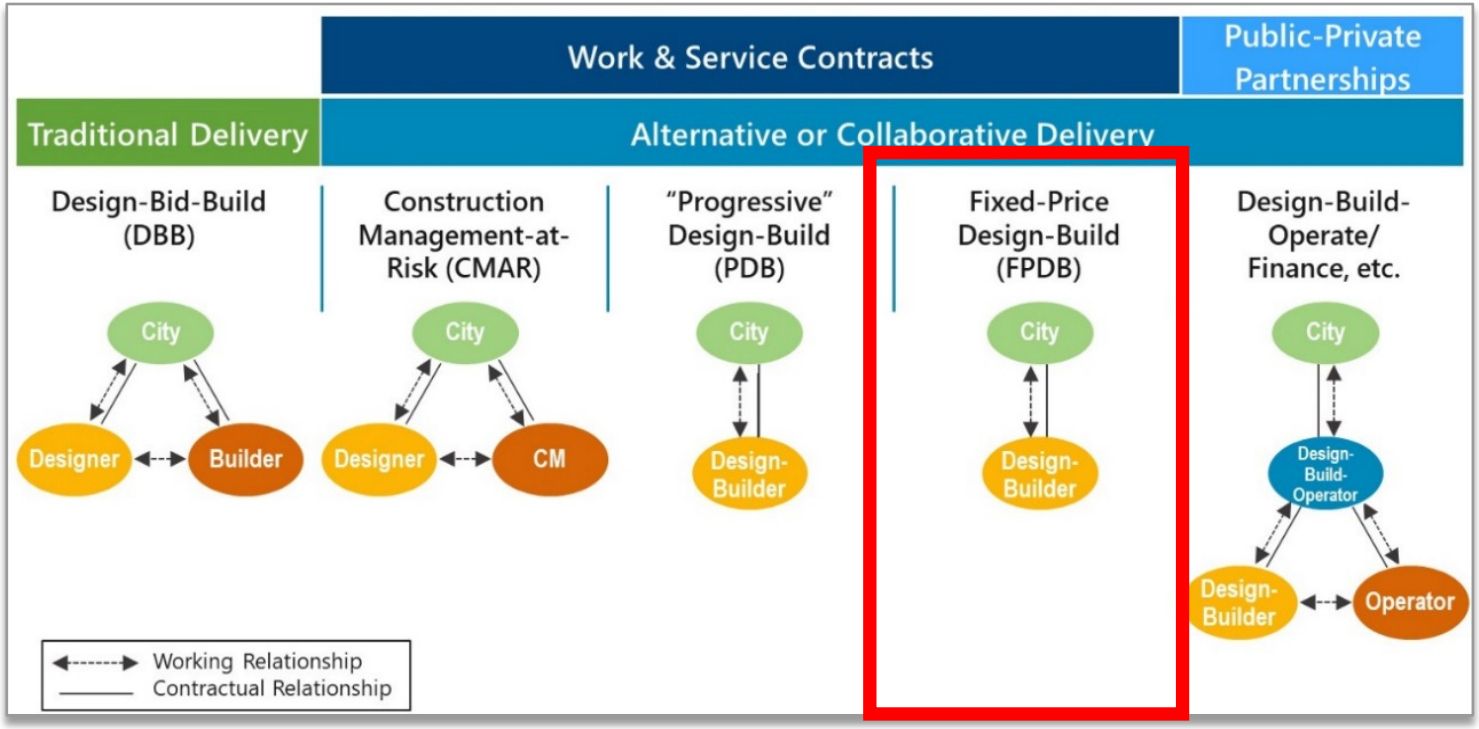
External Funding Requirements

SRF and WIFIA

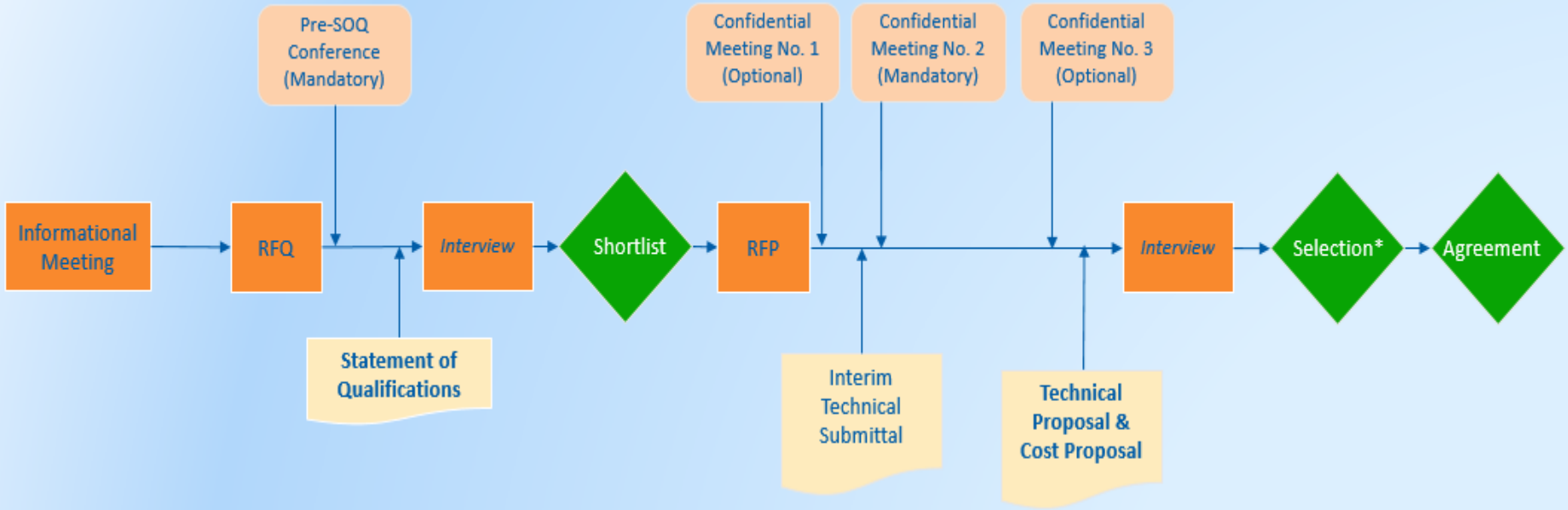
1. American Iron and Steel
2. Buy American

PROCUREMENT

Best Value Design-Build



Procurement Path



* Sealed Cost Proposals are opened publicly. Final Design-Builder selection based on combined scoring of Technical Proposals and Cost Proposal.

SOQ Sections

1. Transmittal Letter
2. Design-Builder Profile
3. Key Personnel (Utilization, Location, Detailed Project Experience)
4. Past Experience (Be Specific)
5. Safety Record
6. Appendices

50 Page limit

Detailed Schedule

- Advertise RFQ August 23, 2019
- Mandatory Pre-SOQ Conference August 30, 2019
- Deadline for Receipt of Written Questions September 20, 2019
- SOQ Submission Date October 1, 2019
- SOQ Interviews October 23, 2019*
- Shortlist Selection Date October 23, 2019*
- Issuance of RFP December 3, 2019*
- Proposal Submission March 24 2020*
- Notice to Proceed October 2020*
- Substantial Completion September 2023*

*Provisional

City reserves the right to request additional information after receiving the SOQ.

Parallel Work during Shortlisting

1. RFP Scoring Criteria
2. THP Vendor Selected
3. Biogas Plan
4. Source of Steam
5. Development of Request for Proposal
6. Preliminary Design
7. Air Permitting
8. Criticality in particular Spare Parts
9. City Design-Build Contract Updates

Items not to be considered in the project

1. ESCOs based on Biogas Utilization
2. Scope Over the $150 Million Budget
3. FOG Receiving Station (possible)

Selected RFP Attachments

- Existing Conditions BIM
- Current Plant 1 Line
- Current Plant Load Study
- Current Site Piping
- Project Risk Register
- Basis of Design Report

ENGAGEMENT

Communications

- In general, all communications (written and spoken) about this project are prohibited and grounds for disqualification of a Design-Builder.
- No Site access during the shortlisting stage

Exceptions

- Written Questions maybe submitted to:
  - Darrell Everette: Procurement Manager- Darrell.Everette@kcmo.org
- KC MBE/WBE firms are exempt. They may communication with myself and others City Staff to facilitate teaming.
- Design-Builders may contact Human Relations Staff to facilitate meeting Goals

Questions