South Well Field and Water Treatment Plant Improvement Project

City of Salina, Kansas

November 26, 2018

BURNS McDONNELL

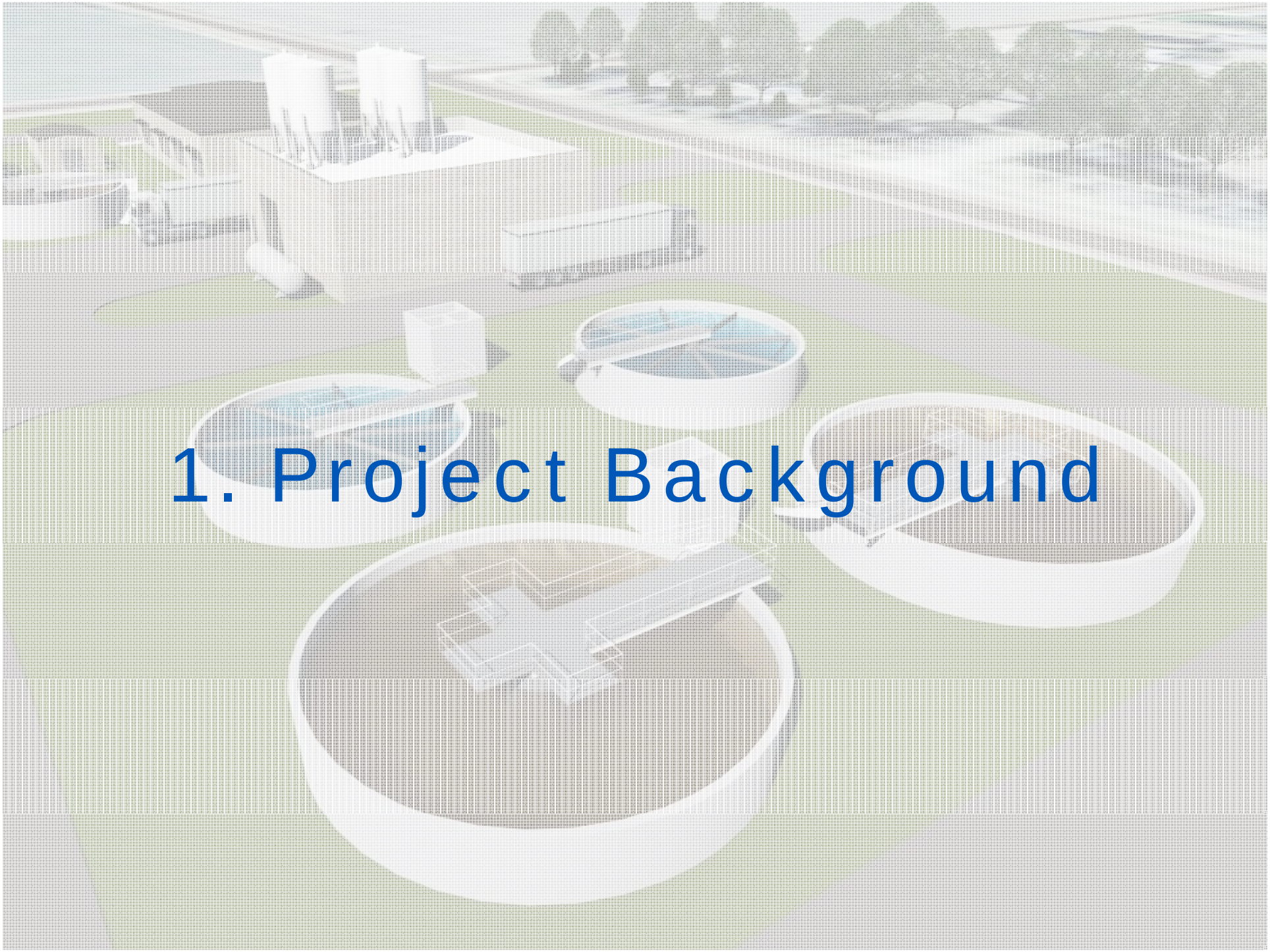
CAS CONSTRUCTORS LLC
AN ALBERICI ENTERPRISE

1 Project Background

2 Project Cost

3 Owner’s Rep Project Review

4 Next Steps

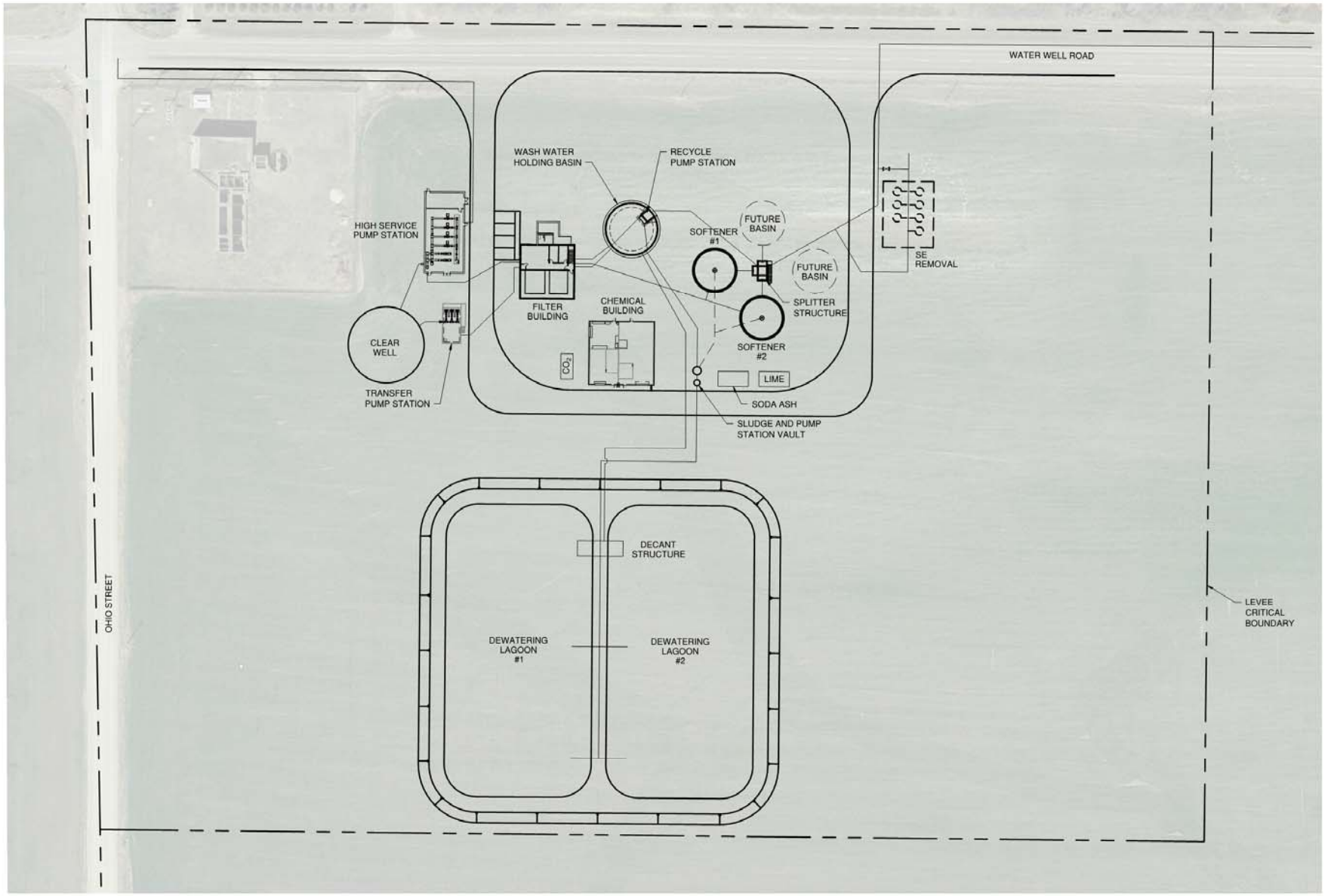


1. Project Background

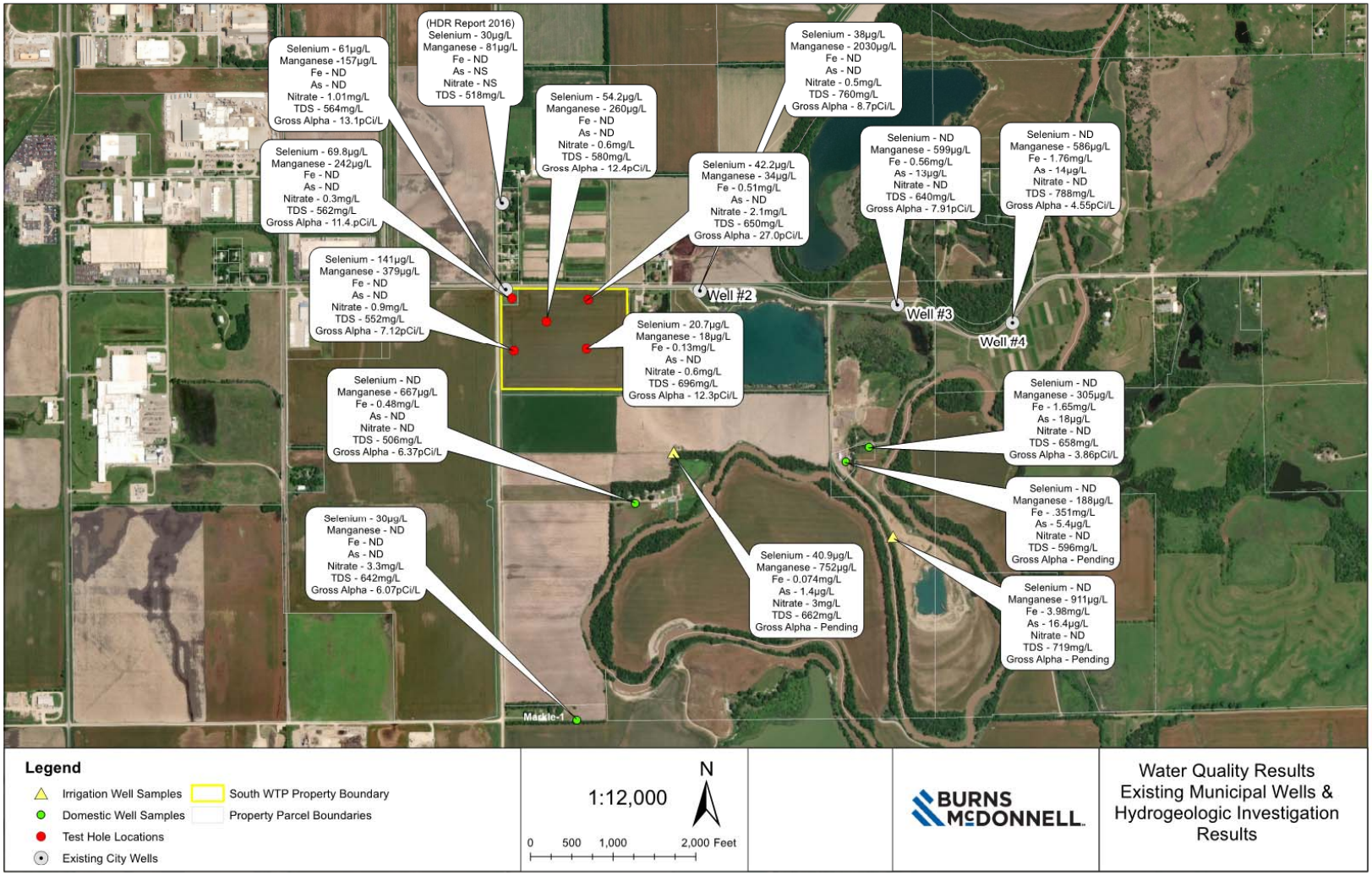
Project Background

- **Goal:**
  - Key component of long-term water supply strategy
  - Increase water supply resiliency
  - Decrease drought vulnerability
  - Enhance economic development
- **Feasibility Study(FS):**
  - Initiated in 2012
  - Estimated Project Budget $32-37M
  - SRF Funding
- **Project Elements:**
  - New Water Treatment Plant
  - Water Supply (Wellfield) Improvements
  - System Connections/Improvements

Lime Softening WTP



Wellfield Improvements



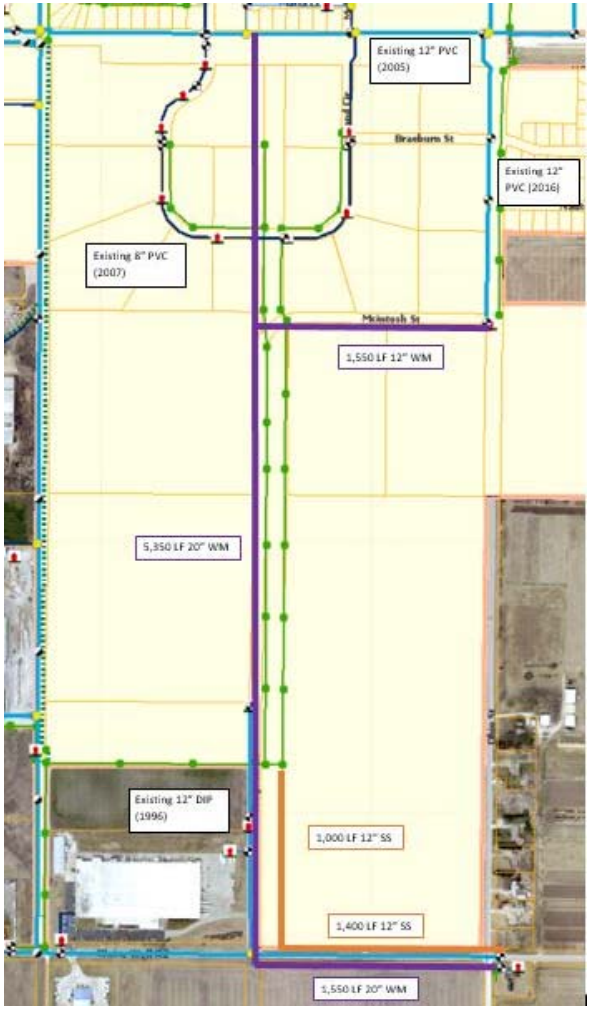
- **Rehabilitate wells with most compatible water quality**
- **Construct new wells at locations with improved water quality**

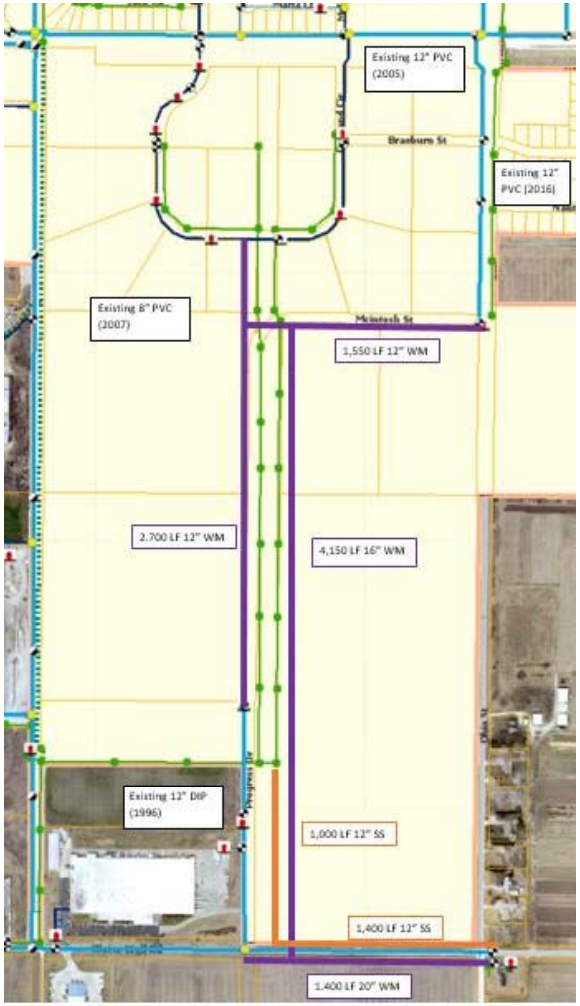
Wellfield Improvements

- Well Rehabilitation - #2, #3 and #4

- Abandonment of Well #1 and #5, Drill 1 New Well

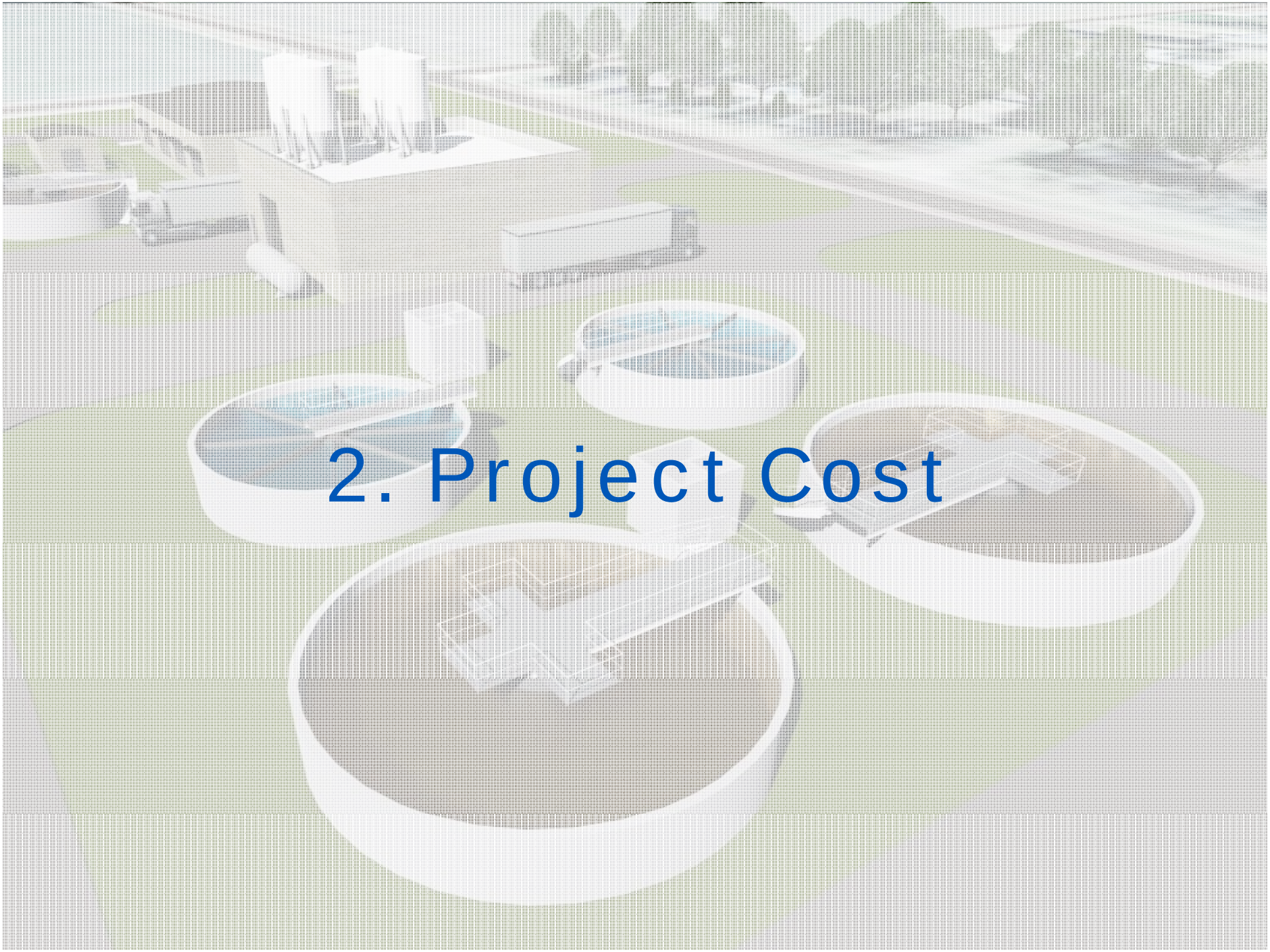
System Connection Options





Capital Improvement Project - Year 2020:

- Estimated $1.4M
- Benefits future development



2. Project Cost

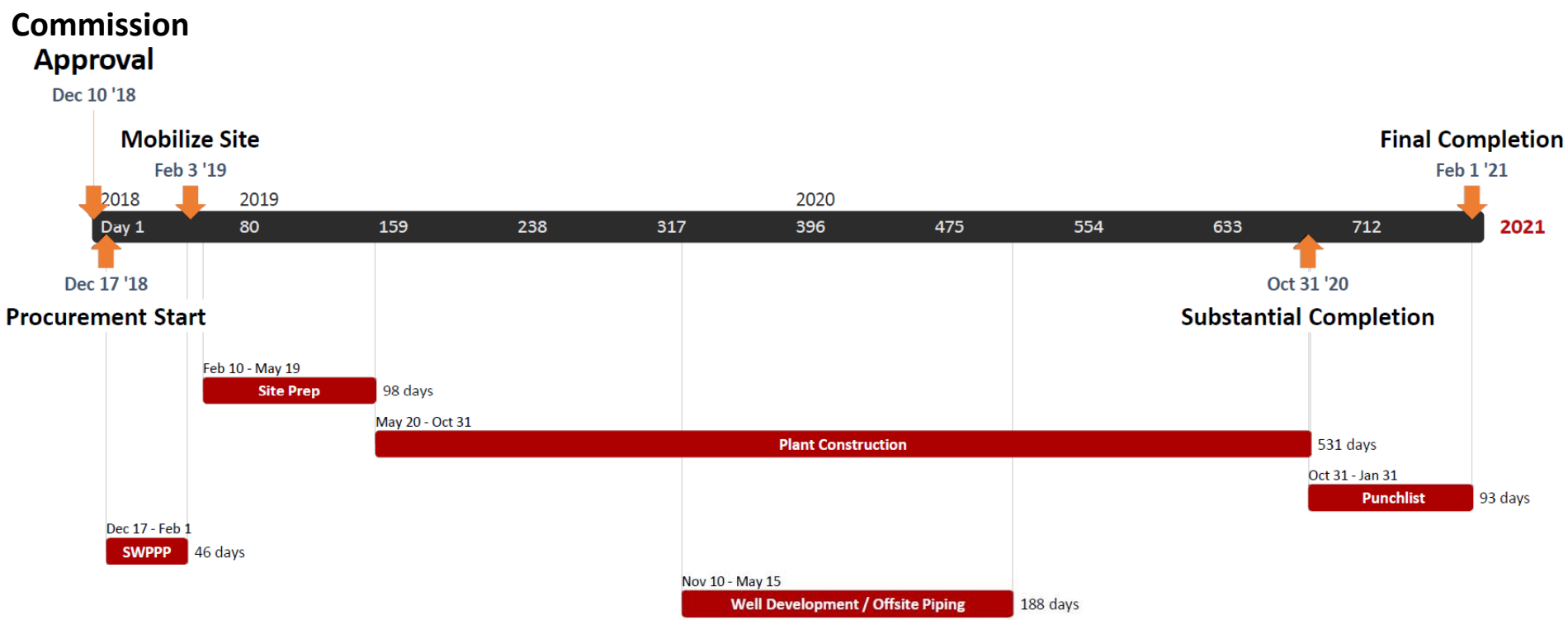
Cost Considerations

- Inflation impacts over 5 years
- Site acquisition
- Material Cost Escalation (AIS/tariffs)
- Geotechnical Considerations (deep foundations)

Project Cost

Phase I Engineering	$1,664,524
Owner's Rep	$1,444,330
Total Construction	$27,032,239
Phase II Engineering	$2,117,456
Owner Controlled Contingency	$250,000
Loan Origination Fee	$80,000
Total	$32,588,549

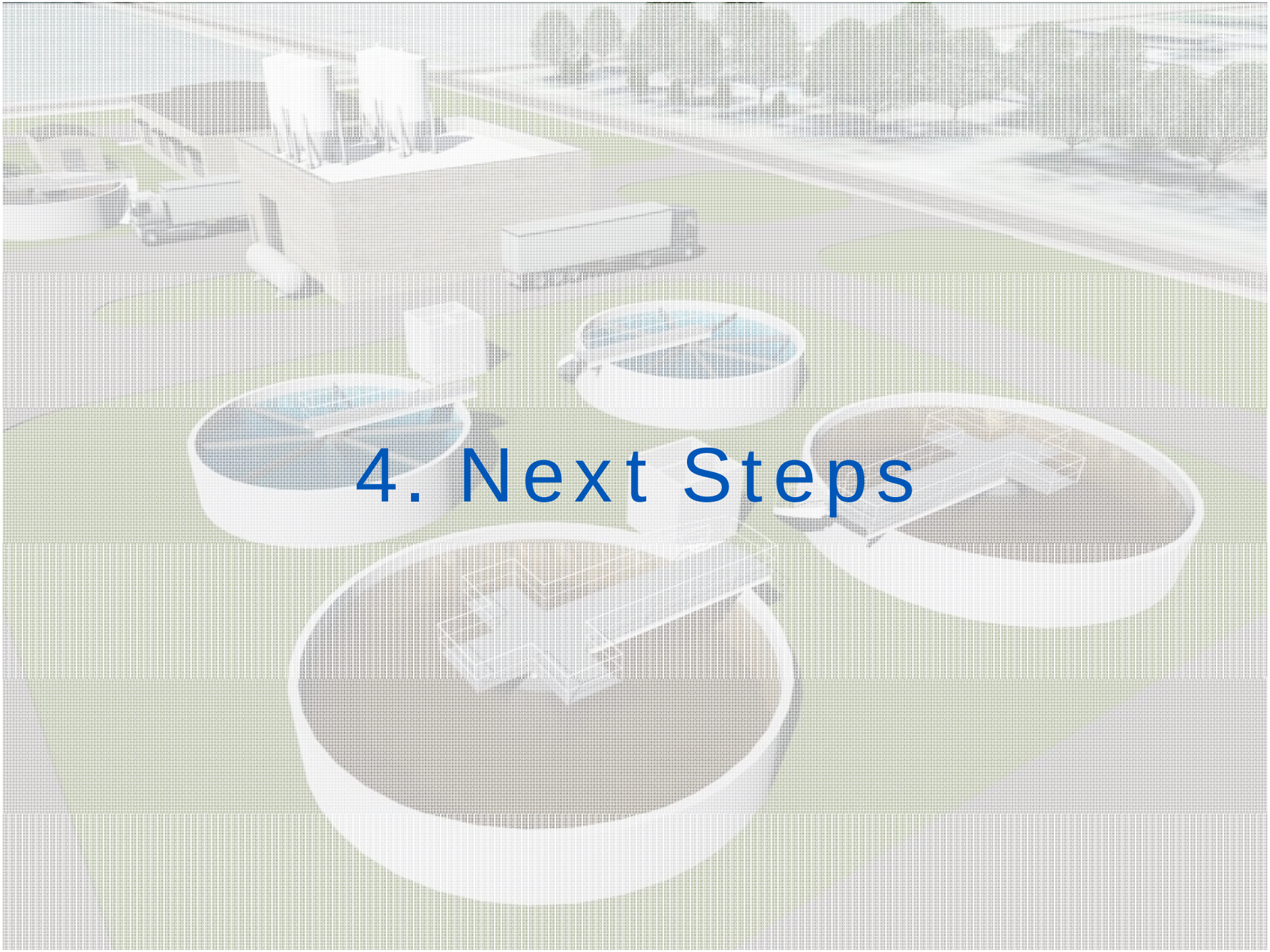
Schedule


Commission Approval
Dec 10 '18
Mobilize Site
Feb 3 '19
Final Completion
Feb 1 '21
2018
2019
2020
2021
Day 1
80
159
238
317
396
475
554
633
712
Dec 17 '18
Procurement Start
Oct 31 '20
Substantial Completion
Feb 10 - May 19
Site Prep
98 days
May 20 - Oct 31
Plant Construction
531 days
Oct 31 - Jan 31
Punchlist
93 days
Dec 17 - Feb 1
SWPPP
46 days
Nov 10 - May 15
Well Development / Offsite Piping
188 days

3. Owner's Rep Project Review

Owner's Rep Project Review

- Assist with Design Build Procurement
- Assist with Phase 1 and 2 Contract Negotiation
- Provide review of BODR, 30% Drawings
- Value Engineering:
  - Selenium Mitigation Alternatives
  - Removal of Gravity Thickener
  - Removal of Solids Contact Clarifier
  - Reconfiguration of Buildings and Site Plan
  - Lime Feed Equipment Optimization
- Revisited Feasibility Study Cost Estimate
  - Inflation and material cost escalation (AIS/tariffs)
  - Deep foundations



4. Next Steps

Next Steps

- Execute KPWSLF Loan Fund Agreement for $32,000,000
  - Project Cost $32,588,549
  - Amend Loan Amount/Pay Balance from Cash Reserve
- Execute Phase 2 Final Design & Construction Agreement

QUESTIONS / DISCUSSION