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Capital Planning Committee Meeting
Water Engineering

July 18, 2025 | Tim Kuhns

Agenda

- Specific projects presented:
  - 122004: 96-inch Water Transmission Main Relocation and Isolation Valve Replacement Project
  - 112008: Northeast Water Treatment Plant Filter Replacement Project
  - 122016: Downriver Transmission Main Loop Project
- CIP and Project Delivery Challenges
- Key Factors in how projects are prioritized

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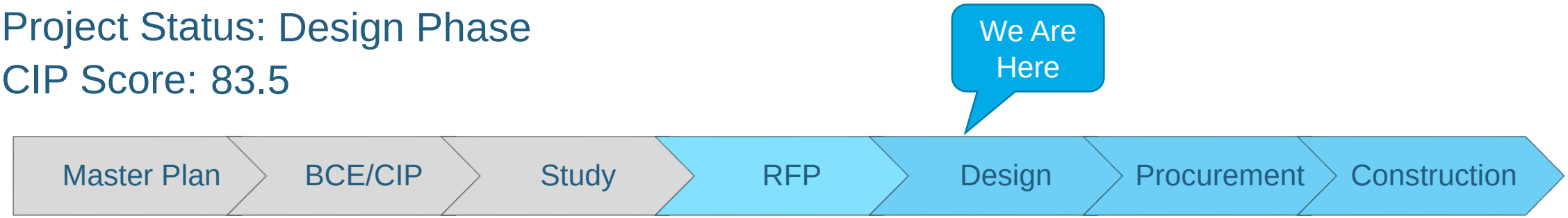
Water CIP Project STATUS

CIP #: 122004 96” Water Transmission Main Phase 3 Relocation

Project Manager: Corey Brecht
Project Delivery Method: Design-Build
Project Status: Design Phase
CIP Score: 83.5



Contract	Contractor	Contract Amount	Earned Value	% Complete	Start	End	% Elapsed Time
• 2401015 (Design/Build)	• Ric Man/Clark & Brown/Caldwell	• $138,611,881.17	• $0	• 0%	• June 27, 2025	• December 31, 2028	• 0%

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Water CIP Project INFO

CIP #: 122004 96” Water Transmission Main Phase 3 Relocation

- **Project Scope of Work / Goals**
  - **Complete final phase of 96-inch main relocation.**
  - **New isolation valves at North Service Center and Rochester are to be installed as part of this phase.**
- **Significance / Need / Background**
  - **Existing 96-inch is located within the influence of contaminated landfill site.**
  - **Project requires line stop at Rochester Station.**
  - **Project requires temporary pumping facility in Chesterfield Township**

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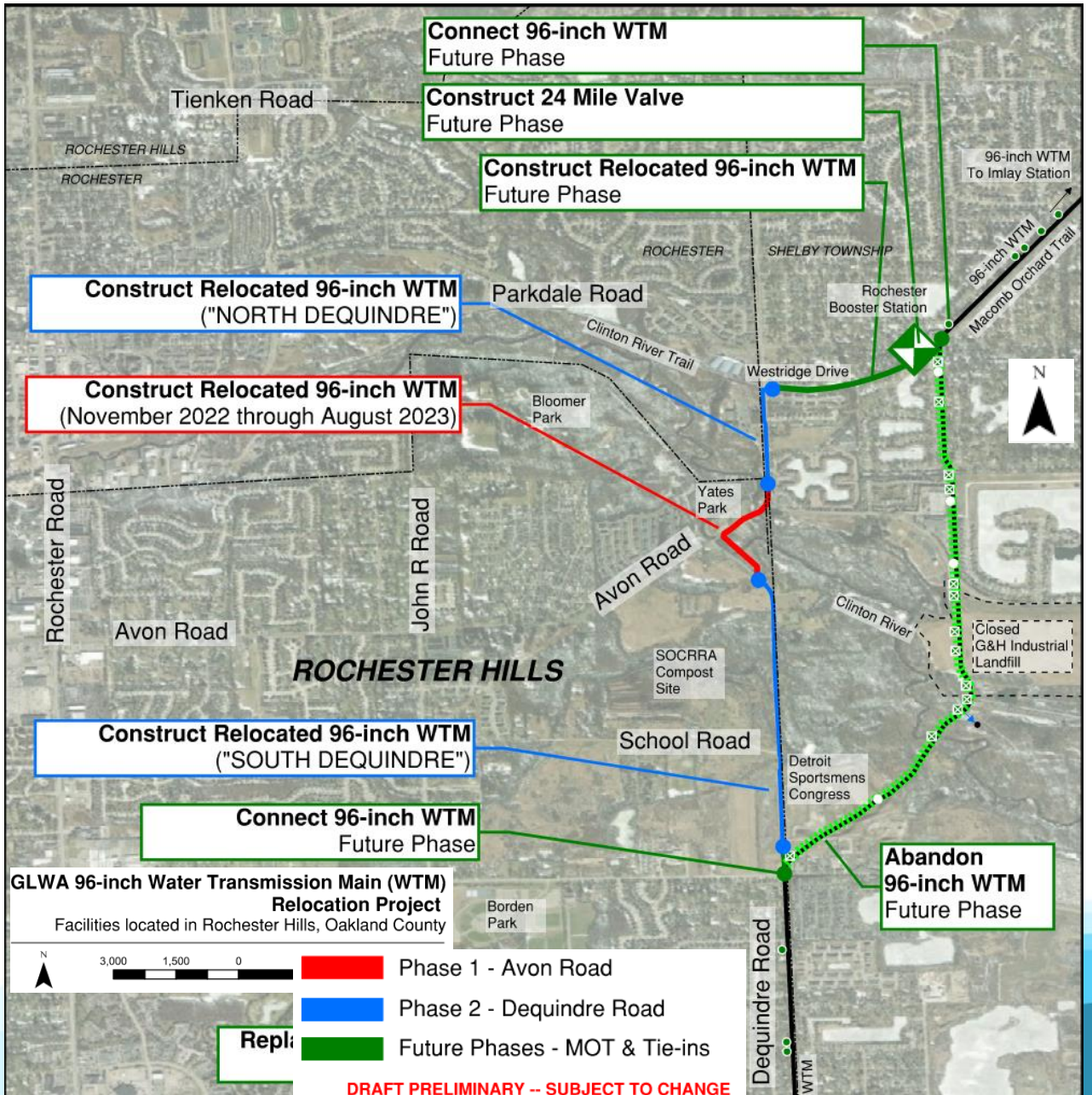
Phase 1 – Avon Road Segment

- Construction of 2,220 feet of 96-inch water main through Avon Road and Yates Cider Mill.
- Segment presented opportunity to construct planned public works projects concurrently (Road Commission of Oakland County and GLWA) to minimize disruption to public.



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Phase 1 – Avon Road Construction Status Updates

- 96-inch welded steel pipe installation on Avon Road and Clinton River

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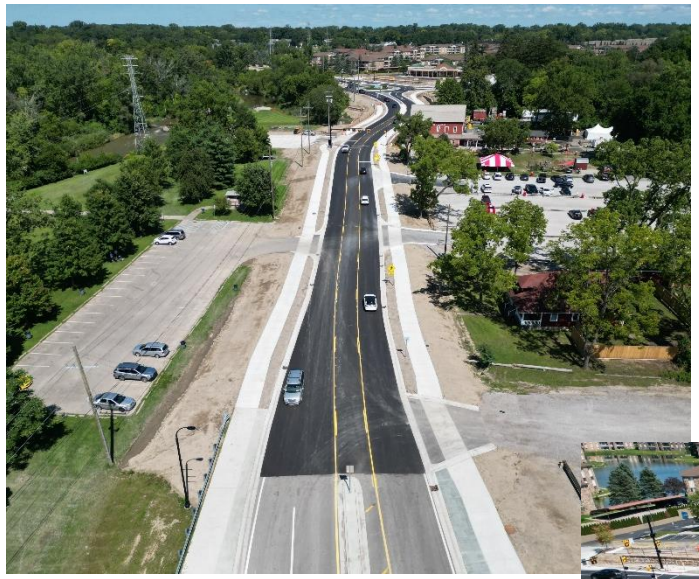
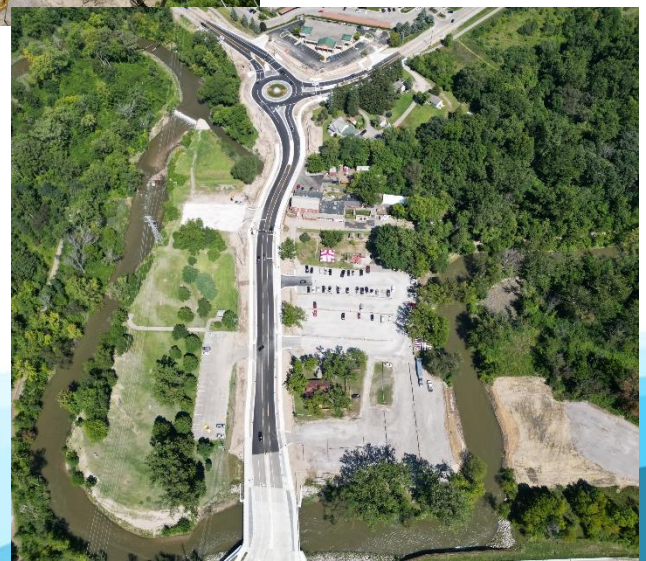
Phase 1 – Avon Road Construction Status Updates

- Phase 1 Avon Road reconstruction, widening, and roundabout:





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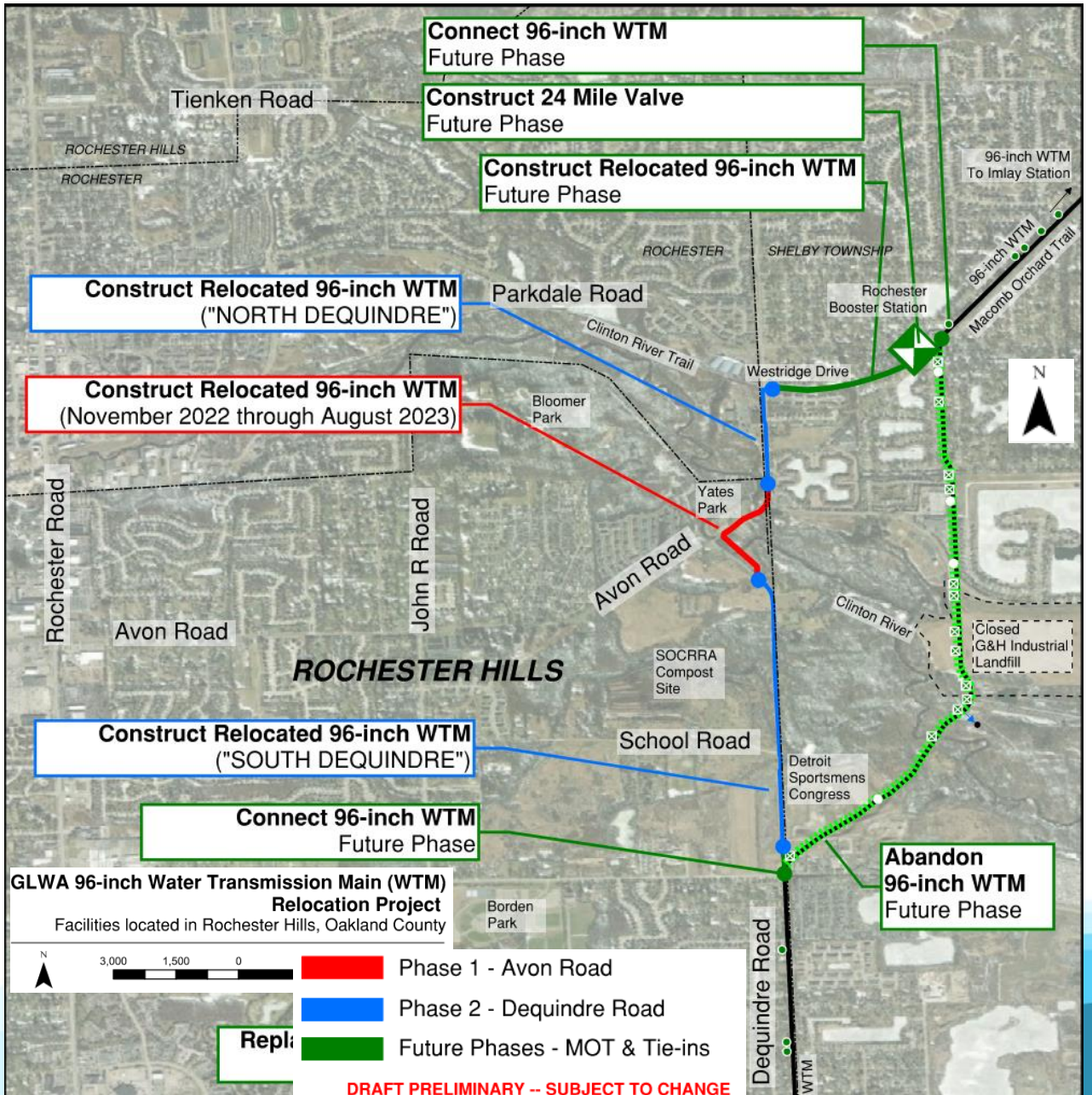
Phase 2 – Dequindre Road Construction Status Updates

- Construction of additional 8,000 feet of 96-inch water main in Dequindre Road
- Notice to Proceed issued to Ric-Man/Clark JV on September 1, 2023.
- Substantial Completion reached April 25, 2025



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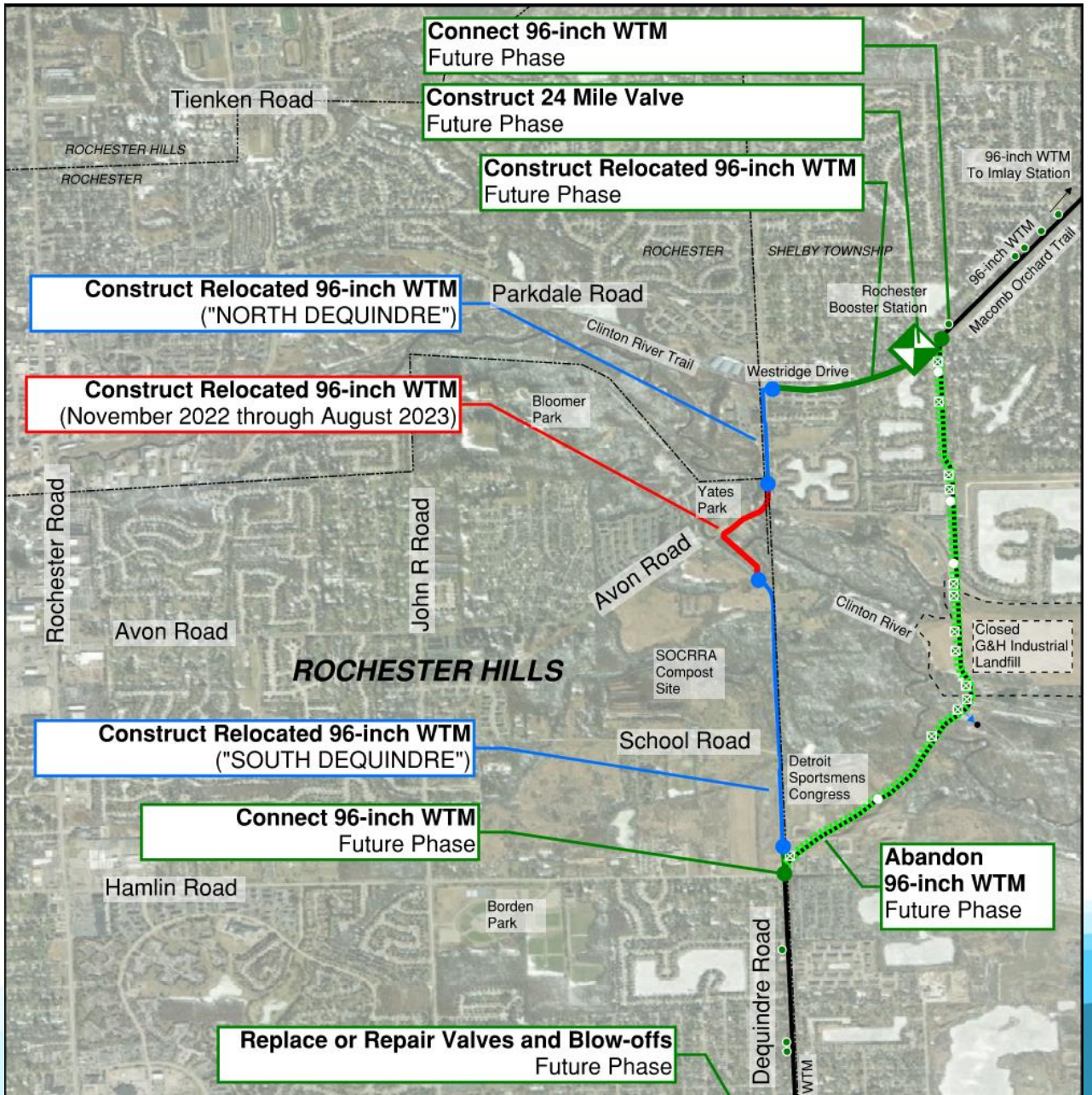
Phase 3 Progress Updates

- GLWA issued notice to proceed on June 27, 2025.
- GLWA constructing 3,100 feet of 96-inch transmission to connect the Phase 1 and 2 piping to the existing transmission main. This will enable GLWA to take the segment of main that passes through the landfill out of service.



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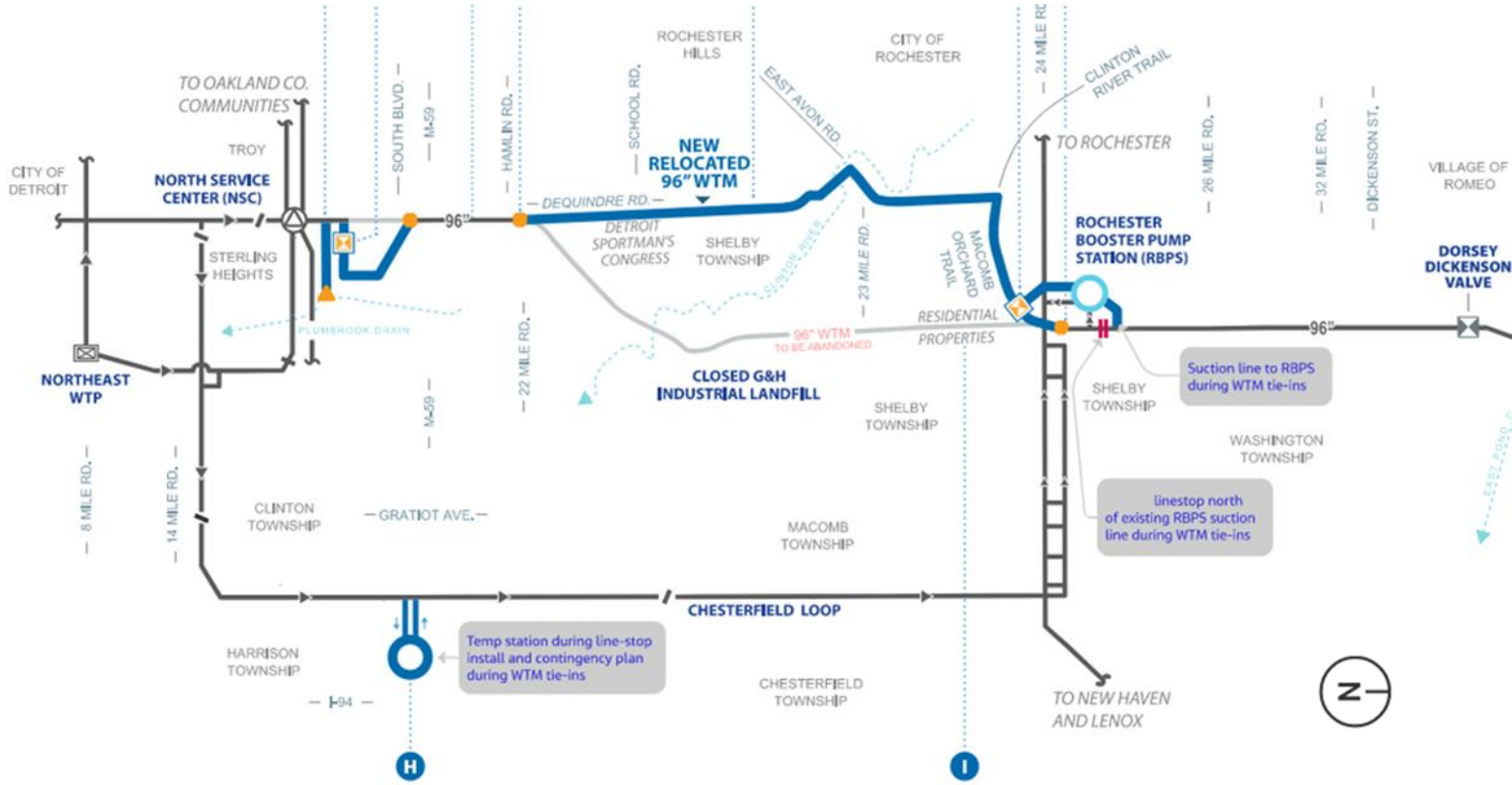
Phase 3 Progress Updates

- Includes repair of appurtenances on portion of 96-inch transmission that is taken out of service during construction.
- Includes construction of new 84-inch isolation valve at North Service Center.
- Includes construction of new 84-inch isolation valve and Rochester Pump Station yard piping to improve reliability.
- GLWA to construct a line stop on 96-inch WTM to facilitate tie-ins, and to reduce the time the 96-inch is out of service during construction.
- GLWA to include temporary booster pump station on Chesterfield Loop WTM in Phase 3.



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Water CIP Project STATUS

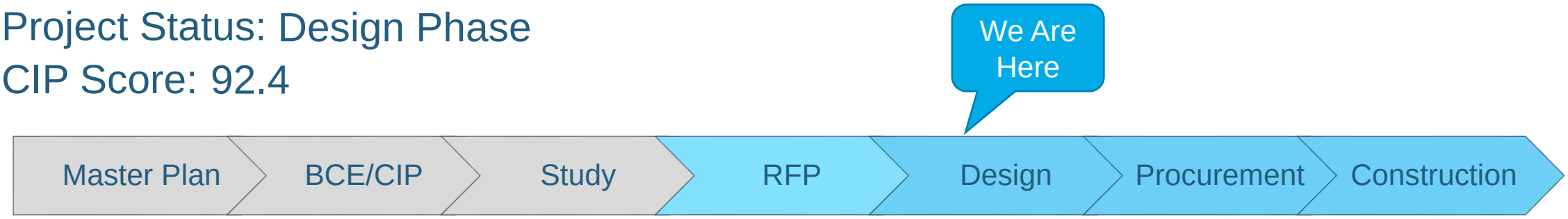
CIP #: 112008 NE WTP Filter Replacement Project

Project Manager: Erich Klun

Project Delivery Method: Design-Build

Project Status: Design Phase

CIP Score: 92.4



Contract	Contractor	Contract Amount	Earned Value	% Complete	Start	End	% Elapsed Time
• 2400082 (Design/Build)	• Kokosing & Fishbeck	• $138,989,000.00	• $0	• 0%	• FY26 (TBD)	• FY30 (TBD)	• NA

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Water CIP Project INFO

CIP #: 112008 NE WTP Filter Replacement Project

- **Project Scope of Work / Goals**
  - **Reconstruct Piping Filter Gallery.**
  - **Rehab filter underdrains, replace media, surface sweeps, troughs.**
  - **Replace backwash pumps, surface sweep pumps**
- **Significance / Need / Background**
  - **Filters have never been rehabilitated at NE WTP.**
  - **Current filtration capacity 300 MGD based on 48 filters in service.**
  - **Filtration right-sized to match settling capacity limitation of 190 MGD.**
  - **190 MGD is the firm capacity. Actual capacity based on rehab of 32 filters is 200 MGD.**

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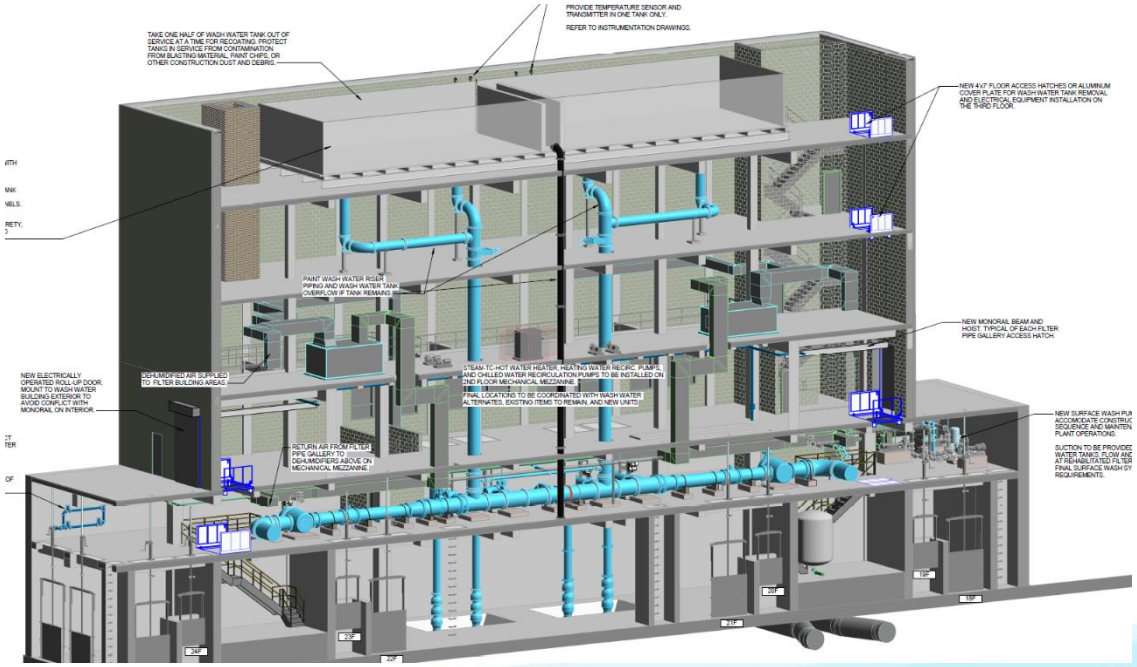
Water CIP Project PHOTOS

CIP #: 112008 NE WTP Filter Replacement Project

Existing Filter Beds

Wash Water Upgrades



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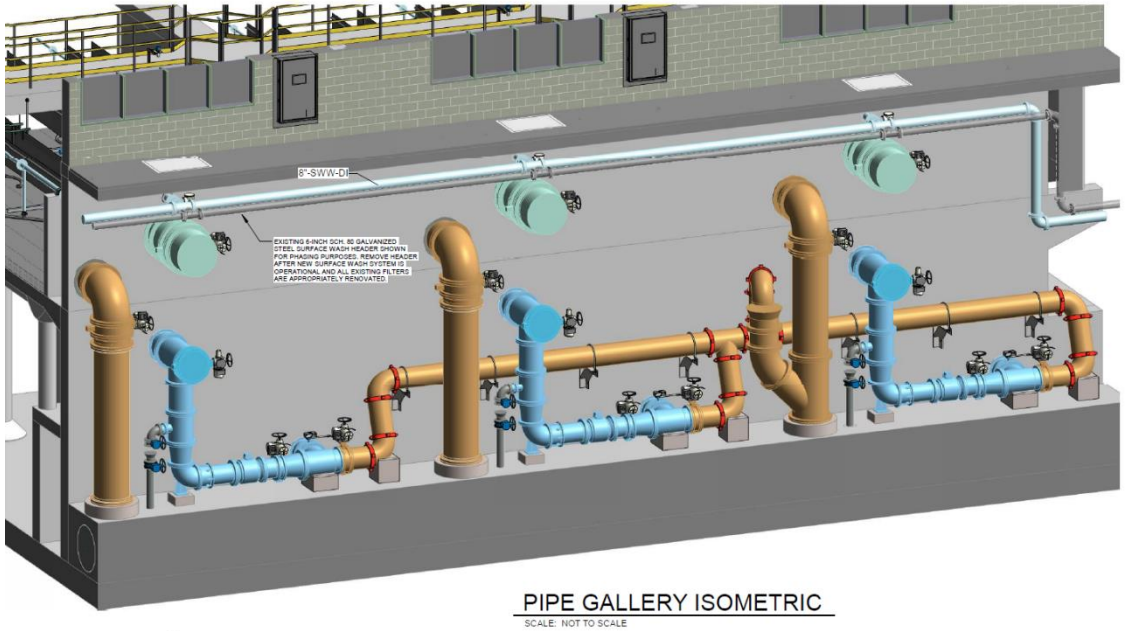
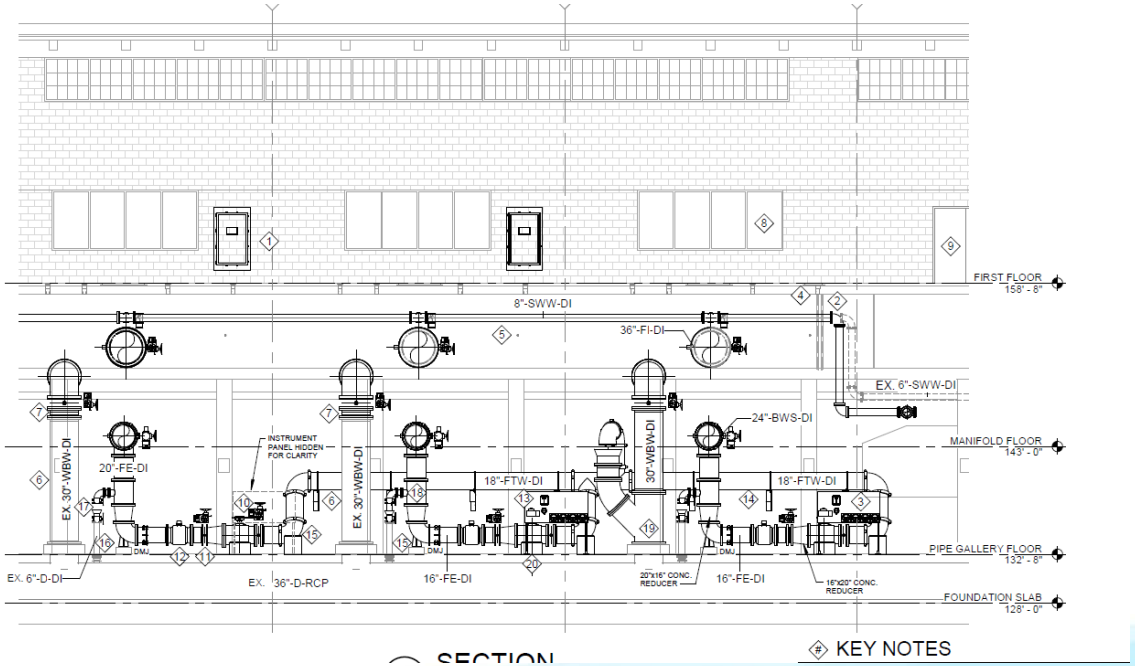
Water CIP Project PHOTOS

CIP #: 112008 NE WTP Filter Replacement Project

Pipe Gallery Isometric



Pipe Gallery Section



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Water CIP Project STATUS

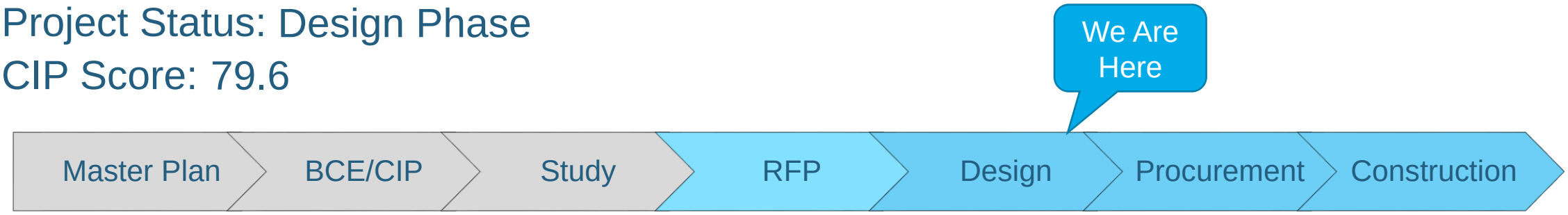
CIP #: 122016 Downriver Transmission Main Loop

Project Manager: Vittoria Veltri

Project Delivery Method: Design-Bid-Build

Project Status: Design Phase

CIP Score: 79.6



Contract	Contractor	Contract Amount	Earned Value	% Complete	Start	End	% Elapsed Time
• 1803942 (Design) •TBD (Construction)	•OHM/WSP •TBD	•$5,164,631.17 •$54,900,000 (estimated)	• $3,137,614.44 •NA	• 61% •NA	• May 1, 2020 •FY26 (TBD)	•December 31, 2027 •FY28 (TBD)	•66% •NA

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Water CIP Project INFO

CIP #: 122016 Downriver Transmission Main Loop

- **Project Scope of Work / Goals**
  - **Construction of 4 Miles of 42-inch transmission along Inkster Road from Pennsylvania to Wick Road.**
- **Significance / Need / Background**
  - **Allen Road Transmission Main is single feed to downriver member partners of Brownstown Township, Gibraltar, Woodhaven, Rockwood, South Rockwood, and Berlin Township. This transmission project will provide backup service to the portion of Allen Road from Southwest WTP to Pennsylvania.**

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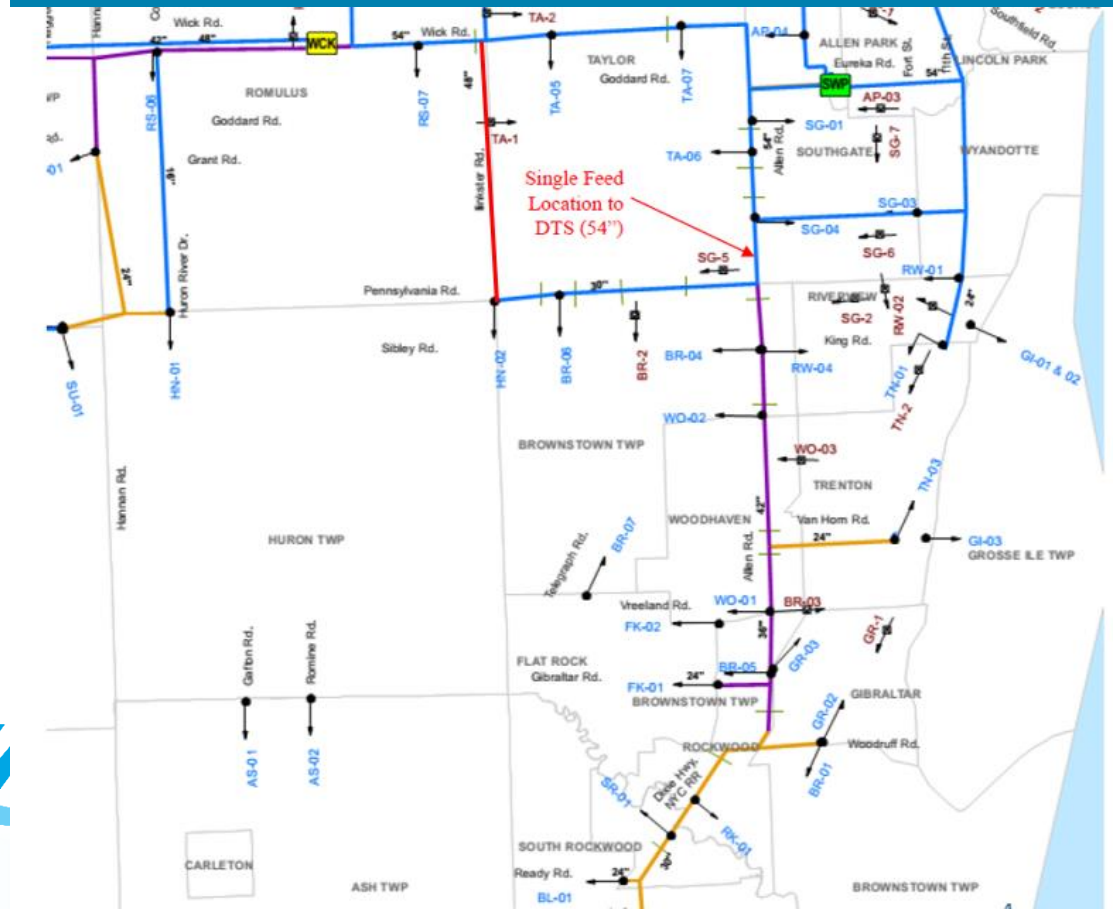
Water CIP Project PHOTOS

CIP #: 122016 Downriver Transmission Main Loop

System



Electric Avenue Tank Demo

CIP and Project Delivery Challenges

- Generally, construction contractors are meeting schedules and budgets.
- Challenge is getting the project design phase completed on time. GLWA has taken advantage of streamlined design schedules under design-build delivery. Also, design-build allows GLWA to obtain pricing for construction up-front which allows for better capital planning.
- Reliance on off peak shutdowns (September thru April) is also a project delivery challenge, especially if unplanned urgent work comes up.
- Continued support for sludge removal projects/contracts is needed at the Northeast and Springwells Water Treatment Plants to facilitate shutdowns for capital projects at these plants.

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Key Factors in how projects are prioritized

- **Ultimate priority is to keep current construction contracts moving along.**
- **EGLE agreed projects are immediate priority (e.g. – flocculation at most WTPs, filtration at NE, etc).**
- **Priority is given to maintaining existing level of service over new assets that improve level of service. This means existing asset rehab and replacement is the priority.**
- **For existing asset rehab and replacement at water treatment plants and booster stations, focus is on work related to process equipment, not facility rehab.**
- **For existing pipeline rehab, focus is on pipelines prioritized through the linear system integrity program.**

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Questions and Contact

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