



TriCo Regional Sewer Utility

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CAPITAL & CONSTRUCTION COMMITTEE MEETING

Monday, December 14, 2020 at 5:30 P.M.

7236 Mayflower Park Drive, Zionsville, IN 46077

AGENDA

1. Public Comment
2. Capital Budget
3. Locate Wire Repairs
4. Capital Project Updates
5. Other Business

Next Scheduled C&C Meeting: Monday, January 4, 2021 at 4:30 pm



MEMORANDUM

To: Capital and Construction Committee

From: Wes Merkle

Date: December 9, 2020

Subject: Capital Budget

The attached 2021 Capital Budget was originally presented in October. Since the Capital Budget was last discussed by the C&C Committee in November, adjustments were made to several projects to account for slower than anticipated progress through the end of the year, shifting costs from 2020 to 2021, however total project costs remain the same. Staff increased the Annual Repairs, Replacements and Line Relocations budget from \$150,000 to \$175,000 to account for the tone wire repair project as well as ongoing I&I elimination work anticipated in 2021. Staff increased the budget for #1911 Lift Station 11 Pump and Control Panel Replacement to \$175,000 to account for a larger scope of work and higher construction costs.

Recommended Action: Recommend the Board approve the Capital Budget.

2021 Capital Budget

CAPITAL BUDGET LAST UPDATED 12/9/2020

See project fact sheets for more information on individual projects

| Location | Project No. | Project | Near-term Priority | Year needed Earliest | Year needed Latest | Year Budgeted | Manager In Charge | Funding Source | 2020 Budget | 2020 Total Projected Spending | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Note | Change from 2020 Approved Capital Budget to 2021 Draft Capital Budget | |
|--------------|---|--|--------------------|----------------------|--------------------|---------------|-------------------|-------------------------|---------------|-------------------------------|--------------|--------------|------------|--------------|--------------|------|--|---|
| | | | | | | | | | | | 2021 | 2022 | 2023 | 2024 | 2025 | | | |
| WRRF | Michigan Road Water Resource Recovery Facility | | | | | | | | | | | | | | | | | |
| | 1902 | WRRF Expansion | High | 2020 | 2021 | 2019-21 | WM | Bond Proceeds | \$ 11,940,000 | \$ 14,200,000 | \$ 8,000,000 | | | | | | Bonds to be paid back by Plant Expansion, Operating, and Reserve for Replacement funds. See separate breakdown included in fund projections. | Reduced overall project budget for 2020-2021 from 23.3M to 22.2M |
| | 1906 | WRRF Outfall Sewer Expansion | High | 2018 | 2019 | 2018-19 | WM | Plant Expansion | \$ 2,300,000 | \$ 2,050,000 | | | | | | | | Projected expected to finish >10% under budget with all work complete in 2020 |
| | 1910 | WRRF Office Unification | High | 2019 | 2020 | 2019-20 | WM | Operating | \$ 2,300,000 | \$ 2,350,000 | | | | | | | | Projected expected to finish <50,000 over budget |
| | 2104 | Covered company vehicle parking | Medium | 2021 | 2021 | 2021 | WM | Operating | | | \$ 100,000 | | | | | | | Reduce staff time spent clearing snow and ice |
| | 2105 | Biosolids building addition | High | 2020 | 2021 | 2021 | WM | Operating | | | \$ 150,000 | | | | | | | Climate controlled storage tractor truck & equip |
| | 2601 | WRRF Belt filter press replacement | Low | 2025 | 2027 | 2025-27 | WM | Reserve for Replacement | | | | | | | \$ 150,000 | | | |
| | | Plant Pump Replacements | High | 2021 | 2023 | 2022 | SW | Reserve for Replacement | | | | \$ 100,000 | | | | | | Replacement pumps for the digesters, lift station and scum station. |
| | | Annual Plant Improvement & Repair Projects | | | | annual | SW | Operating | \$ 150,000 | \$ 30,000 | \$ 150,000 | \$ 150,000 | \$ 150,000 | \$ 150,000 | \$ 150,000 | | | Typical annual expenditures |
| LS 1 | Carmel Creek | | | | | | | | | | | | | | | | | |
| | 1802 | Haver Way/Whitley Drive Lift Station & Sewer Reconstruction | High | 2018 | 2021 | 2020-21 | WM | Interceptor | \$ 650,000 | \$ 400,000 | \$ 250,000 | | | | | | | Amounts budgeted do not include contribution or future reimbursement from property owners |
| | 2004 | LS 1 Generator Replacement | High | 2020 | 2020 | 2020 | WM | Reserve for Replacement | \$ - | \$ 10,000 | \$ 350,000 | | | | | | | Project added to budget after fallen tree destroyed the old genset |
| | 2201 | LS 1 Replace wet weather pumps | Medium | 2020 | 2022 | 2022 | WM | Reserve for Replacement | | | | \$ 200,000 | | | | | | Amount excludes 250k insurance reimbursement |
| | | | | | | | | | | | | | | | | | | Replace equipment at the end of its service life. |
| LS 2 | Meridian Corridor | | | | | | | | | | | | | | | | | |
| | 2002 | LS 2 Odor Control System Replacement | High | 2019 | 2020 | 2020 | WM | Reserve for Replacement | \$ 200,000 | \$ 5,000 | \$ 250,000 | | | | | | | Replace failing equipment |
| | | Fence Replacement and Added Trees | Medium | 2021 | 2022 | 2021 | AS | Reserve for Replacement | | | \$ 50,000 | | | | | | | Replace fence & improve visual screening at site |
| | 2401 | 106th Street Parallel Force main (LS 2 to Ditch Road) | Low | 2020 | 2025 | 2024 | WM | Interceptor | | | | | | \$ 1,700,000 | | | | Timing is based on when capacity is needed. |
| LS 3 | Northern Heights | | | | | | | | | | | | | | | | | |
| | | (no projects) | | | | | | | | | | | | | | | | |
| LS 5 | Spring Mill Streams | | | | | | | | | | | | | | | | | |
| | 2701 | Interceptor extension & lift station elimination | Low | 2020 | 2026 | 2026 | WM | Interceptor | | | | | | | | | | Combine this project with the LS19 elimination project. |
| LS 6 | Waldon Pond | | | | | | | | | | | | | | | | | |
| | 2302 | Interceptor extension & lift station elimination | Medium | 2020 | 2028 | 2022-23 | WM | Interceptor | | | \$ 50,000 | \$ 900,000 | | | | | | Timing is development driven. Some 99th St residents have requested sewer service recently. |
| LS 7 | Laurelwood Sub | | | | | | | | | | | | | | | | | |
| | | Pump replacements | Low | 2025 | 2028 | 2028 | AS | Reserve for Replacement | | | | | | | | | | |
| LS 8 | Laurelwood | | | | | | | | | | | | | | | | | |
| | 2202 | LS 8 Reconstruction + new force main to 106th St | High | 2020 | 2022 | 2021-22 | WM | Operating | | | \$ 75,000 | \$ 1,550,000 | | | | | | Wet weather capacity needed. Scope is pending force main troubleshooting and I&I removal |
| LS 9 | Towne Road | | | | | | | | | | | | | | | | | |
| | | Pump & control panel replacement | Low | 2029 | 2032 | 2029 | AS | Reserve for Replacement | | | | | | | | | | |
| LS 10 | Michigan Road | | | | | | | | | | | | | | | | | |
| | 2203 | LS 10 Replace pumps, wet well piping, controls, backup generator | High | 2020 | 2022 | 2021-22 | WM | Reserve for Replacement | | | \$ 50,000 | \$ 850,000 | | | | | | Wet weather capacity needed. Scope is pending force main troubleshooting |
| LS 11 | Boone County | | | | | | | | | | | | | | | | | |
| | 1911 | Pump and control panel replacement | High | 2019 | 2020 | 2020 | WM | Reserve for Replacement | \$ 100,000 | \$ - | \$ 175,000 | | | | | | | |
| | 2204 | Added generator | High | 2022 | 2022 | 2022 | WM | Operating | | | | \$ 75,000 | | | | | | Location has occasional outages with little storage and time for emergency response |
| LS 12 | Kingsmill | | | | | | | | | | | | | | | | | |
| | | (no projects) | | | | | | | | | | | | | | | | |
| LS 14 | Austin Oaks | | | | | | | | | | | | | | | | | |
| | 1901 | Parallel force main extension | High | 2018 | 2020 | 2018-20 | WM | Interceptor | \$ 925,000 | \$ 900,000 | | | | | | | | Project expected to finish below budget |
| | 2205 | LS 14 Generator & control upgrades | Medium | 2019 | 2022 | 2022 | WM | Reserve for Replacement | | | | \$ 250,000 | | | | | | Replace equipment at the end of its service life. |
| | 2101 | LEC Interceptor extension | Medium | 2019 | 2028 | 2020 | WM | Interceptor | \$ 500,000 | \$ - | \$ 100,000 | \$ 1,500,000 | | | | | | Timing is development driven. |
| LS 16 | Zionsville Presbyterian | | | | | | | | | | | | | | | | | |
| | 2102 | LS 16 Replacement/relocation | Medium | 2019 | 2028 | 2019-20 | WM | Interceptor | \$ 400,000 | \$ - | \$ 200,000 | \$ 600,000 | | | | | | Timing is development driven. |
| LS 17 | Zion Hills | | | | | | | | | | | | | | | | | |
| | 2501 | LS 17 Pump & electrical upgrades | Low | 2022 | 2025 | 2025 | WM | Reserve for Replacement | | | | | | | \$ 1,500,000 | | | Timing is based on when capacity is needed. |
| LS 18 | Train Express | | | | | | | | | | | | | | | | | |
| | | Pump replacements | Low | 2019 | 2022 | 2022 | AS | Reserve for Replacement | | | | \$ 30,000 | | | | | | Replace pumps at the end of their service life. |
| LS 19 | Village of West Clay | | | | | | | | | | | | | | | | | |
| | 2701 | Interceptor extension & lift station elimination | Low | 2019 | 2028 | 2026 | WM | Interceptor | | | | | | | | | | Combine this project with the LS5 elimination project. |
| LS 20 | Mayflower Park | | | | | | | | | | | | | | | | | |
| | | Pump replacement | Low | 2019 | 2022 | 2022 | AS | Reserve for Replacement | | | | \$ 30,000 | | | | | | Replace pumps at the end of their service life. |
| LS 21 | High Grove | | | | | | | | | | | | | | | | | |

2021 Capital Budget

CAPITAL BUDGET LAST UPDATED 12/9/2020

See project fact sheets for more information on individual projects

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|---|-------------|---|--------------------|----------------------|--------------------|---------------|-------------------|-------------------------|--------------------------------|-------------------------------|---------------|---------------|--------------|--------------|--------------|---|---|
| | | | | | | | | | | | 2021 | 2022 | 2023 | 2024 | 2025 | | |
| LS 22 | 2301 | Interceptor extension & lift station elimination | Low | 2019 | 2028 | 2023 | WM | Interceptor | | | | | \$ 900,000 | | | Timing is development driven. | |
| | | (no projects) | | | | | | | | | | | | | | | |
| LS 23 | 2303 | 126th Street LS 23 Pump & electrical upgrades | Low | 2021 | 2023 | 2022 | WM | Reserve for Replacement | | | | | \$ 400,000 | | | Timing is based on when capacity is needed. | Project moved to 2023 |
| LS 24 | | Parkwood West Pump & control panel replacement | Low | 2025 | 2028 | 2025 | AS | Reserve for Replacement | | | | | | | \$ 100,000 | | |
| LS 25 | | Towne Oak Estates Pump replacement | Low | 2029 | 2032 | 2029 | AS | Reserve for Replacement | | | | | | | | | |
| LS 26 | 2206 | Jacksons Grant LS 26 additional pumps, backup generator & parallel force main extension | Medium | 2020 | 2022 | 2022 | WM | Interceptor | | \$ 100,000 | \$ 1,900,000 | | | | | Timing is based on when capacity is needed in the Spring Mill Interceptor and at LS 26. | |
| General collection system projects | | | | | | | | | | | | | | | | | |
| | | Annual Misc. Repairs, Replacements & Line Relocations | Medium | | | annual | AS | Reserve for Replacement | \$ 150,000 | \$ 150,000 | \$ 175,000 | \$ 150,000 | \$ 150,000 | \$ 150,000 | \$ 150,000 | Repairs are made as problems are found during televising. | |
| | 1908 | Brandywine, Crossfields, Larkspur, Oak Tree, North Augusta and Lakewood Gardens Sewer Extension | High | 2019 | 2019 | 2019 | WM | Interceptor | \$ - | \$ 50,250 | | | | | | '19 neighborhood sewer project | Construction costs rolled from 2019 into '20 |
| | 2003 | Lakewood Gardens, Williams Creek Farms, Woodhaven and Timber Ridge Sewer Extension | High | 2020 | 2020 | 2020 | WM | Interceptor | \$ 300,000 | \$ 400,000 | | | | | | '20 neighborhood sewer project | Add'l scope added to project no sewer more homes so bids came back higher |
| | 2103 | Long Brook, Bridlewood, and Countrywood Sewer Extension | Medium | 2021 | 2021 | 2021 | WM | Interceptor | | | \$ 300,000 | | | | | Final neighborhood sewer project anticipated in '21 | Sewer extension project budget from 2020-2025 reduced by \$140,000 |
| | | Future Sewer Extension Projects | Medium | | | annual | WM | Interceptor | | | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | Extend service into unsewered areas | Future estate lot sewer extensions |
| Equipment | | | | | | | | | | | | | | | | | |
| | | Vehicles | Medium | | | varies | DW | Operating | | | \$ 30,000 | \$ 30,000 | \$ 30,000 | \$ 30,000 | \$ 30,000 | Scheduled Replacement of Aging Vehicles | Increased annual budget |
| | | Laboratory Equipment | Medium | | | varies | SW | Reserve for Replacement | \$ 5,000 | \$ 4,398 | | \$ 5,000 | | \$ 5,000 | | Replacement and Upgrades to Lab equipment | |
| | | Future annual equipment and software purchases | Medium | | | | | Reserve for Replacement | \$ 13,734 | | \$ 75,000 | \$ 75,000 | \$ 75,000 | \$ 75,000 | \$ 75,000 | Annual capital purchases needed to maintain operations. | Increased annual budget to reflect typical annual expenses |
| | | 240, 480 Selectable portable Genset | Medium | 2019 | 2023 | 2021 | AS | Reserve for Replacement | \$ 18,791 | | \$ 120,000 | | | | | Existing Generators are from 1985 & 1992 | |
| | | Lateral Push Camera | Medium | 2021 | 2022 | 2021 | AS | Reserve for Replacement | | \$ 11,000 | | | | | | Replace existing camera, heavy use on cross-bores | Added to budget |
| | | Vehicle - F-450 W/Utility Body | High | 2021 | 2023 | 2021 | AS | Operating | | \$ 60,000 | | | | | | Trade-in 2 trucks for a specialty vehicle | Added to budget |
| | | SCADA Switch Upgrades | High | 2021 | 2021 | 2021 | SW | Reserve for Replacement | | \$ 25,000 | | | | | | Replace existing switches with gigabit switches | Added to budget |
| | | Odor Loggers | Medium | 2021 | 2021 | 2021 | SW | Reserve for Replacement | | \$ 5,000 | | | | | | New bluetooth odor loggers | Added to budget |
| | | HACH Laboratory Software | Medium | 2021 | 2021 | 2021 | SW | Operating | | \$ 40,000 | | | | | | Software to assist operations of the plant and lab | Added to budget |
| | | Air Monitor | High | 2021 | 2021 | 2021 | SW | Reserve for Replacement | | \$ 5,000 | | | | | | Replacement air monitor for safety | Added to budget |
| | | Rack UPS Replacement | High | 2021 | 2021 | 2021 | SW | Reserve for Replacement | | \$ 5,000 | | | | | | Replace the old rack UPS | Added to budget |
| | | Replacement NAS | High | 2021 | 2021 | 2021 | SW | Reserve for Replacement | | \$ 12,000 | | | | | | Replacement NAS (POSM and security videos) | Added to budget |
| | | Redundant Firewall | Medium | 2021 | 2021 | 2021 | SW | Reserve for Replacement | | \$ 5,000 | | | | | | A back up firewall for redundancy during updates or failures | Added to budget |
| | | New Garage Doors | Medium | 2021 | | 2023 | SW | Reserve for Replacement | | | | | \$ 20,000 | | | Replacement garage doors to replace the 20+ year old doors. | Added to budget |
| | | Asset Management Software | High | 2021 | 2022 | 2021-22 | DW | Reserve for Replacement | | \$ 50,000 | \$ 50,000 | | | | | Best in Class asset management software | Added to budget |
| | | inHance Billing System | High | 2021 | | 2021 | CS | Operating | | \$ 15,000 | | | | | | New billing software | Added to budget |
| | | FirstNET Lift Station Radios | High | 2020 | 2020 | 2020 | AS | Reserve for Replacement | \$ 19,000 | \$ 17,496 | | | | | | Replace existing radios with FirstNET radios. | |
| | | UV Module | Medium | 2020 | 2020 | 2020 | SW | Reserve for Replacement | \$ 15,000 | \$ 14,754 | | | | | | A spare UV Module for stock. | |
| | | Plant Radar Level Sensors | Medium | 2019 | 2021 | 2020 | SW | Reserve for Replacement | \$ 12,000 | \$ 7,957 | | | | | | Units will replace the existing pressure transducers. | |
| | | Hand Held Sludge Blanket Sensor | Medium | 2019 | 2020 | 2020 | SW | Operating | \$ 8,000 | \$ 7,483 | | | | | | Two hand held sludge blanket sensors. | |
| | | Plant Fiber Optic Cable Mapping | Medium | 2020 | 2020 | 2020 | SW | Operating | \$ 25,000 | \$ 3,775 | | | | | | Map and correctly terminate the plant fiber. | |
| | | Office HV01 Replacement | High | 2020 | 2020 | 2020 | SW | Reserve for Replacement | \$ 35,000 | \$ 34,009 | | | | | | the SAN. All are reaching end of life. | |
| | | Plant HV Replacement | High | 2020 | 2020 | 2020 | SW | Reserve for Replacement | \$ 20,000 | \$ 18,617 | | | | | | reaching end of life. | |
| | | UTV/Skid Steer Combo | Medium | 2019 | 2003 | 2020 | SW | Reserve for Replacement | \$ 60,000 | \$ 55,758 | | | | | | steer is a 1995 model and the UTV is a 2008. Repair frequency | |
| Administration Projects | | | | | | | | | | | | | | | | | |
| | | (no projects) | | | | | | | | | | | | | | | |
| | | | | | | | | | Totals | \$ 20,114,000 | \$ 20,742,022 | \$ 10,708,000 | \$ 7,760,000 | \$ 2,680,000 | \$ 2,155,000 | \$ 2,210,000 | |
| | | | | | | | | | Bond Proceeds | \$ 11,940,000 | \$ 14,200,000 | \$ 8,000,000 | \$ - | \$ - | \$ - | \$ - | |
| | | | | | | | | | Operating | \$ 2,483,000 | \$ 2,391,258 | \$ 590,000 | \$ 1,805,000 | \$ 180,000 | \$ 180,000 | \$ 180,000 | |
| | | | | | | | | | Reserve for Replacement | \$ 616,000 | \$ 350,514 | \$ 1,168,000 | \$ 1,855,000 | \$ 650,000 | \$ 225,000 | \$ 1,980,000 | |
| | | | | | | | | | Plant Expansion | \$ 2,300,000 | \$ 2,050,000 | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | | | | | | | | | Interceptor | \$ 2,775,000 | \$ 1,750,250 | \$ 950,000 | \$ 4,100,000 | \$ 1,850,000 | \$ 1,750,000 | \$ 50,000 | |
| | | | | | | | | | Total | \$ 20,114,000 | \$ 20,742,022 | \$ 10,708,000 | \$ 7,760,000 | \$ 2,680,000 | \$ 2,155,000 | \$ 2,210,000 | |



MEMORANDUM

To: Capital and Construction Committee

From: Wes Merkle

Date: December 9, 2020

Subject: Locate Wire Repair Contract Award

Staff issued a Request for Quotes to eight local contractors and received only one response from TPI Utility Construction for \$45,000. Staff believes this is a fair price for the work, which includes exposing buried pipes at 15 locations throughout our service area and extending locate wire up to the service. This will allow staff to complete utility locate requests by contractors and homeowners via Indiana 811 in an accurate and timely manner. Pipelines at these locations are currently unlocatable because of damaged locate wire. Many locations have already been repaired by Collections and Engineering staff where heavy excavation equipment wasn't required. If awarded, the work will be completed in early 2021 and budgeted under the Capital Budget - Annual Repairs, Replacements, and Relocations.

Recommended Action: Recommend the Board award the tone wire repair construction contract to TPI Utility Construction for \$45,000.



MEMORANDUM

To: Capital and Construction Committee

From: Wes Merkle

Date: December 9, 2020

Subject: Capital Project Updates

The following updates are provided for ongoing capital projects. Please refer to the Capital Project Fact Sheets for background information on individual projects.

1. #1802 – Haver Way Sewer Improvements (located southwest of Keystone and 96th Street)

Work is underway on site. Crews expect to have the new lift station online late next month. Completion is due in May.

2. #1901 – Lift Station 14 Parallel Force Main (located along Michigan Road from Austin Oaks to Ansley Park)

Work is substantially complete and the new force main is in service. Punch list work is expected to be complete shortly.

3. #1902 – TriCo WRRF Expansion

Crews continued installing equipment in all three new clarifiers as well as the mixed liquor splitter. Backfilling and process piping installation continued in the area. The last large concrete pours were completed on construction of the new VLRs. Several smaller concrete pours remain. Finish work within these structures is ongoing with equipment installation to follow.

Work began on the grit structure, which is an addition onto the south side of the pretreatment building. This structure is not as large as the VLRs or clarifiers, however it is quite complex and will require many separate concrete pours to finish.

Electrical work continues as equipment is delivered to the site. Crews began removing the original screen in the pretreatment building and assembling new UV equipment. Overall the work continues on schedule and below budget.

4. #1906 – Eagle Creek Outfall Sewer Expansion (located between TriCo WRRF and Eagle Creek to the west)

Crews completed open cut sewer installation near Lift Station 11, which required closing Old 106th Street. The road closing was coordinated with Zionsville and nearby businesses. The road has been resurfaced and is now open. Installation of the splitter structure at the plant is underway. We are waiting for Vectren to relocate a gas main along Zionsville Road. Open cut installation will continue this month and next month. While completion is due in April, the general contractor expects to finish the work early.

5. #1910 – Office Unification

Punch list work continues by various contractors. Control Tech is replacing the lab HVAC system, which was separate from the office construction contract; work should be complete shortly. Staff requested various furniture modifications from RJE. Staff spent several weeks working with what was provided, which works well for most, however several items didn't meet staff needs. RJE has several furniture pieces and replacement parts that they are waiting to receive and install. Architects at Blackline is working on solutions for acoustics in the open office, lobby, and training/board room, as well as interior décor.

6. #1911 – Lift Station 11 Pump and Control Panel Replacement

We are waiting for delivery of new pumps. ACE Technologies is modifying the control panel from decommissioned Lift Station 4 for reuse. Staff is waiting for Duke Energy to provide a schedule for upgrading electric service. Once Duke's schedule is known staff will receive quotes for installation of pumps, piping, and electrical equipment.

7. #2002 – Lift Station 2 (106th/Spring Mill Road) Odor Control System Replacement

Staff will receive quotes for installation of the new odor control system in late January. Equipment will be delivered by February and installed at that time.

8. #2003 – 2020 Neighborhood Sewer Extensions

The new low pressure sewer mains are all in service and homeowners in all four neighborhoods have been notified that service is available. Punch list work, including restoration, is expected to be complete shortly. Staff continues to monitor Woodhaven and Timber Ridge neighborhoods after a few homeowners voiced concerns about restoration.

10. #2004 – Lift Station 1 Repairs

The generator supplier notified staff that delivery has been pushed back to February. Installation will follow delivery.