



ENGINEERING

Monthly Report

Fiscal Year 2017-2018

October 2017



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Financial Impact Review: Review by Finance Director, Sharon Wojda, determined no significant change to previously published financial information at this time. Future budget adjustments may be needed for projects with significant changes in scope and schedule, but estimates are unknown at this time.

Operational Impact Review: Review by Utility Director, Paul Rheault, determined operational impacts are in line with achieving greater efficiency in our systems.

CAPITAL IMPROVEMENT PROGRAM in BRIEF

For a quick summary of the 2018 fiscal year take a look below...

With 49 active projects and 14 procurement items scheduled between now and the end of January, the the pressure on resources is high. On top of the normal delays caused by the holidays, we expect some number of schedules may slip due to resource constraints throughout the City.

How have the numbers **changed** since the CIP was adopted in June?

	Baseline	Now
TOTAL PROJECTS	75	77
ACTIVE PROJECTS	45	49
BUDGET	\$57.4 M	\$57.5 M

Fiscal year end budget adjustments are anticipated in December and you will see budgets **increase** next month.

How much of the 2018 fiscal year budgets have been **spent** so far?

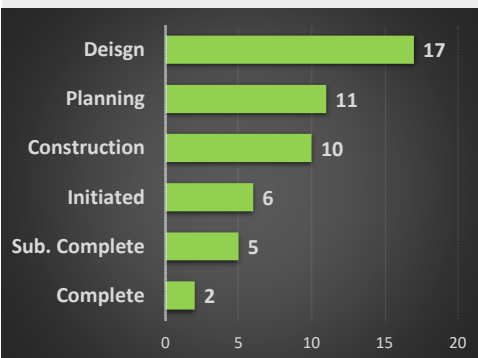
\$10.1 Million

- OR -

18% of the total amount budgeted this fiscal year.

With the snowy winter weather and seasonal festivities upon us, we should see a slow down in spending during November & December.

Of the projects that are active this fiscal year, what phase are they in now in the overall project life cycle?

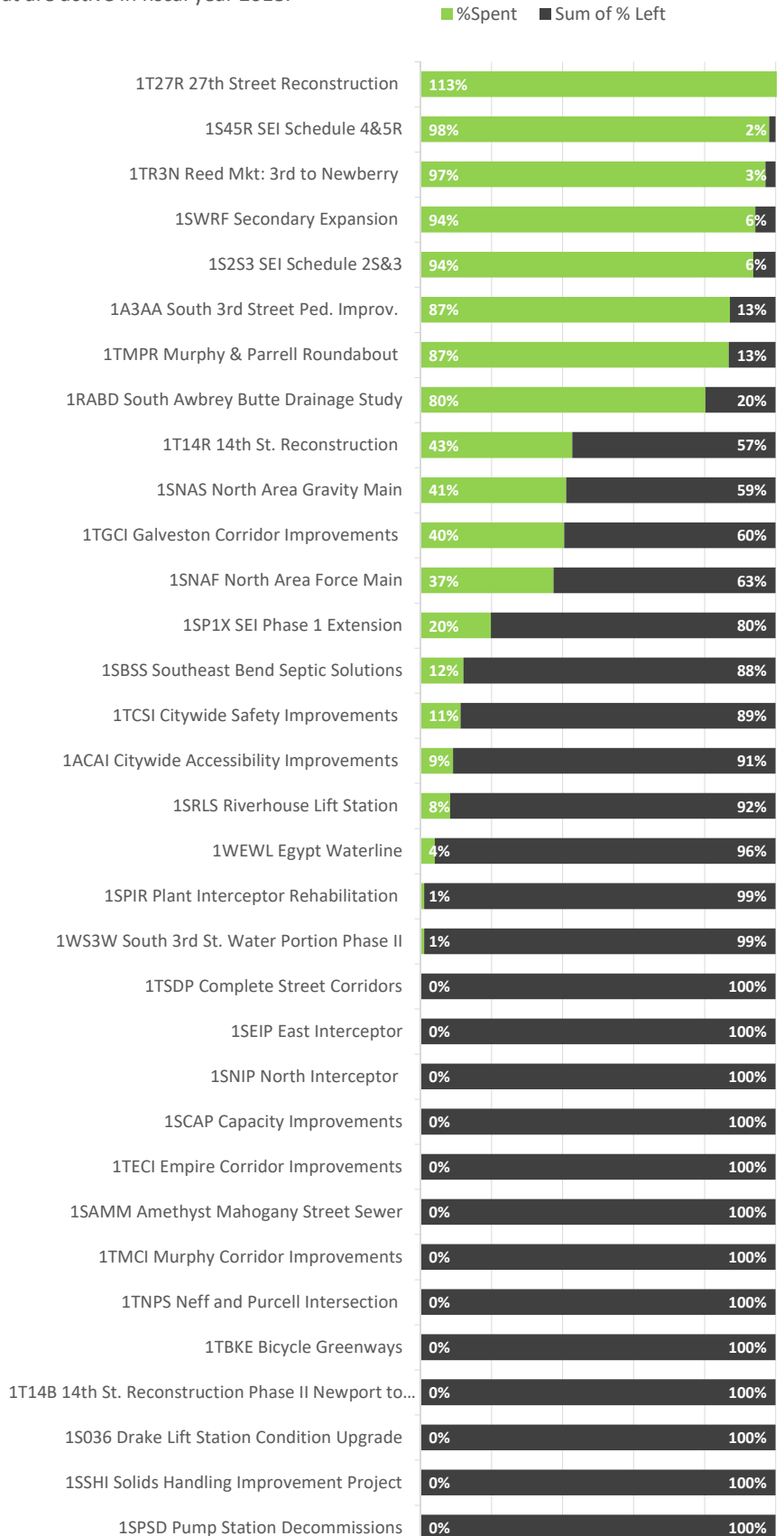


An average of 1.5 projects have been initiated each month so far this fiscal year.

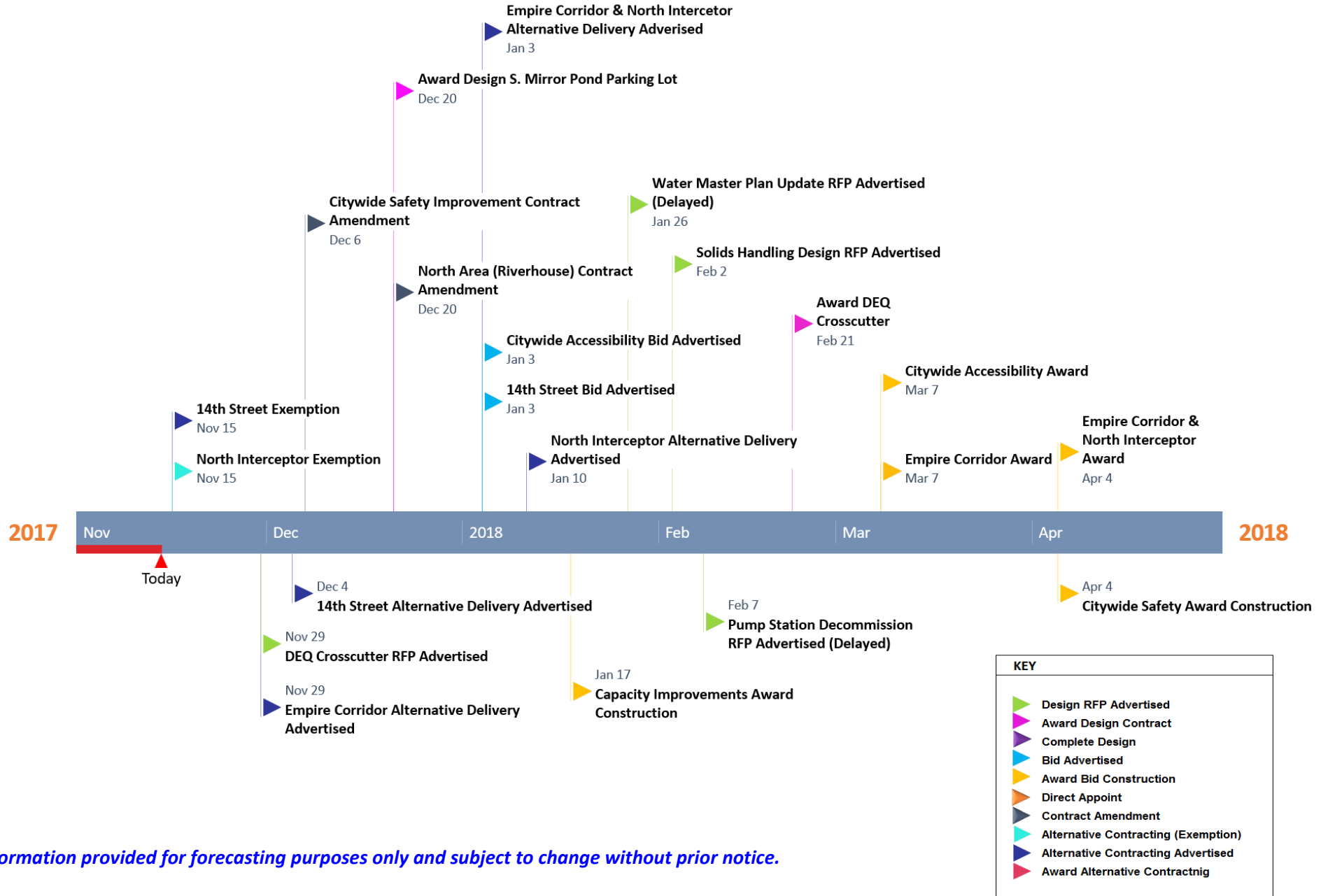
Reporting Period: Oct 1 - 31

SPENDING ON ACTIVE PROJECTS

Total percentage of budgets spent over the lifespan of the project for projects that are active in fiscal year 2018.



EIPD Procurement Timeline



Information provided for forecasting purposes only and subject to change without prior notice.

City of Bend 2018 - 2022 Capital Improvement Program Project List															
Project Name & Number	Major Project	Project Manager & Team Member(s)	Projected Start	Estimated Completion	Current Phase	Total Project Cost Estimate	Spent to Date	2017-18 Budgeted	2018-19 Budgeted	2019-20 Projected	2020-21 Projected	2021-22 Projected	Total 2018-22 CIP Budgeted	Budget Notes & Revisions	Percent Total Cost Est. Spent
Transportation															
1A3AA South 3rd Street Pedestrian Improvements	1X3RD	Suhr, Burr	2011	Jul 2017	Sub. Complete	815,000	749,461	15,000	-	-	-	-	15,000		92%
1XCAI Citywide Accessibility Improvement Program															
1ACAI Citywide Accessibility Improvements	1XCAI	Rowan	2016	Sep 2018	Construction	1,156,000	354,403	850,000					850,000		
Dean Swift Road Corridor	1XCAI	Rowan	2018	Sep 2018	Design	150,000	-		150,000				150,000		
NE Division Street Corridor	1XCAI	Rowan	2018	Sep 2018	Design	500,000	-		500,000				500,000		
Lodge Pole Drive Corridor	1XCAI	Rowan	2019	Dec 2019	Design	315,000	-			315,000			315,000		
Poplar Street Corridor	1XCAI	Rowan	2019	Jun 2020	Design	250,000	-			250,000			250,000		
SW Truman Hill Taft Silver Lake Corridor	1XCAI	Rowan	2020	Jun 2020	Design	440,000	-				440,000		440,000		
SW Cleveland Avenue Corridor	1XCAI	Rowan	2020	Jun 2021	Design	190,000	-				190,000		190,000		
NW Delaware Avenue Corridor	1XCAI	Rowan	2021	Dec 2021	Design	500,000	-					500,000	500,000		
NW Hill Street Corridor	1XCAI	Rowan	2021	Jun 2022	Design	250,000	-					250,000	250,000		
NW Seismore Street Corridor	1XCAI	Rowan	2021	Jun 2022	Design	125,000	-					125,000	125,000		
1ACAI Citywide Accessibility Improvements						3,876,000	354,403	850,000	650,000	565,000	630,000	875,000	3,570,000		9%
1T14R 14th St. Reconstruction †	1XGOB	Sabourin	2016	Oct 2017	Design	6,195,000	1,005,672	4,206,369	150,000	-	-	-	4,356,369		16%
1T14B 14th St. Reconstruction Schedule B Newport to Galveston †		Sabourin	2017	Oct 2018	Initiated	2,600,000	-	-	1,300,000	1,300,000	-	-	2,600,000		0%
1TCSI Citywide Safety Improvements		Rowan	2016	Sep 2018	Construction	3,535,000	397,722	2,219,000	775,000	-	-	-	2,994,000		11%
1TGCI Galveston Corridor Improvements †		Sabourin	2011	Oct 2017	Design	950,000	384,649	520,000	-	-	-	-	520,000		40%
1TBKE Bicycle Greenways		Rowan	2018	May 2018	Pending	900,000	-	225,000	225,000	225,000	225,000	-	900,000		0%
1TMPR Murphy & Parrell Roundabout		Sabourin	2015	May 2020	Sub. Complete	2,952,600	2,562,595	50,000	5,000	5,000	-	-	60,000	1	87%
1TNPS Neff and Purcell Intersection		Rowan	2016	May 2021	Pending	4,000,000	-	50,000	350,000	300,000	3,300,000	-	4,000,000		0%
1TPWP Powers & Brookwood Roundabout Phase II	1XGOB	Sabourin	2017	Oct 2017	Complete	50,000	-	50,000	-	-	-	-	50,000		0%
1TECI Empire Corridor Improvements		Franklet, Burr	2018	Mar 2018	Initiated	15,630,000	62	500,000	3,465,000	5,665,000	3,000,000	3,000,000	15,630,000		0%
1TMCI Murphy Corridor Improvements		Franklet	2018	Mar 2018	Pending	10,000,000	-	500,000	1,500,000	2,000,000	3,000,000	3,000,000	10,000,000		0%
1TSDP Complete Street Corridors		Rowan	2017	Oct 2020	Pending	801,000	965	200,000	600,000	-	-	-	800,000		0%
1TR3N Reed Mkt: 3rd to Newberry	1XGOB	Sabourin	2012	Oct 2018	Sub. Complete	13,804,664	13,409,553	160,000	16,000	-	-	-	176,000		97%
Total Transportation Projects						69,985,264	19,219,485	9,545,369	9,036,000	10,060,000	10,155,000	6,875,000	45,671,369		
Stormwater															
1RMP1 Stormwater Master Plan Update		Martin	2020	Jun 2018	Pending	500,000	-	-	500,000	-	-	-	500,000		0%
1RABD South Awbrey Butte Drainage Study		Sabourin	2016	Oct 2017	Planning	285,000	228,752	10,000	-	-	-	-	10,000		80%
1RNPR Newport Pipe Replacement Design		Sabourin	2018	Jun 2019	Pending	442,000	-	-	442,000	-	-	-	442,000		0%
1RFGU Franklin & Greenwood Underpass		Sabourin	2021	Jun 2022	Pending	5,620,000	-	-	-	-	120,000	600,000	720,000		0%
1RRMC Roosevelt & McKinley		Martin	2020	Jun 2022	Pending	579,000	-	-	-	-	104,000	475,000	579,000		0%
Total Stormwater Projects						6,926,000	228,752	10,000	942,000	-	224,000	1,075,000	2,251,000		
Water															
1WAWP Awbrey Well Supply Expansion		Martin	2020	Jun 2019	Pending	2,021,760	-	-	-	2,021,760	-	-	2,021,760		0%
1WCPS College Parallel Pipe Study		Martin	2020	Jun 2019	Pending	1,215,760	-	-	-	1,215,760	-	-	1,215,760		0%
1WEWL Egypt Waterline		Forster, Webster	2012	Dec 2017	Construction	771,000	31,230	590,000	-	-	-	-	590,000		4%
1WLPE Lafayette Pipe Enlargement		Martin	2020	Jun 2019	Pending	250,640	-	-	-	250,640	-	-	250,640		0%
1WMP1 Water Master Plan Update		Martin	2017	Dec 2017	Initiated	550,000	-	550,000	-	-	-	-	550,000		0%
1WRBO Parallel Piping Rock Bluff to Brookwood		Martin	2022	Jun 2022	Pending	2,940,000	-	-	-	-	-	2,940,000	2,940,000		0%
1WS3W South 3rd St. Water Portion Phase 2	1X3RD	Suhr	2016	Jun 2018	Design	632,000	6,437	550,000	-	-	-	-	550,000		1%
1WSDC Water SDC Methodology Study		Ockner	2017	Dec 2017	Complete	60,578	578	60,000	-	-	-	-	60,000		1%
1WSPP Parallel Piping Brookwood to Brosterhaus		Martin	2021	Jun 2021	Pending	1,596,400	-	-	-	-	1,596,400	-	1,596,400		0%
1WSSC New Water Well Near NE Shirley Court		Martin	2021	Jun 2021	Pending	2,830,464	-	-	-	-	2,830,464	-	2,830,464		0%
1WSWO New Water Well Shiloh Site		Martin	2022	Jun 2022	Pending	2,721,600	-	-	-	-	-	2,721,600	2,721,600		0%
1WVSS Valves Operational System Study		Martin	2020	Jun 2022	Pending	234,000	-	-	-	78,000	78,000	78,000	234,000		0%
Total Water Projects						15,824,202	38,245	1,750,000	-	3,566,160	4,504,864	5,739,600	15,560,624		

City of Bend 2018 - 2022 Capital Improvement Program Project List															
Project Name & Number	Major Project	Project Manager & Team Member(s)	Projected Start	Estimated Completion	Current Phase	Total Project Cost Estimate	Spent to Date	2017-18 Budgeted	2018-19 Budgeted	2019-20 Projected	2020-21 Projected	2021-22 Projected	Total 2018-22 CIP Budgeted	Budget Notes & Revisions	Percent Total Cost Est. Spent
Water Reclamation															
1XSEI Southeast Interceptor Projects															
1SP1X SEI Phase 1 Extension	1XSEI	Forster, MacClanahan	2016	Dec 2017	Construction	10,500,000	2,076,681	8,000,000	-	-	-	-	8,000,000		20%
1S2S3 SEI Schedule 2S&3*	1XSEI	Forster, MacClanahan	2017	Dec 2017	Construction	31,466,250	29,516,936	11,715,000	-	-	-	-	11,715,000		94%
1S45R SEI Schedule 4&5R	1XSEI	Forster	2014	Dec 2016	Sub. Complete	12,500,000	12,280,443	3,000,000	-	-	-	-	3,000,000		
1XSEI Southeast Interceptor						54,466,250	43,874,060	22,715,000	-	-	-	-	22,715,000		81%
1XNAS North Area Sewer Projects															
1SNAF North Area Force Main*	1XNAS	Franklet, Burr, Murray	2017	Jun 2018	Construction	4,450,000	1,648,070	1,700,000	-	-	-	-	1,700,000		37%
1SNAS North Area Gravity Main	1XNAS	Franklet, Burr, Murray	2017	Jun 2018	Construction	3,855,000	1,580,218	1,100,000	-	-	-	-	1,100,000		41%
1SRLS Riverhouse Lift Station Hydraulic Upgrade	1XNAS	Franklet, Burr, Murray	2016	Jun 2017	Construction	555,000	46,355	400,000	-	-	-	-	400,000		8%
1XNAS North Area Sewer Projects						8,860,000	3,274,643	3,200,000	-	-	-	-	3,200,000		37%
1XWRF Water Reclamation Facility Projects															
1SCAP WRF Capacity Improvements	1XWRF	Robertson	2017	Jun 2018	Initiated	8,000,000	214	7,998,000	-	-	-	-	7,998,000		0%
1SSHI Solids Handling Improvement Project	1XWRF	Robertson	2019	Jun 2022	Initiated	5,500,000	-	250,000	250,000	2,500,000	2,500,000	-	5,500,000		0%
1SHWK Headworks	1XWRF	Robertson	2018	Jun 2019	Pending	1,000,000	-	-	1,000,000	-	-	-	1,000,000		0%
1SFPU Facilities Plan Update	1XWRF	Robertson	2018	Jun 2019	Pending	500,000	-	-	-	500,000	-	-	500,000		0%
1SSFU Support Facilities Upgrade	1XWRF	Robertson	2019	Jun 2021	Pending	2,500,000	-	-	-	1,250,000	1,250,000	-	2,500,000		0%
1XWRF Water Reclamation Facility Projects						17,500,000	214	8,248,000	1,250,000	4,250,000	3,750,000	-	17,498,000		0%
1SPSD Pump Station Decommissions Program															
#6A Tri-Peaks	1SPSD	Murray, Forster	2017	Jun 2019	Planning	250,000	-	30,000	220,000	-	-	-	250,000		0%
#13A+B Crown Villa #1	1SPSD	Murray, Forster	2017	Jun 2019	Planning	200,000	-	20,000	180,000	-	-	-	200,000		0%
#14A+B Crown Villa #2	1SPSD	Murray, Forster	2017	Jun 2019	Planning	200,000	-	20,000	180,000	-	-	-	200,000		0%
#15 Murphy	1SPSD	Murray, Forster	2017	Jun 2019	Design	150,000	-	15,000	135,000	-	-	-	150,000		0%
#16A+B Quail Ridge #2	1SPSD	Murray, Forster	2017	Jun 2019	Planning	100,000	-	10,000	90,000	-	-	-	100,000		0%
#17A+B Ridgewater #1	1SPSD	Murray, Forster	2017	Jun 2018	Construction	100,000	-	100,000	-	-	-	-	100,000		100%
#18A+B Bridges at Shadow Glen	1SPSD	Murray, Forster	2017	Jun 2018	Construction	100,000	-	100,000	-	-	-	-	100,000		100%
#19A+B South Village	1SPSD	Murray, Forster	2017	Jun 2019	Planning	200,000	-	20,000	180,000	-	-	-	200,000		0%
#20A+B Sun Meadow	1SPSD	Murray, Forster	2017	Jun 2019	Design	100,000	-	10,000	90,000	-	-	-	100,000		0%
#90A+B Quail Ridge #1	1SPSD	Murray, Forster	2017	Jun 2019	Planning	100,000	-	10,000	90,000	-	-	-	100,000		0%
Nottingham PS Connection to SEI	1SPSD	Murray, Forster	2017	Jun 2019	Planning	15,000	-	15,000	-	-	-	-	15,000		0%
1SPSD Pump Station Decommissions Projects						1,515,000	-	350,000	1,165,000	-	-	-	1,515,000		0%
1SWRF Secondary Expansion		Robertson	2008	Jun 2019	Sub. Complete	43,798,454	41,285,362	1,500,000	1,000,000	-	-	-	2,500,000		94%
1SPIR Plant Interceptor Rehabilitation		Suhr, Martin	2015	Dec 2018	Design	10,700,000	112,275	5,150,000	5,515,000	-	-	-	10,665,000		1%
1SBSS Southeast Bend Septic Solutions		Martin	2017	Jun 2019	Design	2,800,000	337,592	1,150,000	800,000	-	-	-	1,950,000		12%
1SEIP East Interceptor		Franklet	2017	Jun 2019	Planning	21,000,000	13,770	1,000,000	1,000,000	-	-	-	2,000,000		0%
1SNIP North Interceptor		Franklet	2017	Dec 2021	Planning	23,000,000	13,770	1,000,000	1,000,000	7,000,000	7,000,000	7,000,000	23,000,000		0%
1S036 Drake Lift Station Condition Upgrade		Robertson	2017	Dec 2018	Initiated	2,000,000	-	1,000,000	1,000,000	-	-	-	2,000,000		0%
1SPSO Parallel Sewer on Olney Avenue		Robertson	2018	Jun 2018	Pending	605,000	-	605,000	-	-	-	-	605,000		0%
1SAMM Amethyst Mahogany Street Sewer		Forster	2019	Dec 2019	Pending	2,500,000	-	250,000	1,000,000	1,250,000	-	-	2,500,000		0%
1SOC1 Odor Control Master Plan		Martin	2019	Jun 2020	Pending	1,050,000	-	-	-	1,050,000	-	-	1,050,000		0%
1SSLA Sewer Storage - Land Acquisition		Forster	2019	Jun 2020	Pending	730,000	-	-	-	730,000	-	-	730,000		0%
1SPIC Plant Interceptor Condition Assessment		Forster	2019	Jun 2020	Pending	630,000	-	-	-	630,000	-	-	630,000		0%
1SMP1 Collection System Master Plan (Years 6-10)		Franklet	2019	Jun 2020	Pending	750,000	-	-	-	750,000	-	-	750,000		0%
1SGPA Gravity Pipe Condition Assessment		Forster	2020	Jun 2021	Pending	2,000,000	-	-	-	200,000	200,000	200,000	600,000		0%
Total Water Reclamation Projects						193,904,704	88,911,686	46,168,000	13,730,000	15,860,000	10,950,000	7,200,000	93,908,000		
Total 2017-2020 Capital Improvement Program						286,640,170	108,398,167	57,473,369	23,708,000	29,486,160	25,833,864	20,889,600	157,390,993		

Budget Notes and Revisions

† Tied to other projects 1-Budget Adjustment \$40,000 FYE Rollover

* Budget includes Street Preservation Work

Phase 2 - S. 3rd Street Improvements

Phase 2 projects are capital improvement projects and address maintenance issues. The timing is being driven to occur in advance of the street preservation work within 3rd Street that is planned for the summer of 2017. Due to the impacts to the 3rd Street roadway, it is imperative that they occur prior to the grind and inlay preservation work.



Project Engineer: Jason Suhr | jsuhr@bendoregon.gov

Scope

Includes design and construction for streets, water, and stormwater. This work will include an analysis of the drainage basin to assess the condition of the existing stormwater facilities; creation of a striping and paving plan; replace existing 2-inch sub-standard waterlines with 8-inch pipelines.

Schedule

Start Date: 10/1/2015
 Substantial Completion: 1/31/2018
 Final Closeout: 1/31/2018

- Stormwater portion complete
- Streets portion complete

Cost

Total Estimated: \$667,000
 Spent to Date: \$28,961
 % Spent to Estimated: 4%

Sub-Projects:	Est.	Spent
Water	\$632,000	\$6,437
Stormwater	\$5,000	\$6,150
Streets	\$30,000	\$16,104

Status: On Scope

Status: Ahead of Schedule

Status: On Budget

Adjustments: Construction portion of this project is under review

Adjustments: Schedule updated with Utility Operations staff

Adjustments: Cost will be lower if the water portion is not constructed

Status Update: 100% design of the waterline portion will be complete in December. Utility Operations staff will assist in determining priority at that time. There is a potential to deprioritize project until a future date. Current timeline reflects only the design phase. If the project moves to construction, the timeline will be updated in January.

Cost Estimate Classification: 4



Citywide Accessibility Improvements

Through the help of dedicated volunteers on the City of Bend Accessibility Advisory Committee (COBAAC) and the Central Oregon Coalition for Access (COCA), key corridors and neighborhoods across the city have been prioritized for accessibility improvements. This project will design, construct, or repair these curb ramps and sidewalks including those identified through the City's Barrier Removal Request process.



Project Engineer: Rory Rowan | rrowan@bendoregon.gov

Scope

Survey, design, and construction of accessibility improvements in the Mountain View Neighborhood, NE Kearney Avenue, NE Wells Acres Road, and Broadway and Delaware locations. Construction of all locations except the Mountain View Neighborhood in 2017. Construction of Mountain View in 2018.

Schedule

Start Date: 3/1/16
 Substantial Completion: 06/30/2018
 Final Closeout: 06/30/19

Cost

Total Estimated: \$1,156,000
 Spent to Date: \$354,403
 % Spent to Estimated: 31%

Design = \$250,000
Construction = \$906,000

- Mountain View \$466,000
- NE Kearney Ave \$235,000
- NE Wells Acres Rd \$140,000
- Broadway & Delaware \$65,000

Status: On Scope

Adjustments: Scope adjusted to better reflect that future corridors were established as separate sub-projects in the CIP

Status: Ahead of Schedule

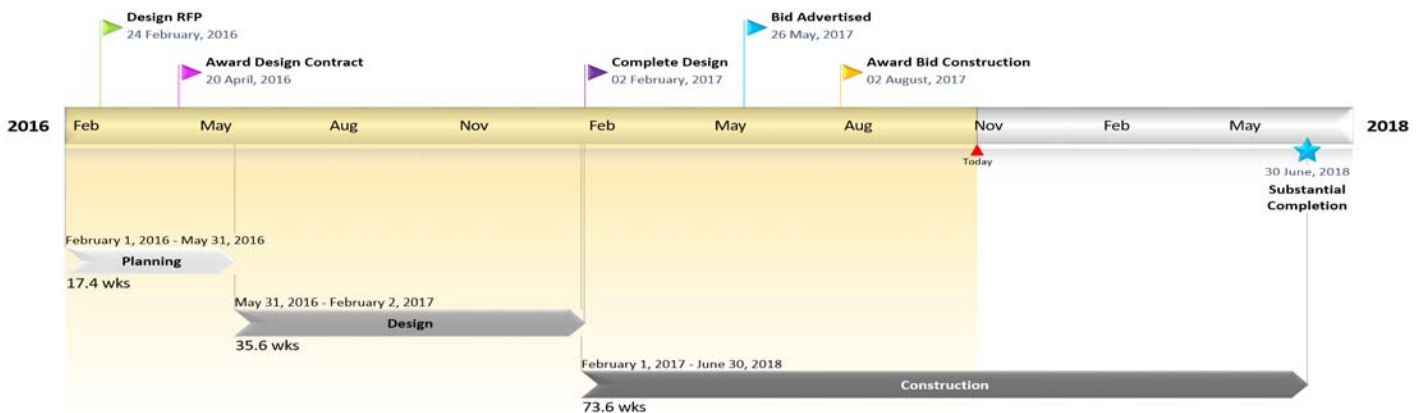
Adjustments: Trending approximately 17 days ahead on all locations currently in construction

Status: On Budget

Adjustments: No impact to budget due to Scope and Schedule updates

Status Update: Wells Acres sidewalk completed in October, NE Kearney sidewalk package to be complete in November, Mountain View sidewalk package going out to bid in early 2018 for construction in Spring 2018.

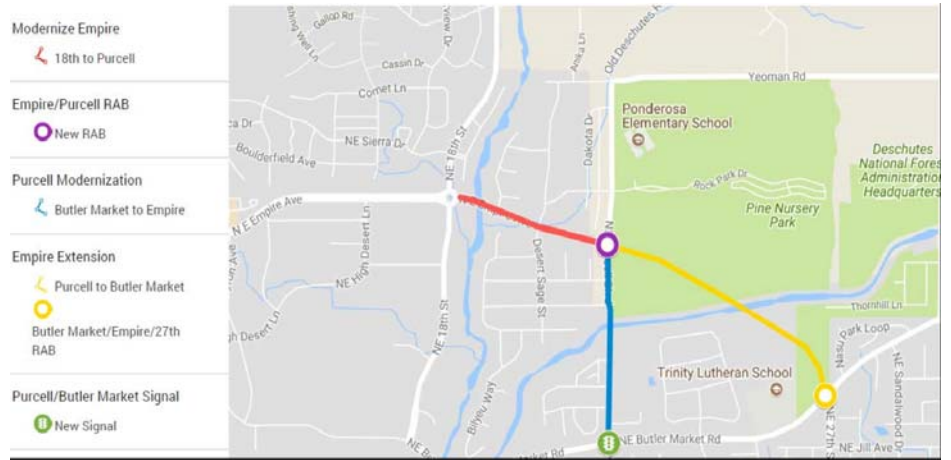
Cost Estimate Classification: 1



Empire Corridor Improvements

Project Engineer: George Franklet | gfranklet@bendoregon.gov

Planning and preliminary design for Empire Avenue began in 2005. In 2017 Council designated it as a high priority for improving the safety, efficiency, and reliability of transportation in northeast Bend. Council identified the design and construction of a roundabout at the Empire/Purcell intersection as the highest priority component of the project.



Scope

Six distinct but interrelated sub-projects are included: Empire/Purcell Roundabout, Empire Avenue Modernization, Purcell Boulevard Modernization, Empire Avenue Extension, Purcell/Butler Market Signal Modernization and 27th Street Roundabout. Due to the complexity of implementing all the related components of the project, a Progressive Design-Build project delivery method will be used.

Schedule

Start Date: 08/1/2017
 Substantial Completion: 9/30/2020
 Final Closeout: 9/30/2021

Cost

Total Estimated: \$15,630,000
 Spent to Date: \$62
 % Spent to Estimated: 0%

Sub-Projects:	Est.	Spent
Purcell RAB	\$4,000,000	\$0
Empire Mod	\$1,000,000	\$0
Purcell Mod	\$1,000,000	\$0
Emp Extension	\$3,630,000	\$0
Butler Mkt Sig	\$1,000,000	\$0
Emp/27 RAB	\$5,000,000	\$0

Status: On Scope

Status: On Schedule

Status: On Budget

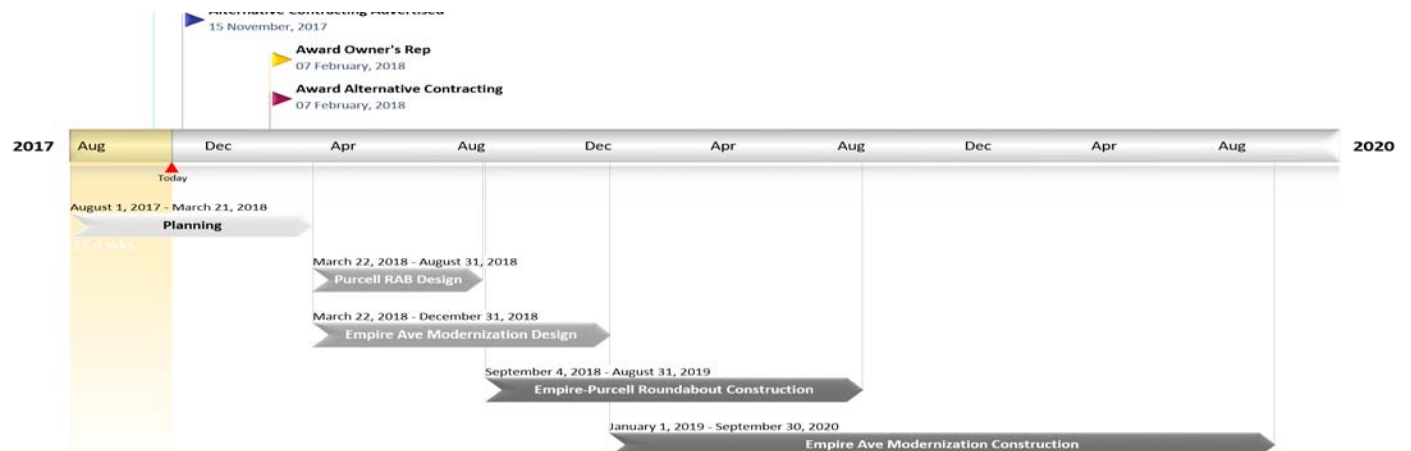
Adjustments: Initiated

Adjustments: Initiated

Adjustments: Initiated

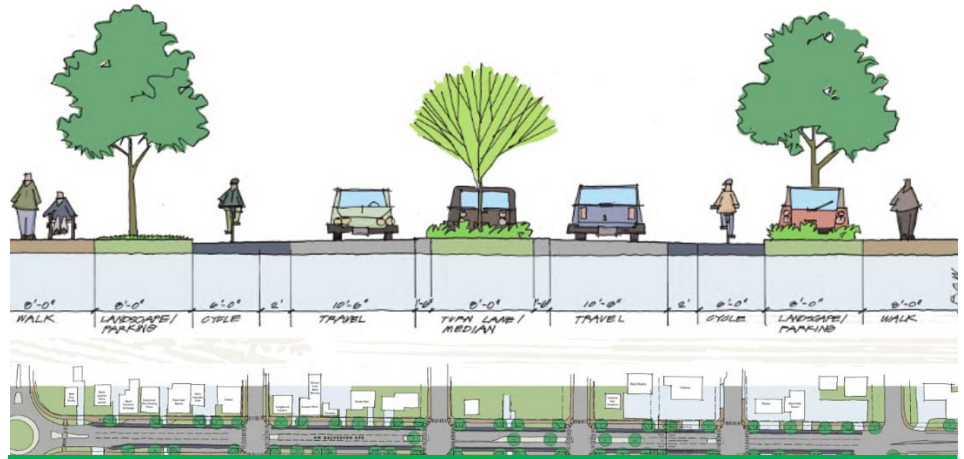
Status Update: City Council authorized the use of the progressive design-build procurement and contracting method on October 18th. The RFP and contract for this method is being prepared with advertisement anticipated in November. A surveyor was hired to complete the topographic survey of the project extents with work to begin in November. Began discussions with Bend Park and Recreation District regarding the right-of-way needed for the roundabout at the Empire/Purcell intersection.

Cost Estimate Classification: 5



Galveston Corridor Improvements

The Galveston Corridor planning dates back to 2007 when the Traffic Safety Advisory Committee identified the project as the City of Bends 4th highest safety priority project, for existing arterials and collectors. Following initial identification of the project there was significant public interest and involvement from the adjacent community, resulting in the development of a local task force and subsequent council acceptance of a 'hybrid' streetscape concept. Design initiated in 2016.



Project Engineer: Garrett Sabourin | gsabourin@bendoregon.gov

Scope

Study to improve safety, access, and connectivity for vehicles, bicycles, and pedestrians. Also to improve the streetscape along a newly emerging mixed use corridor. A collaborative process has formed between City staff and property/business owners with a taskforce to devise project concepts and designs. At 30% design project will be brought to council to decide the Stormwater and other elements to be carried forward.

Schedule

Start Date: 06/01/2011
 Substantial Completion: TBD
 Final Closeout: **09/30/2018****
**** Construction not funded. Final closeout indicates 100% design.**

Cost

Total Estimated: \$950,000+
 Spent to Date: \$384,649*
 % Spent to Estimated: 40%
 † Total cost estimate for design
 * Includes planning prior to CIP

Status: On Scope

Status: On Schedule

Status: On Budget

Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

Status Update: Contract amendment #6 presented to Council on October 4 to include scope and fee to carry design from 30% to final design. Public open house scheduled for January 2018.

Cost Estimate Classification: 4



Citywide Safety Improvements

With the help of the community and a prior safety study, the city has identified multiple locations across the city where there have been a high number of crashes. Several treatments are proposed to make these locations safer for people walking, riding bicycles, and driving. This project will further develop the design of these treatments and construct them with additional community input.



Project Engineer: Rory Rowan | rrowan@bendoregon.gov

Scope

Survey, design, traffic analysis, public involvement, and construction of safety improvements at the following locations: 3rd St at Hawthorne, Franklin, Roosevelt, and Reed Market, Colorado Ave & Bend Pkwy (US Hwy 97) interchange, Neff Rd at Williamson Blvd, 27th St at Conners Ave, Brosterhous Road railroad underpass.

Schedule

Start Date: 10/1/2014
 Substantial Completion: 9/30/2018
 Final Closeout: 9/30/2019

Cost

Total Estimated: \$3,535,000
 Spent to Date: \$397,722
 % Spent to Estimated: 11%

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

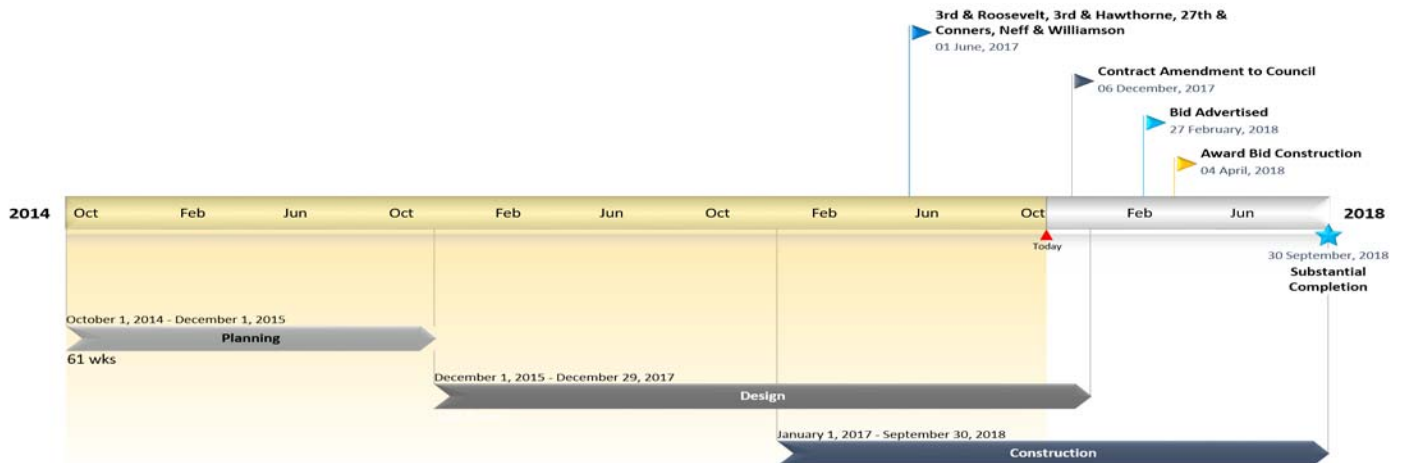
Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Contract amendment for additional scope to add Canal and Pinebrook will be brought to Council on December 6.

Cost Estimate Classification: 4



14th Street Reconstruction

Improve safety of corridor between SW Colorado Avenue and NW Newport Avenue for all modes of transportation. Project is part of voter approved General Obligation Bond and will focus on an updated roadway configuration to include surfacing, striping, bike lanes, sidewalks and streetscape. Design will attempt to tie-in with suggested changes being made to the Galveston Corridor Improvements.



Project Engineer: Garrett Sabourin | gsabourin@bendoregon.gov

Scope

Upgrade to City standard to include but not limited to: roadway, surface, curbs, sidewalks, and striping. Includes safety improvements for bicycles, pedestrians and vehicles. **The project will be constructed in two phases. Phase I: Simpson to Albany & Galveston to Newport; Phase II: Donovan to Simpson & Albany to Galveston.**

Schedule

Start Date: 06/30/2014
Substantial Completion: TBD
Final Closeout: TBD

Cost

Total Estimated: **\$8,795,000**
Spent to Date: \$1,005,672
% Spent to Estimated: 16%

Sub-Projects:	Est.	Spent
PI: GO Bond	\$4,893,612	\$613,774
PI: Trans Con.	\$1,299,630	\$391,899
PII: Trans Con.	\$2,600,000	\$0

Status: On Scope

Status: On Schedule

Status: On Budget

Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

Status Update: Design is on schedule and anticipating advertising for Phase I construction in spring 2018. Advertisement for construction management services is anticipated for late 2017 to coincide with the spring construction schedule.

Cost Estimate Classification: 3



Water Master Plan Update

The existing Water Master Plan was completed in 2011 and is due to be updated in order to more accurately reflect current system conditions. The update will address current operational parameter efficiencies, needed capital improvements, and the full integration of the Water Management and Conservation Plan. All of this information will be used to update the SDC methodology and rate forecasting.

Water System Master Plan Update Optimization Study

City of Bend, Oregon, Project No. WA09FA

Final Report

Project Engineer: Skip Martin | smartin@bendoregon.gov

Scope

Alignment of master planning, rate analysis and SDC development allows for unity between future water system operational needs and the required water system funding.

Start Date: 3/1/2017
Substantial Completion: 06/30/2019
Final Closeout: 06/30/2020

Total Estimated: \$1,110,578
Spent to Date: \$578
% Spent to Estimated: 0.05%

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Project initiated. This project scope changed to include the Water SDC Methodology Study. Project budget increased by savings from the South 3rd St. Water Portion Phase II project (see page 5 of this report).

Cost Estimate Classification: 5



Egypt Waterline Project

The Egypt Waterline seeks to create a redundant water source for Juniper Ridge. This project became a Capital Improvement Project after it was identified in the 2011 Water master Plan Optimization study by Murray and Smith Associates. A redundant connection for Juniper Ridge is necessary to provide an adequate water supply during system disruptions due to maintenance activities, public emergencies, or catastrophic events.



Scope	Schedule	Cost
Design a waterline connection between Ranch Village Dr. and 18th Street. This work will include a pressure zone change to Juniper Ridge to match that of the neighborhood to the southwest.	Start Date: 7/1/2012 Substantial Completion: 04/30/18 Final Closeout: 04/30/18	Total Estimated: \$771,000 Spent to Date: \$31,230 % Spent to Estimated: 4% Additional Funding Sources: Parks & Rec: \$51,995 COB Street Ops: \$83,033 School District: \$6,000
Status: On Scope	Status: Potential Schedule Delay	Status: On Budget
Adjustments: No change from prior month	Adjustments: Construction timeline may move to summer 2018	Adjustments: No change from prior month

Status Update: Coordination with the School District to time construction to summer school closure.

Cost Estimate Classification: 1



Southeast Interceptor

Large diameter gravity sewer pipeline extending from the southwest quadrant to the northeast quadrant of the City, approximately 4 ½ miles in length. This project reroutes or intercepts a significant volume of sewage away from the downtown and central sewer systems to the east side of the City in accordance with the Collection System Master Plan completed in 2014. Segment 2S&3 indicates the 2.5 mile stretch of 27th street between Neff and Reed Market Rd.



Project Engineer: Eric Forster | eforster@bendoregon.gov

Scope

Design and construction of gravity sewer, from South 3rd street to the Neff Road connection. Phase 1 Extension Project, approved in January 2016, adds approximately 4,300 feet of sewer main work.

Schedule

Start Date: 7/1/2006
 Sewer Completion: 12/31/2017
 Street Completion: 10/31/2017
 Phase I Ext. Completion: 3/31/2018
 Final Closeout: 3/31/2019

- Previous segments, as well as 4&5R, are complete.

Cost

Total Estimated: \$72,000,000
 Spent to Date: \$58,852,879
 % Spent to Estimated: 84%

Sub-Projects:	Est.	Spent
Previous	\$17,500,000	\$16,765,255
4&5R	\$12,500,000	\$12,280,443
2S&3	\$31,500,000	\$29,516,936
P1EX	\$10,500,000	\$2,076,681

Status: On Scope

Status: Potential Schedule Revision

Status: Increased Budget

Adjustments: No change from prior month

Adjustments: Timeline simplified below

Adjustments: No change from prior month

Status Update: 2S&3 completed in October significantly ahead of schedule and approximately 6% under contract amount.

Cost Estimate Classification: 1



North Area Sewer Capacity Improvements

This project will increase the capacity of the gravity main downstream of the multiple force main discharge point at manhole 3157 and reroute the force main discharge from several lift stations and the NE 3rd Street pressure sewer. It will also reconfigure the structure at Mervin Sampels Bypass and include modifications to both the Sawyer and Riverhouse lift stations.



Project Engineer: George Franklet | gfranklet@bendoregon.gov

Scope

Analysis of alternatives for pipeline route and construction methods for crossing of irrigation canals and railroad tracks; design and construction of gravity and force mains, pump station modifications, and flow bypass optimization.

Schedule

Start Date: 10/1/2013
 Substantial Completion: **09/30/2018**
 Final Closeout: **09/30/2019**

Cost

Total Estimated: \$8,860,000*
 Spent to Date: \$3,234,726
 % Spent to Estimated: 37%
 * Includes street preservation work

Sub-Projects:	Est.	Spent
Force Main	\$4,450,000	\$1,648,070
Gravity	\$3,855,000	\$1,580,218
Lift Station	\$555,000	\$6,437

Status: Scope Increase

Adjustments: Scope added due to unknown ODOT drainage facilities. Construction of Lift Station added.

Status: Baseline Schedule Update

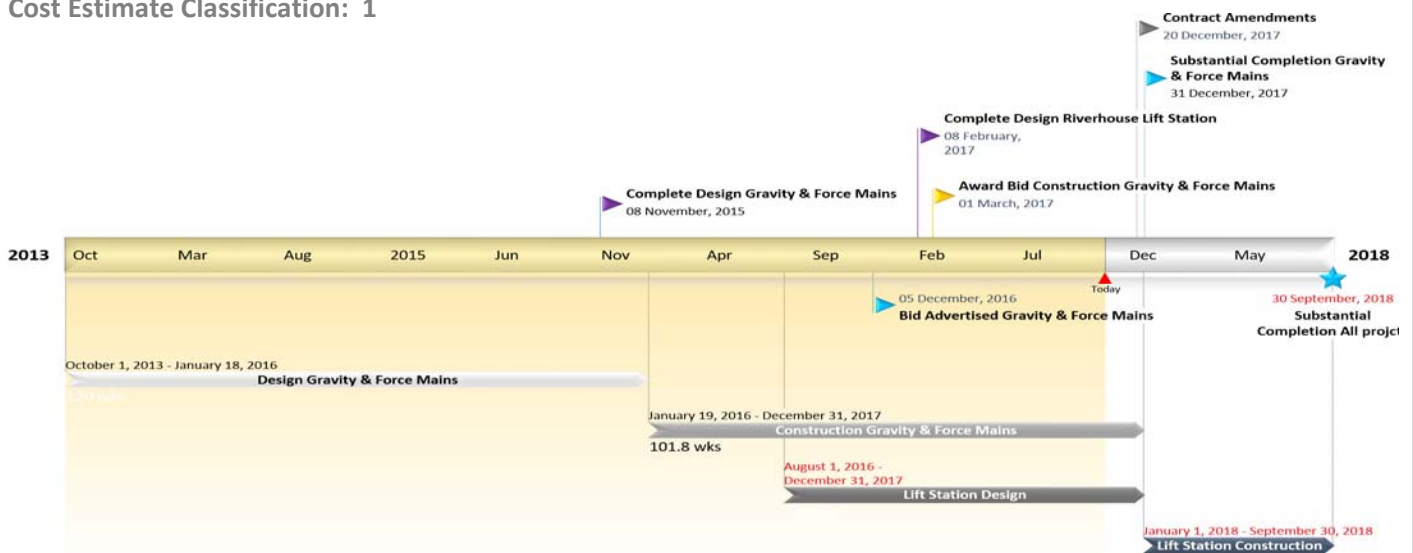
Adjustments: Hwy 97 bore delayed due to unknown ODOT drainage facilities

Status: Potential Cost Increase

Adjustments: Additional costs anticipated due to unforeseen subsurface conditions

Status Update: Schedule updated to reflect new construction timeline for Lift Station. Contract amendments going to Council on December 20. Cost estimate will be updated in December 2017.

Cost Estimate Classification: 1



Southeast Bend Septic to Sewer Solutions

When constructed, existing residences, currently on septic systems, will eventually and systematically connect to the recently constructed South East Interceptor (SEI). This project will require phases to meet constructability limitations and to better meet community involvement requirements.

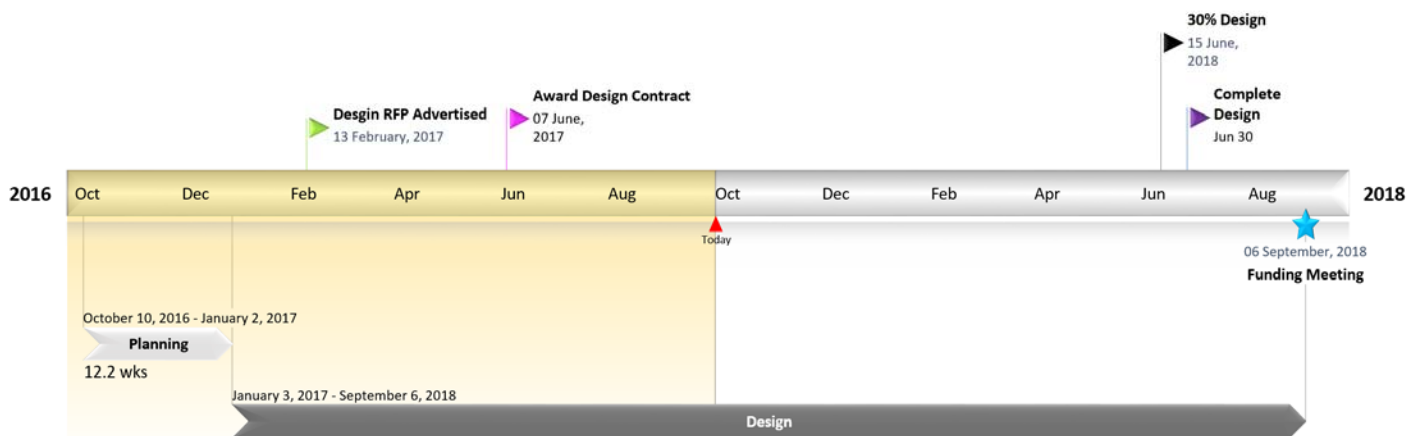


Project Engineer: Skip Martin | smartin@bendoregon.gov

Scope	Schedule	Cost
Design 70,000 feet of gravity sewer through a portion of Southeast Bend area near King's Forest neighborhood.	Start Date: 10/10/2016 Substantial Completion: 12/31/2019 Final Closeout: 12/31/2019*	Total Estimated: \$2,800,000* Spent to Date: \$337,592 % Spent to Estimated: 12%
Status: On Scope	Status: On Schedule	Status: On Budget
Adjustments: No change from prior month	Adjustments: No change from prior month	Adjustments: No change from prior month

Status Update: Topographic survey is 80% complete, and scheduled to be completed by December 2018. Citizen's Advisory meetings are on schedule. Approximately 90% of the 550 homeowners have been contacted.

Cost Estimate Classification: 5



Plant Interceptor Rehabilitation

The existing plant interceptor conveys all of the City’s sewage to the WRF. The concrete pipeline is deteriorating due to age as well as the sulfides breaking down the concrete wall. This project will rehabilitate the plant interceptor by designing and constructing a Cured-In-Place Pipe (CIPP) liner on the pipe segments in the worst structural condition to lengthen the operational life of the pipeline. All project aspects were previously identified in the Plant Interceptor Condition Assessment and incorporated into the CSMP projects list.



Project Engineer: Jason Suhr | jsuhr@bendoregon.gov

Scope

Rehabilitate all pipe segments and manholes with a Cured-In-Place Pipe (CIPP) liner, and replace the existing siphon junction box.

Schedule

Start Date: 3/1/2015
 Substantial Completion: 11/30/18
 Final Closeout: 11/30/19

Cost

Total Estimated: \$10,700,000
 Spent to Date: \$112,275
 % Spent to Estimated: 1%

Status: On Scope

Status: On Schedule

Status: On Budget

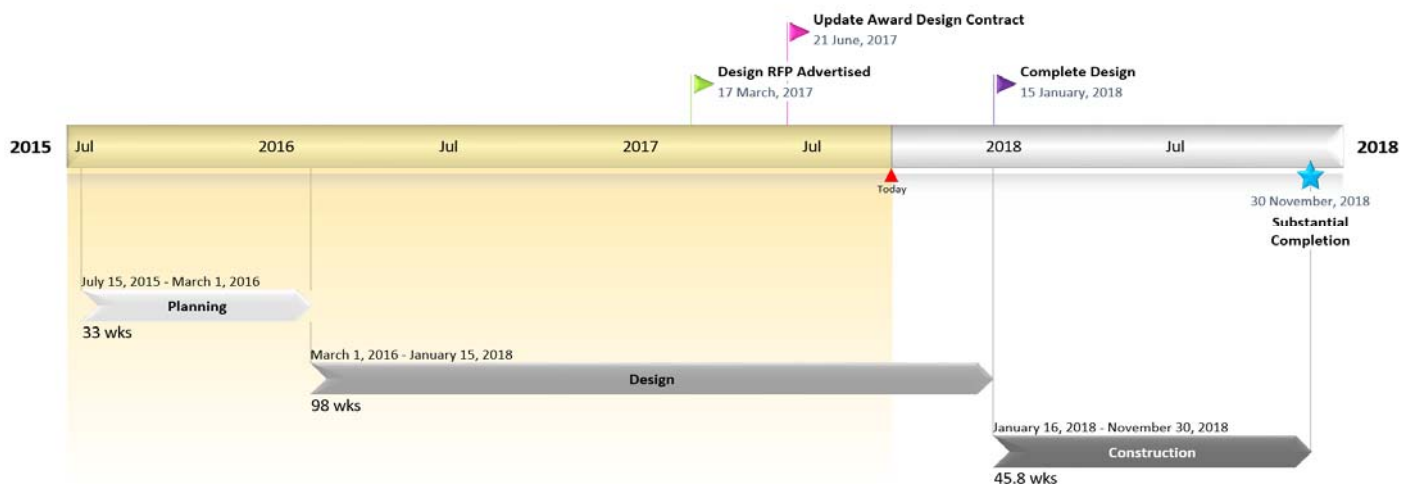
Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

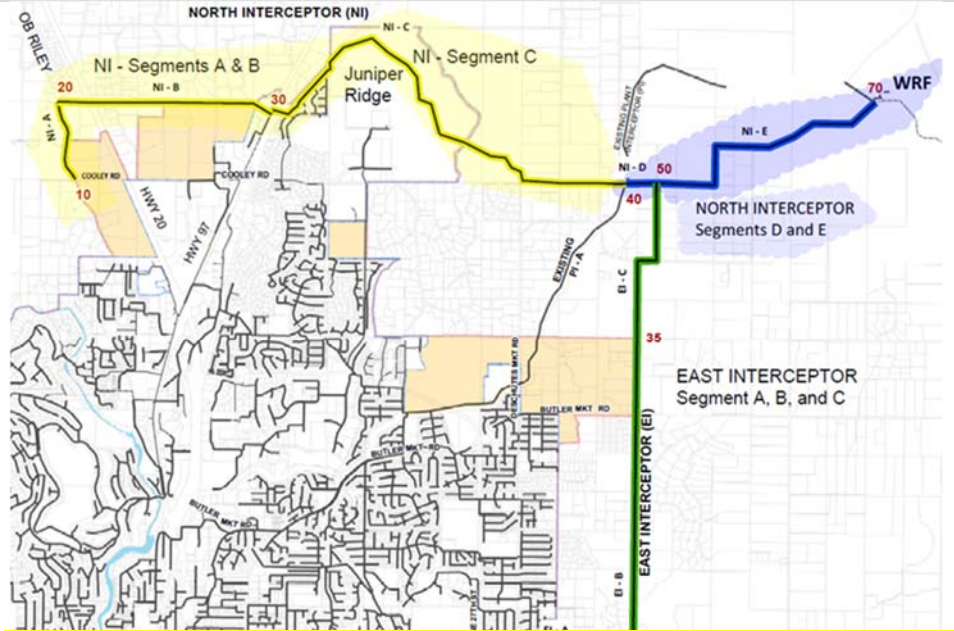
Status Update: Meeting with design team in late November to confirm timeline and delivery method. Ongoing coordination with Bureau of Reclamation, Bureau of Land Management, and United States Forest Service on the special use application. Public involvement meeting held in early October to wild success.

Cost Estimate Classification: 5



North Interceptor Project

Sewer Interceptor running east to west on the Northern Edge of Bend’s UGB, beginning at Cooley Road and OB Riley Road and running east past the Juniper Ridge development, connecting with existing Plant Interceptor, connecting with the East Interceptor, and continuing further east to deliver untreated waste water to the WRF. Segments NI-D and NI-E are designated as Priority 1 (10,300 feet). Segments NI-A, NI-B, and NI-C are designated a Priority 2 (26,300 feet).



Project Engineer: Eric Forster | eforster@bendoregon.gov

Scope

Design, bid, contract, and build approximately 36,000 feet of gravity sewer, various diameters running along the Northern edge of Bend’s UGB. Connects to the WRF.

Schedule

Start Date: 3/1/17
 Substantial Completion: 12/31/2022
 Final Closeout: 12/31/2023

Cost

Total Estimated: \$23,000,000
 Spent to Date: \$13,770
 % Spent to Estimated: 0.06%

Status: On Scope

Adjustments: No change from prior month

Status: Potential Schedule Revision

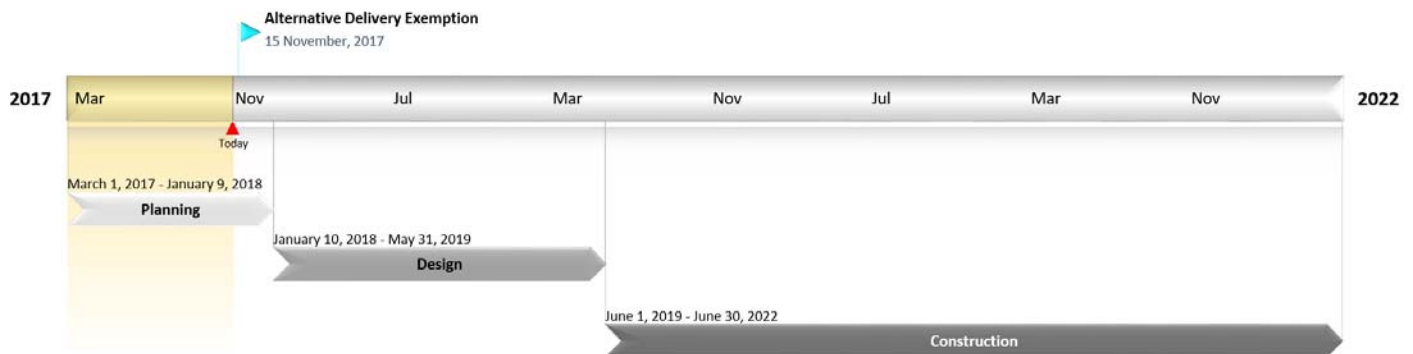
Adjustments: **Timeline revision anticipated**

Status: Potential Budget Revision

Adjustments: **Compressed timeline may require budget revision**

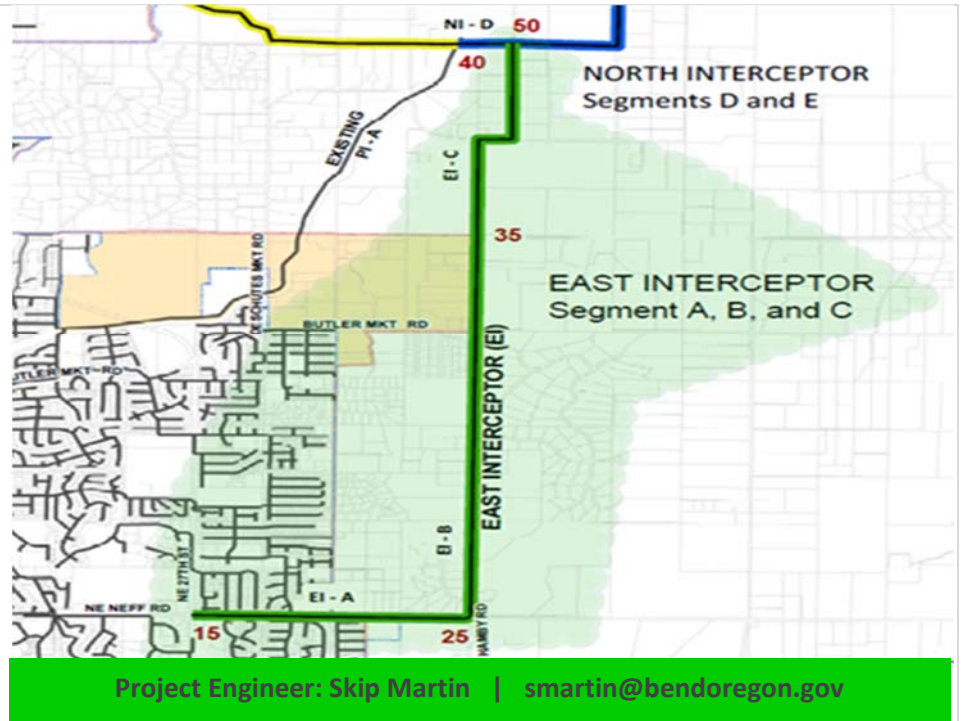
Status Update: Alternative Delivery Exemption going to Council in November. Anticipate schedule compression to deliver project earlier than conventional delivery.

Cost Estimate Classification: 5



East Interceptor Project

Future Sewer Interceptor connecting with the SEI at Neff Rd and 27th St, proceeding east on Neff Rd to Hamby Rd (5,300 feet), then turning north on Hamby and connecting to the North Interceptor (16,500 feet). Total length of East Interceptor is approximately 21,800 feet.



Scope

Design, bid, contract, and build approximately 22,000 feet of gravity sewer, various diameters running along the Eastern edge of Bend's UGB. Connects to the North Interceptor

Schedule

Start Date: 3/1/17
 Substantial Completion: 12/31/2025
 Final Closeout: 12/31/2026

Cost

Total Estimated: \$21,000,000
 Spent to Date: \$13,770
 % Spent to Estimated: 0.07%

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Current work on this project is limited to determining diameter and depth for future alignment to the North Interceptor Project and UGB Expansion modeling.

Cost Estimate Classification: 5



Capacity Improvements Project

Provides additional treatment capacity at the Water Reclamation Facility (WRF) in order to ensure the City continues to meet the needs of the community and Department of Environmental Quality (DEQ) permit requirements. Treatment capacity increases from 6.5 MGD to 8.5 MGD when complete with greater flexibility in the future to increase capacity at a much lower cost.



Project Engineer: Josh Robertson | jrobertson@bendoregon.gov

Scope

This project would add plant capacity by retrofitting existing aeration basins to Integrated Fixed-Film Activated Sludge (IFAS) operation, making hydraulic improvements to plant piping and starting up Ultra Violet disinfection systems to replace the current chlorine contact system.

Schedule

Start Date: 4/1/2017
 Substantial Completion: 7/31/19
 Final Closeout: 7/31/2020

Cost

Total Estimated: \$8,000,000
 Spent to Date: \$214
 % Spent to Estimated: 0.00%

Status: On Scope

Status: On Schedule

Status: On Budget

Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

Status Update: Construction contract negotiations are ongoing. Project team continues to define scope and pursue value-engineering opportunities.

Cost Estimate Classification: 5



Pump Station Decommissions Projects

The cost analysis in the Collection System Master Plan determined the following lift station decommissions: Nottingham Pump Station Connections to SEI, Ridgewater #1, Bridges at Shadow Glen, Tri-Peaks, Crown Villa #1 & #2, Muphy, Quail Ridge #1 & #2, South Village, and Sun Meadow.



Scope

The project consists of decommissioning multiple sewer pump stations throughout the City where gravity sewer diversions have been determined to be viable.

Schedule

Start Date: 3/1/2017
 Substantial Completion: 06/30/2019
 Final Closeout: 06/30/2020

Cost

Total Estimated: \$1,515,000
 Spent to Date: \$0
 % Spent to Estimated: 0.00%

Status: **On Scope**

Status: **Behind Schedule**

Status: **On Budget**

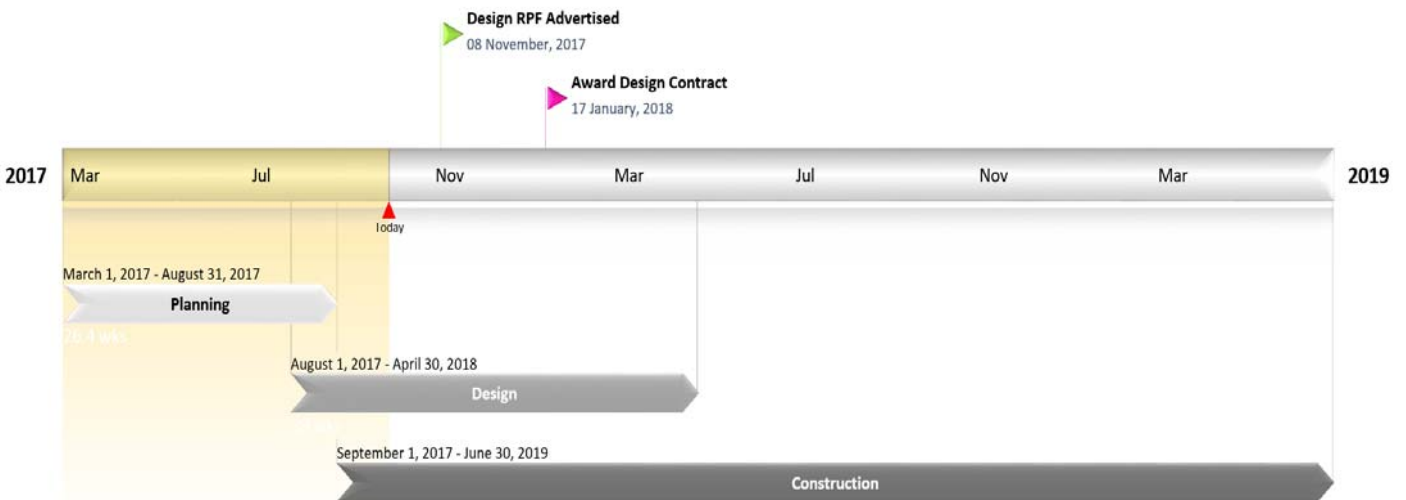
Adjustments: No change from prior month

Adjustments: **Project on hold due to resource constraints**

Adjustments: No change from prior month

Status Update: Project delayed due to workload constraints. Utility Operations vision performed the gravity diversion on #17A+B Ridgewater #1 and #18A+B Bridges at Shadow Glen. Flows have been diverted to SEI and these stations are now offline and in the process of being removed.

Cost Estimate Classification: 5



South Mirror Pond Parking Lot

Current issues with the South Mirror Pond parking lot include a lack of parking for oversized vehicles and bicycle rentals and loitering. This project will update the parking lot to improve intended function and create greater parking diversity.



Project Engineer: Brad Tower | btower@bendoregon.gov

Scope

This is a synergy project with the Economic Development Department and Bend Police Department.

Schedule

Start Date: 9/1/2017
 Substantial Completion: 08/31/2018
 Final Closeout: 08/31/2019

Cost

Total Estimated: \$470,000
 Spent to Date: \$4,622
 % Spent to Estimated: 0.10%

Status: On Scope

Status: On Schedule

Status: On Budget

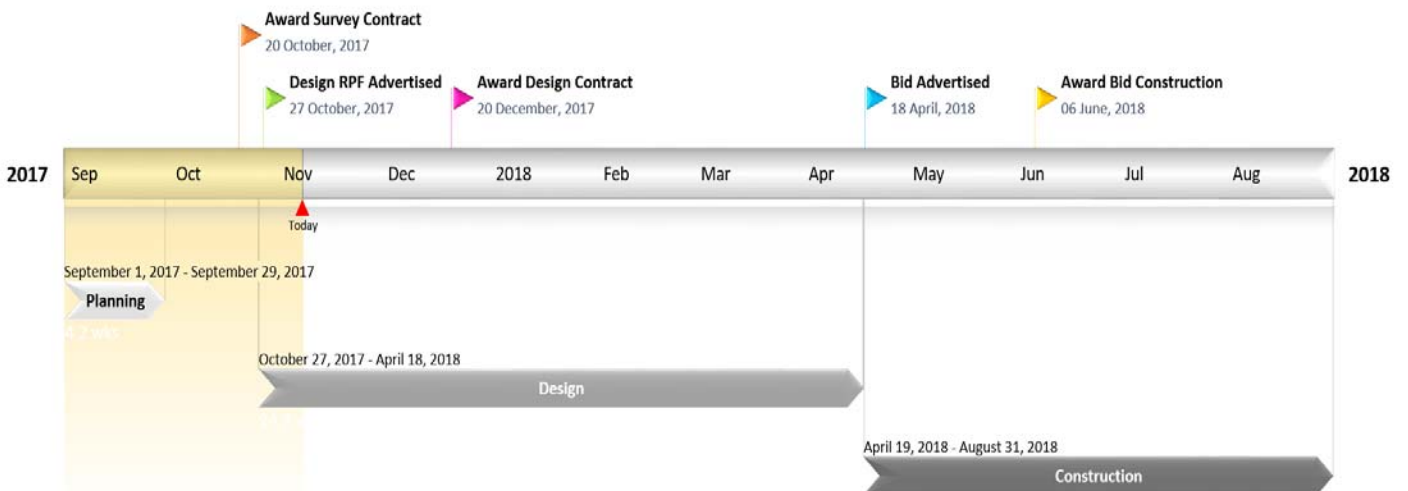
Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

Status Update: Survey work began. Design consultant selection in November with contract approval scheduled for December 20 Council.

Cost Estimate Classification: 5



Collection System Master Plan Post Acknowledgement Plan Amendment

This project is updated the 2014 CSMP to recognize the project elements that were identified as part of the UGB process. This work will identify the elements of the collection system that will be needed to serve the expansion areas and the costs associated with those improvements. This work is being done working closely with the Growth Management Department.



Bend Economic Opportunities Analysis

Bend's Growth to 2028

Project Engineer: Skip Martin | smartin@bendoregon.gov

Scope

This is a synergy project with the Growth Management Department and is not included in the Capital Improvement Program.

Schedule

Start Date: 3/1/2017
 Substantial Completion: 12/30/2017
 Final Closeout: 4/1/2018

Cost

Total Estimated: \$92,000
 Spent to Date: \$0
 % Spent to Estimated: 0.00%

Status: On Scope

Adjustments: Project initiated

Status: On Schedule

Adjustments: Project initiated

Status: On Budget

Adjustments: Project initiated

Status Update: Project initiated

Cost Estimate Classification: 5

