RESOLUTION NO. 3036

A RESOLUTION ADOPTING THE 2017-2021 CAPITAL IMPROVEMENT PROGRAMS.

Findings:

- A. The City's Fiscal Policies state that a five year Capital Improvement Program (CIP) encompassing all City facilities shall be prepared and updated annually.
- B. The five year CIP will be incorporated into the City's budget and long range financial planning processes.
- C. Changes to the CIP such as the addition of new projects, changes in scope and costs of a project or reprioritization of projects will require City Council or City Manager approval.

THE CITY COUNCIL OF THE CITY OF BEND RESOLVES AS FOLLOWS:

1. To adopt the 2017-2021 Capital Improvement Programs, as shown in Exhibit A.

Adopted by a roll call vote of the Bend City Council on July 20, 2016.

Yes: Jim Clinton, Mayor

No:

Doug Knight

Victor Chudowsky

Sally Russell

Nathan Boddie

Casey Roats Barb Campbell

ATTESTS:

Robyn Christie, City Recorder

APPROVED AS TO FORM:

Mary Winters, Legal Counsel

Accessibility Construction Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2 | 020-21 | 5 | Year Total |
|---|-----------------------------------|--------------------------|---------------|---------------------|---------|----|---------------|----|--------------------|
| AA11FA South 3rd Street Pedestrian Improvements AA16AA City Wide Accessibility Improvements | 3 | \$ 100,000 400.000 | \$ 300,000 | \$ 17 <u>2</u> 0 | \$ 2 | \$ | 20 | \$ | 100,000 700,000 |
| AA17XX Future ADA Projects | 5 | 767,000 | - | | - | | (-1) | L | 767,000 |
| Total Accessibility CIP *** | | \$ 1,267,000 | \$ 300,000 | \$ 7/20 | \$ 2 | \$ | (2 0) | \$ | 1,567,000 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

| Estimate Class | Purpose | Project Definition Level | Cost Est. Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| | Not Applicable (For Studies Only) | | |

^{***} Development of the Accessibility CIP beyond FY 2017-18 will be incorporated into the 2017-2019 biennial budget process once current year project costs are finalized and projects are prioritized by the Accessibility Manager and Engineering staff.

Transportation Construction Five Year Capital Improvement Program (CIP) Schedule

| No. | Cost Estimate Classification * | | 2016-17 | | 2017-18 | | 2018-19 | | 2019-20 | : | 2020-21 | 5 | Year Total |
|--|-----------------------------------|----|-----------|-----|-----------|----|-----------|-----|-----------|----|---------|----|------------|
| ST11GA Galveston Corridor Improvements | 5 | \$ | 225.000 | \$ | | \$ | _ | \$ | _ | \$ | _ | s | 225,000 |
| ST14CA Sidewalk Design and Projects** | 5 | 10 | 140,000 | ÷*2 | 380,000 | - | 1,830,000 | - 1 | 1,150,000 | * | 120 | ľ | 3,500,000 |
| ST14DA Neff and Purcell Sidewalks | 5 | | 50,000 | | 350,000 | | 300,000 | | 3,300,000 | | : 40 | ı | 4,000,000 |
| ST14EA City Wide Safety Improvements | 5 | | 1,099,000 | | 1,470,000 | | 775,000 | | - | | - | ┖ | 3,344,000 |
| Total Transportation CIP | | \$ | 1,514,000 | \$ | 2,200,000 | \$ | 2,905,000 | \$ | 4,450,000 | \$ | - | \$ | 11,069,000 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

| Estimate Class | Purpose | Project Definition Level | Cost Est, Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |

^{**} In addition to the amounts listed above, \$100,000 will be transferred in Fiscal Year 2016-17 to the Transportation Operations Program for sidewalk construction to be performed by City staff.

General Obligation (GO) Bond Construction Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | 2016-17 | 2017-18 | 2018-19 | 2019-20 | : | 2020-21 | 5 | Year Total |
|--|-----------------------------------|-----------------|-----------------|--------------|----------------|----|---------|----|------------|
| ST12CE Reed Mkt: Newberry to 27th | 1 | \$ 30,000 | \$ 21,000 | \$ - | \$ | \$ | = | \$ | 51,000 |
| ST12CJ Reed Mkt: 3rd to Newberry | 1 | 45,000 | 10,000 | 16,000 | 135 | | = | 1 | 71,000 |
| ST12CH 27th Street Reconstruction | 5 | 1,049,300 | | 175 | | | Ē. | 1 | 1,049,300 |
| ST12CK 14th St. Reconstruction | 5 | 513,000 | 3,643,527 | - | u - | | - | 1 | 4,156,527 |
| ST17CD Powers/Brookswood Roundabout Phase II | 3 | 45,000 | .000 100 | - | - | | | ┺ | 45,000 |
| Total GO Bond CIP | | \$ 1,682,300 | \$ 3,674,527 | \$ 16,000 | \$ 2 | \$ | = | \$ | 5,372,827 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

| Estimate Class | Purpose | Project Definition Level | Cost Est. Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| | Not Applicable (For Studies Only) | | |

Airport Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | | 2016-17 | 2017-18 | 7-18 2018-19 2019-20 | | 2019-20 | 2020-21 | | | Year Total | |
|---|-----------------------------------|----|-----------|------------|----------------------|---|---------|---------------------|-------|-----------|------------|------------|
| AP13AA Eastside Helipad/Heliport Phase I & Phase II | 2 | \$ | 6,600,000 | \$ - | \$ | - | \$ | - | \$ | _ | \$ | 6,600,000 |
| AP15DA Wildlife Hazard Assessment | NA | | 35,000 | - | | - | | - | 70 | _ | 0 | 35,000 |
| AP16AA FBO Ramp | 4 | | 2,000,000 | - | | - | | 13. - -1 | | - | ı | 2,000,000 |
| Airport Master Plan Update | 5 | | 2 | 3. | | | | 350,000 | | | 1 | 350,000 |
| AP18XX Runway Ext. EA Phase I | 5 | | 2 | <u>4</u> N | | | | 500,000 | | _ | ı | 500,000 |
| AP19XX Runway Ext. EA Phase II Environmental | 5 | | 2 | E1 | | - | | 500,000 | | 2 | | 500,000 |
| AP20XX Runway Ext. Design/Property Acquisition | 5 | | = | 44 | | - | | 500,000 | | ė. | | 500,000 |
| AP20XX Runway Ext. Construction | 5 | _ | - | | | 4 | | (I <u>L</u>) | 10 | 0,000,000 | L | 10,000,000 |
| Total Airport CIP | | \$ | 8,635,000 | \$ - | \$ | | \$ | 1,850,000 | \$ 10 | 0,000,000 | \$ | 20,485,000 |

Note: Airport capital improvement projects are pending approval of 90% FAA funding and other funding sources for City match.

* Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

| Estimate Class | Purpose | Project Definition Level | Cost Est, Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |

Water Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 5 Year Total |
|---|-----------------------------------|-----------------|----------------|-------------------|-----------------|------------------|---------------|
| WATER | | | | | | | |
| WA15HA Water Master Plan Update | N/A | \$ 500,000 | \$ - | \$ 141 | \$ - | \$ 2 | 500,000 |
| WA15JA Phase 2 South 3rd St Water portion | 3 | 1,100,000 | - | 100 | (* | - 1 | 1,100,000 |
| WA12AA 18th Street Waterline Extension (JR) | 2 | = | - | 478,400 | | + | 478,400 |
| WA15BA SDC Methodology Study | N/A | 60,000 | (#0) | S=S | 8₩ | (- | 60,000 |
| WA20AX Awbrey Well Supply Expansion | 5 | = | := 0 | - | 2,021,760 | 0.00 | 2,021,760 |
| WA20BX Lafayette Pipe Enlargement | 5 | - | - 0 | 3-8 | 250,640 | | 250,640 |
| WA20CX College Parallel Pipe Study | N/A | = | - | 5. 4 0 | 1,215,760 | (c) | 1,215,760 |
| WA20DX Valves Operational System Study | N/A | - | - | 3 | 78,000 | 78,000 | 156,000 |
| WA21DX Opt Study - Parallel Piping Rock Bluff to Brookswo | N/A | - | | - | | 1,596,400 | 1,596,400 |
| WA21EX Opt Study - New Level 5 well - Shirley Ct. | N/A | | | | (7) | 2,830,464 | 2,830,464 |
| Total Water CIP | | \$ 1,660,000 | \$ (4) | \$ 478,400 | \$ 3,566,160 | \$ 4,504,864 | \$ 10,209,424 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

Note: The costs reflected above are growth related projects anticipated over the next 5 years. Total capital outlay included in the City's water rate model and financial planning tool for the 5 year period is \$29.55 million. Additional costs not shown within this schedule include ongoing repair & replacement projects and capital equipment used in operations.

| Estimate Class | Purpose | Project Definition Level | Cost Est. Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |

Bridge Creek Intake and Pipeline Replacement, Outback Membrane Water Treatment Plant Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | | 2016-17 | 2017-18 | 2018-19 | 20 | 019-20 | 20 | 20-21 | 5 ` | ∕ear Total |
|---|-----------------------------------|------|---------|------------------|-----------|----|--------|----|-------|-----|------------|
| WA0902 Bridge Creek Intake and Pipeline | 1 | . \$ | 783,100 | \$ W . | \$ | \$ | - | \$ | - | \$ | 783,100 |
| Total Bridge Creek CIP | | \$ | 783,100 | \$ S#10 | \$ 283 | \$ | | \$ | | \$ | 783,100 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

| Estimate Class | Purpose | Project Definition Level | Cost Est, Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |

Water Reclamation (Sewer) Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 5 Year Total |
|---|-----------------------------------|-------------------|--------------------|------------------|------------------|------------------|---------------|
| SW11BA Valhalla Sewer Relocation | 1 | \$ 2,000,000 | \$ (= (| \$ - | \$ - | \$ - | \$ 2,000,000 |
| SW13DA North Area Sewer Capacity Improvements | 1 | 5,669,700 | (- | - | - | 1 - 0 | 5,669,700 |
| SW13EA Colorado Pump Station and Force Main | 1 | 4,525,000 | 1;=0 | = | = | | 4,525,000 |
| SW15AA Plant Interceptor Rehabilitation | 5 | 5,970,000 | 18 | = | - | = | 5,970,000 |
| SW16DA Riverhouse Lift Station Hydraulic Upgrade | 5 | 370,000 | | = | 5 | | 370,000 |
| SW17DA Solids Handling Improvement Technology | 5 | 6,000,000 | 4,000,000 | 7,000,000 | | | 17,000,000 |
| SW17FA North Interceptor | 5 | 1,000,000 | 1,000,000 | 7,000,000 | 7,000,000 | 7,000,000 | 23,000,000 |
| SW17AA WRF Facilities Plan Update | 5 | | 500,000 | 曼 | - | - | 500,000 |
| SW18BX Parallel Sewer on Olney Avenue | 5 | * | 605,000 | - | 2 | 21 | 605,000 |
| SW15KA WRF Evaporation Percolation Ponds | 5 | - | 1027 | 1,630,000 | - | 21 | 1,630,000 |
| SW19AX Amethyst/Mahogany Street Sewer | 5 | 4207 | - | 710,000 | 2 | | 710,000 |
| SW19BX Mahogany Street/Hwy 97 Sewer | 5 | (2) | 127 | 1,050,000 | ~ | - | 1,050,000 |
| SW18AA WRF Support Facilities Upgrade | 5 | 4 | \$ = (| | 2,500,000 | (e | 2,500,000 |
| SW20AX Odor Control Master Plan | NA | ** | | | 1,050,000 | | 1,050,000 |
| SW20BX Sewer Storage - Land Acquisition | NA | (40) | (e) | (€ | 730,000 | | 730,000 |
| SW20EX Plant Interceptor Condition Assessment | 5 | | 0 ≠ 0 | (;€) | 630,000 | æ | 630,000 |
| SW20FX Collection System Master Plan (Years 6-10) | NA | æ | X = 1 | 13- | 1,050,000 | = | 1,050,000 |
| SW20GX Gravity Pipe Condition Assessment | 5 | | (*) | | 210,000 | 208,000 | 418,000 |
| Total Water Reclamation CIP | | \$ 25,534,700 | \$ 6,105,000 | \$ 17,390,000 | \$ 13,170,000 | \$ 7,208,000 | \$ 69,407,700 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

Note: The costs reflected above are growth related projects anticipated over the next 5 years. Total capital outlay included in the City's water reclamation rate model and financial planning tool for the 5 year period is \$152.32 million. Additional costs not shown within this schedule include ongoing repair & replacement projects and capital equipment used in operations, as well as the projects on the Southeast Interceptor and Secondary Expansion CIP.

| Estimate Class | Purpose | Project Definition Level | Cost Est. Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |

Water Reclamation Facility Secondary Expansion Project Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | 2016-17 | 201 | 7-18 | 20 | 18-19 | 20 | 19-20 | 20 | 20-21 | 5 | Year Total |
|-------------------------------|-----------------------------------|--------------|-----|------|----|-------|----|------------------|----|-------|----|------------|
| SW0802 Secondary Expansion | 1 | \$ 2,353,000 | \$ | - | \$ | - | \$ | (e) | \$ | - | \$ | 2,353,000 |
| Total Secondary Expansion CIP | | \$ 2,353,000 | \$ | ¥ | \$ | | \$ | | \$ | | \$ | 2,353,000 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

| Estimate Class | Purpose | Project Definition Level | Cost Est. Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |

Southeast Interceptor Project Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | 2016-17 | 2017-18 | 2018-19 | 2 | 019-20 | 20 | 20-21 | 5 Year Total |
|---|-----------------------------------|---------------|------------------|---------|----|------------------|----|-------|---------------|
| SW0707 Southeast Interceptor Project | 3 | \$ 22,959,500 | \$ 8,575,000 | \$ = | \$ | (=) | \$ | | \$ 31,534,500 |
| SW0707 SEI Extension Project - Segments 2S & 3 | 1 | 4,637,500 | 3,402,500 | - | | : - : | | - | 8,040,000 |
| SW17EA East Interceptor (Formerly SEI Phase II North) | 5 | 1,000,000 | 1,000,000 | | | (*) | | - | 2,000,000 |
| Total SE Interceptor CIP | | \$ 28,597,000 | \$ 12,977,500 | \$ | \$ | | \$ | 15 | \$ 41,574,500 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

| Estimate Class | Purpose | Project Definition Level | Cost Est. Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |

Stormwater Five Year Capital Improvement Program (CIP) Schedule

| | Cost Estimate Classification * | | 2016-17 | 2017-18 | | 2018-19 | | 2019-20 | 2020-21 | 5 | Year Total |
|--|-----------------------------------|------|------------|---------|------|---------------|------|------------------|---------------|----|------------|
| SR15AA South Awbrey Butte Drainage Study | NA | \$ | 200,000 | | \$ | 120 | \$ | _ | \$ - | \$ | 200,000 |
| SR15BA South 3rd Street - Stormwater portion | 5 | 0.00 | 150,000 | - | 5800 | | 2350 | 140 | :=: | | 150,000 |
| SR15CA Newport Pipe Replacement Design | 5 | | | * | | 442,000 | | 1=3 | · | ı | 442,000 |
| SR21AX Stormwater Master Plan Update | 5 | | - | - | | | | 3 - 0 | 130,000 | ı | 130,000 |
| SR21BX Franklin & Greenwood Underpass | 5 | | - | - | | . | | - | 572,000 | ı | 572.000 |
| SR21CX Roosevelt & McKinley | 5 | | 16 | - | | (T/) | | | 104,000 | | 104,000 |
| Total Stormwater CIP | | \$ | 350,000 \$ | ; - | \$ | 442,000 | \$ | - | \$ 806,000 | \$ | 1,598,000 |

^{*} Cost estimate classifications are based on standards developed by the Association for the Advancement of Cost Engineering International (AACE)

Note: The costs reflected above are growth related projects anticipated over the next 5 years. Total capital outlay included in the City's stormwater rate model and financial planning tool for the 5 year period is \$4.02 million. Additional costs not shown within this schedule include ongoing repair & replacement projects and capital equipment used in operations.

| Estimate Class | Purpose | Project Definition Level | Cost Est. Range |
|----------------|-----------------------------------|--------------------------|-----------------|
| Class 5 | Concept or Feasibility | 0% to 2% | +100% / -50% |
| Class 4 | Preliminary Engineering | 1% to 15% | +50% / -30% |
| Class 3 | Semi-Detailed (30-60% Design) | 10% to 40% | +30% / -20% |
| Class 2 | Detailed (60-90% Design) | 30% to 70% | +20% / -15% |
| Class 1 | Final (100% Design) | 50% to 100% | +15% / -10% |
| N/A | Not Applicable (For Studies Only) | | |