

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-01

## Project Description Form

Department                      Wastewater                      Program    Clarifier Rehab

|                          |                       |                                      |     |
|--------------------------|-----------------------|--------------------------------------|-----|
|                          | <b>Est Total Cost</b> | <b>\$ 150,000</b>                    |     |
| <b>Est. Cost FY 2020</b> | \$150,000             | <b>Est Cost FY 2021 - 2024</b>       | \$0 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0 |

- 1. Description of Project**  
Complete Clarifier #2 overhaul. Refurbish Clarifier mechanism, Rebuild drive unit and main gear assembly and all associated seal components.
- 2. Need for and Impact of Project**  
Water Street Plant has (2) two 80' Round clarifiers. Last time #2 has been semi refurbished was in the late 1980's Leaking seals, gearboxes and surface rusting.
- 3. Consistency with the adopted plans or other related planning documents**
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 0
- 5. New personnel, equipment, or supplies required**
- 6. How project originated and how cost estimates were obtained**  
Project Originated through talking to other districts and engineering firms knowing the life expectancy of said equipment being 15/20 years see #2 above. Estimate by staff and engineering study.
- 7. Any related department or city projects**  
Concrete and steel analysis of aeration basins and clarifiers prior to any capital projects.
- 8. Financing possibilities or potential grants**
- 9. Justification of timing of project and segments (if applicable)**  
This project is required to control operation cost, maintenance cost and to ensure daily regulatory compliance and reliability of equipment.
- 10. Other information**

|                           | FY 2020      | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|--------------|---------|---------|---------|---------|
| <b>Total Project Cost</b> | \$150,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$150,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00       | \$0.00  | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-02

## Project Description Form

**Department** Wastewater                      **Program** CSO Separation Project, Center Street

|                          |                       |                                      |     |
|--------------------------|-----------------------|--------------------------------------|-----|
|                          | <b>Est Total Cost</b> | <b>\$ 1,100,000</b>                  |     |
| <b>Est. Cost FY 2020</b> | \$1,100,000           | <b>Est Cost FY 2021 - 2024</b>       | \$0 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0 |

- 1. Description of Project**  
CSO Separation project
- 2. Need for and Impact of Project**  
required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
 FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 1,035,000
- 5. New personnel, equipment, or supplies required**  
Consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff and consultant
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
MeDEP SRF loan
- 9. Justification of timing of project and segments (if applicable)**  
Flow reduction/separation required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020        | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|----------------|---------|---------|---------|---------|
| <b>Total Project Cost</b> | \$1,100,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$1,100,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00         | \$0.00  | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-03

## Project Description Form

**Department** Wastewater                      **Program** CSO Separation Project, Lower Main Street

|                          |                       |                     |                                      |             |
|--------------------------|-----------------------|---------------------|--------------------------------------|-------------|
|                          | <b>Est Total Cost</b> | <b>\$ 2,000,000</b> |                                      |             |
| <b>Est. Cost FY 2020</b> | \$0                   |                     | <b>Est Cost FY 2021 - 2024</b>       | \$2,000,000 |
| <b>City Share 2020</b>   | \$0                   |                     | <b>Est City Share FY 2021 - 2024</b> | \$0         |

- 1. Description of Project**  
CSO Separation project lfred to water
- 2. Need for and Impact of Project**  
flow reduction is required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
 FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 760,000
- 5. New personnel, equipment, or supplies required**  
Consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff and consultant
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
MeDEP CWSRF loan
- 9. Justification of timing of project and segments (if applicable)**  
Flow reduction/separation required by CSO Master Plan Phase II,
- 10. Other information**

|                           | FY 2020 | FY 2021        | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|---------|----------------|---------|---------|---------|
| <b>Total Project Cost</b> | \$0.00  | \$2,000,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$0.00  | \$2,000,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00  | \$0.00         | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-04

## Project Description Form

**Department** Wastewater                      **Program** CSO Separation Project, Pool and Foss Street

|                          |                       |                                      |     |
|--------------------------|-----------------------|--------------------------------------|-----|
|                          | <b>Est Total Cost</b> | <b>\$ 1,300,000</b>                  |     |
| <b>Est. Cost FY 2020</b> | \$1,300,000           | <b>Est Cost FY 2021 - 2024</b>       | \$0 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0 |

- 1. Description of Project**  
CSO Separation project
- 2. Need for and Impact of Project**  
flow reduction is required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
 FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 850,000
- 5. New personnel, equipment, or supplies required**  
Consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff and consultant
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
MeDEP CWSRF loan
- 9. Justification of timing of project and segments (if applicable)**  
Flow reduction/separation required by CSO Master Plan Phase II, PACTS road project 2018
- 10. Other information**

|                           | FY 2020        | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|----------------|---------|---------|---------|---------|
| <b>Total Project Cost</b> | \$1,300,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$1,300,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00         | \$0.00  | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-05

## Project Description Form

Department                      Wastewater                      Program      CSO Phase III Master Plan

|                          |                       |                                      |           |
|--------------------------|-----------------------|--------------------------------------|-----------|
|                          | <b>Est Total Cost</b> | <b>\$ 240,000</b>                    |           |
| <b>Est. Cost FY 2020</b> | \$120,000             | <b>Est Cost FY 2021 - 2024</b>       | \$120,000 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0       |

- 1. Description of Project**  
CSO Phase III Master Plan
- 2. Need for and Impact of Project**  
required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
required by the CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  

|              |              |              |             |                   |
|--------------|--------------|--------------|-------------|-------------------|
| FY 2015 \$ 0 | FY 2016 \$ 0 | FY 2017 \$ 0 | FY2018 \$ 0 | FY2019 \$ 115,000 |
|--------------|--------------|--------------|-------------|-------------------|
- 5. New personnel, equipment, or supplies required**  
Consultants
- 6. How project originated and how cost estimates were obtained**
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**
- 9. Justification of timing of project and segments (if applicable)**  
Required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020      | FY 2021      | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|--------------|--------------|---------|---------|---------|
| <b>Total Project Cost</b> | \$120,000.00 | \$120,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$120,000.00 | \$120,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00       | \$0.00       | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-06

## Project Description Form

**Department** Wastewater                      **Program** CSO Storage Tank, Horrigan's Court Area

**Est Total Cost      \$ 2,600,000**

|                          |     |                                      |             |
|--------------------------|-----|--------------------------------------|-------------|
| <b>Est. Cost FY 2020</b> | \$0 | <b>Est Cost FY 2021 - 2024</b>       | \$2,600,000 |
| <b>City Share 2020</b>   | \$0 | <b>Est City Share FY 2021 - 2024</b> | \$0         |

- 1. Description of Project**  
CSO Storage Tank
- 2. Need for and Impact of Project**  
required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
 FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 0
- 5. New personnel, equipment, or supplies required**  
Consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff and consultant
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
MeDEP SRF loan
- 9. Justification of timing of project and segments (if applicable)**  
Required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020 | FY 2021        | FY 2022      | FY 2023 | FY 2024 |
|---------------------------|---------|----------------|--------------|---------|---------|
| <b>Total Project Cost</b> | \$0.00  | \$2,000,000.00 | \$600,000.00 | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$0.00  | \$2,000,000.00 | \$600,000.00 | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00  | \$0.00         | \$0.00       | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-07

## Project Description Form

Department                      Wastewater                      Program    Disinfection System Installation

**Est Total Cost      \$ 1,100,000**

|                          |     |                                      |             |
|--------------------------|-----|--------------------------------------|-------------|
| <b>Est. Cost FY 2020</b> | \$0 | <b>Est Cost FY 2021 - 2024</b>       | \$1,100,000 |
| <b>City Share 2020</b>   | \$0 | <b>Est City Share FY 2021 - 2024</b> | \$0         |

- 1. Description of Project**  
Install new Disinfection System
- 2. Need for and Impact of Project**  
Go to Ultraviolet system and fade away from chemical.
- 3. Consistency with the adopted plans or other related planning documents**
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  

|              |              |              |             |             |
|--------------|--------------|--------------|-------------|-------------|
| FY 2015 \$ 0 | FY 2016 \$ 0 | FY 2017 \$ 0 | FY2018 \$ 0 | FY2019 \$ 0 |
|--------------|--------------|--------------|-------------|-------------|
- 5. New personnel, equipment, or supplies required**
- 6. How project originated and how cost estimates were obtained**  
Cost estimates by staff. Originated by discontinuing chemical cost and discharging chemicals to the Saco river.
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**
- 9. Justification of timing of project and segments (if applicable)**  
Not knowing the cost of chemical in the future could be a large savings. Not knowing Regulations in the future get away from discharging chemical's to the river.
- 10. Other information**

|                           | FY 2020 | FY 2021      | FY 2022      | FY 2023 | FY 2024 |
|---------------------------|---------|--------------|--------------|---------|---------|
| <b>Total Project Cost</b> | \$0.00  | \$500,000.00 | \$600,000.00 | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$0.00  | \$500,000.00 | \$600,000.00 | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00  | \$0.00       | \$0.00       | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-08

## Project Description Form

Department                      Wastewater                      Program      Effluent Pumping Station Installation

**Est Total Cost      \$ 950,000**

|                          |     |                                      |           |
|--------------------------|-----|--------------------------------------|-----------|
| <b>Est. Cost FY 2020</b> | \$0 | <b>Est Cost FY 2021 - 2024</b>       | \$950,000 |
| <b>City Share 2020</b>   | \$0 | <b>Est City Share FY 2021 - 2024</b> | \$0       |

**1. Description of Project**

Install new Effluent Pumping station.

**2. Need for and Impact of Project**

The need is because higher receiving water levels in the river allowing gravity going out from the plant to back up into the Aeration basins and clarifiers.

**3. Consistency with the adopted plans or other related planning documents**

**4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**

FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 0

**5. New personnel, equipment, or supplies required**

**6. How project originated and how cost estimates were obtained**

Cost estimates by staff. Originated by rising water levels.

**7. Any related department or city projects**

**8. Financing possibilities or potential grants**

**9. Justification of timing of project and segments (if applicable)**

Not knowing how the receiving water levels will continue to change the need to force the treated water out of the plant is a must.

**10. Other information**

|                           | FY 2020 | FY 2021 | FY 2022      | FY 2023      | FY 2024 |
|---------------------------|---------|---------|--------------|--------------|---------|
| <b>Total Project Cost</b> | \$0.00  | \$0.00  | \$475,000.00 | \$475,000.00 | \$0.00  |
| <b>Non City Share</b>     | \$0.00  | \$0.00  | \$475,000.00 | \$475,000.00 | \$0.00  |
| <b>City Share</b>         | \$0.00  | \$0.00  | \$0.00       | \$0.00       | \$0.00  |



# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-09

## Project Description Form

Department                      Wastewater                      Program    Elm Street Pump Station

|                          |                       |                                      |             |
|--------------------------|-----------------------|--------------------------------------|-------------|
|                          | <b>Est Total Cost</b> | <b>\$ 5,000,000</b>                  |             |
| <b>Est. Cost FY 2020</b> | \$2,500,000           | <b>Est Cost FY 2021 - 2024</b>       | \$2,500,000 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0         |

- 1. Description of Project**  
New Pump station on Elm Street at River
- 2. Need for and Impact of Project**  
to remove portions of wastewater flow from Horrigan’s Court Pump Station by pumping to Main Street sewer, flow reduction required by CSO Master Plan Phase II to reduce CSO overflow
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 0
- 5. New personnel, equipment, or supplies required**  
Consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff, consultants
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
MeDEP CWSRF Loan, CSO bond
- 9. Justification of timing of project and segments (if applicable)**  
Leaking pipe system, adds flow to the system and increases treatment costs and increases CSO activity, action required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020        | FY 2021        | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|----------------|----------------|---------|---------|---------|
| <b>Total Project Cost</b> | \$2,500,000.00 | \$2,500,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$2,500,000.00 | \$2,500,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00         | \$0.00         | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-10

## Project Description Form

Department                      Wastewater                      Program    Engineering Analysis

|                          |                       |                  |                                      |     |
|--------------------------|-----------------------|------------------|--------------------------------------|-----|
|                          | <b>Est Total Cost</b> | <b>\$ 40,000</b> |                                      |     |
| <b>Est. Cost FY 2020</b> | \$40,000              |                  | <b>Est Cost FY 2021 - 2024</b>       | \$0 |
| <b>City Share 2020</b>   | \$0                   |                  | <b>Est City Share FY 2021 - 2024</b> | \$0 |

- 1. Description of Project**  
Engineering Analysis on Aeration basins.
- 2. Need for and Impact of Project**  
Have an Engineering firm come in and do a complete analysis on the integrity of both Aeration basins prior to any capital work being performed.
- 3. Consistency with the adopted plans or other related planning documents**  
Coating of aeration tanks.
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  

|              |              |              |             |             |
|--------------|--------------|--------------|-------------|-------------|
| FY 2015 \$ 0 | FY 2016 \$ 0 | FY 2017 \$ 0 | FY2018 \$ 0 | FY2019 \$ 0 |
|--------------|--------------|--------------|-------------|-------------|
- 5. New personnel, equipment, or supplies required**
- 6. How project originated and how cost estimates were obtained**  
To make sure the integrity of the concrete meets all requirements and standards. Cost estimated by staff.
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**
- 9. Justification of timing of project and segments (if applicable)**  
This Engineering/ inspection process should be performed prior to moving forward with any other related projects related to the aeration basins or clarifiers.
- 10. Other information**

|                           | FY 2020     | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|-------------|---------|---------|---------|---------|
| <b>Total Project Cost</b> | \$40,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$40,000.00 | \$0.00  | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00      | \$0.00  | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-11

## Project Description Form

Department                      Wastewater                      Program      Flow Monitoring

|                          |                       |                                      |           |
|--------------------------|-----------------------|--------------------------------------|-----------|
|                          | <b>Est Total Cost</b> | <b>\$ 600,000</b>                    |           |
| <b>Est. Cost FY 2020</b> | \$120,000             | <b>Est Cost FY 2021 - 2024</b>       | \$480,000 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0       |

- 1. Description of Project**  
CSO and system Flow Monitoring Program
- 2. Need for and Impact of Project**  
required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
 FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 120,000              FY2019 \$ 120,000
- 5. New personnel, equipment, or supplies required**  
Consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff and consultant
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**
- 9. Justification of timing of project and segments (if applicable)**  
Required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020      | FY 2021      | FY 2022      | FY 2023      | FY 2024      |
|---------------------------|--------------|--------------|--------------|--------------|--------------|
| <b>Total Project Cost</b> | \$120,000.00 | \$120,000.00 | \$120,000.00 | \$120,000.00 | \$120,000.00 |
| <b>Non City Share</b>     | \$120,000.00 | \$120,000.00 | \$120,000.00 | \$120,000.00 | \$120,000.00 |
| <b>City Share</b>         | \$0.00       | \$0.00       | \$0.00       | \$0.00       | \$0.00       |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-12

## Project Description Form

Department                      Wastewater                      Program      Media in Bio-tower

**Est Total Cost      \$ 1,050,000**

|                          |     |                                      |             |
|--------------------------|-----|--------------------------------------|-------------|
| <b>Est. Cost FY 2020</b> | \$0 | <b>Est Cost FY 2021 - 2024</b>       | \$1,050,000 |
| <b>City Share 2020</b>   | \$0 | <b>Est City Share FY 2021 - 2024</b> | \$0         |

**1. Description of Project**

Change out Media in Bio-tower.

**2. Need for and Impact of Project**

Older media replacement. Life expediency is 15/20 years, Bio-tower was put on line in 1998.

**3. Consistency with the adopted plans or other related planning documents**

**4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**

FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 0

**5. New personnel, equipment, or supplies required**

**6. How project originated and how cost estimates were obtained**

Cost estimate through Bangor with similar tower and Engineering services. Originated from planned maintenance.

**7. Any related department or city projects**

**8. Financing possibilities or potential grants**

**9. Justification of timing of project and segments (if applicable)**

This project will be required depending on the City's growth and what type of business's are brought into the community.

**10. Other information**

|                           | FY 2020 | FY 2021      | FY 2022      | FY 2023      | FY 2024 |
|---------------------------|---------|--------------|--------------|--------------|---------|
| <b>Total Project Cost</b> | \$0.00  | \$350,000.00 | \$350,000.00 | \$350,000.00 | \$0.00  |
| <b>Non City Share</b>     | \$0.00  | \$350,000.00 | \$350,000.00 | \$350,000.00 | \$0.00  |
| <b>City Share</b>         | \$0.00  | \$0.00       | \$0.00       | \$0.00       | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-13

## Project Description Form

Department                      Wastewater                      Program      Recirculation pump for Aeration Basin

|                          |                       |                                      |           |
|--------------------------|-----------------------|--------------------------------------|-----------|
|                          | <b>Est Total Cost</b> | <b>\$ 225,000</b>                    |           |
| <b>Est. Cost FY 2020</b> | \$100,000             | <b>Est Cost FY 2021 - 2024</b>       | \$125,000 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0       |

**1. Description of Project**

Recirculation pump for aeration basin (A/B) #2. Add pump into A/B at far end of tank. Run 36" piping to receiving part of A/B, install (2) two mechanical mixers and install fiberglass wall 1/3 down tank to allow anoxic zone with inline Oxidation-reduction potential (ORP) measuring.

**2. Need for and Impact of Project**

To allow staff to handle nitrification issues more readily through summer months and prepare for possible compliance with future permit regulations.

**3. Consistency with the adopted plans or other related planning documents**

**4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**

FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 75,000

**5. New personnel, equipment, or supplies required**

**6. How project originated and how cost estimates were obtained**

Project Originated through continuous plant monitoring lab data. While looking ahead. Other New England states needing to handle nitrogen limits per E.P.A with Maine still performing testing by D.E.P. for E.P.A We are experiencing these issue now during the summer months.

**7. Any related department or city projects**

Concrete and steel analysis of aeration basins and clarifiers prior to any capital projects.

**8. Financing possibilities or potential grants**

**9. Justification of timing of project and segments (if applicable)**

This project is required to control operation cost, maintenance cost and to ensure daily regulatory compliance.

**10. Other information**

|                           | FY 2020      | FY 2021      | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|--------------|--------------|---------|---------|---------|
| <b>Total Project Cost</b> | \$100,000.00 | \$125,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$100,000.00 | \$125,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00       | \$0.00       | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-14

## Project Description Form

Department                      Wastewater                      Program      Sewer Mapping Updates, Phase I

|                          |                       |                                      |           |
|--------------------------|-----------------------|--------------------------------------|-----------|
|                          | <b>Est Total Cost</b> | <b>\$ 500,000</b>                    |           |
| <b>Est. Cost FY 2020</b> | \$250,000             | <b>Est Cost FY 2021 - 2024</b>       | \$250,000 |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0       |

**1. Description of Project**

Sewer Mapping Updates Phase I. This project will verify the current digital sewer mapping, update all elevation data and make the data available to the necessary City departments and personnel on portable devices, such as tablets, from a central server.

**2. Need for and Impact of Project**

Sewer map needs to verified/updated and GPS into a data base This project will bring us into compliance with our MS4 requirements as well as making compliance with our wastewater licensing easier..

**3. Consistency with the adopted plans or other related planning documents**

City MS4 Stormwater Plan

**4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**

FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 250,000

**5. New personnel, equipment, or supplies required**

consultants/contractors

**6. How project originated and how cost estimates were obtained**

Staff and consultant

**7. Any related department or city projects**

IT, Stormwater

**8. Financing possibilities or potential grants**

**9. Justification of timing of project and segments (if applicable)**

Mapping needs to be updated to verify attributes and to create digital data base. MS4 requirements are making digital sewer mapping necessary. We are at this time required to have the Thatcher Brook watershed sewer system digitally mapped. The current data set is incomplete and needs to be completed.

**10. Other information**

In the early 2000's the City's combined sewer system mapping was converted from paper maps to digital mapping by CDM engineers. Cost limitations at the time only allowed for the conversion of paper maps to digital. No verification or elevation data was included at the time

|                           | FY 2020      | FY 2021      | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|--------------|--------------|---------|---------|---------|
| <b>Total Project Cost</b> | \$250,000.00 | \$250,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$250,000.00 | \$250,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00       | \$0.00       | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-15

## Project Description Form

Department                      Wastewater                      Program      Sewer Pipe Lining

|                          |                       |                                      |           |  |
|--------------------------|-----------------------|--------------------------------------|-----------|--|
|                          | <b>Est Total Cost</b> | <b>\$ 1,000,000</b>                  |           |  |
| <b>Est. Cost FY 2020</b> | \$200,000             | <b>Est Cost FY 2021 - 2024</b>       | \$800,000 |  |
| <b>City Share 2020</b>   | \$0                   | <b>Est City Share FY 2021 - 2024</b> | \$0       |  |

- 1. Description of Project**  
Line various segments of pipe throughout the City
- 2. Need for and Impact of Project**  
Flow reduction is required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  

|              |              |              |             |                   |
|--------------|--------------|--------------|-------------|-------------------|
| FY 2015 \$ 0 | FY 2016 \$ 0 | FY 2017 \$ 0 | FY2018 \$ 0 | FY2019 \$ 200,000 |
|--------------|--------------|--------------|-------------|-------------------|
- 5. New personnel, equipment, or supplies required**  
consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff and consultant
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
MeDEP CWSRF
- 9. Justification of timing of project and segments (if applicable)**  
Leaking pipe system, adds flow to the system and increases treatment costs and increases CSO activity, required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020      | FY 2021      | FY 2022      | FY 2023      | FY 2024      |
|---------------------------|--------------|--------------|--------------|--------------|--------------|
| <b>Total Project Cost</b> | \$200,000.00 | \$200,000.00 | \$200,000.00 | \$200,000.00 | \$200,000.00 |
| <b>Non City Share</b>     | \$200,000.00 | \$200,000.00 | \$200,000.00 | \$200,000.00 | \$200,000.00 |
| <b>City Share</b>         | \$0.00       | \$0.00       | \$0.00       | \$0.00       | \$0.00       |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-16

## Project Description Form

Department                      Wastewater                      Program      Sewer Pipe Replacement Along River

**Est Total Cost      \$ 1,200,000**

|                          |     |                                      |             |
|--------------------------|-----|--------------------------------------|-------------|
| <b>Est. Cost FY 2020</b> | \$0 | <b>Est Cost FY 2021 - 2024</b>       | \$1,200,000 |
| <b>City Share 2020</b>   | \$0 | <b>Est City Share FY 2021 - 2024</b> | \$0         |

- 1. Description of Project**  
Replace/line sewer pipe along river from Elm Street to Horrigan's Court
- 2. Need for and Impact of Project**  
Flow reduction is required by CSO Master Plan Phase II
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
 FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 0
- 5. New personnel, equipment, or supplies required**  
consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff and consultant
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
MeDEP CWSRF
- 9. Justification of timing of project and segments (if applicable)**  
Flow reduction required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020 | FY 2021 | FY 2022      | FY 2023      | FY 2024 |
|---------------------------|---------|---------|--------------|--------------|---------|
| <b>Total Project Cost</b> | \$0.00  | \$0.00  | \$600,000.00 | \$600,000.00 | \$0.00  |
| <b>Non City Share</b>     | \$0.00  | \$0.00  | \$600,000.00 | \$600,000.00 | \$0.00  |
| <b>City Share</b>         | \$0.00  | \$0.00  | \$0.00       | \$0.00       | \$0.00  |



# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-17

## Project Description Form

Department                      Wastewater                      Program      South Street Sewer Separation

**Est Total Cost      \$ 500,000**

|                          |     |                                      |           |
|--------------------------|-----|--------------------------------------|-----------|
| <b>Est. Cost FY 2020</b> | \$0 | <b>Est Cost FY 2021 - 2024</b>       | \$500,000 |
| <b>City Share 2020</b>   | \$0 | <b>Est City Share FY 2021 - 2024</b> | \$0       |

- 1. Description of Project**  
South Street Sewer Separation Elm to Mount Pleasant
- 2. Need for and Impact of Project**  
Continued Sewer separation work
- 3. Consistency with the adopted plans or other related planning documents**  
CSO Master Plan Phase II
- 4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**  
FY 2015 \$ 0              FY 2016 \$ 0              FY 2017 \$ 0              FY2018 \$ 0              FY2019 \$ 2,142,000
- 5. New personnel, equipment, or supplies required**  
consultants/contractors
- 6. How project originated and how cost estimates were obtained**  
Staff
- 7. Any related department or city projects**
- 8. Financing possibilities or potential grants**  
CWSRF loan
- 9. Justification of timing of project and segments (if applicable)**  
Complete prior to paving project. Flow reduction/separation required by CSO Master Plan Phase II
- 10. Other information**

|                           | FY 2020 | FY 2021      | FY 2022 | FY 2023 | FY 2024 |
|---------------------------|---------|--------------|---------|---------|---------|
| <b>Total Project Cost</b> | \$0.00  | \$500,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$0.00  | \$500,000.00 | \$0.00  | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00  | \$0.00       | \$0.00  | \$0.00  | \$0.00  |

# FY2020 BIDDEFORD CAPITAL IMPROVEMENT PROGRAM

WW-18

## Project Description Form

Department                                      Wastewater                                      Program    Supervisory Control & Data Acquisitions (SCADA)

**Est Total Cost      \$ 112,500**

|                          |          |                                      |          |
|--------------------------|----------|--------------------------------------|----------|
| <b>Est. Cost FY 2020</b> | \$37,500 | <b>Est Cost FY 2021 - 2024</b>       | \$75,000 |
| <b>City Share 2020</b>   | \$0      | <b>Est City Share FY 2021 - 2024</b> | \$0      |

**1. Description of Project**

Update Supervisory Control & Data Acquisition (SCADA) System & Process Improvements at (2) twenty pump stations.

**2. Need for and Impact of Project**

Older Moscad units for all lift stations are no longer available. Need to be changed out with Allen Bradley PLC units

**3. Consistency with the adopted plans or other related planning documents**

**4. Years previously on the BIDDCIP; funding received in each of the past five (5) years (if applicable)**

FY 2015 \$ 0                      FY 2016 \$ 0                      FY 2017 \$ 0                      FY2018 \$ 37,500                      FY2019 \$ 37,500

**5. New personnel, equipment, or supplies required**

**6. How project originated and how cost estimates were obtained**

Cost estimate through vendors and ongoing work being performed to date. Originated due to obsoleted existing equipment.

**7. Any related department or city projects**

**8. Financing possibilities or potential grants**

**9. Justification of timing of project and segments (if applicable)**

This project is required to Dial out all alarms and control operation and maintenance cost and to ensure regulatory compliance.

**10. Other information**

Each Pumping station is \$7,500 to change over. There are (20) twenty Stations remaining to change to new system.

|                           | FY 2020     | FY 2021     | FY 2022     | FY 2023 | FY 2024 |
|---------------------------|-------------|-------------|-------------|---------|---------|
| <b>Total Project Cost</b> | \$37,500.00 | \$37,500.00 | \$37,500.00 | \$0.00  | \$0.00  |
| <b>Non City Share</b>     | \$37,500.00 | \$37,500.00 | \$37,500.00 | \$0.00  | \$0.00  |
| <b>City Share</b>         | \$0.00      | \$0.00      | \$0.00      | \$0.00  | \$0.00  |