

Town of Belleair – Infrastructure Master Plan Executive Summary

May 14, 2021

Purpose

The Town of Belleair (Town) had a need for an updated Infrastructure Capital Improvements Program (CIP) Master Plan (Plan) and tasked McKim & Creed to develop the Plan that will be used to manage the Town's Infrastructure CIPs. The Plan also provides the Town with a structured and disciplined approach for the Town's infrastructure needs as follows:

1. Establishes priorities for CIP projects
2. Provides planning-level design and construction cost estimates
3. Develops reasonable design and construction schedules
4. Provides clear CIP project descriptions

Background

The Town has previously used a common approach for prioritizing CIPs by using a scoring and weighting matrix evaluation system. The Town developed a draft of the *Town of Belleair Strategic Planning Process Report to the Community* (the "Report") in October 2019. The Report included a "prioritization matrix" that ranked infrastructure systems and goals, with higher priority given to systems and goals that provide maximum benefit and ease of implementation (i.e., lower costs). Some of the important items for the Town include roadway quality, erosion control, and improvements to the Bluff.

Master Plan Development Process

The general Plan development process was as follows:

1. Meetings with Town to develop general understanding of infrastructure concerns and goals
2. Review available documents
3. Perform site visits at key locations
4. Evaluate existing infrastructure (i.e., pavement conditions, seawall & bridge evaluations)
5. Coordinate with Town to develop CIP project descriptions
6. Develop / confirm budgetary cost estimates
7. Evaluate potential funding sources
8. Prioritize CIP projects
9. Present preliminary recommendations
10. Finalize Plan

The Town's previous Plan included ongoing and planned CIP projects, with capital costs outlaid over the previous planning period. Based on discussions and meetings with the Town, some of the potential criteria used for this evaluation process are as follows:

- Roadway conditions (minimum PCI of 70)
- Pavement quality appearance
- Traffic management
- Roadway drainage

- Road lighting photometrics
- ADA compliance
- Sidewalk conditions
- Public safety
- Resiliency/undergrounding utilities
- Project costs and funding availability
- “Dig once”
- Safe multi-modal connectivity
- Reliable potable water resource
- Beneficial use of new technology

The prioritization criteria for planned and potential CIP projects were developed using information and input provided by the Town along with our engineering judgement of typical infrastructure system considerations. Weighting factors were developed are shown in **Table 1**.

Table 1 – Roadway Infrastructure Prioritization Criteria			
Criteria No.	Criteria	Considerations	Weighting Factor
1	Pavement Quality	Includes goals of improving PCI to min of 70; all roads >50 PCI; considers existing pavement condition & appearance	3
2	Project Cost / Ease of Implementation	Includes project costs (lower cost is higher rated); permitting requirements; etc. Considers cost of not making the improvements (i.e., maintenance costs)	1
3	Construction Cost Efficiency "Dig Once"	Higher ratings for projects including multiple infrastructure components (paving improvements, lighting, stormwater, water mains, sidewalks, etc.)	3
4	Safe Multi-Modal Connectivity	Biking/walking paths, general transportation safety, sidewalks (i.e., road widening)	2
5	Public Perception	Appearance, environmental benefits, overall community benefits	3
6	Drainage/Erosion Control Improvements	Higher ratings for projects that address ongoing flooding issues and erosion improvements projects such as the Bluff and Belleair Creek	3
7	Public Safety	Overall community safety	4
8	Overall Impact/Risk Reduction	Higher ratings for projects that address financial and other consequential risks	3
9	Funding / Cost-Sharing	Higher ratings for projects that include, or may include funding from outside agencies	2
10	Water Main Improvements	Higher ratings for projects that replace CIP/galvanized pipe and/or address hydraulic deficiencies	2

Note: Scale of 1-4, higher is more weighted

Each planned or potential CIP was evaluated and scored with respect to the criteria. The rating was then multiplied by the weighting factor to calculate the overall project score and the projects were then prioritized from the total score.

Roadway Project Cost Estimates

Planning level project costs were developed using a review of typical industry standards, recent bid tabulations and experience with similar projects. **Table 2** provides a summary of the prioritized CIPs and estimated project costs.

Table 2 – Estimated Project Costs		
CIP No.	Project	Cost Estimate ¹
1	Ponce from Roundabout to Trail	\$3,241,000
2	Carl Ave	\$1,582,000
3	Indian Rocks Road - Bayview to Belleview	\$3,424,000
4	Indian Rocks Road – Mehlenbacher to Poinsettia 2,827,000	\$2,827,000
5	Indian Rocks Road – Hunter Bayview to Poinsettia	\$1,918,000
6	Osceola East of Indian Rocks Road-	\$2,132,000
7	The Mall/Gardenia-	\$1,722,000
8	Ponce from Manatee to Rosery-	\$1,938,000
9	Ocala/Ponce (Ponce from Manatee to Oleander 2)	\$1,942,000
10	Orlando/Ponce	\$2,975,000
11	Orlando/Osceola (Osceola from Oleander to Manatee 1)	\$1,277,000
12	Ocala/Osceola	\$1,404,000
13	Bayview Drive Bridge to IRR (Mill & Resurface)	\$97,000
14	Magnolia Wall/One Way (Mill & Resurface)	\$147,000
15	Wildwood/Woodlawn (Mill & Resurface)	\$134,000
16	Poinsettia (Mill & Resurface)	\$55,000

1) In 2021 costs

2) SOURCE CIP SCHEDULE 05-06-21

The planning level design and construction costs were then distributed over time in three (3) groups (0-3 yrs., 4-6 yrs. and 6+ yrs.), and future worth was calculated using a 4% escalation rate. Refer to **Appendix A** for details and descriptions for the 16 projects shown in **Table 2**.

Bluff, Bridge, and Seawall Projects

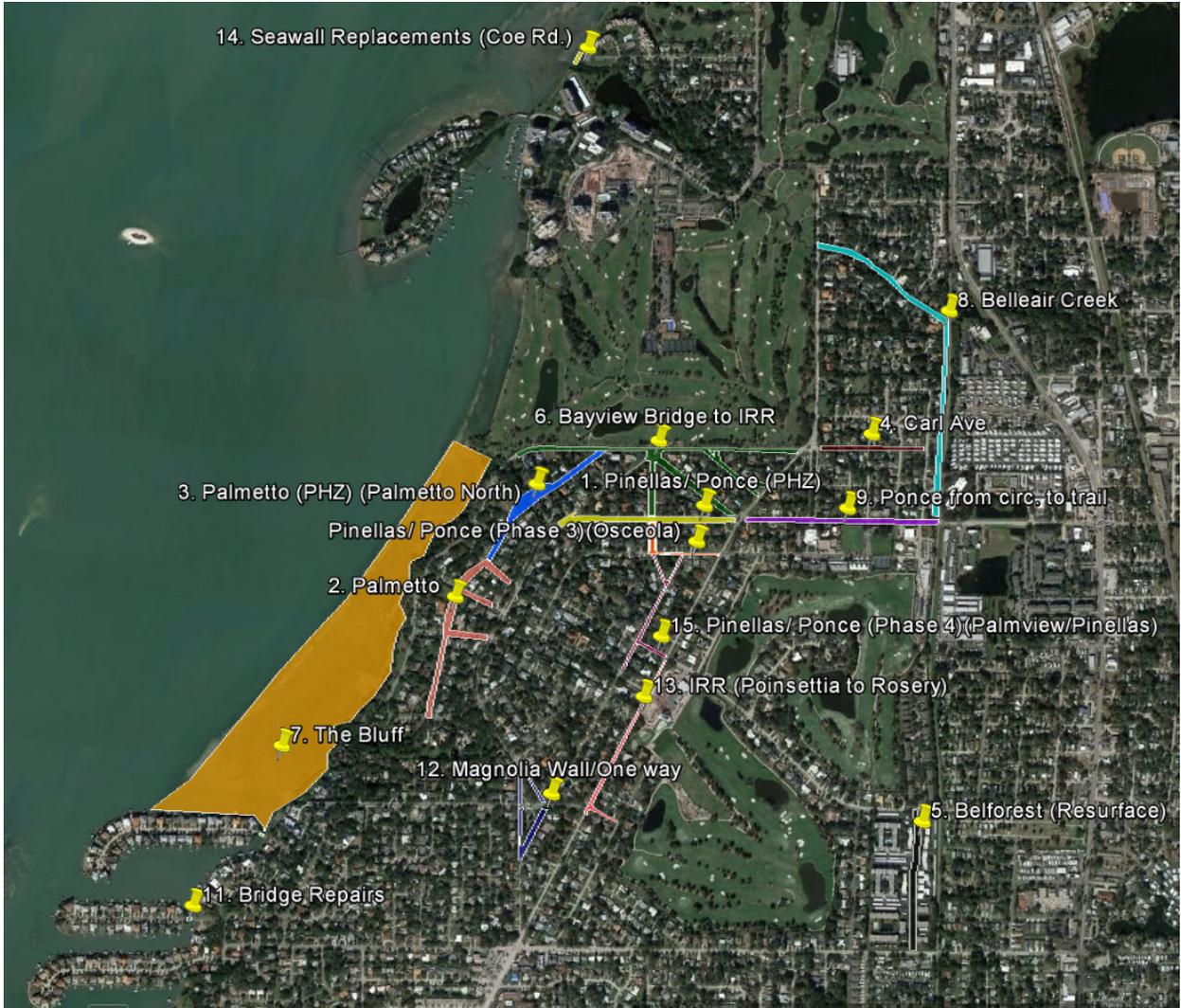
Engineering studies were performed for the bridges and seawalls and previous information from the Town was used to plan for potential projects needed for the Bluff and Belleair Creek. In general, the studies showed that the bridges are structurally sound and no major foundation work is anticipated over the next 20-years. Work is needed to replace the seawall at Thompson park and costs were developed to aid with budgeting. **Appendix A** includes details and descriptions for the bluff, bridges, and seawalls.

Recommendations

McKim & Creed recommends the following current and long-term action items for the Town for the Infrastructure Master Plan:

1. Implement CIP projects in order of prioritization (Refer to **Appendix A**)
2. Continue exploring funding opportunities and secure funding where possible
3. Continue with plan to evaluate needs for the Bluff
4. Evaluate potential cost-sharing or “funding” from other for Belleair Creek bank stabilization and dredging Harold’s Lake
5. Review CIP schedules and costs annually
6. Develop complete Master Plan at least every 3-years

Appendix A



1. Ponce from Roundabout to Trail
2. Carl Ave
3. Indian Rocks Road - Bayview to Belleview
4. Indian Rocks Road – Mehlenbacher to Poinsettia
5. Indian Rocks Road – Hunter Bayview to Poinsettia
6. Osceola East of Indian Rocks Road
7. The Mall/Gardenia
8. Ponce from Manatee to Rosery
9. Ocala/Ponce (Ponce from Manatee to Oleander 2)
10. Orlando/Ponce
11. Orlando/Osceola (Osceola from Oleander to Manatee 1)
12. Ocala/Osceola
13. Bayview Drive Bridge to IRR (Mill & Resurface)
14. Magnolia Wall/One Way (Mill & Resurface)
15. Wildwood/Woodlawn (Mill & Resurface)
16. Poinsettia (Mill & Resurface)