

A photograph of the North Beach Archway, a large wooden structure with a thatched roof, spanning a road. The archway has the words "NORTH BEACH" written across it. The background shows palm trees and a cloudy sky. The image is overlaid with a semi-transparent blue filter.




NORTH BEACH REVITALIZATION

Drainage Improvement Project Plan and
Phase 1 Implementation

Drainage Improvement Project Plan



Tidal Flooding Reduction

-  Elevate key infrastructure. Varies <math>< 6''</math> to 4'
-  Install backflow devices to prevent backflow to low lying areas.
-  Install Coastal Barrier (dunes).

Drainage Improvement Project Plan



Rainfall Flooding Reduction

- Install new open channel conveyance system, integrated within linear open space amenity.*
- Install new piped conveyance system, were
- * Install pump stations to provide drainage of low-lying infrastructure during high tides.

Drainage Improvement Project Plan



- Comprehensive improvement plan will be implemented in phases
- Phasing will be determined based on timing of funding availability and bridge progress

North Beach Revitalization

Existing Conditions



North Beach Revitalization Bridge Replacement



North Beach Revitalization Neighborhood Assets



North Beach Revitalization

Recent & Planned Investments



North Beach Revitalization Opportunity Areas



North Beach Revitalization Drainage Improvement Integration



North Beach Revitalization

Community Feedback

- Increase pedestrian connectivity to the beach, closing gaps in missing sidewalks
- Coordinate with overall North Beach multi-modal connectivity buildout
- Provide interest and attraction at varying tidal levels
- Accommodate water-based recreation, e.g. kayaking and paddle boats
- Coordinate to ensure design that does not preclude future expansion of the open channel
- Maintain water quality



Linear Open Space + Open Channel



Linear Park Experience



Linear Park Experience



Linear Park Experience



Linear Park Experience



Linear Park Experience



Phase 1 Projects



\$4.5M

Surfside Park Improvements:
Elevating parking, restroom and active park areas

- Design-Build RFQ – Oct. 2021
- Design-Build Contract Award – Mar. 2022
- Design-Build Const. Start – Mar. 2023

Phase 1 Projects



\$2.55M

Gulf Spray and Beach Reconstruction: Elevating roadways, elevating parking and pedestrian improvements

- Design RFQ – Est. Nov. 2022
- Design Contract Award – Est. Apr. 2023
- Construction RFB – Est. Mar. 2024
- Construction Start – Est. Aug. 2024

Phase 1 Projects



\$7M

Linear Open Space and Channel: Elevating roadways, creating open channel, installing new northern outfall to Eco Park, temporary channel aeration/circulation system, redirect existing Gulfbreeze piped conveyance to linear open space channel with backflow prevention, linear open space activation improvements, pedestrian improvements

- Design RFQ – Est. Nov. 2022
- Design Contract Award – Est. Apr. 2023
- Construction RFB – Est. Jun. 2024
- Construction Start – Est. Oct. 2024

*Phase to include stakeholder outreach regarding level of protection trade-offs (elevation and conveyance sizing), long-term multi-modal transportation build-out, linear park design standards. Phase to include sediment monitoring and maintenance plan recommendations.



Initial Funding Plan

Available Budget: \$14.05M

Bond 2020/2023	\$4.50M
ARPA	\$5.00M
Bond 2018 - Beach Avenue	\$1.00M
Bond 2018 - GulfSpray Pedestrian Access	\$0.30M
Bond 2018 - NB Primary Access Project (To be redirected to GulfSpray and Beach)	\$1.25M
FY 2023 General Fund	\$2.00M

Future Phase Projects



\$14M

■ Elevating roadways, creating open channel, installing new southern outfall at Pearl Ave, temporary channel aeration/circulation system, new piped conveyance in Shoreline Blvd and adjoining streets with backflow prevention, linear open space activation improvements, pedestrian improvements

\$6M

■ Elevating roadways, competition of open channel, redirect existing piped conveyance to open channel with backflow prevention, complete linear open space activation improvements, pedestrian improvements

\$11M

■ Elevate roadways, construct coastal barrier, install pump stations



Recommendation

Staff recommends City Council adopt the North Beach Drainage Improvement Project, approve the Phase 1 construction of the proposed strategy, and repeal Ordinance No. 031970.