



City of Marco Island

MEMORANDUM

Date: March 29, 2024
To: City Council
Through: Michael A. McNees, City Manager
From: Justin Martin, P.E., Director, Public Works
Subject: Public Works Departmental Report – March 2024

The City's public works department has 13 dedicated employees that administer, repair, and maintain the city's public infrastructure including traffic signals, streetlights, roads, sidewalks, swales, street signs, stop signs, median landscaping and irrigation, city street trees, storm sewer drainage, and bridges.

The following summarizes the department's notable activities over the month of March:

Capri Pass/Sand Dollar Spit Sand Management Plan

The City's cost sharing request for tourist development funds from the County for the needed beach berm maintenance is slated for consideration at the County's Coastal Advisory Committee (CAC) meeting on 4/11/24. The Tourist Development Council (TDC) and County Commission meetings will follow in successive months. The cost sharing will require an interlocal agreement between the City and the County. The interlocal agreement will be presented to council for approval prior to being presented at the county commission meeting.



W. Winterberry Bridge (a/k/a "Smokehouse Bay Bridge")

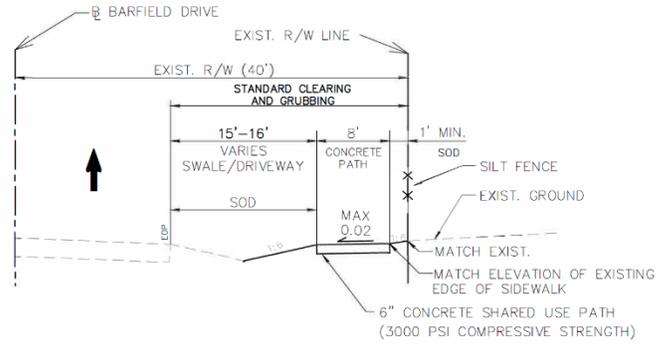
Bids for this project opened on 3/7/24. The city received three (3) bids. The low bid was \$8.7M which includes \$1M for accommodations of the water and sewer mains. The budgeted amount for this project was \$7M which includes \$1.7M in FDOT grant funds. Staff is evaluating possible value engineering options with the contractor and engineer to see if any cost reductions are possible. Staff will present bridge options to council upon completion of the value engineering.

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N. Barfield Shared Path

This new 8ft. wide shared path will replace the existing 4ft wide sidewalk on N. Barfield Dr. between N. Collier Blvd. and Bald Eagle Dr. The project also includes pedestrian crosswalks for the roadway crossings and reconfiguration of the existing roadside swales to exfiltration swales to provide water quality. Bids for this project opened on 3/1/24. Construction should commence in April or May.



Traffic Signal Posts and Mast Arm Painting

The City's traffic signal posts and mast arms need repainting. The City's Beautification Advisory Committee (BAC) voted to change the color of the traffic signal posts and mast arms to match the theme used by the City of Naples (black) instead of the Collier County green. Below are photos of one of the city's traffic signal post and mast arm and a photo of the City of Naples post and mast arms on 5th Ave. S. Public Works staff is contracting the painting of the Bald Eagle Dr./Elkcam Cir. intersection traffic signal posts and arms.



Existing traffic signal posts and mast arms at Bald Eagle Dr. and Elkcam Cir.



City of Naples traffic signal post and mast arm on 5th Ave. S.

Pedestrian Crosswalks

Public Works staff replaced the non-conforming pedestrian crosswalk signs on Bald Eagle Dr. at Rose Marina. The new signs are part of the Public Works department efforts to standardize all pedestrian crossing signs throughout the island. The new signs have solar powered flashing beacons that have proven to be effective and resilient. The Public Works department will be seeking to replace the existing non-conforming signs on Bald Eagle Dr. at Pier 81 and at 901 S. Collier Blvd. that serve the Marco Beach Vacation Suites.



Annual Street Resurfacing

The annual street paving is being publicly bid. Bids will open on 5/9/24. The streets included are depicted in the map on the right. The award of contract for resurfacing will be presented to council at the 5/20/24 city council meeting.

Advisory Committee Support

In addition to the above projects, PW staff attends and supports the Waterways Advisory Committee, the Beautification Advisory Committee, and the Hideaway Beach Tax District Committee, and the Bike Lane and Shared Path Ad-Hoc Committee including the preparation of meeting minutes, conducting research, updating the city website related to committee functions, coordinating among committee members, and attending additional meetings, and responding to requests.

PW Staff Recognition

The city is fortunate to have dedicated employees who care passionately about service to the community. City Department Directors and City Management recognize those employees who excel in their daily work with a “Caught in the Act” award. Public Works employees **John Lafakis** and **Mike Chidester** were recognized for their outstanding community service and were presented a “Caught in the Act” award for stopping to assist a fellow city employee who discovered an unsafe condition on City property next to the Pier 81 condominium in Old Marco. John and Mike responded by retrieving and erecting barricades, cones, and caution tape to cordon off an area of settled brick pavers and gravel next to the



seawall. John and Mike could have simply driven by and not stopped. However, their professionalism and genuine concern prompted them to stop and assist by making the area safe until repairs could be made. John and Mike are examples of the entire outstanding Public Works staff. Congratulations John and Mike!

Water Quality Action Items

The following table lists the water quality action items being considered or performed by the city. The items appearing in gray text are not recommended, not feasible, and not implemented.



WQ Action Item	Cost	Status
dredging	\$30M (\$6M/yr x 5yrs)	coordinated permitting feasibility with FDEP. A pilot program will be presented to council in the FY 26 proposed budget.
inlet side slot filling	\$300/inlet	ongoing: 3 filled in month of March (143 total to date)
Exfiltration swales	\$12M	120 miles of swales in Marco Island. Seeking \$1.5M in grant funding.
inlet screens	\$600 ea	ongoing: 218 installed to date. More will be installed as part of the N. Collier Blvd./N. Barfield Dr. intersection improvements project.
rain barrells/gardens	borne by homeowner	add to education campaign for homeowner implementation
seawall denitrification beds	borne by homeowner	not recommended - media can migrate into canals (unintended consequence)
reuse disposal alternatives	\$5M+	not feasible - FDEP will not permit the discarding of reuse water into deep injection well. Defeats the purpose of re-using treated water.
reuse irrigation inspections	included in operating budget	ongoing: city-owned irrigation inspected and repaired by city landscape contractor. Condo HOA's and hotels inspect and repair their systems
reuse educational program	included in operating budget	W&S dept prepared and distributed educational material. Follow up with HOA's annually
golf course irrigation	borne by golf courses	W&S dept coordinated with golf courses regarding irrigation rates. Golf courses effectively manage their irrigation
golf course interconnecting culverts	borne by golf courses	golf course water management systems detain stormwater and irrigation runoff onsite. Discharge to offsite is through outfall weirs. Interconnecting culverts are internal to golf course SWM systems.
Hydrodynamic study for dead-end canal circulation	\$50k	completed in Dec 2023 and presented to council in Jan 2024
Dead-end canal interconnects	\$6M	state legislative appropriation approvals obtained. The first interconnect project design is complete. Project will be publicly bid in Mar/Apr.
Street sweeper	\$380k	street sweeping program underway
fertilizer education campaign	low	city environmental staff coordinating

fertilizer enforcement	low	ongoing - city code enforcement
fertilizer ordinance revision	low	not recommended - unenforceable
stormwater utility	property owner assessments	requires stormwater system inventory, master plan update, and rate study by consultant. Staff has not received direction from city council to proceed with this.
Alternate water quality plan (4e)	\$50k	submitted to FDEP on 6/14/23. City is proceeding with projects in the plan as indicated in this table.
WQ testing	\$50k/yr	ongoing
WQ monitoring evaluation	\$10k/yr	evaluation being conducted as part of the MS4 permit. PW staff submitted the NPDES Annual Report for the Phase II MS4 permit for year 2 on 2/28/24. Staff currently working on responses to FDEP comments.

Permitting Functions

Public works staff reviewed the development and right-of-way permit applications and conducted inspections of the active right-of-way, SDP, and Seawall permits as indicated below.

Reviews

Permit Type	qty
ROW permits (residential)	20
ROW permits (commercial)	2
SDP stormwater reviews	5
SEAW Seawall Work	22

Inspections

Type	qty
Residential	133
commercial	0

Infrastructure Maintenance Field Crew Activities (March 2024)

- Swept City roadways with street sweeper (361 lane miles swept between 2/12/24 and 3/15/24).
- Inspected crosswalks.
- Removed four loads of concrete rubble from SWTP.
- Repaired crossover pipe on Acorn Ct.
- Measured Collier Blvd. for repaving.
- Repaired storm box on 900 block of Juniper Ct.
- Collected roadkill on Winterberry and San Marco Rd.
- Cleaned traffic cameras on Bald Eagle and Collier Blvd. due to citizen complaint.
- Repaired stop sign on Coronado Ct.
- Transferred swale grading dirt to source water facility in Naples.
- Received replacement pickup truck (PW10) and installed City decals. PW 10 replaces PW 16.
- Prepared pickup truck PW16 for auction.
- Replaced wood sign poles with metal poles (various locations).
- Repaired edge of road along 6th Avenue.
- Repaired pothole on S. Barfield.
- Installed gopher tortoise signs on Covewood St.
- Installed dry erase board at City Hall Annex building.
- Filmed storm pipe where a sink hole (depression) had formed in response to a homeowner claim.
- Filled pothole on Waikiki Ct.
- Collected trash along San Marco Rd.
- Graded temporary parking area on Lily Ct. next to treatment plant to accommodate employee parking during SWTP construction.
- Two PW field crew employees completed Florida Stormwater level 1 certification.

- Collected roadkill on Bald Eagle and Winterberry.
- Repaired potholes along Neil Bahr Way.
- Repaired storm drain structure on Breakwater Ct.
- Installed light bars on two PW vehicles.
- Filmed storm pipe at 833 Chestnut in response to homeowner concern. Pipe needs replacement.
- Facilitated FEMA inspections of Hurricane Ian stormwater pipe repairs.
- Conducted traffic control to replace streetlight pole on Collier Blvd. at Century Dr.
- Collected roadkill on Yellowbird.
- Filmed storm pipe on Bald Eagle Dr. (near City Hall).
- Repaired storm structure at 850 Scott Dr.
- Repaired edge of pavement on Bald Eagle Dr.
- Repaired storm structure at the intersection of Samoa and Tahiti.
- Repaired stop sign at the intersection of Columbus and Sand Hill.
- Repaired pothole on W. Elkcam Cir. near the cemetery.
- Serviced PW City Vac truck (oil changed, lubed, general maintenance).
- Assembled and ran emergency generator for PW field crew facility at SWTP.
- Inspections conducted for yearly shared pathway trip hazard removal.
- Installed safety bars for mitered end pipe along Bald Eagle and Collier Blvd.
- Replaced green navigation light on Kendall bridge.
- Replaced crosswalk signs on Bald Eagle Dr. at Rose Marina.
- Filled sinkhole caused by fiber optic contractor damage 382 Century Dr. and cordoned off area to make it safe for pedestrian traffic.
- Repaired speed limit sign on N. Barfield Dr.
- Responded to stormwater complaint at 900 S. Collier Ct. (no issues found; PW staff answered property manager's stormwater drainage questions).



Bald Eagle & Collier Safety Bars
Installed on Miterd Ends



Edge of Driveway Repairs on 6th Ave.



Samoa and Bald Eagle Storm Pipe Repair