



City of Marco Island

MEMORANDUM

Date: April 25, 2025
To: City Council
Through: Michael A. McNees, City Manager
From: Justin Martin, P.E., Director, Public Works
Subject: Public Works Departmental Report – April 2025

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 operations over the month of April:

Public Works Capital Projects Overview:

N. Collier Blvd./N. Barfield Dr. intersection

- Contract awarded to Coastal Concrete Products at the 4/21/25 Council meeting.
- Construction to commence upon complete execution of the contract.
- Construction Schedule: June 2025 – June 2026

Canal Aeration Pilot

- Construction contract awarded. Lab testing Purchase Order in process.
- The scope includes ten weeks of sampling and testing of DO, temperature, conductivity, oxidation-reduction potential (ORP), depth, and airflow.
- Construction and Pilot Study Schedule: May 2025 – Sept. 2025

Traffic Signal Control Replacements

- Purchase order in process
- Design: May 2025 – Nov 2025
- Bidding: Nov 2025 – Jan 2026
- Construction: Feb 2026 – Aug 2026

Pedestrian Safety Improvements

- Purchase order in process
- Design: May 2025 – Oct 2025
- Bidding: Nov 2025 – Jan 2026
- Construction: Feb 2026 – Aug 2026

Tidal Flushing/Canal Interconnects

- Bids rejected 2024
- Awaiting additional grant funding
- Re-bid and construction TBD

Sand Hill St. Shared Path

- Design completed
- PW staff is conducting value engineering with the consultant
- Bidding: June 2025 – July 2025
- Construction: Aug. 2025 – March 2026

Annual Street Resurfacing (Paving)

- The project is advertised for bids
- Bid opens on May 13, 2025
- Construction: Jul 2025 – Sep 2025

Caxambas Ct. Bridge Replacement

- Bridge development report completed
- City/FDOT utility design agreement execution in progress
- 60% plans: Jul 2025
- 90% plans: Jan 2026; construction funding agreement between city and FDOT must be executed by Jan 2026.
- 100% plans: Jun 2026
- Bidding: Jul 2026 – Aug 2026
- Construction: Sep 2026 – Sep 2027

S. Barfield Dr. Flood Remediation

- Design awarded: 4/07/25
- Design: May 2025 – Dec 2025
- Bidding: Jan 2026 – Feb 2026
- Construction: Mar 2026 – Jan 2027

Exfiltration Swales (S. Collier Blvd - Huron to end of Collier Ct.)

- The project is advertised for bids.
- Bid opens on: May 27, 2025
- Construction: Jul 2025 – Dec 2025

Roadway Restriping

- Soliciting proposals
- City council contract award scheduled for May/June pending receipt of proposals
- Construction: Jul 2025 – Sep 2025

Additional Street Lights

- PW staff coordinating with LCEC for additional lights on Bald Eagle Dr.
- Solicitation: May 2025 – Jul 2025
- Construction: Aug 2025 – Nov 2025

Goldenrod Bridge Rehabilitation

- Two bids were received.
- City Council contract award scheduled for May 5, 2025.
- Construction: Jul 2025 – Sep 2025

San Marco Drainage Improvement Project:

This project involves installing new culverts, mitered ends, inlets, and swale grading to help reduce flooding. Engineered filter media will also be installed in selected areas to capture nutrients before they reach the waterways.

This project includes Wintergreen Ct., Manor Terrace, Greenbrier St., Buttercup Ct., Robin Ct., and the portion of San Marco Rd. from 780 to 860 San Marco Rd.

Approximately 90% of drainage structures have been installed. Work along Wintergreen Ct. and Greenbrier Street is complete. Drainage work on Manor Terrace, Buttercup Ct., and Robin Ct. is substantially complete, with installation of the engineer filter media expected to be completed in June.

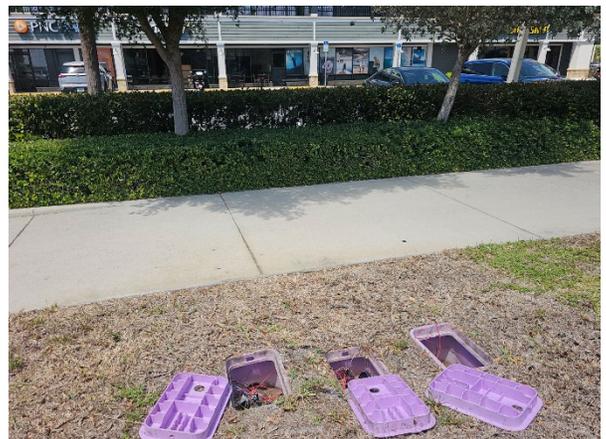
Overall, construction is approximately 90% complete. The project remains on track for substantial completion in June 2025, with administrative close-out by July.



Collier Blvd. Median Irrigation

The City’s landscape maintenance contractor discovered irrigation valve boxes and irrigation sprinklers that have been vandalized. The incident was reported to MIPD. Also, a group of Marco Islanders reported irrigation runoff on Collier Blvd to FDEP. There is an active case with MIPD and FDEP regarding these issues.

The medians are irrigated with reclaimed water. Runoff of reclaimed water into the storm drainage systems is prohibited by statutes. City staff is researching xeriscape options to minimize the need for irrigation.



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 Board, and the bike lane and shared path strategy group 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.

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. City Council will review C-HAWQ public-private partnership proposal for dredging at the May 5, 2025 special called meeting. City will contract with an independent consultant to review the proposal if directed by council.
inlet side slot filling	\$300/inlet	ongoing: 0 filled in month of April (149 total to date)
Exfiltration swales	\$12M	There are 120 miles of swales in Marco Island. \$1.5M in grant funding has been approved with 50% city matching funds. New exfiltration swales were constructed as part of the N. Barfield Shared Path project. The exfiltration swales on project S. Collier Blvd. from Huron Ct. to the end of Collier Ct. is being publicly bid. Bids open on May 27. More exfiltration swale project designs are on the way in FY25. The right of way construction standards manual was revised to require that exfiltration swales be constructed as part of the right of way permitting process. Thus far over 12 residential right of way permits include the construction of exfiltration swales.
inlet screens	\$600 ea	ongoing: 222 installed to date. Four were installed with the recently completed Barfield drainage project. 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. The design of the interconnects was based on this study.
Dead-end canal interconnects	\$6M	state legislative appropriation approvals obtained. The first interconnect project has been designed, and bids opened on 8/5/24. The City is seeking additional state funding in FY25 so that this project can be constructed.
Street sweeper	\$380k	street sweeping program underway
fertilizer education campaign	low	city growth management 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 although this topic was recently proposed for discussions at a WAC meeting.
Alternate water quality plan (4e)	\$50k	Approved by FDEP in Sept 2023. City is proceeding with projects in the plan as indicated in this table.
WQ testing	\$86k/yr	Ongoing. Quarterly testing of PTOX algae added in FY25.
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. FDEP approved the annual report in August 2024.

Permitting Functions

Public works staff also reviews development and right-of-way permit applications and conducts inspections of the active right-of-way, SDP, and Seawall permits. The reviews and inspections are summarized below.

Reviews

Permit Type	qty
ROW permits (residential)	32
ROW permits (commercial)	0
SDP reviews	2
SEAW Seawall Work	23

Inspections

Type	qty
Residential	122
Commercial	0

Infrastructure Maintenance Field Crew Activities

- Swept City Roadways with new street sweeper (177 lane miles swept between 3/24/2025 and 4/18/2025).
- Inspected crosswalks.
- Cleaned 481 Storm drains for the month of April.
- Painted stop bars and crosswalks.
- Repaired vacuum truck water leak.
- Installed pedestrian crosswalk signs on Bayport Ave.
- Replaced faded school signs surrounding Tommy Barfield Elementary.
- Replaced and repaired waterway markers within Collier Bay, Clam Bay, Smokehouse Bay and Factory Bay.
- Repaired shared pathway on San Marco Rd. and Cushing Lane.
- Cleaned up roadkill on San Marco Rd.
- Grinded concrete to eliminate trip and fall hazards along City shared paths.
- Changed traffic signal camera on Barfield and Collier Blvd. (worked with Southern Signal to repair traffic camera).
- Documented and created maps and added GIS mapping (assisted Public Works office personnel) for Marco Island waterway markers.
- Assisted PW office with right-of-way inspections.
- Removed broken glass on Yellowbird.

- Removed roadkill on Bald Eagle Drive.
- Filled sinkhole with 57 stone on Inlet and Scott Dr. (property owner driveway pipe collapsed).
- Patched outfall pipe at seawall on S. Heathwood Dr.
- Cleaned and vacuumed traffic control boxes.
- Assisted Affordable landscaping with inspection of City irrigation repairs along Collier Blvd.
- Inspected drainage complaint at 1131 Cara Ct. (no issues found).
- Inspected traffic signal complaint at Kendall Ave (traffic signals reset).
- Repaired edge of pavement at Lily Ct. and Heathwood.
- Inspected complaint at Winterberry and Collier (PED crosswalk button complaint), signals working correctly.
- Performed maintenance on traffic light monitor on Elkcam and Collier.
- Inspected debris in waterway complaint on Wavecrest, no debris found.
- Repaired swale on S. Heathwood Dr.
- Repaired sinkhole over outfall pipe on Tigertail Ct. (temporary repair).
- Installed 'No Wake' signs on Hernando Bridge.
- Collected trash along Herb Savage Alleyway, PW call out for trash in roadway.
- Removed wooden structure at Spruce and Collier Blvd. (damaged structure removed for safety).

Swale Repair on S. Heathwood Dr.



Vacuum Truck Repair



Sidewalk Grinding



No Wake Sign Installed on Hernando Bridge



Waterway Marker Repair and Installation



Spruce Ave. Structure Removal



Completed Spruce Ave. Structure Removed

