



City of Marco Island

MEMORANDUM

Date: May 22, 2025
To: City Council
Through: Michael A. McNees, City Manager
From: Justin Martin, P.E., Director, Public Works
Subject: Public Works Departmental Report – May 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

- Contractor executing contract and procuring bonds.
- Project will commence upon receiving executed contract and required bonds.
- Construction Schedule: June 2025 – June 2026

Canal Aeration Pilot

- The installation of the aerator is estimated to be completed in mid-June.
- Following the installation of the aerators, ten weeks of sampling and testing will be conducted, covering parameters such as dissolved oxygen (DO), temperature, conductivity, oxidation-reduction potential (ORP), depth, and airflow.
- Construction and Pilot Study Schedule: June 2025 – Sept. 2025

Traffic Signal Control Replacements

- The design kickoff meeting took place on May 16, focusing on replacing traffic signal controllers and the importance of standard details and schematics.
- Design: May 2025 – Nov 2025
- Bidding: Nov 2025 – Jan 2026
- Construction: Feb 2026 – Aug 2026

Pedestrian Safety Improvements

- The design kickoff meeting took place on May 16, covering pedestrian safety upgrades and the implementation of blank-out signals.
- 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. The city's grant consultant is assisting.

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- 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)

- Approval of the contract and award letter is scheduled for the June 2 City Council meeting.
- Construction: Jul 2025 – Sep 2025

Caxambas Ct. Bridge Replacement

- Bridge development report completed
- City/FDOT utility design agreement execution in progress
- 60% plans: Nov 2025
- 90% plans: May 2026; construction funding agreement between city and FDOT must be executed by May 2026.
- 100% plans: Oct 2026
- Bidding: Dec 2026 – Feb 2027
- Construction: Mar 2027 – Mar 2028

S. Barfield Dr. Flood Remediation

- Design kickoff meeting May 7.
- 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.)

- Bid opens on: May 27, 2025
- Construction: Jul 2025 – Dec 2025

Roadway Restriping

- Bid opens on: June 6, 2025
- Construction: Jul 2025 – Sep 2025

Additional Street Lights

- coordinating with LCEC for additional lights on Bald Eagle Dr.
- Solicitation: Jun 2025 – Aug 2025
- Construction: Sep 2025 – Dec 2025

Goldenrod Bridge Rehabilitation

- Contract awarded
- Construction: Jul 2025 – Sep 2025

San Marco Drainage Improvements Project:

The San Marco Drainage project is nearing completion, with approximately 97% of the work finalized. A substantial completion letter has been issued.

The remaining tasks include minor punch list items and final documentation. The project is progressing as scheduled and is expected to be fully complete in the coming weeks.



Collier Blvd. Irrigation

The city's irrigation sprinklers on Collier Blvd. from Winterberry Dr. to the Jolley bridge spray reclaimed water to irrigate the landscaping. Runoff of reclaimed water into the storm drainage systems is prohibited by the Florida Administrative Code . A Marco Island water quality activist group reported irrigation runoff onto the pavement to FDEP which then cited the city for a violation. City staff directed the city's landscape contractor to inspect and make repairs to all sprinkler heads to minimize runoff onto the pavement. However, given the water pressure of the reclaimed irrigation and the limited width of the landscaped areas, spray onto the pavement cannot be avoided.



The city has been irrigating the roadsides in addition to the medians since Collier Blvd was reconstructed in the early 2000's. All roadside landscaping and sod everywhere else in Marco Island is irrigated by the adjacent properties. Most single-family homes that have irrigation irrigate the area between the pavement and sidewalk with their respective irrigation sprinkler systems.

The city will discontinue irrigating the roadsides (from the curb to the property lines) on Collier Blvd. to be consistent with all other areas in Marco Island whereby property owners irrigate up

to the pavement. Also, to mitigate the reclaimed water spray onto the pavement from the medians, the city will replace sprinkler spray heads with bubbler type heads to soak the landscaped ground rather than spraying into the air. In FY 26 the city will remove the dead sod in the medians and replace with mulch which does not require spray type irrigation. These changes are necessary to comply with regulations for the land application of reclaimed water to avoid violations.



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 reviewed the C-HAWQ public-private partnership proposal for dredging at the May 5, 2025 special called meeting. City is issuing a PO to an independent consultant to review the proposal as directed by council.
inlet side slot filling	\$300/inlet	ongoing: 0 filled in month of May (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 project on 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 15 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. W&S has also assigned an employee to continue the public education campaign.
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 and 26 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)	43
ROW permits (commercial)	0
SDP reviews	3
SEAW Seawall Work	25

Inspections

Type	qty
Residential	130
Commercial	0

Infrastructure Maintenance Field Crew Activities

- Swept City Roadways with new street sweeper (384 lane miles swept between 4/21/2025 and 5/16/2025).
- Inspected crosswalks.
- Cleaned 811 Storm drains between (4/21/2025 and 5/16/2025).
- Painted stop bars and crosswalks.
- Repaired water leak on heat exchanger tube on Vacall truck.
- Installed crosswalk signs on Bayport Ave.
- Replaced school signs around Tommy Barfield Elementary.
- Replaced ATON markers on Collier Bay.
- Repair broken shared pathway on San Marco Rd.
- Removed roadkill on San Marco Rd.
- Camera stormwater outfall pipe on Kendall Dr.
- Removed trip and fall hazards (grind sidewalks) on City shared pathways.
- Inspected and diagnosed issue with traffic signal on Elkcam and Collier (work done with Southern Signal).
- Temporary repair on outfall pipe at 569 Tigertail Ct.
- Installed lift platform on City Kubota (banner arm replacement lift).
- Commenced generator service work for hurricane preparation.
- Installed crosswalk signs on Tahiti and Andros.
- Completed 'No Wake' signage on bridge decks along waterways.
- Inspected and forwarded complaint on bee nest on collier Blvd. and Bald Eagle.
- Inspected City irrigation system along Collier Blvd. for reuse water operation.
- Began installation of lock mechanisms on control valves for City irrigation along Collier Blvd.
- Repaired tire on PW 25.
- Filled sinkhole over storm pipe on Windmill and Barfield (temporary repair).
- Replaced speed limit sign on Palm Ave.
- Removed roadkill on Heathwood Dr.
- Replaced rusted storm grate on E. Elkcam.
- Built and installed light assisted crosswalks on Andalusia Ter.
- Relocated 'Bike Lane' signs on Winterberry Dr.
- Installed 'No Parking' signs on Vintage Bay Dr.
- Inspected sinkhole complaint over storm pipe on Seminole Dr.
- Assisted bridge inspector for inspection of Goldenrod Bridge and Caxambas Ct. Bridge.
- Filled sinkhole over Caxambas Bridge storm pipe.
- Inspected sinkhole on 591 Galleon.
- Inspected Polynesia Ct. storm pipe repair by contractor.
- Filled depression on 747 Amber Dr.
- Repaired sod on Seaview Ct. due to traffic accident.
- Repaired storm box at Butterfly Ct.
- Repaired storm box at Bald Eagle Dr. Near Old Marco.
- Repaired crosswalk signage on Landmark Ave.

- Repaired edge of roadway Barbados and Geranium.
- Repaired edge of roadway on Polynesia Ct.
- Repaired storm pipe on Nassau Dr. (temporary storm pipe repair).
- Assisted MOT for flag repair company on Jolley Bridge Flag.

O'Neil's Way at E. Elkcarn Storm Box Repair



Elkcarn Cir. Storm Grate Replacement



Updated Weight Limit Signs at Caxambas Ct. Bridge



Butterfly Ct. Storm Box Repair



Edge of Pavement repair on Barbados and Gerranium



Jolley Bridge Flag Repair



Vintage Bay Dr. No Parking Signs Installed

