

INDIAN RIVER COUNTY, FLORIDA  
MEMORANDUM

**TO:** Jason E. Brown, County Administrator

**THROUGH:** Richard B. Szpyrka, P.E., Public Works Director

**THROUGH:** Eric Charest, Natural Resources Manager

**FROM:** Kylie Ariotti, Beach Environmental Specialist

**SUBJECT:** Release of Retainage for Sector 5 Additional Dune Planting Project (IRC-2112)

**DATE:** August 4, 2022

**DESCRIPTION AND CONDITIONS**

The Sector 5 Beach and Dune Restoration Project area is a 3-mile section of shoreline that extends just north of Tracking Station Beach Park south to the Gables Oceanfront Condominiums. The Sector 5 project area sustained damage from Hurricane Matthew (2016), Hurricane Irma (2017), and Hurricane Dorian (2019). In response to the damage and background erosion, the County constructed the Sector 5 Beach and Dune Restoration Project in February 2020 in order to maintain protection to upland properties and infrastructure. The Sector 5 Beach and Dune Restoration project consisted of placing approximately 166,176 cubic yards of beach compatible sand obtained from an upland sand mine on the beach and dune system. Additionally, 120,750 native, salt tolerant plants were installed on the newly created dune at the approved planting density of 18 inches on center.

Funding assistance for the Sector 5 Beach and Dune Restoration Project was made available through FEMA, the Division of Emergency Management, the Florida Department of Environmental Protection and Indian River County through the Tourist Tax revenue account. As part of FEMA's requirement to provide funding, an additional storm mitigation element was added to the project in order to provide an extra level of protectionary measures from future storms. In the case of the Sector 5 Beach and Dune Restoration Project, the mitigation element approved by FEMA was the installation of 135,000 additional sea oats plants in the newly constructed dune. Sea oats are known for their resilience to beach conditions and aggressive root structure that aids in retaining dunes. The mitigation element called for installing these additional plants at a density of 9 inches on center, in between the existing plants.

The County secured the services of Aptim Environmental & Infrastructure, LLC (APTIM) to pursue permitting and design for the increase in dune plants, as well as for installation oversight and warranty monitoring. On October 8, 2021 the County advertised for Bid No. 2022001 for the addition of 135,000 sea oats to the 3 mile stretch of the Sector 5 project. Bids were received on November 10, 2021, with the lowest responsive, responsible bidder being Cardno, Inc., with a bid amount of \$148,250.00.

On December 7, 2021 staff brought before the Board of County Commissioners (BCC) a recommendation to award Bid No. 2022001 to Cardno, Inc. in the amount of \$148,250.00 for Sector 5 Additional Dune Planting Project (IRC-2112). The BCC unanimously approved staff's recommendation of award of Bid No. 2022001 to Cardno, Inc.

Installation of plants for the Sector 5 Additional Dune Planting Project commenced on February 2, 2022 and ran through February 24, 2022.

Warranty metrics for the survival and growth of the newly installed dune plants has since been met, with monitoring being performed by the County and APTIM.

Cardno, Inc. has been paid \$126,753.75 to date, with \$6,671.25 being held in retainage. Cardno Inc. has submitted Contractor's Application for Payment No. 4 for the final payment amount of \$14,083.75, with 5% retainage of \$741.25 being withheld. In addition, Cardno, Inc. has submitted an invoice to account for the release of retainage in the amount of \$7,412.50.

**FUNDING**

Funding for the Sector 5 Additional Dune Planting project was provided by a portion of Local Option Tourist Tax and FEMA Project Worksheets. Funding for the final payment of \$14,083.75 is available in the Beach Restoration Fund/Other Contractual Service/Hurricane Matthew, Account # 12814472-033490-17001, with the release of retainage being available in the Beach Restoration Fund/Retainage-Cardno, Inc., Account #128-206003-17001 for \$7,412.50.

<b>Account Name</b>	<b>Account Number</b>	<b>Amount</b>
Beach Restoration/Other Contractual Services /Hurricane Matthew	12814472-033490-17001	\$14,083.75
Beach Restoration/Retainage-Cardno, Inc.	128-206003-17001	\$ 7,412.50

**RECOMMENDATION**

Staff recommends payment of final invoice number 4 in the amount of \$14,083.75, and the release and payment of Contractor's retainage in the amount of \$7,412.50.

**ATTACHMENTS**

1. APTIM Recommendation of Payment
2. Sector 5 Additional Dune Plants Pay App No 4
3. APTIM Retainage Payment Recommendation
4. Cardno, Inc. Sector 5 Release of Retainage

**APPROVED AGENDA ITEM FOR AUGUST 16, 2022**