



AEROSTAR  
AIRPORT HOLDINGS LLC

Luis Muñoz Marín International Airport

# PFC APPLICATION #9

## Public Notice Materials

December 2023

1. Project List and Financing Plan
2. Summary of PFC projects
  - Description, Justification, Costs, and Project Timing
3. PFC Collection Details

# Project List and Financing Plan



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# Project List and Financing Plan



Proposed Funding for PFC#9						
Project No.	PFC No. 9 Projects	Pay-as-you-go/ PFC Funds	AIP Funds		PFC Not Eligible	Total Project Cost
09-001	Airport Sustainability Plan	\$165,004.00	3-72-0016-071-2022	\$ 385,010.00		\$550,014.00
09-002	ARFF Vehicle Class 4 with 1,500 Gallons	\$301,456.37	3-72-0016-072-2022	\$ 614,287.00		\$915,743.37
09-003	ARFF Equipment	\$51,662.00				\$51,662.00
09-004	Apron 3 Rehabilitation Design	\$388,516.00	3-72-0016-072-2022	\$ 906,538.00		\$1,295,054.00
09-005	Master Plan Supplement/Narrative Report	\$465,083.00				\$465,083.00
09-006	Terminal C/D FIS Design and Reconstruction	\$5,583,016.76			\$3,752,891.74	\$9,335,908.50
09-007	PFC Program Administration	\$280,000.00				\$280,000.00
09-008	Terminal A Narrative Report	\$985,863.21				\$985,863.21
09-009	Replacement of PCA Units	\$1,555,724.00				\$1,555,724.00
09-010	Replacement of Passenger Boarding Bridges	\$64,935,308.00	BIL/ATP Grant Submitted			\$64,935,308.00
09-011	Connector S Reconstruction - Design	\$126,519.00	3-72-0016-073-2022	\$ 295,211.00		\$421,730.00
09-012	Runway 08 End Reconstruction - Design	\$134,349.00	3-72-0016-074-2023	\$ 313,481.00		\$447,830.00
09-013	Connector S Pavement Reconstruction (Phase 2- Construction)	\$2,637,856.20	3-72-0016-076-2023	\$ 6,154,997.80		\$8,792,854.00
09-014	Runway 08 End Pavement Reconstruction (Phase 2- Construction)	\$3,135,579.00	3-72-0016-075-2023	\$ 7,316,352.00		\$10,451,931.00
09-015	Reconstruction of Apron 1 - Design	\$233,593.80	3-72-0016-072-2022	\$ 545,052.20		\$778,646.00
09-016	Reconstruction of Apron 1 - Construction	\$6,688,526.10	3-72-0016-077/78-2023	\$ 15,606,560.00		\$22,295,087.00
09-017	Underground Electrical Feeder Replacement Program	\$810,194.84			\$72,897.29	\$883,092.13
09-018	HVAC System Replacement	\$2,019,177.03			\$381,963.53	\$2,401,140.56
09-019	Baggage Handling System Enhancement Program	\$1,669,729.00				\$1,669,729.00
09-020	North Perimeter Fiber Optic Infrastructure and CCTV - Design & Const.	\$1,678,000.15				\$1,678,000.15
09-021	South Perimeter Fiber Optic Infrastructure and CCTV - Design & Const.	\$2,525,958.42				\$2,525,958.42
09-022	ARFF Protective Equipment	\$41,879.39				\$41,879.39
09-023	Garage Solar Project for Terminal A	\$9,739,947.32	BIL/ATP Grant Submitted		\$3,475,720.68	\$13,215,668.00
09-024	PFC Application and Amendment Costs	\$190,000.00				\$190,000.00
09-025	Runway 8-26 Rehabilitation Construction	\$2,800,000.00	3-72-0016-067/68-2021	\$ 17,415,661.00		\$20,215,661.00
	<b>Total</b>	<b>\$109,142,942.58</b>		<b>\$49,553,150.00</b>	<b>\$7,683,473.24</b>	<b>\$166,379,566.73</b>

# SUMMARY OF PFC PROJECTS



**AEROSTAR**  
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## AIRPORT SUSTAINABILITY PLAN

**Total Project Costs: \$550,014**

- PFC Funding: \$165,004 (30%)
- Existing AIP Funds: (70%) \$385,010 (3-72-0016-071-2022)

### Project Justification:

- Evaluating resiliency and efficiencies of critical airport infrastructure is key to minimizing disruptions and ensuring facilities remain operable
- Evaluating resource consumption is critical to ensure the airport has adequate water and electricity to meet future growth, and storage and distribution systems are adequate and meet required standards
- Enhance and preserve capacity of airport facilities

### Project Description:

- Produce an Airport Sustainability Plan (ASP) for the Airport that follows FAA guidance

### Project Timing:

Commenced December 2022

Estimated completion December 2023

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Luis Muñoz Marín International Airport (SJU)  
Airport Sustainability Plan (ASP)

Attachment 2  
Preliminary Project Schedule

Task	Estimated Number of Months	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Task 1: Project Kick-off Meeting and Management/FAA Coordination	Ongoing												
Task 2: Prepare Stakeholder Engagement/ Communications Plan and Convene Sustainability Action Committee (SAC)	2												
Task 3: Identify ASP Sustainable Categories	2												
Task 4: Prepare Baseline Assessment	3												
Task 5: Identify Policy Statement, Sustainability and Resiliency Goals/Objectives and Performance Targets	2												
FAA BRIEFING	<1						★						
Task 6: Identify, Evaluate and Recommend Sustainability and Resiliency Strategies	2												
Task 7: Develop Implementation Plan	2												
Task 8: Develop Process to Review and Annually Update ASP	2												
Task 9: Prepare SJU Airport Sustainability Plan	4												
FAA Review Final Plan	2												★

Proposed Scope of Work

18 of 19

vhb AVCON

## ARFF VEHICLE CLASS 4 WITH 1,500 GALLONS

**Total Project Costs: \$ 915,743**

- PFC Funding: \$301,457
- Existing AIP Funds: \$614,287 (3-72-0016-072-2022)

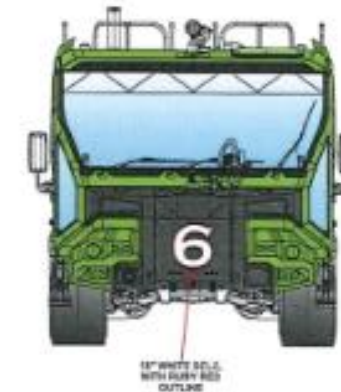
### Project Justification:

- The Airport is projected to be an Index E airport within the next few years and requires an additional ARFF vehicle
- Necessary for Airport to remain in compliance with the requirements outlined in 14 CFR Part 139.317 - Aircraft rescue and firefighting

### Project Description:

- The new vehicle will be a Class 4 ARFF truck and include a 1,500-gallon water tank and a 450lb capacity dry chemical agent system
- Project cost includes roof mounted camera, electric ladder deploy rack, automatic foam proportioner, fire-fighting agents and test charge

**Project Timing:**  
May 2022 - August 2023



## ARFF EQUIPMENT

**Total Project Costs: \$51,662**

- PFC Funding: \$51,662
- Existing AIP Funds: None

### Project Justification:

- The Airport is projected to be Index E within the next few years and requires radio and communication equipment for the additional ARFF vehicle
- The Penetration Aircraft Skin Trainer (PAST) device improves safety by preparing staff for emergency responses
- Complements ARFF training and is necessary for Airport to remain in compliance with the requirements outlined in 14 CFR Part 139.317 - Aircraft rescue and firefighting

### Project Description:

- ARFF equipment includes new radios and communication equipment for the new ARFF vehicle and a new PAST device

**Project Timing:**  
May 2022 - August 2023



## APRON 3 REHABILITATION DESIGN

**Total Project Costs: \$1,295,054**

- PFC Funding: (30%) \$388,516
- Existing AIP Funds: (70%) \$906,538 (3-72-0016-072-2022)

### Project Justification:

- Portions of the Apron built around 1987 and 1991, but others much older and some of the first on the airport
- Average PCI grades of 17, 26, and 47 for some areas

### Project Description:

- Apron 3 is located between Terminal B and Terminal C and comprises approximately 40,000 SY
- The project consists of the evaluation of the pavement to provide alternatives for the proposed reconstruction, and the subsequent design of pavement cross sections identified for reconstruction
- Includes Geotech, subsurface utility exploration, cost estimates, and phasing plan development

**Project Timing:**  
Sep 2023 - April 2024



## MASTER PLAN SUPPLEMENT/NARRATIVE REPORT

**Total Project Costs: \$465,083**

- PFC Funding: \$465,083
- Existing AIP Funds: None

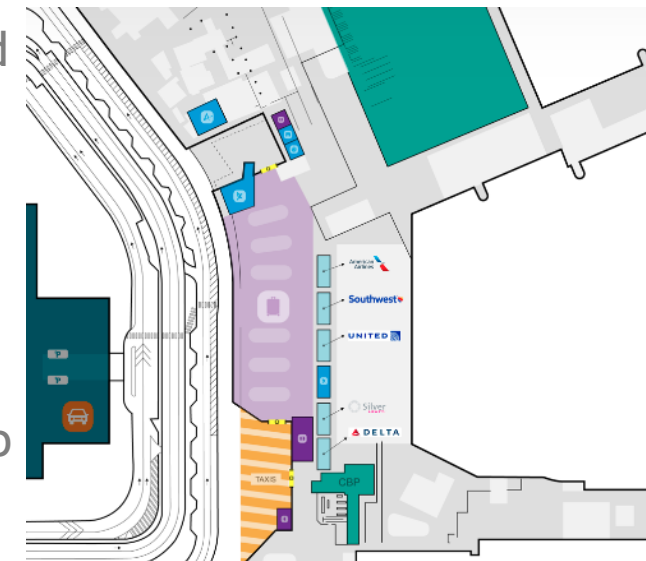
**Project Timing: June 2022 - Dec 2023**

### Project Justification:

- Narrative Reports are appropriate in lieu of full master plans if certain airport facilities lack capacity or if the airline fleet mix has changed impacting space and use
- The recovery of traffic post-COVID and Irma/Maria has exceeded projections
- The airport is projected to soon be Index E, and the sponsor will need to implement certain capital projects earlier than anticipated to meet demand

### Project Description:

- Provides peak hour activity projections, flight schedules, cargo capacity, and ramp charts for new planning horizons for higher activity levels and changing fleet mix
- Assesses proposed airfield modifications, updates the timing of capital projects in the CIP (including gates, BHS, holdrooms, etc), and provides ROM cost estimates that will assist in the design phase of upcoming projects



## TERMINAL C/D FIS - DESIGN AND RECONSTRUCTION

**Total Project Costs: \$9,335,909**

- PFC Funding: \$5,583,017
- Existing AIP Funds: None

**Project Timing:**

Design - Jan 2023 - June 2023

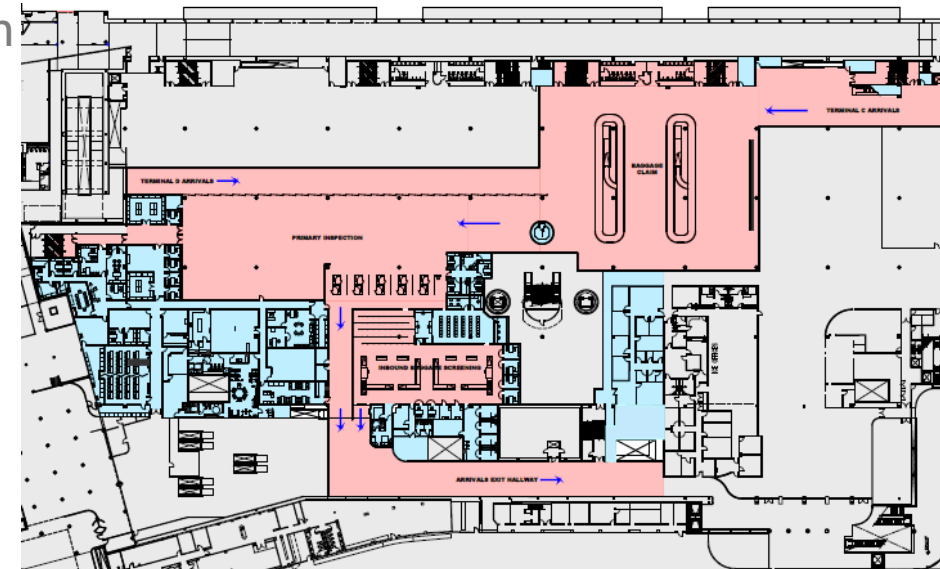
Construction - August 2023-Dec 2024

### Project Justification:

- Revisions to CBP facility requirements (Simplified Arrival, Modified Egress, and “Baggage First”) since initial construction pre 9/11 mean existing configuration and passenger flows no longer meet latest ATDS for occupancy, operational space and passenger processing
- Currently split operations over two levels and Primary screening occurs prior to baggage claim. Elevator and escalator need major overhaul and existing bathrooms do not meet ADA requirements

### Project Description:

- Design and reconstruction of FIS facilities serving Terminals C and D, and overhaul elevators/escalators
- Consolidates the Primary, baggage screening and Secondary inspection areas onto one level along with their corresponding holding rooms, triage, enforcement offices, restrooms, and training areas



## PFC PROGRAM ADMINISTRATION

**Total Project Costs: \$280,000**

- PFC Funding: \$280,000
- Existing AIP Funds: None

### Project Justification:

- Sponsor utilizes experienced CPA firm to perform annual audits of PFC program to ensure compliance
- Due to limited staff, consultants are utilized to assist with PFC program administration, PFC collection estimates, and evaluation of PFC financing/funding alternatives

### Project Description:

- The project covers internal staff time on PFC admin, consultant costs for traffic updates, PFC eligibility and refunding/refinancing analysis, and CPA firm for external audit of the PFC program for five years

**Project Timing:**

Jan 2021 - Life of Application



## TERMINAL A NARRATIVE REPORT

**Total Project Costs: \$985,863**

- PFC Funding: \$985,863
- Existing AIP Funds: None

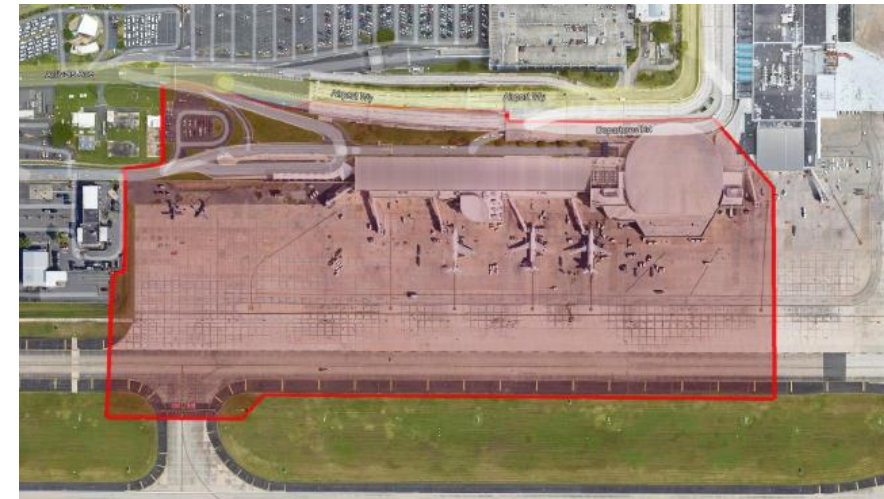
### Project Justification:

- Narrative Reports are appropriate if terminals lack capacity or if the fleet mix has changed impacting space and use
- The recovery of traffic post-COVID and Irma/Maria has exceeded projections, the airport is projected to become Index E on account of larger aircraft, and the sponsor will need to implement certain capital projects earlier than anticipated to meet demand

### Project Description:

- The project will study alternatives for expansion and rehabilitation, consider options for adding gates, ticket counters, and screening capacity
- Includes preliminary engineering studies, including geotechnical investigations, topographic surveys, subsurface utility surveys, and review of baggage handling, fire alarm, mechanical, electrical, and plumbing systems

**Project Timing:**  
June 2023 - Dec 2023



## REPLACEMENT OF PRE-CONDITIONED AIR UNITS

**Total Project Costs:** \$1,555,724

- PFC Funding: \$1,555,724
- Existing AIP Funds: None

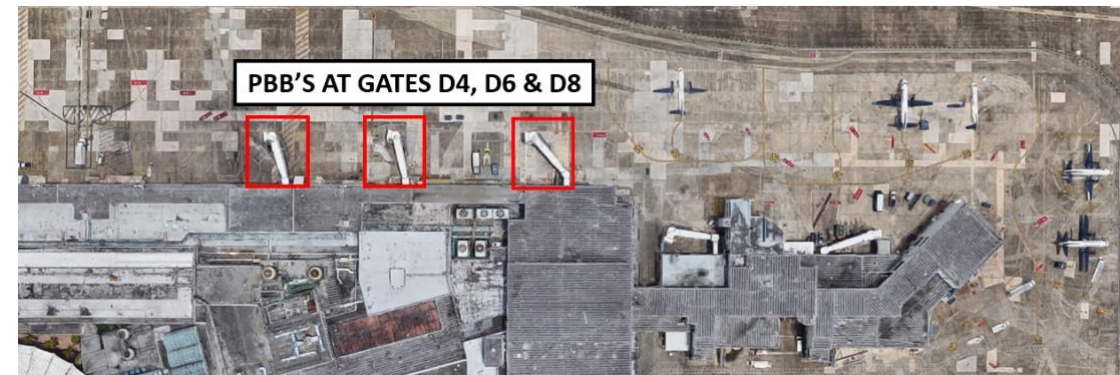
### Project Justification:

- A number of PCA units have exceeded their useful life and need to be replaced, and the sponsor has added three new boarding bridges that require PCA
- The PCA units cool parked aircraft instead of using aircraft power, reducing fuel consumption, noise, and emissions

### Project Description:

- Installation of 14 total units across Terminals A, B, C and D
- A mix of 30, 45, and/or 90 Ton units

**Project Timing:**  
Jan 2022 - June 2024



## REPLACEMENT OF PASSENGER BOARDING BRIDGES

**Total Project Costs: \$64,935,308**

- PFC Funding: \$64,935,308
- Existing AIP Funds: None
- BIL/ATP Funds requested and PFC to be reduced if awarded

**Project Timing:**  
Jan 2023 - Dec 2028

### Project Justification:

- Many of the existing PBBs are approaching 30 years old, and more than half are more than 20 years old. The salt air and exposure to severe weather contributes to an elevated deterioration rate
- Frequent downtime negatively impacts airline operations and repairs are no longer feasible
- Installation of standardized systems and parts provides for the most cost-efficient long-term operation

### Project Description:

- A phased installation of 32 PBBs and associated ancillary equipment and improvements. Includes initial anchor bolt inspection, phasing plan, demolition, permits, new foundations as required for new bridge positions, HVAC, PCA units (as needed), 400Hz GPUs, potable water cabinets, engineering design services, and project management



## CONNECTOR S RECONSTRUCTION - DESIGN

**Total Project Costs: \$421,730**

- PFC Funding: (30%) \$126,519
- Existing BIL/AIG Funds: (70%) \$295,211 (3-72-0016-073-2022)

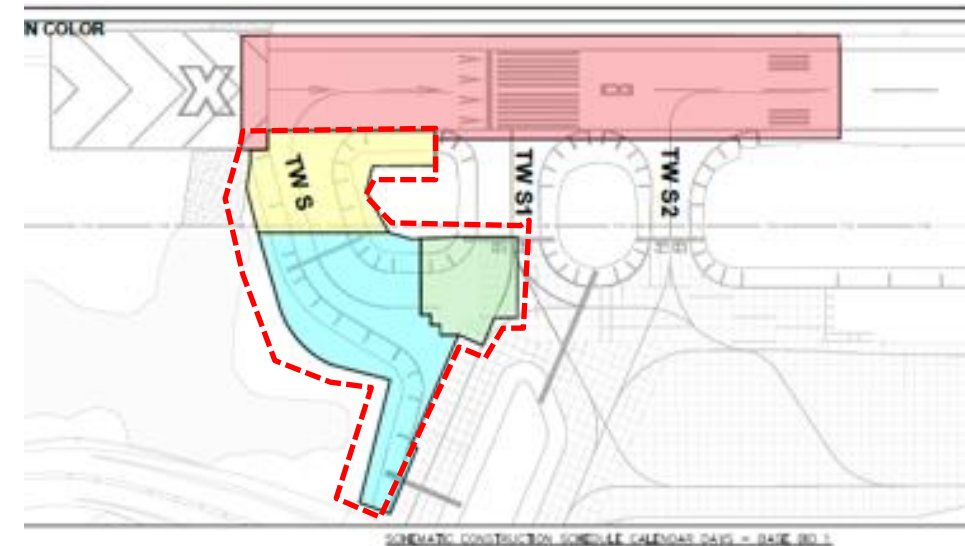
### Project Justification:

- Connector S serves as the primary departure access point, allowing aircraft to utilize the full runway length.
- The existing pavement currently suffers from structural and age-related pavement distresses
- The pavement condition index (PCI) rating is at an average of 55, or “Poor” on the PCI range
- Connector S will continue to have issues if a major rehabilitation is not completed

### Project Description:

- The design will include the plan for reconstruction of 12,700 SY of Portland cement concrete (PCC) pavement, asphalt shoulder pavement, and electrical upgrades

**Project Timing:**  
Oct 2022 - Mar 2023



Project Areas -----

## RUNWAY 08 END PAVEMENT RECONSTRUCTION - DESIGN

**Total Project Costs: \$447,830**

- PFC Funding: (30%) \$134,349
- Existing BIL/AIG Funds: (70%) \$313,481(3-72-0016-074-2023)

**Project Timing:**

Oct 2022 - Mar 2023

### Project Justification:

- Rehabilitation of Runway 8 End would ensure the pavement condition is FAA compliant and enhance safety by returning the pavement condition index to good.
- The current pavement condition index is 61, or “Fair” on the PCI rating, and continuing to deteriorate
- The design would preserve capacity and ensure that Group III aircraft and above can safely and efficiently taxi from the S Connector to Runway 8

### Project Description:

- Design phase and evaluation of the pavement and joint layout of the Runway 8 End and a portion of Runway 8



## CONNECTOR S PAVEMENT RECONSTRUCTION PHASE 2 - CONSTRUCTION

**Project Timing:**  
Dec 2023-Dec 2024

**Total Project Costs: \$8,792,854**

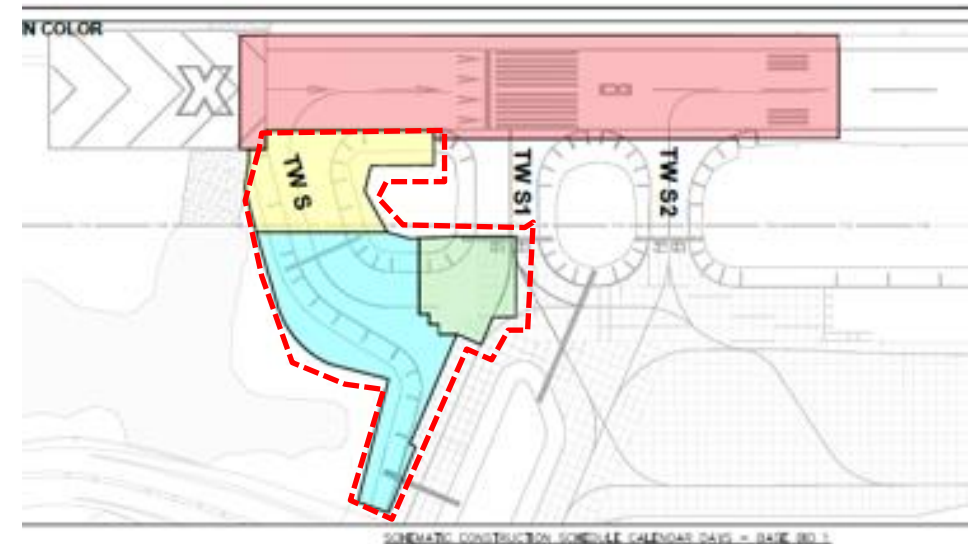
- PFC Funding: \$2,637,856
- AIP Funds: \$6,154,998 (3-72-0016-076-2023)

### Project Justification:

- Connector S serves as the primary connector for aircraft departing Runway 8 and has been subject to multiple closures for emergency repairs
- Reconstruction of Connector S with PCC would ensure the pavement condition is compliant with FAA requirements and enhance safety by returning the pavement to a higher condition index

### Project Description:

- Includes reconstruction of 12,700 SY of PCC pavement, asphalt shoulder pavement, and electrical upgrades
- Includes construction inspection and project management services



Project Areas -----

## RUNWAY 08 END PAVEMENT RECONSTRUCTION PHASE 2 - CONSTRUCTION

**Project Timing:**  
Dec 2023-Oct 2024

**Total Project Costs: \$10,451,931**

- PFC Funding: \$3,135,579
- AIP Funds: \$7,316,352 (3-72-0016-075-2023)

### Project Justification:

- Pavement is experiencing severe raveling, localized depressions, swelling, and open paving joints
- Reconstruction with PCC reduces distresses caused by aircraft and enhances safety by returning the pavement to a higher condition index

### Project Description:

- Reconstruction of 15,600 square yards of existing hot mix asphalt (HMA/P401) to be replaced by PCC (P501) pavement, joint sealant, pavement markings, electrical manholes adjustment, and tie-ins to the existing pavement surfaces
- Includes construction inspection and project management services



## RECONSTRUCTION OF APRON 1 - DESIGN

**Total Project Costs: \$778,646**

- PFC Funding: (30%) \$233,594
- Existing AIP Funds: (70%) \$545,052 (3-72-0016-072-2022)

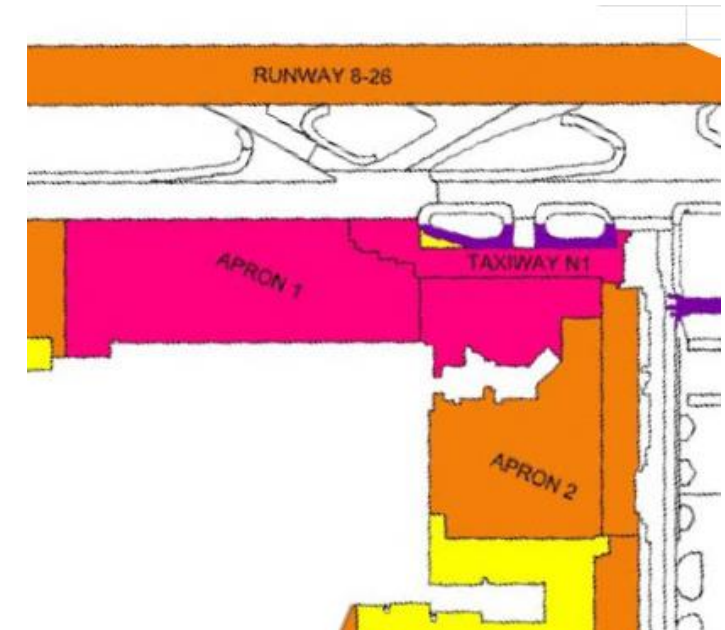
**Project Timing:**  
Jun 2022 - Dec 2022

### Project Justification:

- Age of pavement is unknown but some of the first on the airport with average PCI grades of 33, 36, 40, 41 and 56 for some areas
- Pavement deficiencies include high severity patches, joint spalls, corner breaks and shattered slabs present throughout inspected samples

### Project Description:

- Apron 1 located to the north of Terminal D. Project design area comprises approximately 50,000 SY
- The project consists of the evaluation of pavement design options, determine alternatives for reconstruction, and identify pavement sections for reconstruction
- Includes geotechnical, subsurface utility location, pavement section analysis, bid and award services, and contract administration



## RECONSTRUCTION OF APRON 1 - CONSTRUCTION

**Total Project Costs: \$22,295,087**

- PFC Funding: (30%) \$6,688,526
- Requested AIP Funds: (70%) \$15,606,560 (3-72-0016-077-2023) & (3-72-0016-078-2023)

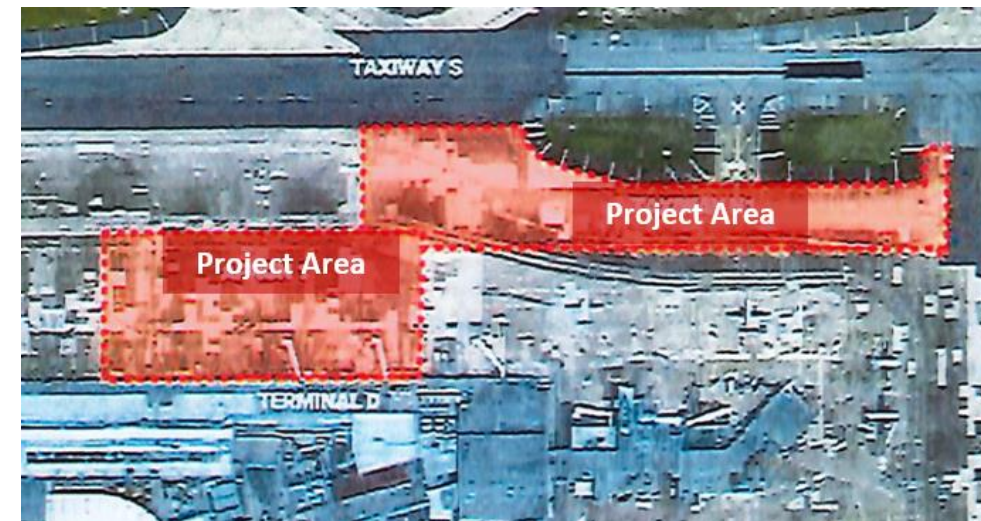
**Project Timing:**  
Jan 2025 - Jan 2026

### Project Justification:

- Age of pavement is unknown but some of the first on the airport with average PCI grades of 33, 36, 40, 41 and 56 for some areas
- High severity deficiencies such as patches, joint spalls, corner breaks and shattered slabs present throughout inspected samples

### Project Description:

- Project consists of reconstructing 37,000 SY of PCC (P501) pavement slabs along with electrical infrastructure upgrades
- Includes construction, inspection, and project management services, as well as local excise taxes and permits



## UNDERGROUND ELECTRICAL FEEDER REPLACEMENT PROGRAM

Total Project Costs: \$883,092

- PFC Funding: \$810,195
- Existing AIP Funds: None

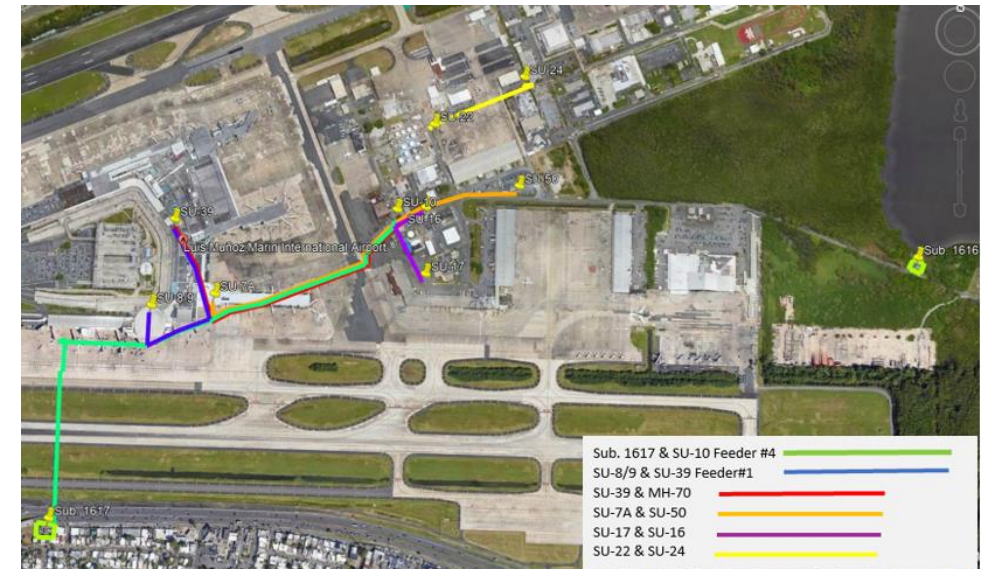
Project Timing:  
Oct 2020 - Dec 2023

### Project Justification:

- Power is distributed throughout the airport from three electrical substations. Several underground distribution feeder cables serving critical areas of the airport from these substations are no longer functional and out of service
- Replacement of these new lines will restore redundancy to critical areas of the airport

### Project Description:

- The sections to be replaced by new lines are on Feeder #1, Feeder #4, Feeder #13, and Feeder #14
- The project includes the removal and replacement of the existing out of service 500 MCM 15KV cable, installation and connection of new cable and testing, along with project management costs



## HVAC SYSTEM REPLACEMENT

**Total Project Costs:** \$2,401,141

- PFC Funding: \$2,019,177 (Calculated to be 84.1% eligible)
- Existing AIP Funds: None

### Project Justification:

- Chillers, water pumps, cooling towers, condensers, and A/C unit controllers have all reached the end of their useful lives and need to be replaced
- Maintaining these systems is no longer viable, due to costs and lack of available parts and replacement of these critical components is required to ensure a functioning air-conditioning system is available

### Project Description:

- Replace Terminal B chiller #3, chiller water pump in Terminal C, replace AHU in Terminal A, demo and replace cooling tower #3, replace AC unit controls, and replace condenser and evaporator in ARFF building

**Project Timing:**  
Jan 2023 - Dec 2024

AHU 2-22/2-23 Replacement to XD or CHW connection to Terminal A Chiller Plant



## BAGGAGE HANDLING SYSTEM ENHANCEMENT PROGRAM

Total Project Costs: \$1,699,729

- PFC Funding: \$1,699,729
- Existing AIP Funds: None

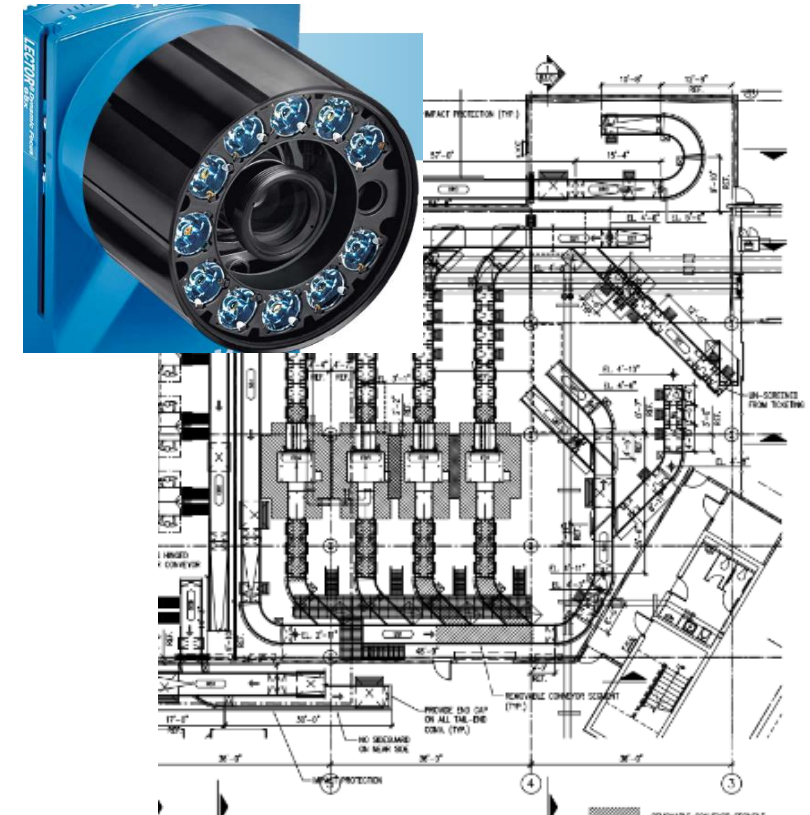
### Project Justification:

- Current scanners, servers, and applications are 9 years old and in need of an upgrade that will enable the latest technology to be implemented. Normal life span of servers is 4-6 years
- Provide a more efficient and reliable sorting system, enhancing the safety and security of the baggage screenings and preserving processing capacity

### Project Description:

- Upgrade and replace the baggage handling system (BHS) hardware and servers and replacement of obsolete laser automatic tag readers (ATRs) with cameras. Upgrade BHS software, applications and controls in Terminals A and B/C

Project Timing:  
Feb 2023 - Dec 2024





## SOUTH PERIMETER FIBER OPTIC INFRASTRUCTURE AND CCTV - DESIGN AND CONSTRUCTION

Total Project Costs: \$2,525,958

- PFC Funding: \$2,525,958
- Existing AIP Funds: None

### Project Justification:

- Construction of a new power distribution system is necessary to run the perimeter security system at the south side of the airport
- Increasing the capability of CCTV coverage in different sections of the airport, and enabling technology to detect and deter unauthorized entry through the airport perimeter, increases safety and security at the airport

### Project Description:

- Covers the condition surveys, facility assessments, design, and construction of electronic perimeter fiber optic infrastructure and CCTV on the southern boundary of the airport

Project Timing:  
Dec 2022 - Sept 2024



## ARFF PROTECTIVE EQUIPMENT

**Total Project Costs: \$41,879**

- PFC Funding: \$41,879
- Existing AIP Funds: None

### Project Justification:

- New ARFF Personal Protective Equipment (PPE) will enhance safety at the Airport by providing new equipment for rescue personnel
- New Helmets purchased to comply with NFPA standard 1971

### Project Description:

- Includes the purchase of 7 full bunker gear PPE sets (Coats, pants liners, boots, gloves, hood, helmet) for new ARFF personnel, purchase of various components of bunker gear due to having reached their useful life, and replacement of existing helmets to meet changes in standards

**Project Timing:**  
Oct 2021 - May 2023



## GARAGE SOLAR PROJECT FOR TERMINAL A

**Total Project Costs: \$13,215,668**

- PFC Funding: \$9,739,947
- Existing AIP Funds: None
- BIL/ATP requested for this project

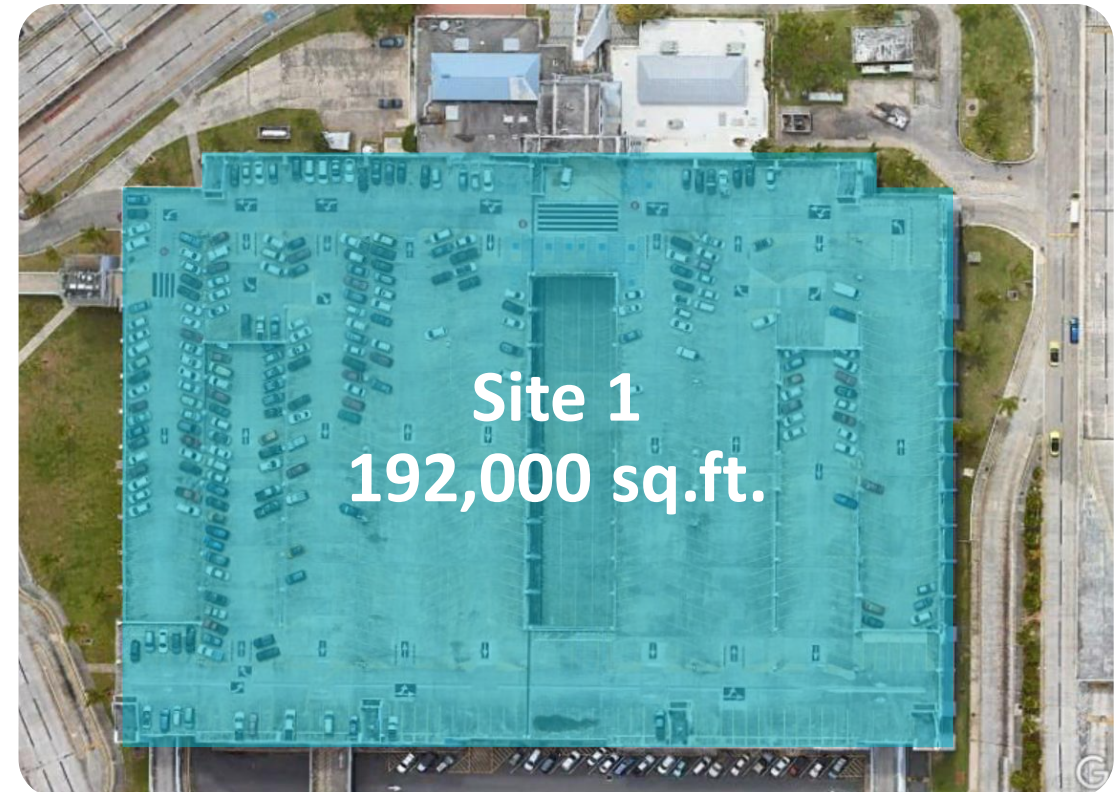
### Project Justification:

- Enhance safety and preserve capacity by providing an additional power supply for the airport
- This will be the primary power source for Terminal A
- Ensure critical airport systems can remain operational during unreliable PR power grid events

### Project Description:

- Design and construction of the Parking Structure Photovoltaic Sunshade, a 5,000-panel photovoltaic system to be mounted above the 5th level of the terminal parking structure adjacent to Terminal A

**Project Timing:**  
Oct 2023 - Feb 2025



## PFC PROGRAM APPLICATION AND AMENDMENT COSTS

**Total Project Costs: \$190,000**

- PFC Funding: \$190,000
- Existing AIP Funds: None

### Project Justification:

- Due to limited staff, consultants are utilized to assist with PFC application and amendment services

### Project Description:

- The project covers application development costs for PFC#9, and anticipated PFC amendment costs for PFC #4 and PFC #5

**Project Timing:**  
Jan 2023-Dec 2024



Luis Muñoz Marín International Airport

**PFC APPLICATION #9**  
**CARRIERS CONSULTATION**  
**MEETING**

## RUNWAY 8-26 REHABILITATION - CONSTRUCTION

**Total Project Costs:** \$20,215,661

- PFC Funding: \$2,800,000
- Existing AIP Funds: \$17,415,661 (3-72-0016-067-2021) & (3-72-0016-068-2021)

**Project Timing:**  
Feb 2024- Sept 2024

### Project Justification:

- Runway 8-26 presents major pavement distresses such as weathering, bleeding, patching, swelling, longitudinal and transverse cracking, alligator, joint reflection, and slippage cracking. Previous overlay was completed in 1997

### Project Description:

- Runway 8-26 is the primary departure runway at the airport with a length of 10,400 ft. Rehabilitation of approximately 8,500 ft of the runway
- Project will utilize a variable milling process of existing asphaltic pavement, exposed subsurface pavement distresses will be crack sealed and overlay installed consisting of new hot mix asphalt.
- Rehabilitation accommodates required adjustments to existing electrical fixtures with lighting and signage upgrades to LED components



# PFC COLLECTIONS DETAILS



**AEROSTAR**  
AIRPORT HOLDINGS LLC

- Proposed charge effective date: August 2028
- Estimated charge expiration date: April 2032
- PFC Charge level: \$4.50 for each project



AEROSTAR  

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AIRPORT HOLDINGS LLC

Public comments on this new PFC Application #9 will be received until January 21, 2024.

Comments should be sent to:

Planning & Development Department  
Luis Muñoz Marín International  
Airport Way, Carolina, 00979, Puerto Rico  
[p.d@aerostarairports.com](mailto:p.d@aerostarairports.com)