St. Pete-Clearwater International Airport (PIE) Proposed Passenger Facility Charge Application #7 Project Descriptions

07-001 Cargo Apron Reconstruction, Phase 2

This project includes the design and reconstruction of the cargo aircraft apron west of the terminal parking positions. This apron is approximately 300 feet by 500 feet and will be reconstructed with Portland Cement Concrete (PCC) to accommodate three parking positions for ADG-III aircraft. The project will include demolition, stormwater, grading, PCC pavement, and pavement markings.

The existing pavement is constructed of a combination of bituminous asphalt and PCC and are exhibiting various types of distress including weathering, slippage cracks, block cracking, spalling, and mid-slab cracking. The Pavement Condition Index (PCI) ratings for this pavement is 51 (poor condition).

The start date for this project is estimated to be April 2023 and is estimated to be completed in January 2024. The estimated total cost of this project (based on bids) and funding sources are as follows:

Estimated Costs – Phase 1 & 2	
Design	\$418,645
Construction (Based on Bid)	4,956,260
Construction Administration	91,279
Construction Management	206,096
Total Estimated Costs – Phase 1 & 2	\$5,672,280
State Funding	\$1,000,000
PFC Funding – Phase 1 (App #4)	1,000,000
PFC Funding – Phase 2 (Requested)	3,672,280
Total Funding Sources	\$5,672,280

07-002 Construct New Taxiways "C" and "A4," Phase 2

This project includes the design; construction administration and construction management; and construction of two new taxiways. These two new taxiways will be fifty feet (50') wide, constructed with asphalt pavement and turf shoulders. New Taxiway "C" will be approximately 1,700' and will be constructed from Taxiway B to Taxiway A. New Taxiway "A4" will be approximately 400' and will be constructed between Taxiway A and Runway 18-36. These new taxiways will be designed for Airplane Design Group (ADG) C-III aircraft as per the existing Airport Reference Code (ARC) noted in the current Airport Layout Plan. The project also includes completely demolishing and removing the portion of decommissioned Runway 9-27 between Taxiway B and Runway 18-36.

The project will include field surveys and geotechnical investigations; permitting; pavement demolition; grading and drainage; subgrade preparation; installation of base course and asphalt pavement; pavement markings; lighting and signing; necessary airfield electrical vault improvements; construction sequencing and phasing; and erosion control.

The design will be performed in accordance with the latest versions of FAA Advisory Circulars 150/5300-13B, *Airport Design* and other applicable advisory circulars as required.

These new taxiways will preserve capacity and enhance safety of the taxiway system to the north of the existing terminal building. This project will improve taxiway ingress and egress for existing tenants.

Taxiway "T" (the taxiway in between the existing Runway 9-27 and the terminal aircraft parking positions on the north) provides the only path of ingress and egress for passenger service aircraft to aircraft parking positions on the north side of the existing terminal building. This new taxiway will provide a second point of entry to or departure from those parking positions should Taxiway "T" be occupied by a disabled aircraft, another taxiing aircraft, or should the taxiway require closure for maintenance activities.

Aircraft arriving to and departing from the Pinellas County Sheriff's Hangar and the U.S. Coast Guard fixed-wing parking apron also utilize Taxiway "T" for access to the airfield. This new taxiway would eliminate the need for those aircraft to utilize Taxiway "T" thereby deconflicting them from the arriving and departing commercial passenger flights. Having two access points to the airfield will maintain the critical missions of the Pinellas County Sheriff's Office and the U.S. Coast Guard.

The start date for this project is estimated to be April 2023 and is estimated to be completed in January 2024. The estimated total cost of this project (based on bids) and funding sources are as follows:

Estimated Costs – Phases 1 & 2	
Design	\$535,240
Construction (Based on Bid)	8,594,357
Construction Administration	109,012
Construction Management	206,096
Total Estimated Costs – Phases 1 & 2	\$9,444,705
State Funding	\$3,500,000
PFC Funding – Phase 1 (App #5)	4,575,000
PFC Funding – Phase 2 (Requested)	1,369,705
Total Funding Sources	\$9,444,705

07-003 Construct New Taxiway "N"

This project includes additions and changes to taxiway pavement and airfield geometry north of the existing intersection of Taxiway "A" and Runway 4. The project includes the following:

- The design; construction administration and construction management; and construction of a new Taxiway "N." Taxiway "N" will be approximately 1,100 feet long by 50 feet wide constructed with asphalt pavement. The pavement will be designed to ADG III/TDG 3 standards. The taxiway will be constructed from the existing Taxiway A to the northwest side of Runway 4.
- The partial demolition of the southeast corner of the Signature Flight Support ADG-I small aircraft parking apron to provide the required taxiway object free area safety-related setback for the new Taxiway "N."
- The complete removal and demolition of the ADG-I taxilane connector providing aircraft taxi movement between the apron/ramp and Taxiway "A."
- The construction of a new taxilane connector from the apron/ramp to new Taxiway "N."
- The addition of surface painted taxiway direction signs along Taxiway "A" immediately north of taxiway connectors "A4," "A5," and "A6."
- The addition of in-pavement guard light and an additional, retroreflective unlighted Mandatory Instruction sign located on the right side of the Taxiway "A"/Runway 22-4 holding position marking.
- The installation of new elevated omnidirectional blue medium intensity LED edge lights, (including transformers), installed with concrete encased L-867 base cans; and new Runway Guard Lights. The installation of new LED location, direction, and mandatory signs with concrete pads and transformers. All L-824 unshielded #8 AWG 5kv stranded copper cable will be installed in 2" Schedule 40 PVC conduit in direct earth or concrete encased duct with #2 AWG solid copper counterpoise cable installed over conduit. The necessary airfield electrical vault modifications, as well as updates to the airfield lighting control system (ALCMS), will be made. The lighting will be designed and constructed to FAA design standards per Advisory Circular 150/5340-18G, *Standards for Airport Sign Systems*.

The existing intersection of Taxiway A and the north approach end of Runway 4 has been identified by the FAA as a hot spot with the potential for runway incursions. These improvements will serve to mitigate pilot deviations and associated runway incursions at this intersection. These proposed facility improvements are based on multiple collaborative meetings between the Airport, the Orlando ADO and the Runway Safety Action Team (RSAT).

The estimated construction start date for this project is May 2024 and is estimated to be completed in February 2025. The total cost of this project is estimated to be \$6,125,000 to be funded 100% with PFCs.

07-004 Passenger Terminal Expansion and Improvements, Design

This project includes the design and pre-construction phase services of the expansion and reconfiguration of the passenger terminal building to meet the current passenger demand placed on the terminal facilities. The ultimate expansion of the terminal building is anticipated to be executed over five phases. This design effort includes the design of the first three phases.

The first three phases include the expansion of approximately 140,730 square feet of new space and the renovation of approximately 26,540 square feet of existing space. These expansions and renovations will address congestion issues in outbound baggage make-up, security screening, passenger hold rooms, concessions, baggage claim, restrooms, and operations areas. The existing terminal configuration provides for twelve gates and three remote parking positions. This project will not change the number of gates or parking positions, but will reconfigure those gates and parking positions to relieve congestion, improve operational efficiencies and passenger level of service. The project will add seven new passenger boarding bridges. The design and pre-construction phase services will include programming, schematic design, design development, contract documents, bidding and permitting support.

The purpose of the terminal expansion is to accommodate the increase in passengers at the airport by increasing or reconfiguring the outbound baggage make-up, security screening, passenger hold rooms, baggage claim, concessions, restrooms and operations space in response to the large growth in passengers experienced since 2013. The gate reconfiguration and additional passenger boarding bridges will help improve the loading and deplaning of aircraft during poor weather conditions. These improvements will elevate the level of service consistent with passenger and industry expectations while reducing passenger wait times and delays. These first three phases are anticipated to meet the needs identified for Passenger Activity Level (PAL) 2 identified in the Master Plan, which represents annual enplanements of 1,750,000 and/or annual aircraft operations of 145,000. This accurately reflects the Airport's current needs.

Total passengers at PIE increased from just over 1.02 million in CY 2013 to 2.29 million in CY 2019, a 125 percent increase. While total passengers dipped in 2020 and remained just off their highs in 2021 due to the effects of COVID-19, the Airport set its all-time passenger record in 2022 with total passengers of 2,445,919, a 20 percent increase over 2021 and a 7 percent increase over 2019.

While the terminal facility at PIE has undergone numerous improvements throughout the past few decades, most of these have been limited to renovations with limited new space added to the facility. The terminal facility still requires reconfiguration, but also expansion of existing spaces to meet the current demand and address numerous ongoing operational inefficiencies.

• The two holdrooms are unable to accommodate current passenger loads and passengers often have to wait outside of security screening until holdroom capacity is available. When there are weather delays, passengers are sometimes required to leave the holdrooms and wait on the non-secure side, thus requiring security screening again to board their flight. This adds to the congestion in the non-secure facilities, puts added pressure on the security checkpoints, increases the potential for flight delays, and results in added stress and frustration for passengers (lower level of service and operational

inefficiencies).

- The post security bathrooms and concessions often have large queues because they are unable to accommodate passenger demand. This limits circulation, increases congestion, and results in frustrated passengers (lower level of service).
- The baggage system is unable to handle the volume of outbound bags and the claim devices are unable to accommodate the volume of inbound bags during peak periods. This results in baggage cart queues and delays in servicing aircraft and results in extreme passenger congestion in the claim area (lower level of service and operational inefficiencies).
- The operations support areas are not adequate to service GSE equipment or ramp operations. This results in congestion and difficulty servicing aircraft on the ramp (operational inefficiencies).
- The single level terminal currently only has two gates served by passenger boarding bridges. The current hold room configuration and lack of boarding bridges often results in long walks across the active apron area during poor weather conditions and boarding or deplaning delays (lower level of service and operational inefficiencies).

The existing facility constraints create a poor passenger experience wrought with operational inefficiencies. The proposed project will bring the level of service back into alignment with customer expectations and ensure more consistent and reliable air travel.

The start date for the design and pre-construction services phase of this project is estimated to be August 2023 and is estimated to be completed in February 2025. The estimated total cost of this project and funding sources are presented in the table below. Based on the planning level space programming, the project is estimated to be 73.7% PFC eligible.

	Total Estimated	Eligible	Ineligible
	Cost	(73.7%)	(26.3%)
Estimated Cost	\$9,500,000	\$7,001,500	\$2,498,500
Funding Sources			
AIP/AIG	\$4,914,957	\$4,914,957	\$0
PFCs	2,086,543	2,086,543	0
State Funds	1,975,000	0	1,975,000
Airport Funds	523,500	0	523,500
Total Funding Sources	\$9,500,000	\$7,001,500	\$2,498,500

07-005 Acquire Airfield Sweeper

This project consists of the acquisition of a new Elgin Regenx Sweeper. This model features an 8 cubic yard hopper, 12' cleaning path, spray nozzles, vacuum head, and 265 gallon water tank. The broom/vacuum system is powered by a turbocharged diesel engine producing 74 hp.

This sweeper is necessary to allow the Airport to promptly remove mud, dirt, sand, loose aggregate, foreign object debris, and other contaminants from all runways, taxiways and ramp areas. This sweeper will replace a 2012 Elgin Crosswind Sweeper. The current Elgin sweeper is experiencing more frequent failures including failing to start at all on multiple occasions, and at other times it will start but the sweep and vacuuming functions do not work correctly. Repairing

the sweeper often takes a week or more, during which time PIE has no immediate replacement available.

The total cost of this project is \$315,000. PFCs are anticipated to provide 100% funding for this project. This project is estimated to start in July 2023 and will be complete in July 2024.

07-006 PFC Application Costs

PFC-eligible general formation costs included in this PFC project are the necessary expenditures to prepare the new PFC application. Development associated with the approved projects in this application will preserve and enhance capacity and safety at the Airport. The total cost of this project is \$57,600. PFCs are anticipated to provide 100% funding for this project. This project started in January 2023 and will be complete July 2023.

07-007 PFC Administration Costs

PFC-eligible costs included in this PFC project are the eligible ongoing administrative costs, amendments and closeout for this PFC application. Administration costs associated with the approved projects in this application will preserve and enhance capacity and safety at the Airport. The total cost of this project is \$27,400. PFCs are anticipated to provide 100% funding for this project. This project is estimated to start in July 2023 and will be complete in November 2026.