



November 22, 2023

Mr. Andrew Brooks
Environmental Program Manager
Federal Aviation Administration
1 Aviation Plaza
Jamaica, NY 11434

RE: Aircraft Rescue and Fire Fighting (ARFF) Building Project
Change in Project Limit of Disturbance – Technical Memo
Trenton-Mercer Airport (TTN)

Dear Mr. Brooks:

Trenton Mercer Airport's "Terminal Area Improvements Environment Assessment (EA)" was prepared in February 2022 on behalf of Mercer County who owns and operates said airport. The EA's purpose was to serve as the FAA's Findings of No Significant Impact and Record of Decision (FONSI/ROD) for a new terminal building and associated improvements, which included expansion of the terminal aircraft apron, **Aircraft Rescue and Fire Fighting (ARFF) building relocation, access road construction for the ARFF building relocation,** terminal access road and terminal parking lot reconfiguration, new parking garage and associated utilities, and stormwater management. During the ARFF Building and ARFF access road design development phases, site plan revisions were made to meet design and local and state environmental permitting requirements while further reducing environmental impacts. These revisions in several instances occurred outside the original limits of disturbance presented in the EA for ARFF relocation; therefore, this technical memo has been prepared to summarize the changes in limit of disturbances in all such locations.

During detailed engineering design phase of the ARFF building project, the site plan elements such as access road, vehicular parking lot pavement, entrance driveway, proposed utility lines, etc. were re-evaluated to eliminate and/or reduce environmental impacts on regulated environmental sensitive areas near by the project location. Coordination with environmental agencies such as the Delaware and Raritan Canal Commission (DRCC) and Mercer County Soil Conservation District (MCSCD) was performed during detailed engineering design phases to obtain the environmental permits. See **Attachment A** (extracted from Page 3-23 of the EA, **Figure 3-5** "Relocated Aircraft Rescue and Firefighting Facility") for the schematic layout of proposed ARFF building and it's components presented in the EA. See **Attachment B** for the final layout of the proposed ARFF building and site elements as per detailed engineering design. See **Attachment C** for the overlays of ARFF layout presented in EA and as per current designs for comparison purposes. The following changes to the site plan were made:



1. **ARFF Access Road** – In the EA, the access road between the proposed ARFF building and Runway 6-24 ran in a westerly direction connecting with Runway 6-24 at roughly 50 degrees. With this orientation, the access road crossed and impacted an existing 60” storm sewer trunk line which pipes the West Branch Shabakunk Creek underneath the Trenton-Mercer Airport. Additionally, this orientation placed the access road near existing isolated wetland areas “XX” and “YY” as shown on the EA exhibit (refer to **Attachment A**) and the Letter of Interpretation (LOI).

The access road layout per detailed engineering design (**See Attachment B**) runs in a northwesterly direction connecting with Runway 6-24 at roughly 90 degrees. This orientation avoids the conflicts with the existing 60” storm sewer trunk line crossing and also provides a greater buffer with the existing isolated wetlands areas as indicated above as well as any other environmentally sensitive areas. The reorientated access road provides a shorter distance to the primary Runway 6-24 and is in compliance with the required response time of three (3) minutes.

2. **ARFF Building Entrance Driveway** – The proposed ARFF building will be accessed off existing Scotch Road. The proposed driveway shown in the EA layout was located within the Delaware and Raritan Canal Commission (DRCC)’s 100’ stream corridor. Per DRCC regulations and guidelines, the development of such impervious area and any land disturbance activities were not permitted. Therefore, the site access entrance driveway was relocated further north on Scotch Road to avoid any disturbance/impact to regulated DRCC stream corridor areas.
3. **Vehicular Parking Lot Pavement and Stormwater Basin** – The ARFF building’s vehicular parking lot and associated pavement including proposed stormwater management basin originally included in the EA was partially located in the DRCC’s 100’ stream corridor. Based on the DRCC regulation and per our coordination with DRCC, such design elements were determined to be relocated outside of the 100’ stream corridor to avoid any impact to the regulated areas. Therefore, the current pavement design relocated all pavement (impervious area) and stormwater management basin outside of the DRCC 100’ stream corridor eliminating all disturbance. Additionally, the overall pavement area (impervious area) was reduced from 1.48 Acres to 1.05 Acres thereby reducing the environmental impacts.
4. **Area of Land Disturbance** – The total project limit of disturbance for ARFF building and site elements presented in the EA was approximately 4.14 Acres. The total project limit of disturbance for updated ARFF building and site elements per detailed engineering design is approximately 2.91 Acres. This is a reduction of approximately 1.24 Acres of site land disturbance, which is approximately 30% reduction in the project disturbance than presented in the EA.



Additionally, please note that the existing wetland delineation letter of interpretation (LOI) boundary encompasses the aforementioned area of site plan changes, and no wetlands were identified in the said areas. Therefore, it is our understanding that the above discussed changes in the site elements and the limit of disturbance have no impacts. Refer to Attachment D (*extracted from Appendix H of the EA, Page 123, Page 162, and Page 163*).

I sincerely request you to review the above-mentioned changes in the project limit of disturbance of the proposed ARFF building between the revised layout and the EA layout. Upon your review, please provide your determination on the changes.

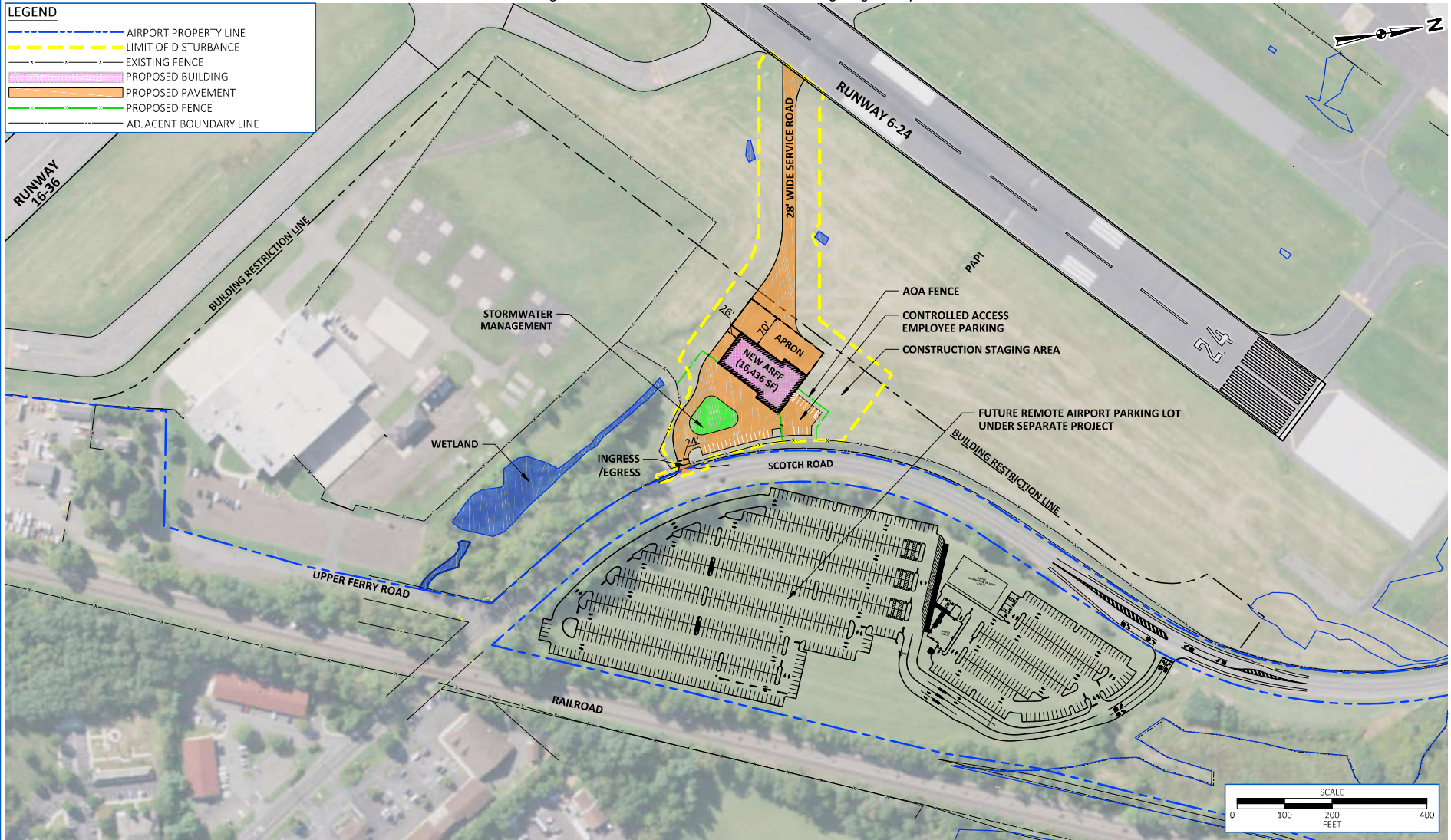
Should you need additional information in regard to the above request, please do not hesitate to contact me or my office.

Sincerely,

Niraj Lamichhane, P.E., ENV. SP
Director, Airport Engineering Services
DY Consultants




Figure 3-5: Relocated Aircraft Rescue and Firefighting Facility



K:\Trenton\T-0608.00 TTN Terminal CAD\Drawings\Figures\ARFF.dwg



Legend

 Study Area

SOILS LIST:

- QukB - Quakertown silt loam,
2 to 6 percent slopes
- UdbB - Udorthents, bedrock substratum,
0 to 8 percent slopes

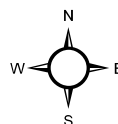


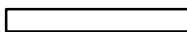
Sources:
Soil Survey Geographic (SSURGO) Database for Mercer County, New Jersey,
U.S. Department of Agriculture, Natural Resources Conservation Service, Fort Worth, Texas, January 2014.
New Jersey 2015 High Resolution Orthophotography, NAD83 NJ State Plane Feet, State of New Jersey -
Office of Information Technology, Office of Geographic Information Systems, Trenton, NJ, February 2012

Figure 3
SSURGO Soils Map

Trenton Mercer Airport
Aircraft Rescue and Firefighting (ARFF) Station
Block 373, portion of Lots 9 & 9.01
Ewing Township
Mercer County, New Jersey

ASGECI Project # 4487



200

Feet

