

ATTACHMENT #4



MEMORANDUM

TO: Patty Wahto, Airport Manager

FROM: Mike Greene, JNU Airport Project Manager

RE: Projects Office Monthly Report

DATE: November 9, 2021

Project specific summaries of project status and activity are presented below.

Terminal Reconstruction – Phase 1&2. In October, Dawson Construction continued demolition work within the Phase 2 work areas, and removed the old elevator, the old terminal boilers and completed the abatement work associated with the demolition of the old north annex. Work continued on the removal of the old concrete elevator shaft, which has proved to be surprisingly difficult to bring down. Dawson Construction started work on the structural steel modifications within the Phase 2 work area, and has erected a temporary roof assembly to facilitate lowering the new steel members down through the roof into the work area. Dawson Construction also continued to work on some of the outstanding issues from the initial construction phase.

The existing main entry to the terminal remains closed, and will remain closed until late December 2021 or early January 2022. Dawson Construction is currently looking into the possibility of opening up this entry and removing the Phase 2 work area partitioning earlier as this would benefit the work to match-up the new interior finishes to the old interior finishes. First floor access between the old portion of the terminal and the new portion of the terminal continues to be facilitated by the use of the temporary “tunnel” which routes foot traffic behind the Phase 2 work area. One of the two new elevators continues to be used to provide accessible access to the second floor of the terminal.

Look Ahead to Upcoming Activity. The Contractor’s schedule for November calls for the continuation of the effort to remove the old elevator tower and the start of the work to install the new structural steel within the central Phase 2 work area. The crane that is to be used to lower the new steel into the building will be staged in front of the main terminal entry on Tuesday, November 9, and the work to install the new steel and new roof pan decking will begin on November 10. This work is scheduled to be complete on November 19, at which time the crane will be removed from the site.

The demolition of the old north annex is scheduled to be completed on November 12. This schedule may slip a bit in order to deal with some very deep pier footings and what appears to be an old tower footing that had been found within the footprint of the annex. When complete, the annex site will be graded, capped with D-1, and the old entry canopy will remain in place for use by Alaska Seaplanes as part of their new terminal project.

Dawson Construction will also continue working within the Phase 1B work area to address the punch list items and to finalize the outstanding Change Order work.

Terminal Fire Alarm Upgrade: The project Contractor, Johnson Controls, continues to work on the preparation and submission of the administrative and materials submittals and system shop drawings. JNU, in conjunction with Johnson Controls, has developed an updated project schedule in which work will begin on-site on November 12, 2021, and will be substantially complete on April 1, 2023.

ATTACHMENT #4

Haight & Associates (Electrical Engineer & Designer of Record) remains under contract and will provide construction administration services for this project.

Snow Removal Equipment Building (SREB): JNU continues to work with PDC Engineers on the development of the 100% documents that will be used to obtain competitive bids for the replacement of the primary circulation pumps P-1A and P-1B in the SREB. These pumps were designed to be operated in a redundant-pair system to circulate glycol fluid between the SREB, the Sand-Chem Building and the 144 borehole ground source field located below the tarmac on the south side of the SREB. Each pump was originally designed to take the full load of the two heat pumps in the SREB and the one heat pump in the Sand-Chem Building. Following the completion of the Sand-Chem Building, it was determined that the head loss associated with the overall system (SREB plus Sand-Chem) was much higher than originally anticipated, and pumps P-1A and P-1B cannot meet the needed design flow rate. To correct this, the existing 15 horsepower pumps are to be replaced with 25 horsepower pumps. The existing variable frequency drives and power feeds to the new pumps are also to be replaced. PDC Engineers estimates the two pumps and drives installed would be \$87,000, but not inclusive of contract administration, temporary heating during installation and administrative costs. Total project cost is estimated to not exceed \$115,000.

PDC Engineers submitted a 95% set of design documents to JNU on October 15, 2021, and JNU completed an in-house review and provided review comments back to PDC on October 21, 2021. PDC will deliver the completed 100% set of documents on the week of November 8-12. Since this is an upgrade to the system, the Airport will be responsible for the cost of the system upgrades. This is presented for Board approval in the agenda.

Sand/Chemical Building: Ground Source Heat Pump (GSHP) -1 is currently operational, but it is not clear for how long. With cold weather now here, there is a very real concern that the flow rate of the glycol circulation system (driven by pumps P-1A and P-1B in the SREB) will be inadequate, which will cause GSHP-1 to shut-down. JNU continues to work with PDC Engineers on the post-construction commissioning of the SREB and Sand-Chem buildings, as well as with Daikin and Meridian Controls. At this time, and until SREB pumps P-1A and P-1B have been replaced, it will not be known whether the past failures of GSHP-1 were caused by inadequate flow in the circulation system, or an inherent flaw in the design of GSHP-1.

The continued problems with GSHP-1 lends credibility to the idea of introducing an 80KW electric back-up boiler to the Sand-Chem Building. ROM cost estimate, including design, electrical work, contract administration and administration costs would be \$175,000. This system is presented to the Board for approval in the agenda.

Sand/Chemical Building – Fueling Station: JNU has requested a proposal from Haight & Associates (electrical engineering) to provide the necessary design documents to expand the diesel-gasoline fuel dispenser system at the NWDA Fuel Station to include access control and fuel usage tracking features. Haight & Associates has been asked to review the site controllers offered by Gas Boy, which is the manufacturer of the Fuel Station fuel pumps. Haight & Associates has submitted a fee proposal in the amount of \$4,730 to complete the design for this project. JNU has not yet followed up on this proposal with a letter of agreement, and no design work has been started/completed.

Sand Shed Demolition: Southeast Earthmovers (SEEMS) has completed all of the items listed within the substantial completion inspection which was conducted on August 25, 2021. JNU has notified Southeast Earthmovers, as well as Craig Loken, that the project was determined to be Substantially Complete on September 19, 2021. JNU has begun work on closing out this project.

Float Pond Improvements – Phase 2: JNU has not completed a full review of PND Engineers 95% set of design/bid documents for the second phase of this project. The scope of work for the project will include raising a portion of the existing roadbed, the introduction of a drainage ditch, armoring a portion of the southern pond bank with rock and reconstructing/re-positioning 14 of the existing concrete float plane dock headwalls. CBJ Engineering Department has amended the current contract with PND for the second phase of design work and

ATTACHMENT #4

JNU had been coordinating with PND to have bid-ready documents completed for a schedule that would bid as early as this winter. The work was originally scheduled for this fall and the schedule has slipped. The order of the work is critical with the pond embankment needing to be done prior to the road work. Staff and PND are working on this schedule since the pond will need to be drained for this work during the winter months, while also coordinating the timing of the grant. The Federal Aviation Administration (FAA) grant money for this project was rolled over to FFY 22 (AIP entitlements) to facilitate this bid schedule.

Runway Safety Area (RSA) Expansion Phase IIC: No change since last report. The project has been determined to be Substantially Complete, and both JNU and DOWL continue to work with the Contractor (SECON) on finalizing the project close-out documentation. Final payment has not yet been made to SECON. DOWL continues to finalize the project as-built record documents and the final engineer's report based on JNU review comments.

Taxiway (TWY) A Rehabilitation, Taxiway D-1 Relocation and Taxiway E Realignment: The project Contractor, SECON, asked for a Substantial Completion inspection of the new Airfield Lighting Regulator Vault (ALRV) addition to SREB on November 3, 2021. An inspection was conducted on November 4, 2021, and consisted of Architectural (Mike Greene, JNU Project Manager) and Mechanical (Stephen Bishop, PDC Engineers). From this inspection, it was determined that the ALRV was not yet Substantially Complete because the fire suppression system was not yet complete or tested, and the fire alarm interconnection to the fire suppression system was not yet complete or tested. JNU advised DOWL of this determination, who in turn, advised SECON.

SECON and their electrical subcontractor (Ever Electric) continue to work on the completion of the electrical distribution system within the ALRV, and on the installation of the new back-up generator within the SREB. Work continues on the installation of the generator controls. The start-up, testing and commissioning of the new generator has not yet taken place.

Construction Administration & Inspection (CA&I) services continue to be provided by DOWL who is serving as the Project Engineer.

As the Engineers of Record, PDC Engineers continues to provide Limited Construction Administration services, coordinating with JNU and with DOWL to insure that all work completed by the construction Contractor complies with the requirements outlined within the project construction documents. PDC Engineers continue to coordinate with JNU, DOWL, and SECON on responding to questions raised by the Contractor and to review materials submittals for items that had previously been scheduled to be installed in Phase 2 (Summer 2021).

Lavatory Waste Dump Site: No change since last report. JNU has updated the project construction cost estimate (\$94K), and the overall project budget (\$128K) based on a budgetary fee estimate (\$19K) provided by PDC Engineers to complete the design work and the associated bidding and construction documents. This project remains on hold pending the identification of a funding source for the design component.

Parking Lot Repairs: DOWL has submitted a fee proposal, in the amount of \$128,000, for an initial Site Investigation and Concept Development phase for this project. This initial phase will complete the subsurface soils investigative work, develop a comprehensive site survey, complete a base map which combines existing ground features with topographic survey, review existing lighting and electrical infrastructure, review existing surface and sub-surface drainage and review existing snow removal procedures. The deliverables from this initial phase will include a 15% concept level design for the parking lots and a 15% cost estimate.

Per the DOWL proposal, they have identified the following work to be addressed in future contract amendments:

- Preliminary Design to 65% level.
- Final Design to 95% level.
- Development of Bid-Ready (100% Level) Construction Documents.

ATTACHMENT #4

- Assistance during CBJ Bidding Process.
- Design Services during Construction.
- Construction Administration and Inspection Services.
- FAA Grant Assistance, Project Close-Out Assistance.

Per the DOWL proposal, the work associated with the initial Site Investigation and Concept Development project phase was to be complete on or before April 1, 2021. This schedule was dependent on approval of the DOWL proposal by November 12, 2021. Acceptance of this proposal, and Notice-to-Proceed is on hold pending approval by the Assembly.

Ramp Lighting Upgrades: No change since last report. JNU has issued a Request for Proposals as part of the Terminal Reconstruction project to introduce lighting mounting brackets on the west (airside) roof parapets of the new north wing. These mounting brackets, and the associated conduit feeds, will be installed by the Terminal Reconstruction contractor because the completion of this work by another contractor would adversely impact the warranty associated with the new terminal roof installation.

Haight & Associates is currently working on revising the construction documents to expand the project scope of work to introduce additional building mounted high-efficiency LED light fixtures on the west side of the new north terminal and to identify the lighting mounting brackets and conduit feeds as existing. As reported earlier, these revision area necessary because of the elimination of the free-standing light poles that were to have been installed within the 135 apron as part of the Terminal Reconstruction project. JNU continues to work with Haight & Associates on completing a final review before submitting this project to CBJ Engineering for release for competitive bid. This project is currently scheduled to be bid later this summer.

Haight & Associates provided confirmation from the manufacturer that the proposed high efficiency LED flood light fixtures meet the FAA's Buy American requirements.

The costs associated with this work have been determined by the FAA to be Airport Improvement Program (AIP) eligible and allowable for AIP participation. The grant has already been received and appropriated (including Airport match funds). However, in trying to abide by the Buy American clause, and other design delays, this grant will sunset on September 30, 2021. Any funds not expended will need to be returned to the FAA (no extension). Staff is working to see if these ramp lights could be incorporated into the terminal project.