



ATTACHMENT #4

TO: Dave Palmer,
JNU Manager

DATE: February 6, 2009

FROM: Catherine Fritz, AIA
JNU Architect

FILE: 1382.16
1182.16

RE: Terminal Renovation and Sno-Man Bldg. Project Updates

Terminal Renovation.

The past month has concentrated on answering questions of bidders for the upcoming renovation project, and completing bid documents for the associated Geothermal Loop Fields project.

The terminal renovation Pre-Bid conference was held on January 16th and had over forty people in attendance. Twelve General Contractors are holding plans for our project, and many sub-contractors are interested, as well. The high level of interest in our project is expected to be reflected in competitive bids. However, it's also important to remember that low bids sometimes mean that the Contractor will seek to recover costs during construction in the form of change orders. Our best defense for this possibility is to make sure that our documents are thorough, clear, and well coordinated, and that our budget for construction management is adequate. The design team, led by Tony Yorba at Jensen Yorba Lott Architects, is responsible for the technical design and the coordination of the many trades of work in the project and for ensuring the documents are sound.

The bid opening was extended by the CBJ Contracts office to February 13, 2009 at 2:00pm in the Assembly Chambers. The extensive addenda, due to questions asked by bidders and the need to have clear documents as noted above led to the decision to delay the opening. It is imperative that bidders have sufficient time to prepare the bids, and the extent of modifications was deemed too great to hold the original date. While this is disappointing, I am in agreement with the decision, as it is best for the project. The Airport Board's bid review group has been rescheduled to accommodate the revised bid opening.

The test wells at Dimond Park and the Airport were completed during the week of January 12, 2009. See attached summary. The project is currently being advertised for bids and scheduled to open on February 18, 2009. The Pre-Bid conference will be held Monday, February 9, 2009 in the CBJ Engineering Dept. conference room.

A solicitation for people interested in serving on the project's Dispute Resolution Board will be announced soon. Selection of members for the DRB will take place after the construction contract is awarded.

Airfield Maintenance (aka Sno-Man) Building.

The Schematic Design review work session was held January 14 – 15, 2009. The scope of the project was broken into two phases to accommodate the expected FAA funding schedule. The first phase will include the primary maintenance and equipment storage building. A second phase will follow for the sand and urea building, fueling station, covered outdoor storage, and site amenities. Phase I design will begin in February, with a milestone review expected in May. The geothermal loop field planned for this facility is being included in the RSA project that will soon go out to bid.



Geothermal Loop Fields CBJ Contract No. E09-167 Test Borings Summary

During the week of January 12, 2009, test borings were drilled at the two geothermal loop field sites specified in CBJ contract E09-167. The drilling was done by Gregory Drilling and overseen by mechanical engineer and design consultant, Jim Rehfeldt, PE. Boring logs, photographs, and a video clip accompany this narrative to describe the subsurface conditions encountered. Equipment use included a rotary mud drill with 6" bit, drilling mud reclaiming unit, and Quick Gel drilling mud. A 1" HDPE U-bend assembly was prepared off-site by Behrends Mechanical, and lowered into the bore and backfilled by Gregory. The pressure test was maintained by Gregory Drilling throughout installation. These U-bend assemblies will be incorporated into the loopfield at each site.

Investigative work began at the Dimond Park Aquatic Center site, on Riverside Drive. The specific site for the boring was located, and the area was cleared of snow. A nearby fire hydrant was tapped for needed water. Containment of the cuttings was not necessary, as there was an area approximately 10ft. from the bore hole to deposit the material. Set up of equipment was accomplished with ease, as the site is flat, has ready access from an established Right-of-Way and was sufficiently isolated from other activities at the park (eg high school, elementary school, and public park use) to not require fencing or barricades.

Drilling began at Dimond Park site on January 14th at 8:00am. The initial drilling encountered wood debris (tree stumps) and large rocks to a depth of about 40 feet; the drilling mud was lost twice during this process. A total of 60 feet was drilled on the first day. On January 15th, the drilling continued to a depth of 300 ft. with completion by 12:00 noon. The heat pipe loop with U-Bend was installed into the 300 ft. bored hole on January 15th. An 8 ft. length of No. 5 steel reinforcing bar was carefully taped to the HDPE pipe to assist the vertical drop of piping. The borehole was backfilled with pea gravel and capped with a 10' long bentonite chip plug.

Encountering tree stumps and large rocks within the first 50 feet of the surface was predictable, given the history of the site as a gravel extraction and construction waste pit that was used during development of the Mendenhall Valley subdivisions in the late 1970's and early 1980's.

Equipment was moved to the Juneau International Airport site, 1873 Shell Simmons Drive (at the south side of the old North terminal), on the morning of January 16th. The site for the investigative boring had been prepared a few days earlier by removing an 18" x 24" area of asphalt and setting up barriers as required by airport security. Water was accessed from a nearby hydrant.

Drilling began at approximately 12:30pm January 16th, and proceeded without complication until 4:00 pm. Weather was about 35 degrees with high overcast and calm. The cuttings were collected in a bin provided by Gregory Drilling, then vacuumed out of the tank by airport staff using airport equipment, and disposed of at a waste site on the airport property.

A 1" HDPE U-bend assembly was lowered into the 318 ft. hole at approximately 10:00am on January 17th. An 8 ft. length of No. 5 steel reinforcing bar was carefully taped to the HDPE pipe to assist the vertical drop of piping. The bore hole was backfilled with pea gravel and capped with a 10' long bentonite chip plug.

Photographs from Dimond Park Aquatic Center Test Boring



Photographs from Juneau International Airport Test Boring

