

AIRPORT BOARD
AGENDA
6:00 P.M., WEDNESDAY, AUGUST 13, 2014
ALASKA ROOM

- I. CALL TO ORDER
- II. ROLL CALL
- III. APPROVAL OF MINUTES:
 - A. Regular Monthly Meeting of July 9, 2014
 - B. Special Meeting of July 14, 2014
- IV. APPROVAL OF AGENDA
- V. PUBLIC COMMENTS
- VI. ELECTION OF OFFICERS
- VII. COMMITTEE APPOINTMENTS
- VIII. UNFINISHED BUSINESS
 - A. **Water/Wastewater (Sewer) Meeting and Regulation Change (Attachments #1 and #2):** The Finance Committee held a meeting on August 5, 2014, to discuss the current Airport Water/Wastewater Rates Regulation. The Airport became a ‘sub-utility’ for water and sewer in 2004, per the CBJ. The Airport established rates in 2004 based on estimated consumption at the airport. Once meters were installed at the Airport property boundary in June 2012, the Airport was able to track the expenses and revenues, and it was apparent that the Airport-set rates were not high enough to cover the expenses. Rates will have to increase, but staff thought it would prudent to see what the increased City rates would be before changes the Airport rates. The City passed their increases for water and sewer (6.5% and 8% respectively) over the next 5 years starting January 1, 2015.

The Finance Committee reviewed the proposed rates at the meeting and concurred that the Airport water/sewer rates needed to mirror the City rates in order to stay balanced. Attachment #1 shows the Water/Wastewater Rates Regulations proposed to change January 1, 2015. This regulation change essentially points Airport tenants to the Public Works rates by stating “all rates as established by CBJ Public Works”. This eliminates the need for the Board to approve each rate change and go out for public process each year.

Board Motion: “*Approve the change to Title 07, Chapter 15, Juneau International Airport Water and Wastewater System Regulation, to reflect that the Airport rates for water and wastewater will be the same as the rates established by CBJ Public Works City-wide rates. The regulation, as shown in Attachment #1 will proceed through the regulation process, public comment period and final Board approval prior to subsequent approval by the Assembly for implementation on January 1, 2015.*”

Additionally, at the August 5, 2014 Finance Committee meeting, the Committee concurred the Airport should not be in the utility business. The Committee wanted to pursue disbanding the Airport as its own utility and return this function back to Public Works. Further discussions would need to take place with Public Works.

Staff feels the best course of action on this matter would be for the Board to go on record in the form of a Resolution. Staff has drafted City and Borough of Juneau, Alaska, International Airport Board Resolution 2014-01, as Attachment #2.

Board Motion: *“Adopt the City and Borough of Juneau, Alaska, International Airport Board Resolution 2014-01, as outlined in Attachment #2, and go on record that all functions of the Airport water/wastewater system revert back to Public Works Department.”*

B. Airport Utilities Report and Special Presentation on the Heat Pump System

(Attachments #3 and #4): Several months ago, staff was asked to provide a summary of the terminal building utilities. The attached memo summarizes the current terminal issues. Doug Murray, PE, Murray and Associates will provide an overview of the geothermal heat pump system.

1. Airport Utility Report. Attachment #3 summarizes the terminal utilities and the current issues.

2. Special Presentation on Heat Pump System by Doug Murray, PE, of Murray and Associates (Attachment #4): As requested earlier this Spring, an analysis and presentation of the heat pump system and efficiencies will be presented at the meeting.

C. MALSR Legislative Grant: Just prior to the July Board meeting, the Airport received word from the Federal Aviation Administration (FAA) that the remaining Runway 26 MALSR (Medium Intensity Approach Lighting System With Runway Alignment Indicator Lights) lights would need to be completed using FAA Facilities and Equipment (F&E) to be consistent with the first phase of installation (by the FAA) and remain an FAA-maintained system. This meant that the \$93,750 Designated Legislative Grant from the Department of Commerce, Community, and Economic Development (DCCED) awarded to the City as local match for this project as an Airport Improvement Program (AIP) project could not be accepted.

Subsequently, the Airport learned that there could be situations that allow for an F&E project to receive such funding under the FY 14 FAA Appropriations Act under the F&E account "there may be credited to this appropriations funds received from States, counties, municipalities, other public authorities, and private sources, for expenses incurred in the establishment, improvement, and modernization of national airspace systems." The Airport contacted FAA Air Traffic Organization and their legal department confirmed that this was the case and the grant money can be accepted without jeopardizing the ownership and maintenance with the system. Therefore, the Airport can accept this grant. The total funding needed for the completion of the Runway 26 MALSR system is \$3M. The Airport/City will be pressing our congressional delegation for

assistance in securing the remaining funding through F&E. Staff will also apply for other grants to help with this project.

Board Motion: *“Request approval to appropriate the Designated Legislative Grant in the amount of \$93,750 toward the remaining Runway 26 MALSR installation.”*

IX. NEW BUSINESS

A. **Americans with Disabilities Act Passenger Boarding Ramp:** FAA Grant

Assurances require that the airport provide access to people with disabilities for aircraft with more than 30 seats. We currently do not provide access to aircraft from the two ground-loaded positions at Gate 2 and Gate 6. Alaska Airlines has historically used a food truck to lift passengers to their aircraft. Delta Air Lines has hand-carried passengers to the aircraft from the ramp when ground loading.

Airport staff has identified a passenger boarding ramp that can be used for both 737 and 757 series aircraft available to purchase from Allegiant. The cost of the ramp is \$52,132 plus shipping and set up of \$7,918 totaling \$60,050, plus administration costs. The ramp is in excellent condition and is ready to ship.

The Airport anticipates a year-end grant for acquisition of a passenger boarding ramp. Since the ramp is considered used equipment it can be purchased without a long bidding process (City Code 53.50.090) so we can take advantage of any unexpended Alaska Region year-end funds from FAA.

Board Motion: *“Approve the acquisition of an FAA required passenger boarding ramp at a not-to-exceed cost of \$70,000, using terminal capital improvement project funds to forward fund the ramp until it is reimbursed with FAA Airport Improvement Program funds. Furthermore, authorize the Airport Manager to accept a grant offer from the FAA and corresponding State of Alaska Department of Transportation matching funds for reimbursement.”*

B. De-Appropriation of ASOS Relocation Project Funds: Staff has closed the Capital Improvement Program (CIP) for the ASOS (Automated Surface Observation System) relocation, which was done during the Runway Safety Area (RSA) project. It was under budget by \$22,650.61, and the remaining Passenger Facility Charge (PFC) funds must be de-appropriated. These remaining PFC funds will simply rollover to PFC #8 for various projects under that application.

Board Motion: *“Approve the de-appropriation of unused PFC funds in the amount of \$22,650.61 from the closed ASOS Relocation project.”*

C. **Airport Manager’s Report:**

1. Clean Up and Limbing of Trees along Yandukin and Jordan Creek Corridor (Attachment #5): The Airport has received numerous complaints about dumping in this area, people ‘living’ in the area and drug activity. The low hanging limbs provide perfect coverage for this activity. Juneau Police Department has voiced their concerns in the attached letter and would also like to see the area cleaned up for safety and

security of all. Staff will be going in to clean up the area and the lower limbs to prevent these activities on this land within the next few weeks.

2. SREF Relocation Update: Staff has been corresponding and providing information to the FAA regarding the request to relocate the proposed Snow Removal Equipment Facility (SREF) from the NE quadrant site to the NW quadrant site. This is for reasons of efficient land use, cost savings in development and increased land lease revenues. The FAA has asked staff to come up to Anchorage this month to discuss the project in person. A date has not been established yet.

3. Art Program Update (Attachment #6): Staff has provided an overview of the terminal art program in the attached memo. Staff expects to have an updated draft of the art program policy ready for the Board this fall. The Airport will continue to use the current temporary exhibit agreements.

4. Congressional Visit: Senator Murkowski's aide, Allison Nyholm, will be in Juneau on August 19th to discuss federally funded grants. The Airport will be on her agenda, but a specific time has not been set up. We will be discussing many of our CIP needs, but request lobbying effort for the completion of the RWY 26 MALSR project completion using FAA F&E funding.

5. Airport Engineer Report (Attachment #7)

6. Airport Architect Report (Attachment #8)

X. CORRESPONDENCE:

XI. COMMITTEE REPORTS

A. **Finance Committee**: The Finance Committee met on August 5, 2014, to discuss the water/sewer rates at the Airport. See Unfinished Business for action items.

B. **Operations Committee**:

XII. ASSEMBLY LIAISON

XIII. PUBLIC COMMENTS

XIV. BOARD MEMBER COMMENTS

XV. ANNOUNCEMENTS

XVI. TIME AND PLACE OF NEXT MEETING:

A. Airport Board, 6:00 p.m., September 10, 2014, Alaska Room

XVII. EXECUTIVE SESSION

XVIII. ADJOURN

ATTACHMENT #1

A REGULATION OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Adoption of Title 07, Chapter 15 Juneau International Airport Water and Wastewater System

PURSUANT TO AUTHORITY GRANTED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, THE MANAGER AND THE JUNEAU INTERNATIONAL AIRPORT BOARD HEREBY ADOPTS THE FOLLOWING REGULATIONS:

Section 1. Authority. These regulations are adopted pursuant to CBJ 01.60 and CBJ 05.01.080.

Section 2. Adoption of Regulations. The City and Borough of Juneau Administrative Code is amended by the adoption of a new Title 07, Chapter 15, reading:

City and Borough of Juneau Administrative Code Title 07: Juneau International Airport Chapter 15: Water and Wastewater System

Sections:

- 010 Policy
- 020 Design/Construction Requirements
- 030 Fees
- 040 Metering and Billing
- 050 Allowable Uses
- 060 Definitions

07 CBJAC 05.010 Policy. The policy of the City and Borough of Juneau International Airport Board (JNU), unless otherwise established by Assembly action, governing of the JNU Water/Sewer System (hereinafter referred to as “system” or “systems”) is as follows:

- (a) The extension of systems on the airport will be to achieve various objectives in the following priorities:
 - (1) Safety and fire protection;
 - (2) Expansion of commercially available lease lots;
 - (3) Availability to private aircraft hangars;
 - (4) Centralized aircraft wash-down and toilet facilities;
 - (5) Other
- (b) Availability of systems to tenant facilities is expressly not for the purpose of establishing rental or residential uses in any facility or for establishing commercial office or retail space in private hangars. Use of facilities shall be as specified in individual tenant leases.
- (c) Water usage by tenants will be charged at a cost recovery rate plus other fees established by the Board to help cover the cost of routine maintenance, repairs, and replacement or expansion of system. It is recognized that these fees will not cover the entire cost of replacement, but will be set to assist in that effort when required. Such fees shall be segregated from general airport revenues and restricted to payment for water usage and for use of maintenance and/or expansion of the system.

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- (d) Any permits, approvals, and fees required of a tenant associated with that tenant's connection to the system shall be paid before that connection will be allowed.
- (e) Any tenant in arrears on any payments to the Airport or to the City and Borough of Juneau shall bring all accounts up to date prior to being permitted to connect to the system.
- (f) Except where specified to the contrary, all other provisions of CBJ Code Title 75, SYSTEMS, shall apply equally to the JNU system and administration.
- (g) Connections shall be for use of individual tenants, their guests, and/or their customers.

07 CBJAC 15.020 Design/Construction/Maintenance Requirements. The following describes the manner in which the Airport will undertake expansion and maintenance of the system and a tenant will be permitted to connect.

- (a) Expansion of the system by the Airport shall be in a manner which brings a main line into an area such that it is accessible to connection by a tenant. Such project will be undertaken in priority set by the Airport Board, with such funding as the Board may make available for such expansion.
- (b) Should a tenant wish to connect to the Airport system prior to such time as the Airport has constructed a readily available main line, the tenant, after coordination with the Airport Manager, may elect to extend the line to his/her facility at his/her own cost. Such undertaking by the tenant shall be in accordance with the Airport's plan for future expansion of the system and done in such a way as to minimize disruption to Airport and tenant operations.
- (c) Any main lines installed shall be placed in such a manner as to minimize disruption to operations during initial construction or in the event of required repairs.
- (d) During installation of the main line, tenants proximate to the installation will be given the opportunity to add connections or fittings necessary for their connection; such additions will be the tenant's cost.
- (e) Items for which the tenant will be responsible if he/she wishes to connect to the system are:
 - (1) Coordination with and approval of the Airport Manager for the connection;
 - (2) All permit, inspection and connection fees;
 - (3) Design or engineering drawings for their specific connection;
 - (4) Excavation, bedding and backfilling of main lines in order to add connections and of trenches from the main lines to their facility
 - (5) Replacement/repair of any pavement affected by the installation to comply with Airport standards.
 - (6) Maintenance and repair of tenant installed pipes, fixtures, etc.

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- (f) Nothing in the foregoing paragraph will prevent the tenant from coordinating with Airport Management to take advantage of open trenches which the Airport has made as part of an Airport project.
- (g) Cost of the connection to private hangars shall be limited to that which would normally be expected for an off-airport residential installation. Such cost will be established by the Airport Board through this regulation.

07 CBJAC 15.030 Fees. ~~It is recognized that the City and Borough of Juneau, CBJ Engineering Department, Regulatory Division, establishes fees for CBJ permits and required inspections. These fees are outside of the authority of the Airport Board and as such are not considered here. It is anticipated these~~ are the full responsibility of the tenant.

The Airport Board sets the following rates and fees for tenant's connection or connected to the Airport System:

- (a) Connection fees, Permit fees and Inspection fees:

Water: As established by CBJ

Sewer: As established by CBJ

- (b) Water Usage – ~~Commercial rate: \$15.50/month up to 4,000 gallons, plus \$2.00 per thousand gallons (or any fraction thereof) over 4,000 gallons~~ All rates as established by CBJ Public Works

- (c) Wastewater – ~~Commercial rate: \$55.00/month up to 4,000 gallons, plus \$7.30 per thousand gallons (or any fraction thereof) over 4,000 gallons~~ All rates as established by CBJ Public Works

- ~~(d) Water Usage – Private rate: \$10.00/month~~

- ~~(e) Wastewater – Private rate: \$25.00/month~~

- ~~(f)(d)~~ Hydrant Meter/Wrench Usage (per use): ~~\$10.00 flat fee plus \$2.00 per thousand over first 1,000 gallons usage~~ All rates as establish by CBJ Public Works

- ~~(g) Central Wash Station Use Fee: \$10.00 per use~~

07 CBJAC 15.040 Metering and Billing.

- (a) BILLING OF TOTAL AIRPORT USAGE: Metering of total Airport usage will be accomplished through meters installed by the CBJ Public Works Department at the point where the CBJ water system enters into the Airport boundary. The rate paid for total water usage within the Airport will be at the rate established by the CBJ Assembly for large commercial users. Billing for such usage will be handled the same as any other large commercial user within CBJ.

- (b) Billing for Usage in Premises by Airport Tenants:

- (1) ~~At the time of establishment of this regulation, certain tenants of the Airport were metered and billed for water usage by CBJ Public Works. Such tenants will continue to be metered and billed~~

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~~in the same manner.~~ Billing and collections for the Airport system will be handled by the CBJ Finance Department Public Works at the established rates, with a monthly report provided to Airport Management regarding usage and billing.

- (2) Commercial, governmental, and large private tenants will be connected to the JNU water system through a water meter specific to that tenant. The meter readings for that tenant will be used as the basis for billing to that tenant. Such tenants will be billed based on both water and wastewater connections.
 - (3) Small private tenants will not be individually metered. Such tenants will be billed on a flat monthly/quarterly rate. Such tenants will be distinguished by either a water only connection or a water and wastewater connection and will be billed accordingly.
- (c) Other System Use: Airport shall collect the fees and charges from persons using the fire hydrants, aircraft wash stations, or other metered public use water stations at the time of use, or provide billing information for collection of CBJ Accounts Receivable.
- (d) At the discretion of the Airport Board, all tenants and users may be levied a system surcharge to assist in paying of the overall system and for centralized facilities which may be constructed or made available.

07 CBJAC 15.050 Allowable Uses.

- (a) Water: Usage of water and control of wastewater will be done in such a way as to not create a hazard or nuisance.
- (b) Wastewater: Connections to the wastewater system are restricted to uses in accordance with appropriate federal, state, and CBJ guidelines, laws, and regulations as to use. For example, discharges from storm drains, roof drains, area drains or oil/water separators are specifically prohibited from connection to the wastewater system. Additionally, hazardous or toxic substances shall not be placed into the wastewater system.
- (c) Penalty for improper or Unauthorized Uses. Penalties or fines assess to the Airport for improper use of the water/wastewater system will be passed through to any tenant who was the cause for such penalty/fine.

07 CBJAC 15.060 Definitions. For purposes of this chapter, unless the context plainly requires otherwise, the following definitions apply:

- (a) Customer Sewer Line means the sewage pipe, including clean out, extending from the premises served to the sewer main;
- (b) Customer Water Line means the pipe, valves, and fittings, including any meter, laid from the water main into the tenant's facility;
- (c) Main means both water and sewer main;

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- (d) Large Private Tenant means any tenant whose lease specifies private aircraft storage only but is in a hangar larger than the standard 40 feet by 60 feet “executive” style hangar;
- (e) Sewage means a combination of water-carried wastes and the wastewater disposed of from tenant facilities;
- (f) Sewer Main means the pipe laid for the purpose of carrying sewage discharged from the customer sewer line;
- (g) Small Private Tenant means any tenant whose lease specified private aircraft storage only but is in a hangar equal to or smaller than the standard 40 feet by 60 feet “executive” style hangar. This would include all “T-Hangars”.
- (h) System/Systems means the water and wastewater system within the airport boundary which connects to the City and Borough of Juneau, Public Works water and wastewater system.
- (i) Water Main means the pipe, usually two inches inside diameter or larger, laid in or alongside a taxiway, taxilane, or road that brings service into or through an airport block of lots for the distribution of water to the tenants through their customer water line connection.

Section 3. Notice of Proposed Adoption of a Regulation. The notice requirements of CBJ 01.60.200 were followed by the agency. The notice period began on _____ 2014, which is not less than 21 days before the adoption of these regulations as set forth below.

Adoption by Agency

After considering all relevant matter presented to it, the agency hereby adopts these regulations as set forth above. The agency will next seek Assembly review and consent.

Date: _____

Jerry Godkin
Juneau International Airport Board

Submitted to the Assembly at its meeting of _____, 2014.

Patricia A. deLaBruere
Airport Manager

ATTACHMENT #1

Assembly Review

These regulations were presented to the Assembly at its meeting of _____. They were adopted by the Assembly.

Date: _____

Laurie J. Sica, Clerk

Legal Review

These regulations have been reviewed and approved in accordance with the following standards set forth in CBJ 01.60.250:

- (1) Its consistency with federal and state law and with the charter, code, and other municipal regulations;
- (2) The existence of code authority and the correctness of the required citation of code authority following each section; and
- (3) Its clarity, simplicity of expression, and absence of possibility of misapplication.

Date: _____

Amy Mead
City Attorney

Filing with Clerk

I certify, as the clerk of the City and Borough of Juneau, that the following statements are true:

1. These regulations were accepted for filing by the office of the clerk at _____ a.m./p.m. on the _____ day of _____, 2014.
2. After signing I will immediately deliver or cause to be delivered copies of this regulation to the attorney and director of libraries.
3. A permanent file of the signed originals of these regulations will be maintained in this office for public inspection.
4. Effective date: _____.

Date: _____

Laurie J. Sica, Clerk

ATTACHMENT #2

RESOLUTION OF THE CITY AND BOROUGH OF JUNEAU, ALASKA JUNEAU INTERNATIONAL AIRPORT BOARD Serial No. 2014-01

A RESOLUTION OF THE AIRPORT BOARD OF THE JUNEAU INTERNATIONAL AIRPORT DECLARING THAT THE AIRPORT SHOULD NOT BE IN THE WATER/WASTEWATER UTILITY BUSINESS NOR SUB-UTILITY BUSINESS, AND THAT ALL FUNCTIONS OF THE WATER/WASTERWATER SYSTEM ON THE AIRPORT PROPERTY INCLUDING INFRASTRUCTURE, CONSTRUCTION, PERMITTING, INSPECTION, BILLING AND COLLECTIONS SHOULD REVERT TO THE CITY AND BOROUGH OF JUNEAU PUBLIC WORKS DEPARTMENT, AND THAT THE MEMORANDUM OF AGREEMENT DATED APRIL 29, 2004 BE CANCELLED BY ALL PARTIES.

WHEREAS, the Juneau International Airport, City and Borough of Juneau Public Works Department, City and Borough of Juneau Engineering Department and City and Borough of Juneau Finance Department entered into a Memorandum of Agreement on April 29, 2004 which established the protocol for the Airport Board to assume all water and wastewater system infrastructure and services on the Airport property; and

WHEREAS, Juneau International Airport is in the transportation business rather than the utility business, and

WHEREAS, the Juneau International Airport Board believes it is in the best financial interest that Public Works oversees all the functions of the water and wastewater system.

NOW, THEREFORE, the Airport Board of the Juneau International Airport, Juneau, Alaska, declares that the Airport should not be in the utility business nor sub-utility business, and that all functions of the water/wastewater system on the Airport property including infrastructure, construction, permitting, inspection, billing and collections should revert to the City and Borough of Juneau Public Works Department, and that the Memorandum of Agreement dated April 29, 2004 be cancelled by all parties.

Adopted this 13th day of August, 2014.

Jerry Godkin, Chair

Attest:

_____, Administrative Assistant



Memorandum

1873 Shell Simmons Drive, Suite 200 • Juneau, Alaska 99801 • (907)789-7821 • FAX: (907)789-1227

TO: Patricia deLaBruere
Airport Manager

DATE: August 5, 2014

FROM: Catherine Fritz, AIA
Airport Architect

SUBJECT: Utility Consumption for JNU Terminal

Summary

The Airport Projects Office has gathered utility consumption/cost data for the terminal to better understand the costs of operating the building, and to consider effective energy conservation and cost savings measures. Additionally, the data may allow for new strategies of allocating utility costs amongst tenants in the terminal. The utilities considered in this memo are electricity, diesel heating fuel, water/sewer, and solid waste (garbage).

Electricity

Electricity usage in the terminal consists of power and lighting, including power for the heat pumps. The City and Borough of Juneau's Accounts Payable office receives invoices for electrical usage directly (Airport does not receive the invoice). However, Alaska Light and Power (AEL&P) provides monthly billing information and consumption data, measured in kilowatt hours (KWH) online at its website. The website provides a table that compares the current year's monthly electrical consumption to the previous year and to the average monthly KWH usage of prior years.

The 2010 renovation/addition project of the terminal building was designed with usage zones to separately meter some areas for electrical consumption by tenants in those zones. The terminal's ten meters comprise an internal system that does not report to AEL&P. While AEL&P cannot directly bill from the internal meters, the Airport can monitor tenants' electrical consumption and bill tenants based on the meter readings that are managed through a software program. There are some limitations to the current set-up of the internal meters, but the Airport is working with the electrical engineering firm Haight & Associates to improve its effectiveness.

Diesel Heating Fuel

The Airport Terminal has diesel fired boilers in a hydronic configuration that serve the older portions of the building. The long-term goal is to replace the diesel boilers with ground source (electric) heat pumps. There is one 10,000 gallon buried fuel tank that serves the terminal.

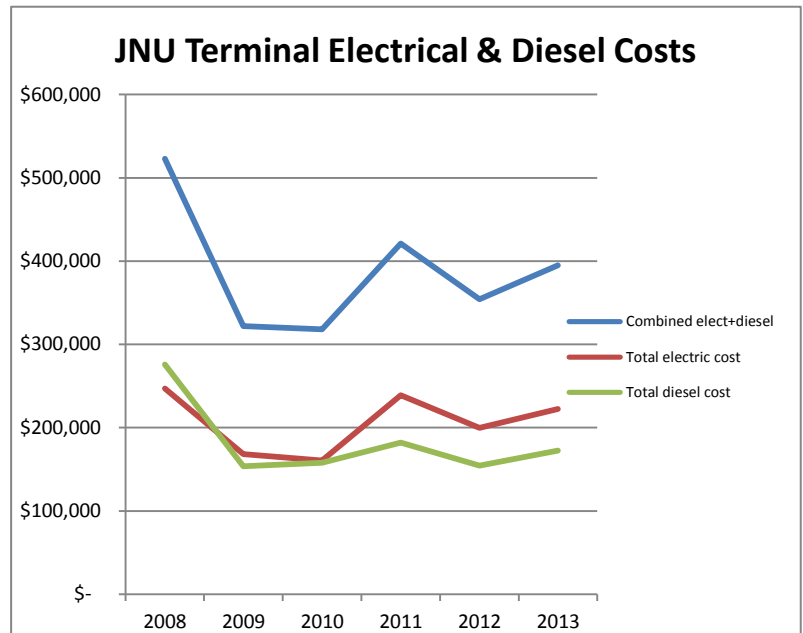
The CBJ Purchasing Office, aka 'Purchasing,' administers the contract for the purchase of all of the CBJ's fuel needs. Currently, the CBJ is riding the State of Alaska contract with Delta Western as its supplier of heating fuel. This is a recent change, effective July 1, 2014, and may or may not be significant when reviewing historical fuel cost data. Riding the state contract is expected to achieve economies of scale and resultant cost savings that would have been, according to Purchasing's estimate, \$42,600 CBJ-wide in FY 2013 had current contract pricing been in effect at that time. Purchasing has advised the Airport that the current contract with Delta Western

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expires at the end of September 2014, but there are two one-year renewal periods that could extend the contract through September 2016. Under the new contract, fuel pricing will be variable, reflecting a price based on an Oil Price Information Service (OPIS) average on the date of delivery.

The Airport does not receive or review the invoices for diesel prior to payment. CBJ Accounts Payable pays the invoices upon receipt. Historically, CBJ Purchasing has supplied reports to all CBJ departments twice each year detailing costs and consumption of diesel by department/user group and tank. Delivery dates are not consistent, and the previous vendor was known to supply fuel to the Airport based on what it had leftover in its truck after other valley deliveries. This helped keep costs down from the supplier, but makes it difficult to identify trends and consumption rates over time since the tank was not filled on a regular basis.

The chart at right illustrates the overall changes in electrical and diesel costs before, during, and after the terminal renovation projects to date.



Water and Sewer

In 2004, the Airport, through a memorandum of agreement with CBJ departments became a “sub-utility,” enabling the Airport to set water/sewer rates that it passes on to its tenants, such rates being independent of utility rates established by the Assembly. In essence, the Airport buys water and pays for sewer service from Public Works, then establishes its own financial structure for recouping those costs from its tenants.

CBJ Utilities provides the Airport water service at the “large commercial client” rate, a discounted price based on the high volume of water consumed at the Airport. There is no similar discount or special rate for sewer service. Water is billed to the Airport through readings of two meters that make up the sub-utility. CBJ Utilities charges the Airport for sewer service based directly on water meter readings. The cost model assumes that all water consumed will ultimately end up in the sewer system.

The Airport property and its tenants are served by municipal water and sewer (except that the Northeast quadrant of the airfield where Temsco Helicopters is located does not have sewer). Most of the Airport’s tenants have water meters, but a few are billed as flat rate. This poses a challenge as the Airport attempts to equitably allocate costs for water and sewer amongst its tenants. Water consumption for metered tenants can be readily determined. For purposes of managing the sub-utility, the Airport terminal building and Airfield shop are metered as if it were a tenant. These two are in-turn allocated to the maintenance and operations budget for appropriate cost center fees.

When Airport property boundary meters were installed in June 2012, a variance between what was metered at the boundary versus what was metered at each tenant meter was detected. This “lost water” or “non-revenue water,” may be due to leakages in the Airport’s water network, a common problem that is difficult to solve, according to the Public Works Department. This affects the cost of both water and sewer, since sewer billings are calculated directly from water entering the sub-utility. Another possible explanation of the lost water is that the

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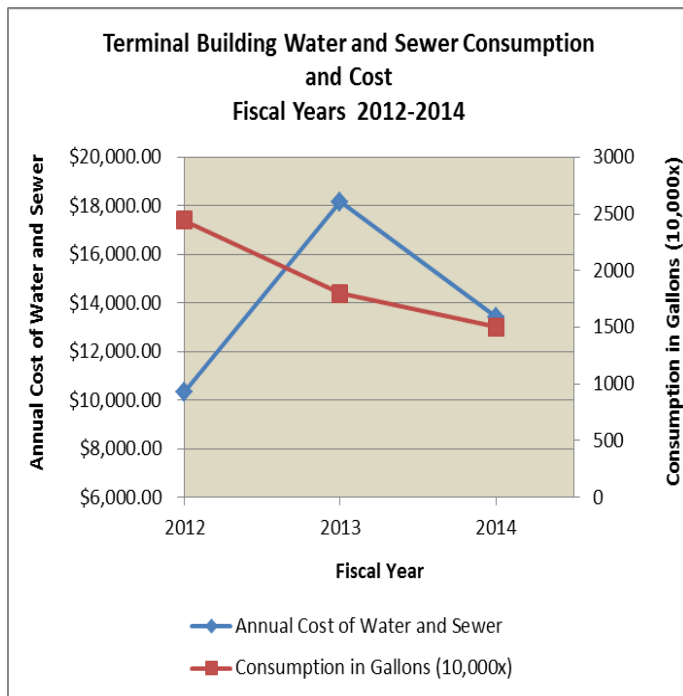
few non-metered water users are using high quantities of water or are leaving hoses/faucets running. Even if the Airport cannot fix the leakage problems, it needs to consider a way to recover the costs of all of the water it buys from CBJ Utilities, whether the water is consumed by the Airport's tenants or "lost" as the lost water is part of the cost of business and affects the sub-utility's ability to be self-sustaining.

On June 30, 2014, CBJ approved increases to the CBJ-wide, the rates for both water and sewer. These are scheduled to increase substantially over the next five years beginning January 1, 2015.

Since the Airport terminal building is organized in the sewer/water reports as a tenant, the following table illustrates terminal usage.

Terminal Building Water and Sewer Consumption and Cost by Fiscal Year

Fiscal Year	Gallons (10,000x)	Water Cost	Sewer Cost	Combined Water and Sewer Costs
2012	2447	\$ 3,116.00	\$ 7,200.30	\$ 10,316.30
2013	1800	\$ 4,429.10	\$ 13,729.10	\$ 18,158.20
2014	1505	\$ 3,100.00	\$ 10,328.60	\$ 13,428.60



The chart at left compares consumption to costs and illustrates two anomalies. The water/sewer rates charged to the Airport sub-utility remained constant during the FY 2012-2014 period, which suggests a high correlation between consumption and cost over time. However, despite a trend of decreasing water/sewer consumption at the terminal during that period, costs have not decreased. The terminal has not been financially rewarded for its water conservation.

A second, related anomaly focuses on FY 2012-2013 when sewer costs rose more sharply than water costs. Since sewer costs are based on water consumption, a direct correlation could be expected between the two costs. However, water costs rose 42% while sewer costs rose 91%, at the same time water/sewer consumption decreased by 26%. This is in part due to the installation of property water meters in June 2012 rather than a total estimated use. Additionally, tenants not hooked up to sewer were not backed out as it had been in the past (i.e., urea tank, Temsco, etc.).

Solid Waste (Garbage)

The Airport owns two 30-yard compactors. One is used by the Airport's food concessionaire, JDA. The second compactor is used for all other terminal solid waste, including Airfield Maintenance's solid waste. Alaska Pacific Environmental Service hauls the waste from the Airport and disposes it at the local landfill. Other airfield tenants must dispose of their own solid waste, using their own dumpsters, or other means.

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Like other utility invoices, the CBJ Accounts Payable office processes invoices for hauling and disposing of the solid waste collected in the Airport's compacter. The airport does not review or approve invoices prior to payment. Upon request, Accounts Payable can generate records showing payment of past invoices for the most recent years. However, around 2012, the CBJ converted to the Lawson financial system; records prior to that conversion are more difficult to retrieve, read, and interpret.

Solid waste is removed from the Airport on an as-needed basis because they are compactors rather than dumpsters. The irregularity of the timing of solid waste disposal poses a challenge for analyzing monthly and seasonal variations. This challenge is compounded by the delay between the "production" of the waste and the invoice posting date noted by CBJ Accounts Payable.

Although quantities of solid waste, measured by tonnage, are noted in the invoices Alaska Pacific Environmental Service sends to CBJ Accounts Payable, neither the vendor nor the CBJ are set up to generate reports that include that data. Therefore, to determine monthly tonnage of solid waste based on dates of service, the individual hard copy invoices were examined from files in the Accounts Payable Office. This was extremely labor intensive, and demonstrates the need for a more efficient data retrieval system if solid waste is to be analyzed further to consider savings.

The chart below summarizes waste disposal costs and tonnage during FY 2012-2014.



Airport Terminal and Airfield Maintenance staff currently participate in the CBJ office recycling program. It is limited to paper, cardboard, and plastics that are generated by CBJ offices. Alaska Airlines independently recycles waste generated from their jet flights and ground operations, and other tenants make efforts to recycle on a case by case basis.

This is an area currently being looked at for expansion. There are multiple aspects to an Airport-wide recycling program that could include greater public recycling. Recently, public recycling bins have been placed in the Terminal building, but there are still many details to work out to make the program effective and efficient. A comprehensive recycling program has potential to reduce solid waste costs.

Juneau International Airport- Energy Analysis, 2014**Scope:**

Murray and Associates, P. C. was hired by the City and Borough of Juneau (CBJ) to investigate, using current data, the energy savings brought about by the installation of the ground source heat pump (GSHP) system in 2009 and completed in 2011. This report will use data provided by the City and Borough of Juneau, AELP and other engineering firms associated with the 2010 Terminal Renovation.

Background:

The Juneau International Airport renovation started in 2008 with the renovation design of the large commercial carrier wing of the terminal and an addition of approximately 12,000 square feet of floor space. The newly renovated areas were converted from a conventional heating fuel system to a GSHP supplied by a loop field consisting of 108 vertical boreholes drilled to a depth of over 350 feet. Each borehole contains a single loop of 1" HDPE piping with a concentration of methanol and water. Overall, the loop field and associated plumbing includes 16 miles of piping. The field supplies the current 34 heat pumps located throughout the renovated portion of the terminal building. The GSHP system also allows for the heating, cooling, and ventilation of the renovated space. Additionally, this system supplies a snow melt system used for the front sidewalk, street crossing, and waiting area. Construction began in the fall of 2009 and was completed in early 2011. Overall, the 2010 Renovation cost approximately \$11.2 million. Of which the geothermal loop field cost approximately \$1.0 million.

Summary:

The analysis shows that the airport geothermal system is providing a direct savings of approximately \$130,000 annually and a simple payback of less than 8 years. In addition, the system provides air conditioning of the 2010 renovation space and 7,000 square feet of heated sidewalks.

Limitations and Assumptions:**Cost of Electricity:**

Data was provided on the billed prices for the airport terminal building from August 2013 until July 2014. These prices come from a new meter installed in 2013. This data showed an average cost per kWh at \$0.085. As a conservative estimate, this report will assume all electrical costs are billed at \$0.090. This will have minimal impact on the cost analysis.

Cost of Fuel:

Fuel costs were provided by the City and Borough of Juneau

Climatic Effects:

Climatic data was analyzed for the period of the study. It was found that there has been statistically zero change in heating days per year over the course of the study. From this, it is assumed that the building's environmentally affected heating requirements are unchanged.

Additional Benefits:

Energy usage also includes the sidewalk snowmelt system added with the renovation. The snowmelt system, which is heated by a dedicated GSHP, requires a significantly higher energy load. However, this system saves approximately \$11,000.00 in yearly maintenance costs from labor, equipment, and chemicals. The heat pump system allows the ability to cool the terminal during the summer months.

ATTACHMENT #4

Murray & Associates, P. C. Consulting Engineers

PO Box 21081, Juneau, Alaska 99802-1081 (907) 780-6151 Fax: (907) 780-6182

This benefit was not available before the renovation. While cooling does increase electrical consumption during the summer months the added cost is negligible.

Addition of Floor Space:

During the 2010 Renovation, approximately 12,000 sq. feet was added to the existing approximately 96,000 sq. feet of floor space for the entire terminal. This significantly increases the amount of heating needed for the building.

Electrical Load Changes:

Electrical upgrades and new lighting has changed heat loading contribution within the thermal envelope of the building. Upon consultation with the renovation electrical engineer; it was determined that several major energy improvements were made to the terminal. These include:

- All of the lighting within the departure lounge was converted from fluorescent to LED lighting with dimmable control. This has resulted in an approximately 50% decrease in energy consumption over the original system.
- Other lighting within the southern terminal was converted from T-12 type fluorescent tubes to T-5 type tubes. This has resulted in an estimated 12-15% energy savings.
- External flood lighting was converted from metal halide to LED, resulting in significant decreases in electrical costs.

Since the mechanical equipment located within the building is not individually metered, it is difficult to attribute costs directly to specific equipment. For this study, data will be limited to overall building energy loads. Lighting efficiency improvements within the building thermal envelope will require a slight increase in heating to compensate.

Thermal Envelope:

Some changes were made to thermal properties of the building envelope, but are considered insignificant for the sake of this report.

Remaining Fuel Oil Heated Areas:

Major portions of the terminal are still heated off of conventional heating fuel. These include:

- The northern commuter portion of the terminal.
- The jet ways and the baggage loading area. Though these systems are reportedly rarely used in the field.
- The Control Tower.

The appendix shows a schematic view of the different heating zones.

Data:

Full data is available from calendar year 2006 thru mid 2014. This analysis will be limited to the time frame of 2006 thru 2013. The data primarily consists of: fuel consumption, fuel costs, electrical consumption for the entire terminal building and electrical billing for the building for 2013 and part of 2014.

For this report, the data is chronologically broken into three sections. These include: pre-renovation (2006 to 2009), during renovation (2009 to 2011), and post renovation (2011 to 2014). Due to irregularities in energy consumption during the renovation the analysis of costs will be limited to before and after the terminal renovation.

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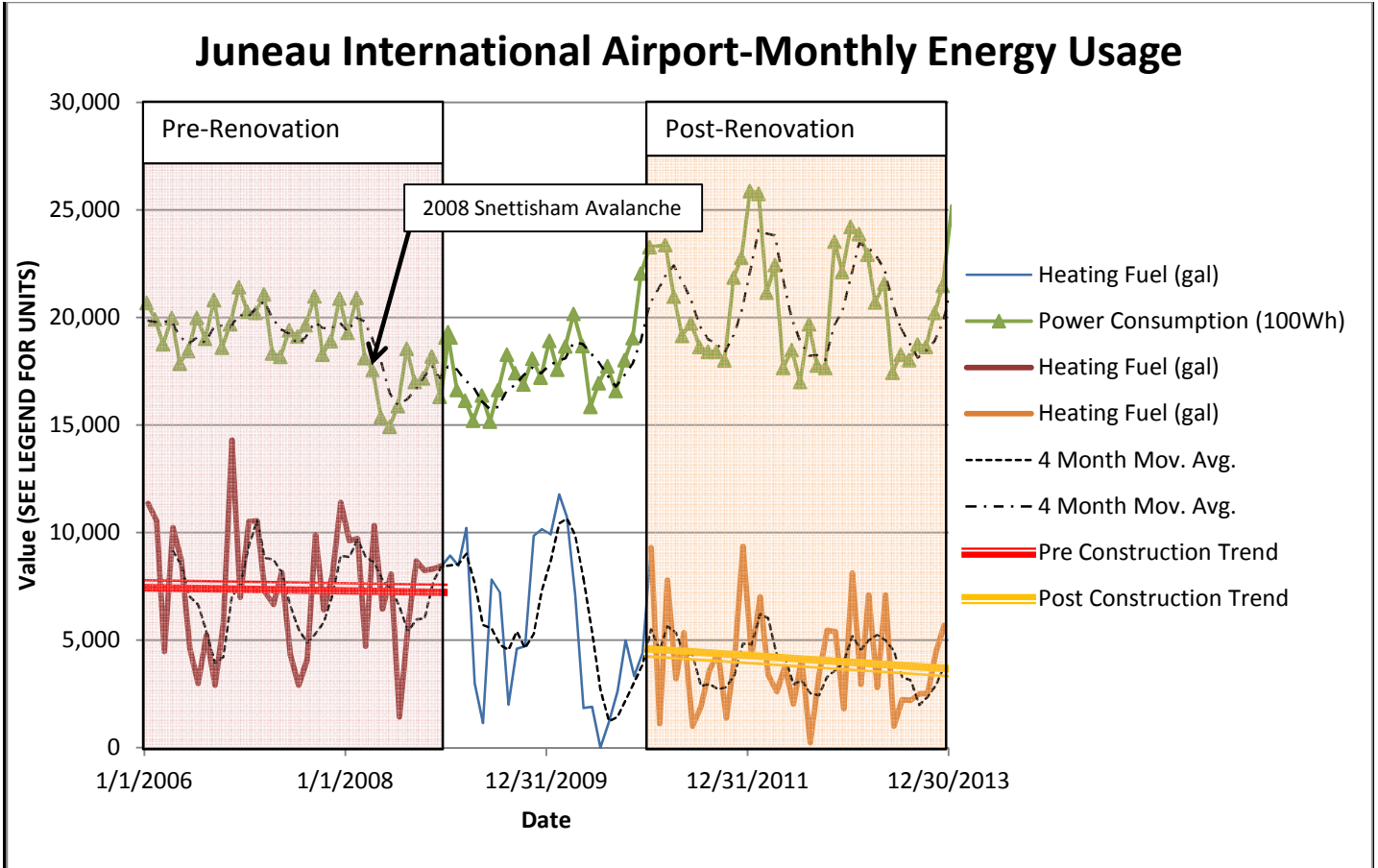


Figure 1: Monthly Energy Consumption

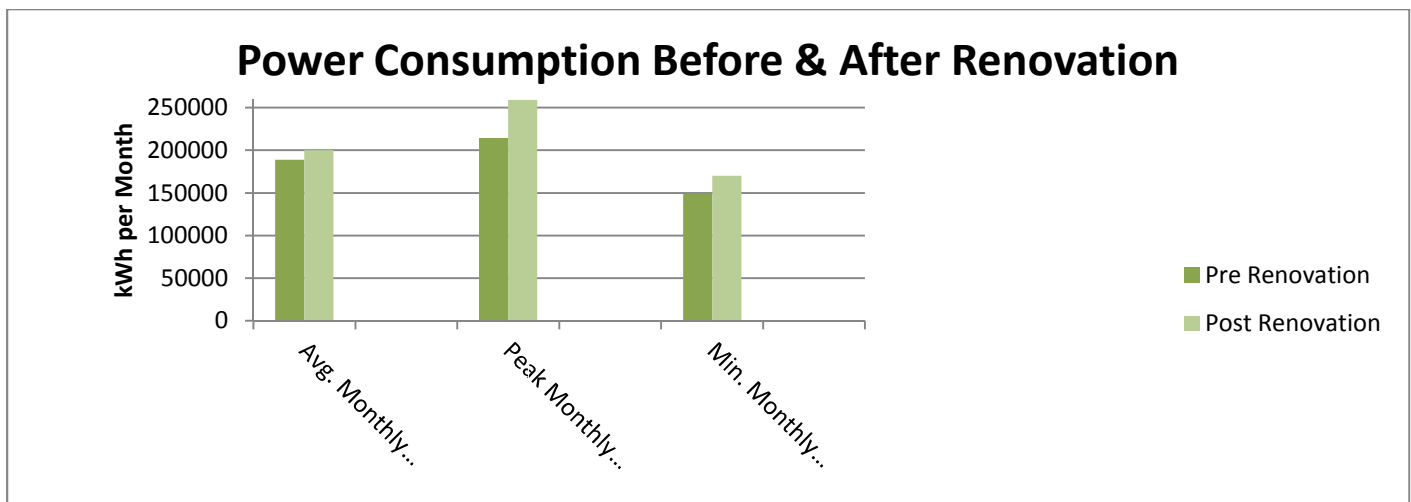


Figure 2: Power Consumption

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Heating Fuel Consumption Before & After Renovation

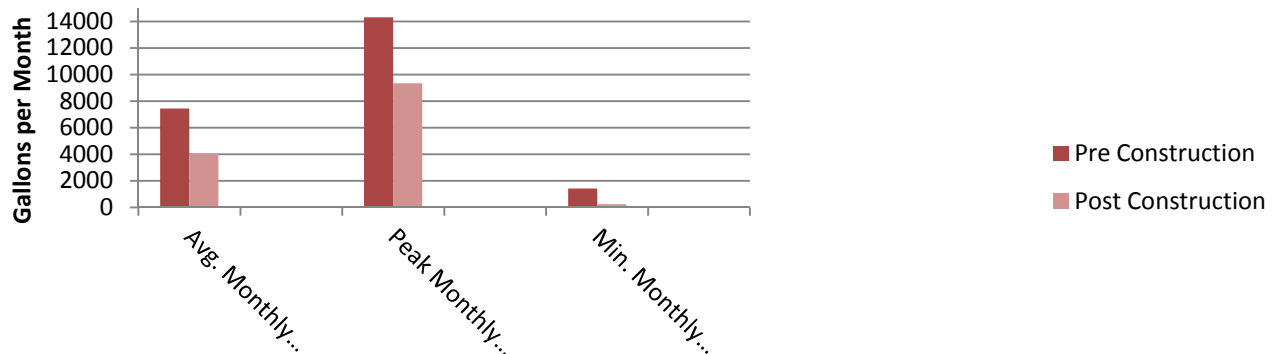


Figure 3: Heating Fuel Consumption

						Cost/kWh:
Annual Costs		Heating Fuel	Avg. Gallons	Cost	Electricity	Avg. kWh
2006 thru 2008	Pre Reno.		89,331.33	\$312,660		2,266,560.00
2011 thru 2013	Post Reno.		48,259.00	\$168,907		2,400,363.24
		Difference:	54.02%	\$143,753	Difference:	105.90%
Annual Savings:						\$12,042
						\$131,711

Table 1: Annual Savings

Results:

Electrical Usage:

As expected, the newly installed ground source heat pumps have resulted in a significant increase in electrical usage. The overall electrical consumption for the terminal building has increased an average of 6% after the renovation. Power consumption habits have also drastically changed after the renovation. As seen in Figure 1, electrical consumption now varies sinusoidally between the summer and winter months. This results in higher peak electrical usage during the winter months.

Fuel Consumption:

The large commercial carrier wing is now almost completely heated through the GSHP system and the commuter wing heated solely off of the original oil-fired boiler. After renovation, the total consumption for the building is about 46% less than pre-renovation levels.

Savings:

Based off of assumed costs, the terminal facility so far is saving over \$130,000 in annual heating costs. Using just the \$130,000 in energy savings; it represents a simple payback in less than 8 years of usage. This price does not include the additional benefits from the added snow melt system which is estimated to save \$11,000 in yearly maintenance costs. Additionally, the new system has provided other benefits in the form of air conditioning for the large commercial carrier portion of the building and allows the transfer of excess heat via air conditioning to other zones of the renovated area.

END OF REPORT

ATTACHMENT #4

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Appendix:

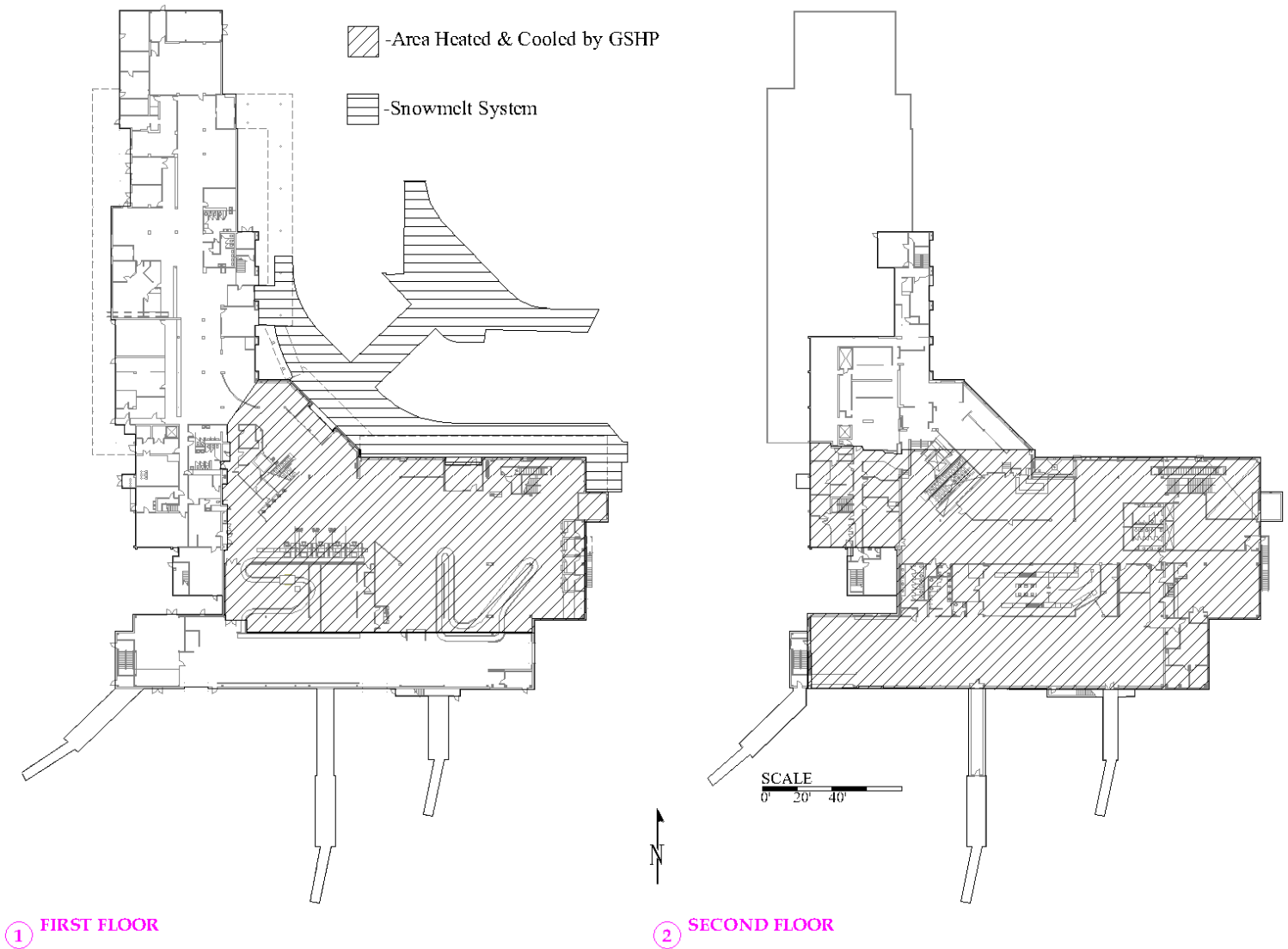


Figure 4: Renovation Area

Previous Reports:

- A report created by Alaska Energy Engineering, LLC from 2007 is available for reference in examining the life cycle cost between the GSHP and a fully oil heated scheme.
- A preliminary report was done by Murray & Associates, P.C. in 2012 with limited data.

ATTACHMENT #5
JUNEAU POLICE DEPARTMENT

6255 ALAWAY AVE. • JUNEAU, ALASKA 99801

BRYCE JOHNSON
CHIEF OF POLICE

Alaska's Capital City

BUSINESS (907) 586-0600
FAX (907) 586-4030

July 23, 2014

Marc Cheatham M.S.
JIA Deputy Airport Manager
1873 Shell Simmons Dr. Suite 200
Juneau, AK 99801

Dear Mark,

Officers of the Juneau Police Department have recently become responsible for security at the Juneau International Airport. As the Lieutenant supervising those security efforts, I request that trees in the greenbelt across Yandukin Drive from the airport have branches trimmed to a height of eight feet above the ground. Often, elevated highways, parking structures, and secure parking lots limit how close someone can get to an airport with a weapon while being concealed from the view of others. This trimming would allow for increased visibility of pedestrians who use the well-worn walkways between the airport and various businesses. The trimming would also discourage transient camping in this area.

The lack of visibility creates several potential problems. The public and employee parking areas for the airport are not fenced, and a pedestrian can easily access those areas. There have been cases in other jurisdictions where explosives were placed under vehicles as a distraction or a tool to injure first responders in association with a larger incident. In the current physical environment, a potential suspect could move from dense cover, across the three-lane road, and into the parking lot with only a few seconds of exposure when someone could see the suspicious behavior.

Also, visitors cross this greenbelt on foot regularly and are currently in the position of entering transient camps or other dangers unaware. JPD has had a previous case of trying to contact a suicidal transient in that area, and the heavy plant growth made it more difficult to find the subject while at the same time allowed other people to come upon the situation without realizing the danger.

While I appreciate the privacy and attractiveness greenbelts provide, most airports have more barriers to public access than JIA which is why I am asking that this greenbelt have the branches trimmed to eight feet above the ground.

Sincerely,



Bryce Johnson
Chief of Police



Lt. Kris Sell
Special Operations



Memorandum

1873 Shell Simmons Drive, Suite 200 • Juneau, Alaska 99801 • (907)789-7821 • FAX: (907)789-1227

TO: Patricia deLaBruere
Airport Manager

DATE: August 7, 2014

FROM: Catherine Fritz, AIA
Airport Architect

RE: Art in the Airport Terminal

The terminal has a long history as a public art venue. Currently, nearly one million visitors pass through the airport terminal each year, making its role as a gateway and reception critically important to the community, region, and state. Artwork adds beauty to the airport, reflects the culture and character of the community, and helps create an inviting atmosphere for the enjoyment of passengers, workers, and visitors. The airport has recognized these values and embraced the arts, incorporating both visual and performing arts in the terminal. Current art programs include: the Music-on-the-Fly program; rotating exhibits in the glass display boxes; 1% art acquisitions from CIP funds; temporary exhibits of loaned art and, and special projects such as the scout projects.

The terminal renovation projects that occurred between 2008 and 2012 created the need to review airport art policies. Many of the exhibits were aged and in poor condition. Others were large and difficult to appropriately place, especially in overcrowded areas. There were many pieces that whose ownership and value was not clear. An inventory of all of the art in the airport was completed in 2008, and a significant quantity of art was removed from the terminal to make way for construction. The newly constructed areas of the terminal provided opportunities for installing new works of art, and reconfiguring and updating existing art displays. However, environmental, space, and security constraints limit the amount and types of art that can be reasonably displayed in the terminal.

The airport's interest in a robust advertising program also affects the available areas to display art. The airport has worked closely with the advertising agency to encourage artist "place based" advertising that positively contributes to the ambiance of the terminal. Revenues from advertising (more than \$30,000) must be balanced against art displays that do not provide revenue.

Last winter, Airport Projects staff began drafting a comprehensive policy to guide the selection, maintenance care, and record keeping of art in the terminal. Unfortunately, work load prevented the policy from being completed into a form ready for Airport Board action. With the recent theft and return of the art piece in the north wing, it is timely to revisit the policy development and bring it forward to the Board. Now that the food and beverage concessionaire is settling into its new space, the Projects Office staff has time to work on this issue, as well.



Memorandum

1873 Shell Simmons Drive, Suite 200 • Juneau, Alaska 99801 • (907)789-7821 • FAX: (907)789-1227

TO: Patricia deLaBruere
JNU Airport Manager

DATE: August 7, 2014

FROM: Ken Nichols, P.E.
JNU Airport Engineer

RE: Engineer's Report

General

In the past month, the projects office worked on several construction and planning projects. Project specific summaries are presented below.

Airport Sustainability Master Plan

URS Corporation was chosen as our planning consultant. An independent fee review is being prepared to compare the costs presented by the consultant as a part of contract negotiations.

RSA Expansion Phase IIA

Punchlist work is still ongoing for the work contracted through Secon. FAA and their contractors still have punchlist items to complete.

Carson Dorn and Dowl HKM are working on revising property boundaries through DNR and in conjunction with South East Alaska Land (SEAL) Trust. Dowl HKM will record the survey documents. The final property boundary adjustment may take several months to get through DNR.

Runway 8/26 Rehabilitation

The first phase of the project is underway with paving in two areas today. Work will continue through late fall for Phase 1 then start up again in approximately March. We have started to provide weekly updates on the airport construction webpage.

Air Cargo Hard Stand

Preliminary documents were received from USKH. The project design is complete to a 90% level. Alaska Airlines has provided comments. The project can move forward pending staff availability.

Alex Holden Way

Staff met with Airport Board Chair Jerry Godkin to review the site challenges. It was determined that the project requires more than a simple fix that could be accomplished with airport personnel and equipment. The project has again been included in our request for special legislative appropriations.

Runway 26 MALSR

A new CIP project has been set up to track this project through implementation. Staff will work with FAA Engineering Services to move the project forward as funding allows.



ATTACHMENT #8

Memorandum

1873 Shell Simmons Drive, Suite 200 • Juneau, Alaska 99801 • (907)789-7821 • FAX: (907)789-1227

TO: Patricia deLaBruere,
JNU Airport Manager

DATE: August 5, 2014

FROM: Catherine Fritz, AIA
JNU Airport Architect

Romeo's Tap Room and *Cup o' Joe* are open for business! The liquor license was authorized in late July, allowing the renovated concession space on the second floor of the terminal (non-secure side) to open on July 29, 2014. Construction is substantially complete and everyone is pleased to have the new café and bar open. A minor punch list remains that is expected to be complete by the end of August. Staff continues to work with JDA to refine the secure Departure Lounge space to allow alcohol service to begin in that area as soon as possible. Many thanks go to the Projects Office staff (especially Kris Ritter and Greg Jerue), and the Terminal Maintenance staff for their hard work to complete the renovation.

Construction documents for Gate 6 roof and siding repairs were reviewed with the Contractor, North Pacific Erectors, who will make the needed roofing repairs at the end of the summer. They will prepare for the work by getting badged, and we will schedule the repairs once Delta Air Lines has closed for the season and Alaska Airlines has reduced service to Fall flight schedules, which will reduce activity on the ramp.

Signage improvements around the airport terminal continue. Staff has developed signage to clarify and direct drivers to the Cell Phone Waiting Area, and is working with Alaska DOT and CBJ Streets staff to get the metal signs made. It is hoped that if more people are aware of this free short-term parking area, they will refrain from waiting or parking on the front curb. The No Smoking signage is also being reviewed to consider improvements that will direct people to designated smoking areas only, and make it clear that e-cigarettes follow the same No Smoking rules as other smoking devices. Staff has also been considering options for replacing the Gateway/Welcome sign. In Fall 2011, the Airport Board approved a concept for a sculptural Gateway sign in the current location. Funding for the sign was not secured, but there was interest in using the 1% for Art program to accomplish the project in the future. Once the next phase of terminal renovation is confirmed, a budget line item will include 1% for Art, per CBJ ordinance, and could be considered for the Gateway/Welcome sign project.

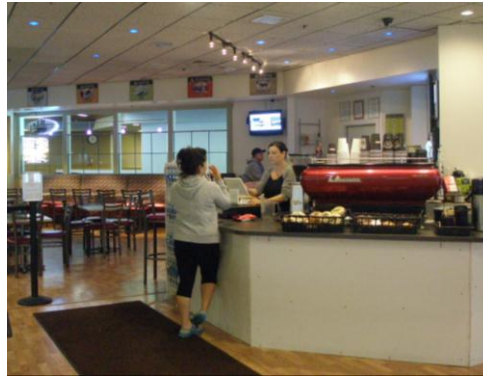
Following direction from the Airport Board on July 9, 2014, staff began working with the design team to develop a concept to replace the north end of the terminal as the next phase of renovation. The architects and engineers are evaluating building systems and materials, and addressing the expected construction impacts to tenants. The building form will be similar to other terminal renovations/additions, but some distinct aesthetic character is being considered for the north wing. A presentation that describes the concept and a financing plan is being prepared for the September 2014 Airport Board meeting.

Projects Office staff has been gathering and analyzing Airport terminal utility information to better understand the building's usage, and develop strategies for energy conservation and cost reductions. The utilities include electrical, diesel heating fuel, garbage, sewer, and water, and are discussed in a separate memo included in the August 13, 2014 Board packet. Additionally, Mechanical Engineer Doug Murray has prepared an analysis of the heat pump system that will be presented at the Airport Board meeting.

ATTACHMENT #8



The Counterfitters modify the counter top in the new concession space.



A customer places an order in the renovated café.



Travelers enjoy Romeo's Tap Room.



Model of 2011 Gateway/Welcome Sign, approx. scale 1" = 2'