



CBJ Downtown Cruise Ship Berths

Work Session with NWCCA in Seattle @ HAL Office
December 6, 2010 10:30 A.M.

Agenda

1. **Introduction & Project Overview – John Stone, P.E., CBJ Port Director**
2. **Berth Configuration – Dick Somerville, P.E., PND Principal**
 - A. Review Concepts 16B -1, 2, 3 & 4 – selection of a preferred alternative w/ mods as req'd.
 - B. Floating pontoon size: 50'x350' or 50'x300'
 - C. Mooring and breasting dolphin locations
 - D. Bollards and cleats required on floating pontoons and existing timber wharf
 - E. Transient and lightering float operations and locations
 - F. Thrust dissipater
 - G. Security gates
 - H. Review two season construction scenario
 - I. Navigational Issues: Ed Page
3. **Wastewater Discharge to City Utility – Jim Dorn, P.E., CDI Principal**
 - A. Do you anticipate facilities to discharge wastewater from cruise ships at the new docks to be beneficial and used regularly by vessels berthed at the dock?
 - B. If so, how would the vessels benefit? Will it allow easier compliance with Alaska Department Environmental Conservation discharge regulations? Will it allow vessels to spend more time in the inside waters?
 - C. How many wastewater discharge events would you anticipate occurring at each dock per week?
 - D. What volume of wastewater discharge would you anticipate during each discharge event?
 - E. What concentration of BOD (biochemical oxygen demand) and TSS (total suspended solids) would you anticipate in the wastewater?
 - F. Would you be able to control discharge wastewater with low BOD and TSS concentrations as opposed to discharging wastewater with higher concentrations of BOD and TSS
 - G. Do you have on-board pumps that would be capable of off loading wastewater?
 - H. What is the anticipated flow rate and discharge pressure for those pumps?
 - I. Juneau's treatment plant can handle the increased volume of wastewater from cruise ships (the hydraulic load) but will have a difficult time handling high concentrations of BOD and TSS (the organic load) without constructing significant improvements to the wastewater treatment plant.
4. **Electrical Power Service – Ben Haight, P.E., HAI Principal**
 - A. Does the cruise industry have the interest in using shore power?
 - B. Energy & Power requirements: We have assembled a tabulation from AEL&P illustrating the demand and consumption for various ships at South Franklin Dock.
 - C. Physical Characteristics: Best locations for shore tie attachments. Discuss voltages, circuit protection, paralleling control, and cable configurations.
 4. Costs: What energy and power costs are affordable? This is a bit of an iterative process.



Exhibit BM
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