CBJ DOCKS AND HARBORS BOARD
REGULAR MEETING AMENDED AGENDA
For Thursday, March 31, 2011

I. Call to Order (7:00 p.m. at the CBJ Assembly Chambers.)

II. Roll (Tom Donek, Don Etheridge, Kevin Jardell, Cheryl Jebe, Eric Kueffner, Michael Williams, Bob Wostmann and Greg Busch, Jim Preston).

III. Approval of Agenda

MOTION: TO APPROVE THE AGENDA AS PRESENTED.

IV. Approval of February 24, 2011 Regular Board Meeting Minutes.

V. Public Participation on Non-Agenda Items (not to exceed 5 minutes per person, or twenty minutes total time).

VI. Items for Action.

1. Statter Harbor Float Addition Layout.
   Presentation by CIP Committee Chair.

   Board Questions

   Public Testimony

   Board Deliberation

   MOTION: TO APPROVE THE STATTER HARBOR FLOAT ADDTION LAYOUT AS PRESENTED BY THE CIP/PLANNING COMMITTEE.

2. Cruise Dock Improvements-Selection of Final Design
   Presentation by CIP Committee Chair.

   Board Questions

   Public Testimony

   Board Deliberation

   MOTION: TO RECOMMEND THE ASSEMBLY APPROVE THE FINAL DESIGN FOR CRUISE SHIP DOCK IMPROVEMENTS.

VI. Items for Action(continued).

3. Contract Amendment with PND Engineers, Inc., for the Final Design of the Cruise Ship Dock Improvement.
   Presentation by CIP Committee Chair.

   Board Questions

   Public Testimony

   Board Deliberation

   MOTION: TO RECOMMEND THE ASSEMBLY APPROVE A CONTRACT AMENDMENT WITH PND ENGINEERS INC., TO PREPARE FINAL DESIGN AND BID DOCUMENTS FOR THE CRUISE SHIP DOCK IMPROVEMENTS IN THE LUMP SUM AMOUNT OF $2,747,500 FOR DESIGN SERVICES AND TIME AND MATERIALS NOT TO EXCEED $100,000 FOR PERMITTING SERVICES.

4. Utilidor Design Fee Proposal – PND Engineers
   Presented by CIP Committee Chair

   Board Questions

   Public Testimony

   Board Deliberation

   MOTION: TO APPROVE A CONTRACT AMENDMENT WITH PND ENGINEERS, INC. TO DESIGN THE ELECTRICAL UTILIDOR TO THE NEW CRUISE SHIP BERTHS IN THE AMOUNT OF $87,390.

5. Account Close Out – Amalga Harbor Launch Ramp Upgrade.
   Presented by CIP Committee Chair

   Board Questions

   Public Testimony

   Board Deliberation

   MOTION: TO RECOMMEND THE ASSEMBLY APPROVE AN APPROPRIATING ORDINANCE TO TRANSFER APPROXIMATELY $28,000 FROM THE HARBORS FUND BALANCE TO CIP #H354-79 AND A DE-APPROPRIATION RESOLUTION TO CLOSE OUT THE AMALGA HARBOR LAUNCH RAMP UPGRADE PROJECT.

VI. Items for Action(continued).

6. FY11 Expense and Revenue Reports
   Presented by Finance Committee Chair

   Board Questions

   Public Testimony

   Board Deliberations

   MOTION: TO APPROVE ADJUSTMENTS TO THE FY11 DOCKS AND HARBORS BUDGETS AS RECOMMENDED BY THE FINANCE COMMITTEE AND TO FORWARD TO THE CITY MANAGER FOR PRESENTATION TO THE ASSEMBLY.

7. Direct Market Sales Facility Report
   Presentation by Port Engineer

   Board Questions

   Public Testimony

   Board Deliberations

   MOTION: TO APPROVE THE DIRECT MARKET SALES FACILITY REPORT FOR SUBMISSION TO THE ALASKA FISHERIES DEVELOPMENT FOUNDATION.

VII. Items for Information/Discussion.

1. DeHart's Marina Condition Report

VIII. Committee and Board Member Reports

1. Operations Committee Meeting – March 22, 2011

2. CIP/Planning Committee Meeting – March 24, 2011

3. Finance Committee Meeting – March 29, 2011

IX. PRAC Representative Report

X. Port Engineer's Report

XI. Harbormaster's Report

XII. Port Director's Report

XIII. Assembly Liaison Report

XIV. Committee Administrative Matters

1. Operations Committee Meeting – April 19, 2011
2. CIP/Planning Committee Meeting – April 21, 2011
3. Finance Committee Meeting– April 26, 2011
4. Board Meeting – April 28, 2011

XV. Executive Session

1. Personnel Issues.

XVI. Adjournment

CBJ DOCKS & HARBORS BOARD

REGULAR BOARD MEETING MINUTES

For Thursday, February 24, 2011

I. Call to Order.

Mr. Preston called the Regular Board Meeting to order at 7:00 p.m. in the CBJ Assembly Chambers.

II. Roll Call.

The following members were present: Tom Donek, Don Etheridge, Greg Busch, Eric Kueffner, Michael Williams and Jim Preston. Kevin Jardell and Cheryl Jebe were absent.

The following member attended via teleconference: Bob Wostmann.

Also present were the following: Mr. Stone – Port Director, Mr. Benner –Harbormaster, Mr. Gillette-Port Engineer.

III. Approval of Agenda.

Mr. Preston added after approval of minutes
V. Special Order – Presentation by Mr. Stone
Mr. Stone added to Items for Action:
4. Auke Bay Loading Facility Phase II Contract Amendment.

MOTION by MR. ETHERIDGE: TO APPROVE THE AGENDA AS AMENDED AND ASK UNANIMOUS CONSENT.

The motion passed without objection.

IV. Approval of Previous Meeting Minutes.

Hearing no objection, the minutes of the January 27, 2011 Regular Board Meeting were approved as presented.

V. Special Orders.

Mr. Stone presented Mr. Gillette with a certificate of appreciation and pin for 20 years of service to CBJ.

VI. Public Participation on Non-Agenda Items.
None

VII. Items for Action

1. Moorage Rate CPI Adjustment for FY12

Mr. Kueffner said the Finance Committee looked at the CPI Adjustment for FY12 in the packet. The Committee recommends the rate increase, and asks that the Board approve this.

Mr. Preston said if no action is taken, it is an automatic adjustment.

VII. Items for Action(continued).

Board Questions/Comments
None

Public Testimony

Dennis Watson, Juneau, AK 99801. He said parking is part of this package, and he has addressed this already to the Finance Committee. At Statter Harbor if you rent by the month, he says you get parking at half price, you pay $75.00 per month instead of $150.00. He said he has a problem with how the parking is assigned. He said the monthly user gets to park where they want and puts the daily user to a disadvantage. If Docks and Harbors is going to do this and have such an attractive price, they need to designate where they can park. He wanted to know if there is a limitation on how many parking permits available to buy per month.

Board Deliberations

Mr. Busch said he recommends that the parking issue Mr. Watson brought up gets referred to the Operations Committee for consideration.

Mr. Preston said it would go to the Finance Committee.

Mr. Kueffner said he recommends to send the parking issue to both committees.

Mr. Preston asked Mr. Stone to add the parking issue to the Operations and Finance Committee agendas.

Mr. Kueffner said moorage is parking and we are in the parking business either on land or in water. Parking is not free and it should not be free.

Mr. Preston said the issue at hand is the CPI adjustment. That is only for the moorage rate and not the parking.

MOTION by MR. KUEFFNER: TO ADJUST THE FY12 MOORAGE RATES BY THE ANCHORAGE CPI OF 1.8% AS SET OUT IN THE HARBOR FEE REGULATIONS AND ASK UNANIMOUS CONSENT.

Motion passed without objection

2. 2011 Moorage Rate Promotions

Mr. Kueffner said this moorage promotion is to encourage moorage in unused spaces downtown. There are two promotions. 1. Buy two months moorage for a summer stay and get one month free at the Douglas Harbor, Harris Harbor or Aurora Harbor as space allows on a first come first serve bases. You must purchase an annual launch ramp permit to qualify. 2. For anyone that buys three months of moorage for a summer stay will get a 5% discount, plus two 1 day permits for launching or retrieving your boat if you pay by the end of May. This is limited to vessels that can fit in a 24 foot slip. The Finance Committee recommends that the rate promotions from last year be offered again this year.

VII. Items for Action (continued)

Board Questions/Comments
None

Public Testimony
None

Board Comments
None

MOTION By MR. KUEFFNER: TO AUTHORIZE THE SPECIAL MOORAGE PROMOTIONS FOR 2011 AS RECOMMENDED BY THE FINANCE COMMITTEE AND AS APPROVED BY THE BOARD IN 2010 AND ASK UNANIMOUS CONSENT.

Motion passed without objection

3. Marine Service Building Programming

Mr. Williams said Northwind Architects are working on services for this building that meet Docks and Harbors needs. Public amenities review, site investigation and the final report should be back to us soon. Total professional services proposal is $7,900 dollars.

Mr. Gillette said he has been in contact with the Engineering department because this project overlaps with them and Docks and Harbors will be working with them. Once Docks and Harbors and the Engineering department get a better feel for size and what is needed for the building, we then decide if we go forward with the building. If we do go forward, we would put out a full RFP for bid.

Mr. Preston said his understanding is Docks and Harbors would get an indication from the Assembly if we should go forward with the RFP, and not just do this on our own.

Board Questions/Comments
None

Public Testimony
None

Board Deliberations

Mr. Preston wanted to know where the funding was coming from.

Mr. Gillette said it would come from the cruise ship money on the port side.

MOTION By MR. WILLIAMS: TO AUTHORIZE THE PORT DIRECTOR TO ENTER INTO A LUMP SUM CONTRACT WITH NORTHWIND ARCHITECTS TO PERFORM PROGRAMMING FOR THE PROPOSED MARINE SERVICES CENTER IN THE AMOUNT OF $7,900 AND ASK UNANIMOUS CONSENT.

VII. Items for Action (continued)

Motion passed without objection.

4. Auke Bay Loading Facility Phase II Contract Amendment.

Mr. Gillette said the contract for construction has been awarded, and now Docks and Harbors would like PND to do the observation and inspections that are required by permitting, and to coordinate the project. The fee proposal is $172,920 dollars. This would be an amendment of their existing contract because they are the designers and the engineers for the project. Item # 17 on the fee proposal is in addition to what was already under contract for design. There is also some redesign work on the ramps for options to include a powered trailer and a gate systems.

Board Questions/Comments

Mr. Kueffner wanted to know if there was going to be an automatic gate installed.

Mr. Gillette said there will be.

Public Testimony
None

Board Deliberations

Mr. Donek asked who was going to do the rest of the inspections.

Mr. Gillette said this should be for most of the inspections Docks and Harbors is anticipating that is required.

Mr. Kueffner asked who was awarded the contract.

Mr. Gillette said Southeast Earth Movers was awarded the contract.

Mr. Preston wanted to know on the offsite inspection where they were going to be manufactured.

Mr. Gillette said Bellingham Marine is doing floats and concrete work. PND has offices in Seattle and can go inspect the work.

MOTION By MR. WILLIAMS: TO ENTER INTO AN AGREEMENT WITH PND ENGINEERING FOR ELECTRICAL AND CONSULTANT WORKS FOR AUKE BAY LOADING FACILITY PHASE II PROJECT AND NOT TO EXCEED $172,920 AND ASK THIS BE FORWARDED TO THE ASSEMBLY AND ASK UNANIMOUS CONSENT.

Motion passed without objections.

VIII. Items for Information/Discussion.
None

IX. Committee and Board Member Reports.

1. Operations Committee Meeting- February 15, 2011
Mr. Busch said the Committee authorized the purchase of a used oil burner.
There was a presentation by the Harbormaster on the status of DeHart's work done last year and recommendations for this year. Mr. Busch said safety and liability issues were discussed with the conditions of the docks.
There were complaints received on launch ramp permits. Mr. Busch commended the Harbor personnel for doing their job of enforcing the launch ramp permits. There has been 250 launch ramp permits sold so far this year.
Mr. Benner gave a report on snow removal and highlighted Mr. Craig's great work performance on keeping the equipment going.
Mr. Benner reported there was good representation at the Seattle Boat Show.
He reported the Harbor crew has been tracking down water leaks, electrical issues, and sewer line repairs. Mr. Benner said Docks and Harbors purchased flow meters and are installing those to be able to identify water leaks faster and be part of a daily check.
He said he is still working on the Naval vessel visit to Juneau in the summer, and Marine Park is closed for parking now.
Mr. Busch said there were some comments received at the meeting from the public on potential areas to look at for repairs at DeHart's. There was also a report of one theft.

2. CIP/Planning Committee Meeting – February 17, 2011
Mr. Williams said the Committee went over the Marine Services Building programming.
The Committee received input on the Fisherman's Memorial. There was a proposal to move the Memorial to the area by Miners Cove. The Memorial Dock would extend toward the water a little and there was a possibility that it might conflict with some of the traffic and the yachts trying to get on the inside of the dock. There is also an issue of a land easement. There is good access for pedestrians and close to the current location, so local people could identify.
The Committee discussed the Memorandum of Agreement. Between CBJ engineering and Docks and Harbors Board. There were changes made to improve information flow with the goal of better integrated waterfront development efforts.
On the Direct Fish sales study updates, Northwind Architects did a presentation. Mr. Williams said this was a work in progress. They were looking as several areas and the Committee would like them to narrow it down more. They are going to work on the presentation more and bring the information back to the Committee.
Mr. Williams said Mr. Gillette also gave a CIP projects status update report.

Mr. Etheridge asked where the easement issue was.

Mr. Preston said the Franklin Dock.

3. Finance Committee Meeting – February 22, 2011
Mr. Kueffner reported there were two action items and they were both discussed here tonight. During the public comments on the rate increases, he did receive comments from Mr. Watson on things to think about. *Rates with respect to parking, and if there are reduction of services at DeHart's, to think about reducing the rates.*

X. PRAC Representative Report.
None

XI. Port Engineer's Report.

Mr. Gillette's report was included in the packet, along with the CIP account summary updated to February 28.

Mr. Kueffner and Mr. Gillette discussed the account summary.

XII. Harbor Master's Report.

Mr. Benner reported he was going to be representing Juneau at the Maritime Festivals in Marine Park in May.
He said there are two more water meters to install and every main water vault will have a meter.
A vessel started sinking in Douglas yesterday and the Harbor crew got there in time to stop it from sinking.
Mr. Benner said answering Mr. Watson's question on the Auke Bay parking permits, they are limited to 20 a month.

XIII. Port Director's Report.

Mr. Stone said he is anticipating a very busy month of March. March 2nd is the Assembly meeting where they will go over the Managers recommendation for passenger fee projects. He does not know if Docks and Harbors will get anything, but he will attend.
He said DeHart's replacement plan portion of the Statter Harbor project will be taken to the CIP meeting. We will be discussing what to do with the dock replacement in the financial plan and then take to the Assembly.
The Geo Tech work for the new cruise ship dock has been completed. They found extensive rock anchors that will be needed. A few places has a lot of debris, and that is sometimes hard to deal with.
Docks and Harbors has completed work with AEL & P figuring out what the possibilities of shore power is, and how to accommodate that in the future. Work has been completed with the public works department and the cruise lines in talking about waste water hook ups. An analysis has been completed on steel verses concrete pontoons. Everything is ready if CBJ wants to move ahead with this dock project.
Mr. Stone said he is talking to Petro Marine about a new fuel dock, and that fits in with the moorage replacement plan.
Mr. Stone said there is personnel issues that he and Mr. Benner have been dealing with.
There is the boat show in March
The Naval academy is coming on March 3rd to work on the new Auke Bay breakwater. They are helping the Corp. of Engineers do a design as part of their academy program.

XIV. Assembly Liaison Report
None

XV. Committee Administrative Matters.

1. Operations Committee Meeting – March 22, 2011
   5:00 p.m. at the Aurora Harbor Office

2. CIP/Planning Committee Meeting – March 24, 2011
   5:00 p.m. in the CBJ Assembly Chambers

3. Finance Committee Meeting – March 29, 2011
   5:00 p.m. in CBJ room 224

4. Regular Board Meeting – March 31, 2011
   7.00 p.m. in the CBJ Assembly Chambers

Mr. Preston said he was going to be gone from March 3rd through the 7th and March 14th through the 18th.

XV. Adjournment.

The Regular Board Meeting adjourned at 7:50 pm.

City & Borough of Juneau • Docks & Harbors
155 S. Seward Street • Juneau, AK 99801
(907) 586-0292 Phone • (907) 586-0295 Fax

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

Port of Juneau

To: Docks and Harbors CIP/Planning Committee
CC:
From: John M. Stone, P.E. Port Director
Date: March 15, 2011
Re: Statter Harbor Moorage Rehabilitation – Future Float Layout

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We are putting together bid documents for Phase I of the moorage rehabilitation project at Statter Harbor. As part of this work, we plan to replace the gangway landing float and a portion of the head float. Phase II of the project calls for installing new moorage slips off the new head float to replace the moorage lost when Dehart's Marina is removed. The Board needs to select slip sizes so the head float details can be finalized.

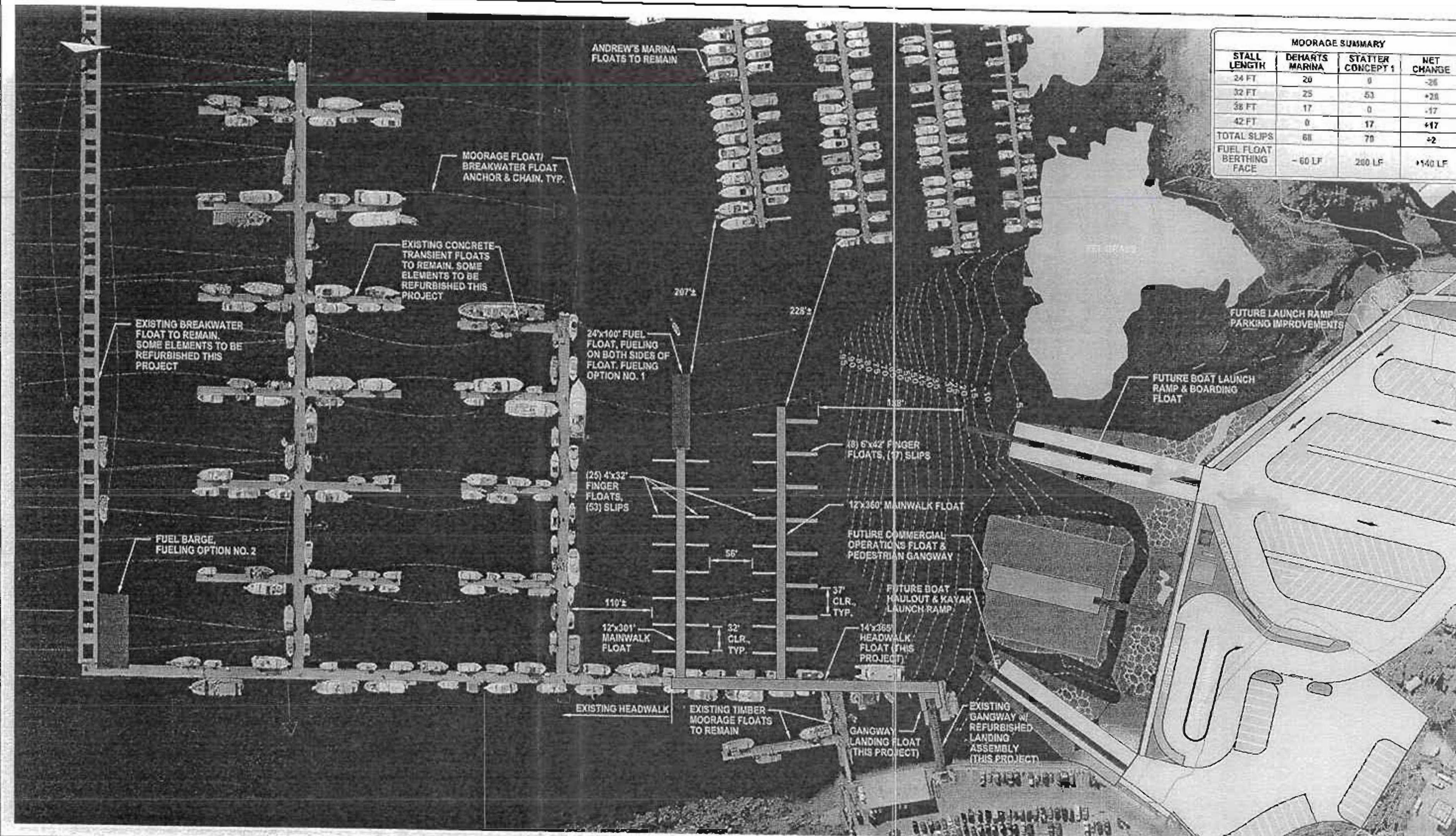
Attached to this memo are four concepts for future slip layouts. Concept 1 is the current preferred alternative and strikes a balance between accommodating the current fleet from DeHart's Marina and providing the best moorage capability over the 50 year design life. Options 2, 3, and 4 include 24' slips and do a better job of matching the current fleet from DeHart's Marina. However, 24' slips are probably not the best way to go over the design life since boats of this size are trailerable and tend to be used on a seasonal basis.

Concept 1 is our recommendation if the Board wants to accommodate the current fleet from DeHart's Marina.

Another alternative is to go with all larger slips, such as 38' and 42' slips. The Board could look at setting rates to pay for the operating and construction cost of the new slips. The Harbormaster has some creative ideas on how we could reduce our operating cost and provide a more private marina atmosphere while covering the capital costs. The downside of this alternative is that moorage would be more expensive. The upside is that we could pursue a revenue bond and get construction underway in short order.

Please call me at 586-0294 if you have questions.

Attachments



MOORAGE SUMMARY

STALL LENGTH	DEHARTS MARINA	STATTER CONCEPT 1	NET CHANGE
24 FT	20	0	-26
32 FT	25	53	+28
38 FT	17	0	-17
42 FT	0	17	+17
TOTAL SLIPS	68	70	+2
FUEL FLOAT BERTHING FACE	~ 60 LF	200 LF	+140 LF

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DOCKS & HARBORS DEPARTMENT

REVISIONS

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

PND ENGINEERS, INC.

DESIGN: AWS CHECKED: CRS DRAWN: AWS APPROVED: CRS

SCALE: SCALE IN FEET 0 60 120 FT

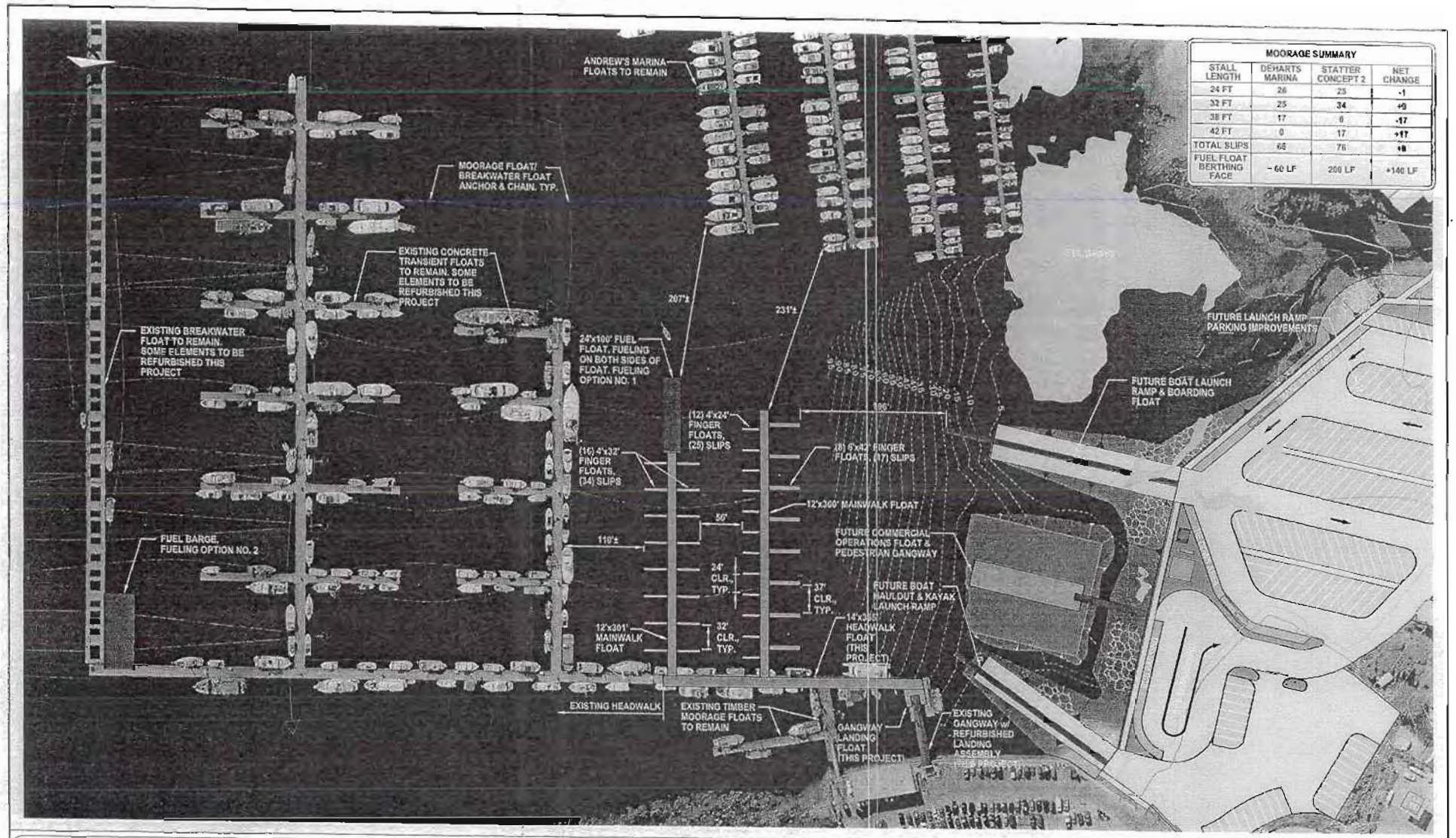
DATE: 3/7/2011

STATTER HARBOR MOORAGE IMPROVEMENTS

SHEET TITLE: CONCEPT NO. 1

PND PROJECT NO.: 102069.01 DWG FILE:

SHEET 1 OF 4



MOORAGE SUMMARY

STALL LENGTH	DEHARTS MARINA	STATTER CONCEPT 2	NET CHANGE
24 FT	26	25	-1
32 FT	25	34	+9
38 FT	17	6	-17
42 FT	0	17	+17
TOTAL SLIPS	68	76	+8
FUEL FLOAT BERTHING FACE	~ 60 LF	200 LF	+140 LF

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DOCKS & HARBORS DEPARTMENT

REVISIONS

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

PND ENGINEERS, INC
2300 Glacier Highway Ste 102
Juneau, Alaska 99801
Phone: 907-586-2093
Fax: 907-586-2099
www.pnd-ak.com

DESIGN: ARS CHECKED: CRS
DRAWN: ARS APPROVED: CRS
SCALE: SCALE IN FEET 0 60 120 FT

STATE OF ALASKA
DATE: 3/07/2011

STATTER HARBOR MOORAGE IMPROVEMENTS

SHEET TITLE: CONCEPT NO. 3

3
SHEET 3 OF 4

PND PROJECT NO.: 102089.01 DWG. FILE:

CITY & BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

STATTER HARBOR MOORAGE IMPROVEMENTS PHASE 2
MAINWALK FLOATS 1, 2 & FUEL FLOAT - PRELIMINARY BUDGET
Prepared By: PND ENGINEERS, INC.
March 9th, 2011

MOORAGE FLOATS

Item	Item Description	Units	Quantity	Unit Cost	Amount
1	Mobilization	LS	All Reqd	10%	$347,164
2	Mainwalk Float 1, 12' x 360' w/(8) 6'x42' Finger Floats & (9) 4'x32' Finger Floats	SF	7488	$180	$1,347,840
3	Mainwalk Float 2, 12' x 301' w/(16) 4'x32' Finger Floats	SF	5660	$180	$1,018,800
4	Mainwalk Float Anchorage System	LS	All Reqd	$600,000	$600,000
5	Electrical System including new lighting & power	LS	All Reqd	$375,000	$375,000
6	Domestic Water System (Summer Use)	LS	All Reqd	$90,000	$90,000
7	Life Ring & Fire Extinguishers	LS	All Reqd	$15,000	$15,000
8	Construction Surveying	LS	All Reqd	$25,000	$25,000
	ESTIMATED CONSTRUCTION BID PRICE				$3,818,804
	SCOPE & CONSTRUCTION CONTINGENCY (15%)				$572,821
	FINAL DESIGN, PERMITTING, CITY ADMINISTRATION, CONTRACT ADMINISTRATION, INSPECTION & OTHER INDIRECT COSTS (18%)				$687,385
	TOTAL RECOMMENDED PROJECT BUDGET				$5,079,009

FUEL FLOAT & PIPING

Item	Item Description	Units	Quantity	Unit Cost	Amount
1	Mobilization	LS	All Reqd	10%	$118,000
2	Fuel Float, 24' x 100'	SF	2400	$250	$600,000
3	Fuel Float Service Shed	LS	All Reqd	$50,000	$50,000
4	Fuel Float Anchorage System	LS	All Reqd	$100,000	$100,000
5	Fuel Piping on floats and upland lines to existing	LS	All Reqd	$400,000	$400,000
6	Electrical System including new lighting & power in shed	LS	All Reqd	$25,000	$25,000
7	Construction Surveying	LS	All Reqd	$5,000	$5,000
	ESTIMATED CONSTRUCTION BID PRICE				$1,298,000
	SCOPE & CONSTRUCTION CONTINGENCY (15%)				$194,700
	FINAL DESIGN, PERMITTING, CITY ADMINISTRATION, CONTRACT ADMINISTRATION, INSPECTION & OTHER INDIRECT COSTS (18%)				$233,640
	TOTAL RECOMMENDED PROJECT BUDGET				$1,726,340

P | N | D

City & Borough of Juneau · Docks & Harbors
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CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

Port of Juneau

To: Docks and Harbors CIP/Planning Committee
CC:
From: John M. Stone, P.E. Port Director
Date: March 17, 2011
Re: Cruise Ship Dock Improvements

We are ready to undertake final design work and compile the construction bid documents for the cruise ship dock project. In order to move forward, the Board needs to approve a final design concept and approve a contract with PND so they can complete the design and compile the bid documents. Both of these items will go to the Assembly for final approval after the Board action.

The recommended final design concept and cost estimate is attached. This concept was developed with significant input from port stakeholders and incorporates findings from the preliminary engineering work that we conducted over the past several months. The cost estimate includes the uplands staging area work previously approved by the Board that has been under development for the past few years. We are proposing to break the project into two construction contracts. On-site construction will take place during three winter construction seasons staring with the 2012/2013 off-season.

The first construction contract will incorporate the work shown as Phase I. This work is estimated to cost of a total of $11.6 million. We anticipate bidding Phase I this fall. Construction will take place during the 2012/2013 off-season with work being completed by the start of the 2013 cruise ship season.

The second construction contract will include the work shown as Phase II and III. Work is estimated to cost a total of $50 million. We anticipate bidding this work next winter. Work will take place in two phases. Phase II includes installation of the new Cruise Ship Terminal Berth and will occur during the 2013/2014 offseason coming online at the start of the 2014 cruise ship season. Phase III includes installation of the new Steamship Berth and will occur during the 2014/2015 offseason coming online at the start of the 2015 cruise ship season.

We opted to phase the project for several reasons. First and foremost, it reduces the possibility that we may not complete a phase by the start of the ensuing cruise ship season. Two, it spreads out the construction costs. Three, it gives contractors more time to do the work which should result in a better bid price. Four, it pulls out a smaller project (Phase I) that should garner a lot of interest from local bidders.

The CBJ Finance Director, Craig Duncan, is working on a plan to finance the improvements. The project will be entirely funded with fees assessed to cruise ships and their passengers. The finance plan will likely include a revenue bond since the cash flow requirement of the project exceeds cruise ship revenues generated over the same time period. However, I expect the term of the bond to be modest.

We currently have about $20 million in-hand which will allow us to move forward with the final design and bid documents for all phases and construction of the Phase I project. We will need to have the revenue bond in place to bid the Phase II and III project.

The cost estimate for the final design concept is greater than the estimate we provided to the Assembly in September, 2010. Some of the major reasons for the increase follow:

1. We added the uplands staging area reconfiguration project into this work. This project was budgeted separately from the earlier cost estimates but is now included since we are combining it with a portion of the dock work.

2. We are including hook-ups for sanitary sewer and are installing enabling infrastructure for shorepower in the event it can be provided in the future. Reports detailing our analysis for providing these services are attached.

3. We increased the size of the floating berths and provided drive-down capability at the Steamship Berth. This was done at industry's suggestion so we can fully accommodate as many different types of ships as possible over the 50 year service life of the project.

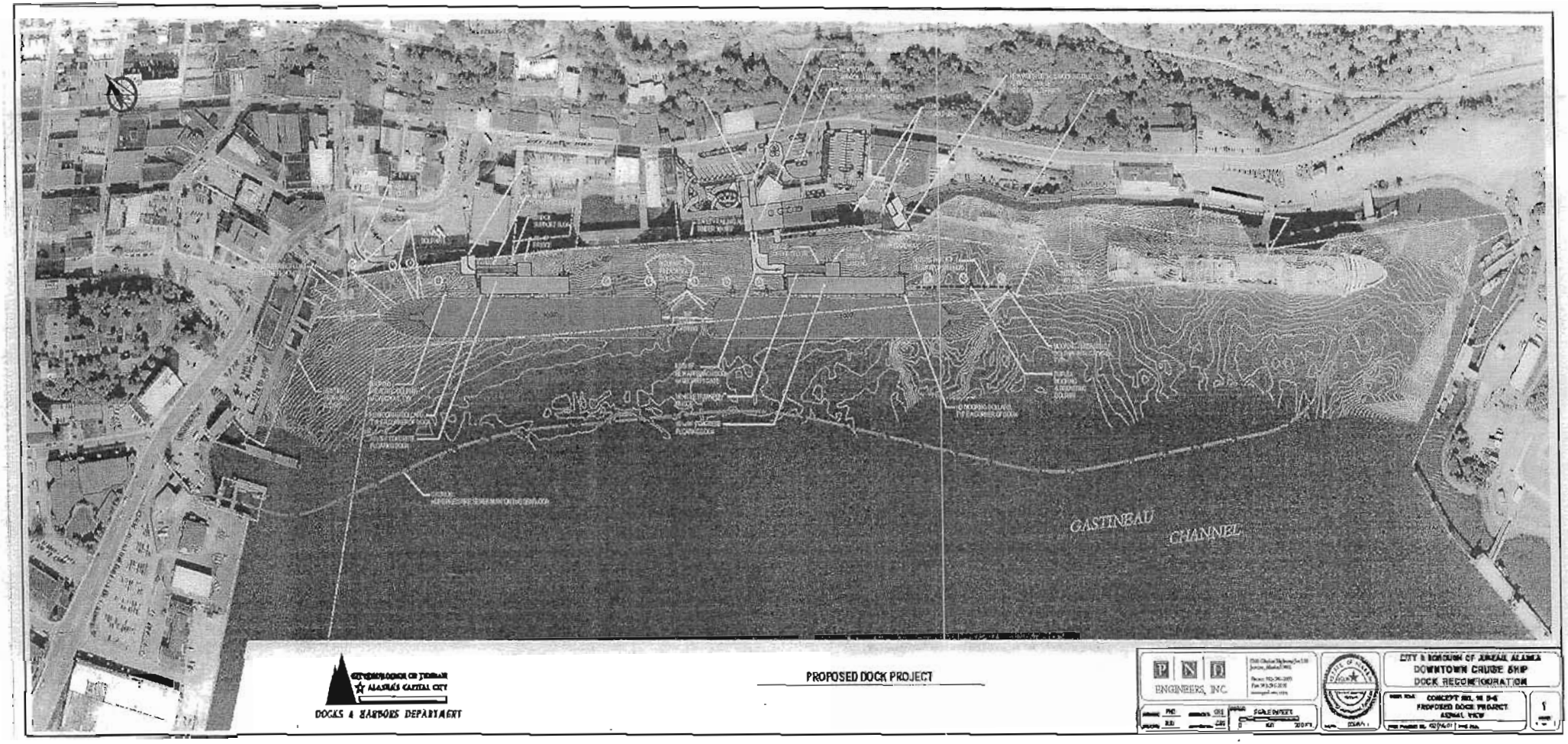
4. Based on input from the cruise industry and the stevedores, we added dolphins, tie-up structures, and catwalks to increase safety and flexibility for mooring a variety of vessel sizes and types into the future.

5. We decided to go with concrete floating berths instead of steel. The upfront cost is more but we believe the life cycle cost is less. A report detailing our recommendation is attached.

I recommend the Board approve the final design concept as presented, the contract with PND for the final design and bid documents, and forward both of these items to the Assembly for action.

Please call me at 586-0294 if you have questions.

Attachments



CITY & BOROUGH OF JUNEAU
☆ ALASKA'S CAPITAL CITY
DOCKS & HARBORS DEPARTMENT

PROPOSED DOCK PROJECT

P N O
ENGINEERS, INC.

CITY & BOROUGH OF JUNEAU, ALASKA
DOWNTOWN CRUISE SHIP
DOCK RECONFIGURATION

CONCEPT NO. 10 B-6
PROPOSED DOCK PROJECT
AERIAL VIEW

1

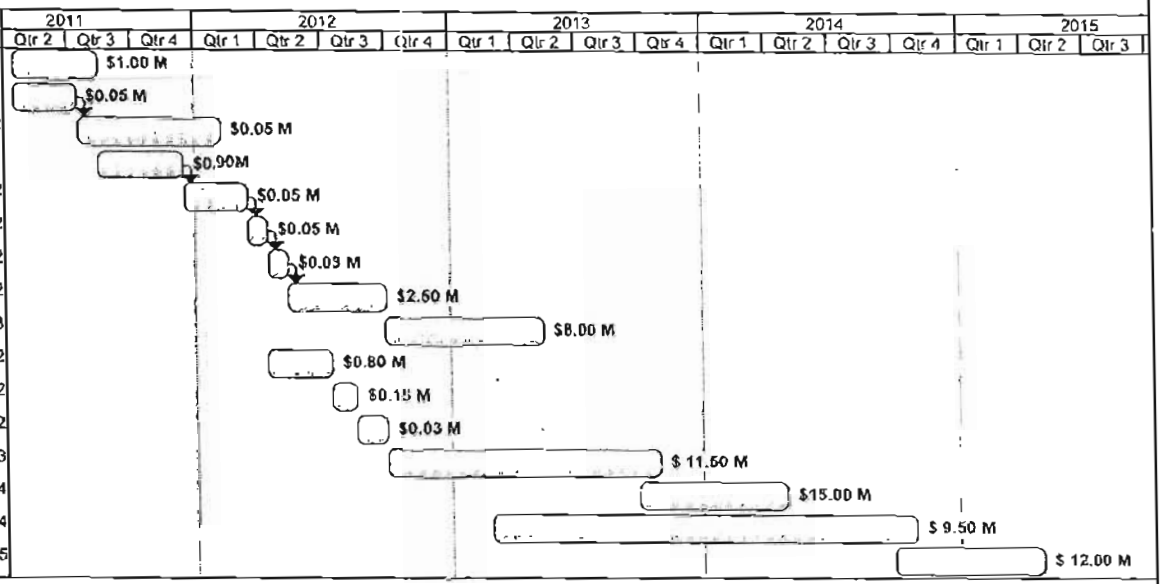
CBJ DOWNTOWN CRUISE SHIP DOCK RECONFIGURATION
CONCEPT 16B-3
SCHEMATIC DESIGN BUDGET - MARINE FACILITIES
14-Mar-11
Prepared by: PND Engineers, Inc.

Item	Item Description	Units	Quantity	Unit Cost	Item Cost	Phase 1 Uplands/Decks	Phase 2 South Berth	Phase 3 North Berth	Check
	Base Bid								
1.01	Mobilization	LS	All Reqd	10%	$4,349,200	$582,500	$2,082,450	$1,684,250	
1.02	Demolition	LS	All Reqd	$750,000	$750,000	$700,000		$50,000	
1.03	South Berth Retaining Walls, Earthwork and Concrete Paving	LS	All Reqd	$950,000	$950,000	$950,000			
1.04	North Berth Pile Supported Approach Docks	SF	2,500	$250	$625,000			$625,000	
1.05	South Berth Pile Supported Approach Docks	SF	17,000	$250	$4,250,000	$2,975,000	$1,275,000		
1.06	North Berth Floating Concrete Pontoon 50'x300'	SF	15,000	$290	$4,350,000			$4,350,000	
1.07	South Berth Floating Concrete Pontoon 50'x400'	SF	20,000	$290	$5,800,000		$5,800,000		
1.08	Floating Dock Pile Restraints	EA	4	$1,200,000	$4,800,000		$2,400,000	$2,400,000	
1.09	Floating Dock Marine Fenders	LF	700	$1,000	$700,000		$400,000	$300,000	
1.10	Vehicle Transfer Bridge & Pile Supported Abutment	EA	2	$1,350,000	$2,700,000		$1,350,000	$1,350,000	
1.11	Transfer Bridge Support Float	EA	2	$200,000	$400,000		$200,000	$200,000	
1.12	Transfer Bridge Landing Float	EA	2	$580,000	$1,160,000		$580,000	$580,000	
1.13	Transfer Bridge End Support Structure	EA	2	$250,000	$500,000		$250,000	$250,000	
1.14	Breasting & Mooring Dolphins	EA	9	$1,000,000	$9,000,000		$6,000,000	$3,000,000	
1.15	Upgrade Existing Mooring Dolphins	EA	2	$250,000	$500,000			$500,000	
1.16	Catwalks	LF	900	$550	$495,000		$247,500	$247,500	
1.17	Catwalk Access Gangways	EA	4	$120,000	$480,000		$240,000	$240,000	
1.18	Water Service (Seasonal Use)	EA	2	$300,000	$600,000	$100,000	$250,000	$250,000	
1.19	Electrical & Lighting	EA	2	$250,000	$500,000	$100,000	$200,000	$200,000	
1.20	Port Security Gates & Cameras	LS	All Reqd	$200,000	$200,000		$100,000	$100,000	
1.21	Safety Railings Along Wharf & Visual Enhancements	LS	All Reqd	$1,000,000	$1,000,000			$1,000,000	
1.22	Pile Anodes	EA	400	$2,000	$800,000		$400,000	$400,000	
1.23	16' x 250' Small Vessel Moorage Float	SF	4,000	$150	$600,000		$600,000		
1.24	Moorage Float Piles	EA	11	$12,000	$132,000		$132,000		
1.25	New Pedestrian Gangway & Dock at Moorage Float	EA	1	$250,000	$250,000		$250,000		
1.26	Moorage Float Power & Lighting	EA	1	$150,000	$150,000		$150,000		
1.27	Sewer Service Discharge Piping & Utility Connection	EA	2	$400,000	$800,000			$800,000	
1.28	Shore Tie Power Utilidor to Dock	EA	1	$1,000,000	$1,000,000	$1,000,000			
	Estimated Construction Costs				$47,841,200	$5,407,500	$22,906,950	$18,526,750	$47,841,200
	Contingency (10%)				$4,784,120	$640,750	$2,290,695	$1,852,675	$4,784,120
	Local, State and Federal Permits & Lease Applications				$100,000	$100,000			$100,000
	Final Design - P, S & E, Contract Documents				$2,693,000	$486,919	$1,219,649	$986,432	$2,693,000
	Contract Administration & Construction Inspection				$2,693,000	$486,919	$1,219,649	$986,432	$2,693,000
	2011 Project Budget				$58,111,320	$8,122,088	$27,636,944	$22,352,288	$58,111,320
	Additive Alternatives								
	Taku Fisheries Dock Expansion	LS	All Reqd	$546,425	$546,425	$546,425			
	Estimated Construction Costs				$546,425	$546,425			$546,425
	Contingency (10%)				$54,643	$54,643			$54,643
	Final Design - P, S & E, Contract Documents				$54,643	$54,643			$54,643
	Contract Administration & Construction Inspection				$54,643	$54,643			$54,643
	2011 Project Budget				$710,353	$710,353			$710,353
	Uplands Staging Area								
	Estimated Construction Costs (see separate cost breakdown)				$2,096,600	$2,096,600			$2,096,600
	Contingency (10%)				$209,660	$209,660			$209,660
	Local, State and Federal Permits & Lease Applications				$15,000	$15,000			$15,000
	Site Investigations - Survey & Geotechnical				$40,000	$40,000			$40,000
	Final Design - P, S & E, Contract Documents				$188,694	$188,694			$188,694
	Contract Administration & Construction Inspection				$188,694	$188,694			$188,694
	2011 Project Budget				$2,738,648	$2,738,648			$2,738,648
				Total	$61,560,321				
					Total Project Budget	$31,571,088	$27,636,944	$22,352,288	$61,560,321
					Phase	Ph 1	Ph 2	Ph 3	Total
					Scope of Work	Uplands/Decks	South Berth	North Berth	All
					Completion Date	May-13	May-14	May-15	May-15

Notes: Final scope of improvements under Base Bid, Add. Alts and Phasing Sequences subject to change based on CBJ direction. Cost of thrust dissipator structure and Marine Park Seawalk not included in this budget. Cost of Uplands Staging Area project added to budget. Inflationary costs not included.

DOWNTOWN CRUISESHIP DOCKS CONCEPT 16B-3
3 SEASON - UPLANDS AND MARINE FACILITIES
PROJECT SCHEDULE & CASH FLOW PROJECTION

ID	Task Name	Start	Finish
1	Preliminary Design Ph 1, 2 & 3 - 35%	Fri 4/15/11	Mon 8/15/11
2	Prepare Permit Applications / Agency Mtgs	Fri 4/15/11	Fri 7/15/11
3	Environmental Review & Permit Authorizations	Mon 7/18/11	Fri 2/10/12
4	Design Development Ph 1, 2 & 3 - 65%	Mon 8/15/11	Fri 12/16/11
5	Final Design Ph 1 - 95%	Mon 12/19/11	Mon 3/19/12
6	Stamped Bid Ready Contract Docs - Ph 1	Tue 3/20/12	Mon 4/16/12
7	Advertise & Award Construction Contract - Ph 1	Wed 4/18/12	Tue 5/15/12
8	Submittals, Material Fabrication & Delivery Ph 1	Wed 5/16/12	Tue 10/2/12
9	On Site Construction - Ph 1 Uplands & Decks	Mon 10/1/12	Wed 5/15/13
10	Final Design Ph 2 & 3 - 95%	Mon 4/16/12	Mon 7/16/12
11	Stamped Bid Ready Contract Docs - Ph 2 & 3	Tue 7/17/12	Mon 8/20/12
12	Advertise & Award Construction Contract - Ph 2 & 3	Tue 8/21/12	Tue 10/2/12
13	Submittals, Material Fabrication & Delivery Ph 2	Wed 10/3/12	Thu 10/31/13
14	On Site Construction - Ph 2 South Berth	Tue 10/1/13	Thu 5/1/14
15	Submittals, Material Fabrication & Delivery Ph 3	Fri 3/1/13	Fri 10/31/14
16	On Site Construction - Ph 3 North Berth	Wed 10/1/14	Fri 5/1/15



Project: PND No. 102050.01
March 18, 2011

Task
Split
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Split
Rolled Up Milestone
Rolled Up Progress
External Tasks
Project Summary
External Milestone
Deadline

Technical Memorandum

Carson Dorn, Inc.

712 West 12th Street
Juneau, AK 99801

Tel: 907-586-4447
Fax: 907-586-5917

Date: March 1, 2011

To: Dick Somerville P.E.

From: Jim Dorn P.E.

Reference:

Subject: Cruise Ship Wastewater Discharges

Introduction

The purpose of this memorandum is to consider the capability of Juneau's wastewater collection and treatment system to accept wastewater discharges from the proposed new cruise ship docking facilities at the Alaska Steamship Dock and the Cruise Ship Terminal. Additionally a conceptual design of wastewater facilities to serve the cruise ship docks will be developed that would allow wastewater from the cruise ships to be accepted by Juneau.

The Juneau Douglas Wastewater Treatment Plant located at the Rock Dump south of Juneau has some capacity to handle higher flows (hydraulic capacity) but there is concern about the impact increased organic loading from additional cruise ship wastewater discharges will have on the wastewater treatment plant operation.

Discharge of wastewater from cruise ships in Southeast Alaska has been a concern to Alaskans and regulatory agencies as the number of cruise ship visits increase each year. In the past decade, the size and number of cruise ships frequenting Alaska's coastal waters has increased dramatically. It is reported that in 2011season there will be approximately 460 cruise ship visits to Juneau.

Historically there have been reports of high concentrations of fecal coliform bacteria in wastewater discharges from cruise ships and the concentration of biological oxygen demand (BOD) which is a measure of the organic material in wastewater and total suspended solids (TSS) in the effluent exceed what would have been expected from most municipal secondary treatment plants.

The cruise ship industry is aware of these problems and is actively employing new technologies, primarily on-board wastewater treatment plants, to address the issues of fecal coliform, BOD and TSS in their wastewater discharges.

Existing Wastewater Facilities/Operation at the South Franklin Street Dock

Facilities were constructed in 2004 at the Princess Cruise Lines South Franklin Street Dock to allow vessels using the dock to pump wastewater into the City and Borough of Juneau wastewater collection system for treatment and disposal.

Flexible hoses are lowered to the vessels and each vessel connects these hoses to its on-board pumps to discharge wastewater to Juneau's wastewater collection system. The shore based facilities include piping form the dock to Juneau's wastewater collection system near the Rock Dump tank farms, a magnetic flow meter to record the total volume discharged, a composite sampler to collect samples of the wastewater every 30 minutes for analysis and valves to control the flow rate and to prevent backflow of sewage to the vessels.

Vessels are charged for these services based on the volume of wastewater discharged and on the BOD and TSS concentration in the wastewater. Experience with the South Franklin Street Dock has shown that the BOD concentration is typically higher than the TSS concentration and usually determines the charge rate per 1000. The following table shows the 2010 charge rates per 1000 gallons for increasing concentrations of BOD and TSS. Normal influent concentrations to the Juneau wastewater treatment plant are 300 mg/l BOD and 350 mg/l TSS.

City and Borough of Juneau
Cruise Ship 2010 Wastewater Charge Rates

BOD Conc.mg/l <	TSS Conc. mg/l <	Rate/1000 gal
300	350	$7.45
600	700	$14.90
900	1,050	$22.35
1,200	1,400	$29.80
1,500	1,750	$37.25
1,800	2,100	$44.70
2,100	2,450	$52.15
2,400	2,800	$59.60
2,700	3,150	$67.05
3,000	3,500	$74.50
3,300	3,850	$81.95
3,600	4,200	$89.40
3,900	4,550	$96.85
4,200	4,900	$104.30
4,500	5,250	$111.75

Wastewater discharge volumes are recorded at the end of each discharge event and a Discharge Receipt is prepared to document the volume of wastewater discharged for billing purposes and for reporting to the US Coast Guard. Wastewater samples collected during the discharge are taken to a local lab to be analyzed for BOD and TSS. At the end of each month a summary of the volume, BOD concentration, TSS concentration and the City and Borough of Juneau charges are prepared for each vessel.

Historic Wastewater Discharge Data from the South Franklin Street Dock

Princess Cruise Lines has been discharging wastewater to the City and Borough of Juneau wastewater collection system since 2004. Appendix A contains graphs showing the volume, BOD concentration and total pounds of BOD discharged during each event during for the two most recent years of operation (2009 and 2010). These graphs illustrate the variations in discharge volumes and concentrations between individual events and the number of discharge events that occur each year.

Projected Cruise Ship Discharge Volume

In 2009 there were a total of 7 discharge events from cruise ships at the South Franklin Street Dock with discharge volumes ranging from 8,788 to 52,261 gallons and in 2010 there were a total of 53 discharge events with discharge volumes ranging from 6,454 to 115,454 gallons.

A review of the records since 2004 indicate there were a few discharge events with total discharges of approximately 150,000 gallons.

If it is assumed that maximum discharge volume from a cruise ship will be on the order of 150,000 gallons and that they occur at the South Franklin Street Dock, Alaska Steamship Dock and the Cruise Ship Terminal simultaneously, the total peak flow would be about 450,000 gallons per day.

While it is not included in this evaluation, there has been some discussion about connecting the AJ Dock to the CBJ wastewater collection and treatment system too, so peak daily flows of 600,000 gallons per day from the cruise ships should be considered in the event that discharges are taking place at 4 docks.

Projected Cruise Ship Biological Oxygen Demand (BOD) Loading

In 2009 there were a total of 7 discharge events from cruise ships at the South Franklin Street Dock with BOD loadings ranging from 36 to 415 pounds and in 2010 there were a total of 53 discharge events with loadings ranging from 29 to 2,465 pounds.

A review of the records since 2004 indicate there were a few discharge events with total BOD loadings in excess of 4,000 pounds.

If it is assumed that maximum BOD loading from a cruise ship will be on the order of 4,000 pounds and that they occur at the South Franklin Street Dock, Alaska Steamship Dock and the Cruise Ship Terminal simultaneously, the total BOD loading from the cruise ships would be about 12,000 pounds per day.

If additional BOD loading occurs from the AJ Dock, the total BOD loading to the wastewater collection and treatment system from cruise ships of 16,000 pounds per day from the cruise ships should be considered in the evaluation of capacity of the Juneau Douglas Wastewater Treatment Plant to handle increase flows from the cruise ships.

Juneau Wastewater Collection and Treatment System Evaluation

The hydraulic capacities of the gravity sewer pipes in the collection system were reviewed to determine if they have sufficient capacity to handle wastewater from the cruise ships. The capacity of the sewers was determined using the Manning formula for calculating flow in gravity sewers. Invert elevations and the distances between manholes were collected from as-built drawings and were used to determine the pipe slope. The sewer lines near Marine Park have a capacity of 886 gallons per minute when flowing full. Figure 1 shows the sewer lines and their capacity.

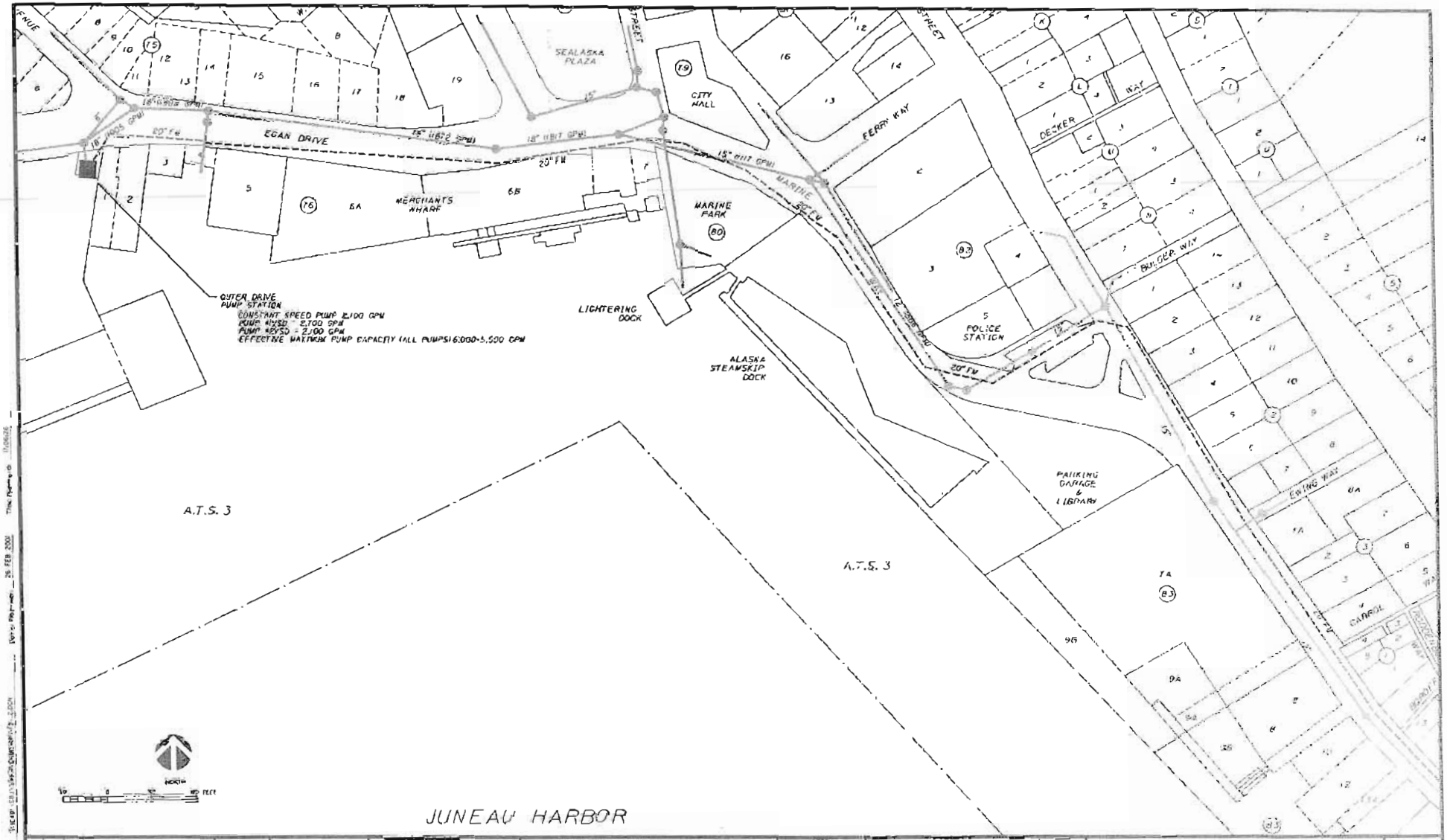
The Outer Drive Pump Station is the pump station that pumps sewage from the downtown Juneau and Douglas area to the Juneau Douglas wastewater treatment plant. The pump station has three pumps, a constant speed pump with a capacity of 2,100 gpm and two variable speed pumps one with a capacity of 2,700 gpm and the other with a capacity of 2,100 gpm. The total capacity of the Outer Drive Pump Station is therefore approximately 6,900 gallons per minute.

The South Franklin Street Dock and the AJ Dock pump directly to the gravity sewer line leading the Juneau Douglas Wastewater Treatment plant and so would not use the collection system piping around Marine Park or the Outer Drive Pump Station. As a result the projected loading on the collection system in this area would be about 300,000 gallons per day. If this flow occurs over a 12 hour period, the flow rate would be about 417 gallons per minute. Both the gravity collection system near Marine Park and the Outer Drive Pumps Station appear to have sufficient capacity to handle increased wastewater flows from vessels docked at the Alaska Steamship Dock and the Cruise Ship Terminal.

Juneau Douglas Wastewater Treatment Plant

The original design criteria for flows and BOD loadings at the Juneau Douglas Wastewater Treatment Plant are as follows:

Avg. Flow	2.76 MGD
Peak Flow	7.23 MGD



CITY AND BOROUGH OF JUNEAU

SEWER SYSTEM
CRUISE SHIP WASTEWATER
EVALUATION

Carson Dorn Inc.

MAXIMUM FLOW IN
MARINE WAY
GRAVITY SEWERS

Total (Avg. Day) BOD lbs/day	3,290 lbs/day
Total (Max. Day) BOD lbs/day	5,980 lbs/day

Measured flow and organic loading records for the 2009 and 2010 summer season at Juneau Douglas Wastewater Treatment Plant are contained in Appendix B.

Flows

Juneau has made a concerted effort to separate its storm drain systems from its sewer system in the downtown core area over the last few years. This effort has dramatically reduced the flow loading on the Juneau Douglas Wastewater Treatment Plant and has resulted in the hydraulic loading on the plant being consistently below the average design flow. Following is a summary of the flow records at the treatment plant for the 2009 and 2010 cruise ship season.

Juneau Douglas Wastewater Treatment Plant Flow Summary
2009-2010 Cruise Ship Season

Month	Average Daily Flow (MGD)	Peak Daily Flow (MGD)	Peak Flow Rainfall Event (inches)
May 2009	0.8555	1.273	0.76
Jun 2009	0.8076	1.357	0.56
Jul 2009	0.9195	1.841	0.80
Aug 2009	1.3363	3.542	1.40
Sep 2009	1.3035	2.428	0.80
May 2010	0.7917	1.127	0.00
Jun 2010	1.1419	2.615	1.52
Jul 2010	1.0475	1.861	0.95
Aug 2010	0.9986	1.331	0.34
Sep 2010	0.9728	1.654	0.69

It was previously projected that the wastewater flow rate from 4 cruise ships would be about 600,000 gallons per day. If this occurs over a 12 hour period it is equivalent to a flow rate of rate of 1.2 MGD. From a flow standpoint it appears that under most circumstances that occur during the summer months, the Juneau Douglas treatment plant will be able to handle the additional flow from the cruise ships in combination with the historic flows when compared to the average design flow of 2.76 MGD and peak design flow of 7.23 MGD.

BOD Loadings

The Juneau Douglas Wastewater Treatment plant is required by its discharge permit to measure influent and effluent BOD levels once per month. The BOD test takes approximately 5 days to conduct and so does not immediately provide feedback with regards to loading or performance of

the plant. Following is a summary of the BOD loading measurements for the 2009 and 2010 cruise ship season:

Juneau Douglas Wastewater Treatment Plant BOD Loading Summary
2009-2010 Cruise Ship Season

Month	Average Daily BOD Loading (pounds)	Peak Daily BOD Loading (pounds)
May 2009	1516	1516
Jun 2009	1187	1187
Jul 2009	1679	1679
Aug 2009	1883	1883
Sep 2009	1990	2
May 2010	1471	1815
Jun 2010	1397	2086
Jul 2010	1632	1632
Aug 2010	2589	2589
Sep 2010	2676	2676

It was previously projected that the peak wastewater BOD loadings from 4 cruise ships could be as high as 16,000 pounds per day. This is nearly 5 times the average daily design capacity of the Juneau Douglas Wastewater Treatment. There are days where the single discharge from cruise ships at South Franklin Street Dock exceeded the average daily design capacity of the plant. From an organic loading standpoint it appears that the Juneau Douglas treatment plant would not be able to handle the additional flow from more than one cruise ship at a time.

Adding additional "full strength" wastewater with high BOD concentrations from the cruise ships to the Juneau Douglas plant will result in the plant being organically overloaded and will most likely result in unsatisfactory effluent quality and violations of the plant's wastewater discharge permit.

After discussing this concern with the cruise line agencies that would be using the Alaska Steamship Dock and the Cruise Ship Terminal is was determined that vessels using those facilities only need to have the ability to discharge treated effluent from their on-board wastewater treatment plants and not untreated wastewater as occurs at the South Franklin Street Dock. Apparently there are times that they need to recertify their on-board wastewater treatment plants and so are unable to discharge from them while in port.

Effluent from their wastewater treatment plants is expected to have BOD concentrations below 30 mg/l as opposed to untreated wastewater from the cruise ships which has had measured BOD concentrations as high as 8,800 mg/l.

If CBJ can be assured that the wastewater discharged from the cruise ships is treated effluent, it can be assumed that the pounds of BOD that would discharged each event would be about 37 pounds instead of the 4,000 pounds per event previously estimated. If treated wastewater is discharged from the vessels using the new facilities, the Juneau Douglas Treatment Plant has sufficient capacity to treat the existing "full strength" discharges from the South Franklin Street Dock as well as the treated effluent discharges from the Alaska Steamship, Cruise Ship Terminal and AJ docks.

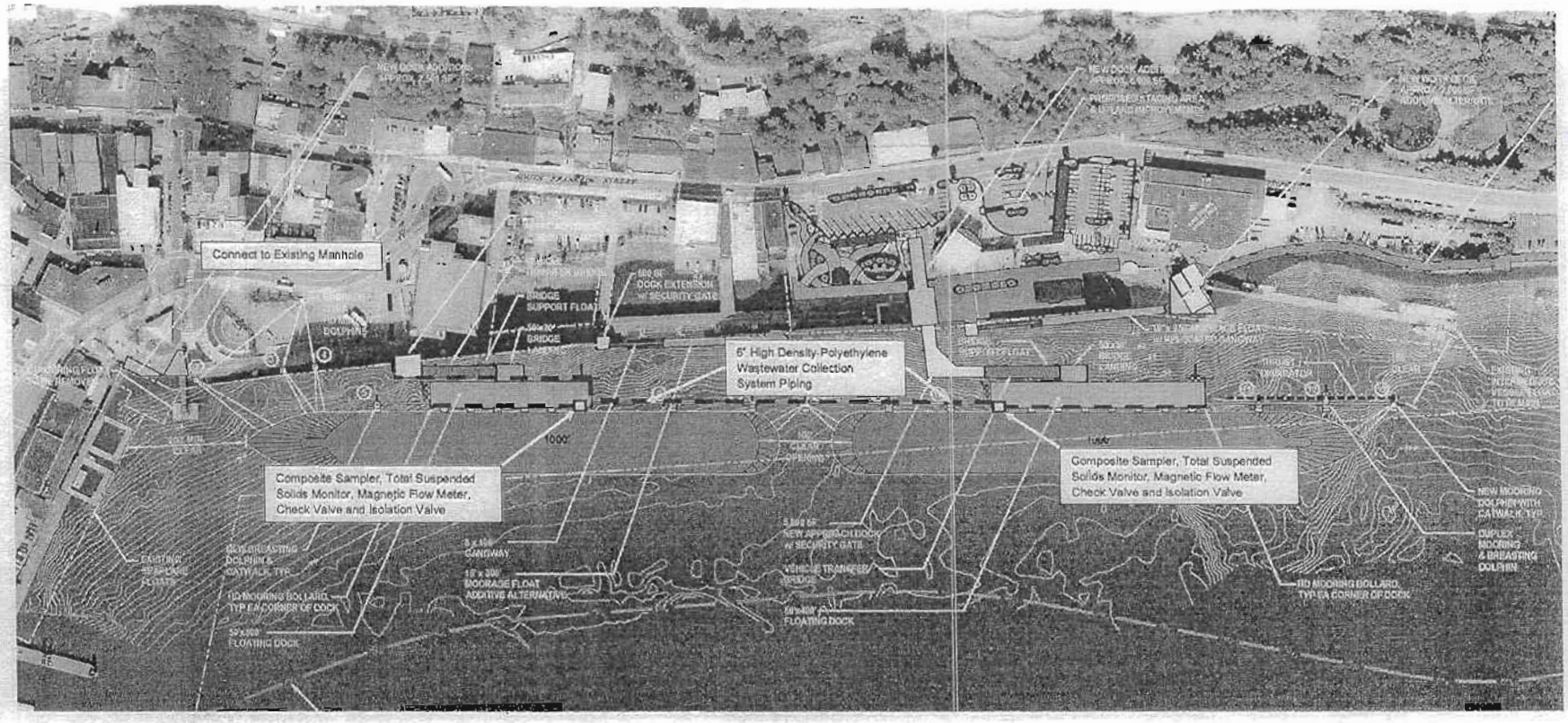
Conceptual Design Recommended Facilities

In order to receive wastewater from the cruise ships at the Alaska Steamship Dock and Cruise Ship Terminal and to monitor and control the discharges, the following facilities need to be provided at each location.

- Piping from the cruise ship floats to the CBJ wastewater collection system
- Magnetic flow meter to measure flow of liquids with high levels of solids
- Composite sampler with the capability to take periodic/representative samples of the discharge in order to determine effluent quality for billing purposes
- Continuous total suspended solids analyzer to measure the concentration of total suspended solids in the discharge. This is an indicator of the quality of the effluent and will be used to immediately determine if there is potential for organically overloading the treatment plant.
- Eccentric plug valve to isolate the connection for each float and to throttle flows in the event flow rates begin to exceed that capacity of the wastewater collection system.
- Check valves to prevent backflow to the cruise ships

The following Site Plan for the Proposed Cruise Ship Wastewater Collection System shows a conceptual layout and location of these facilities.

Estimated construction costs of these wastewater collection facilities for the two docks is $600,000.

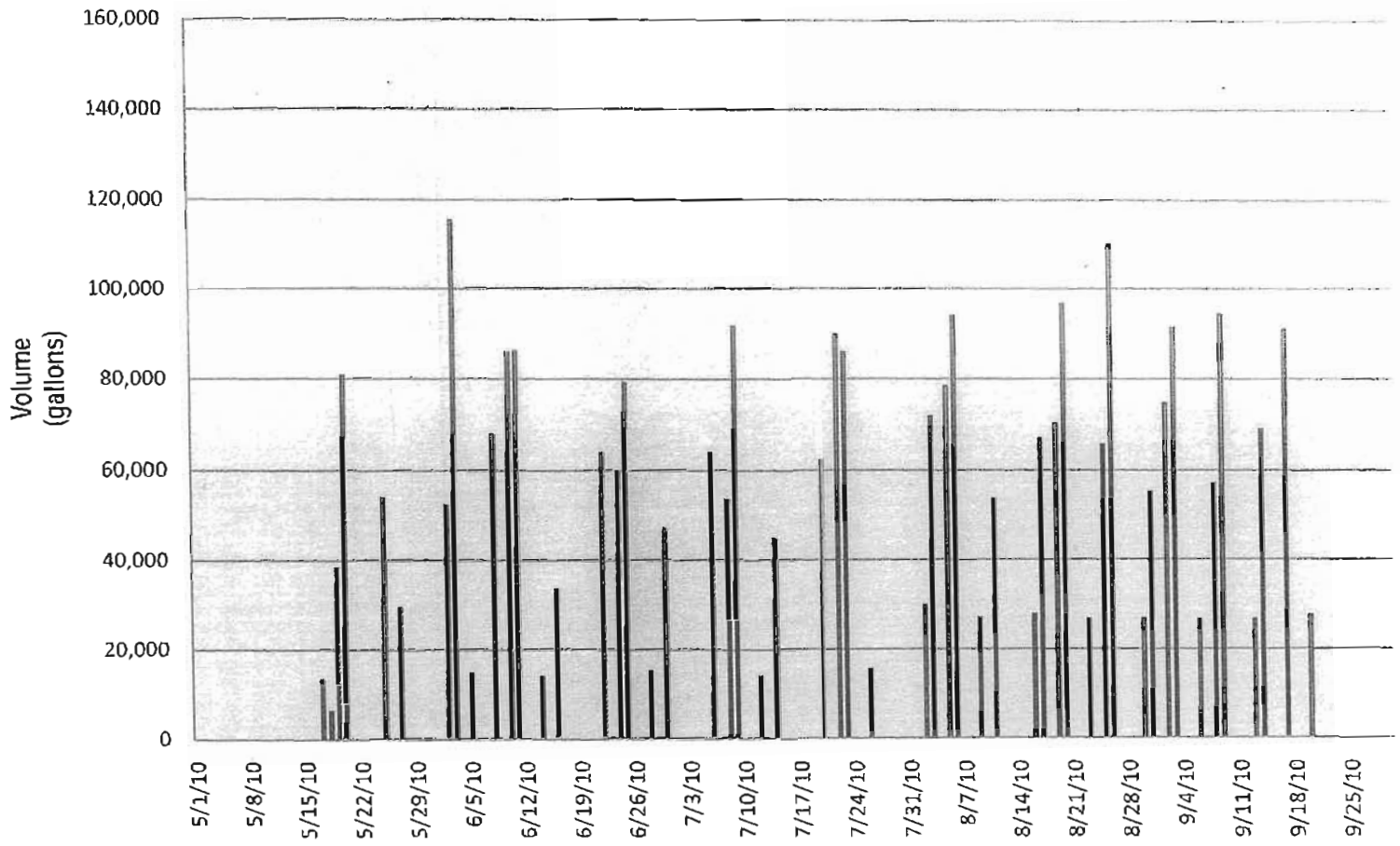


SITE PLAN

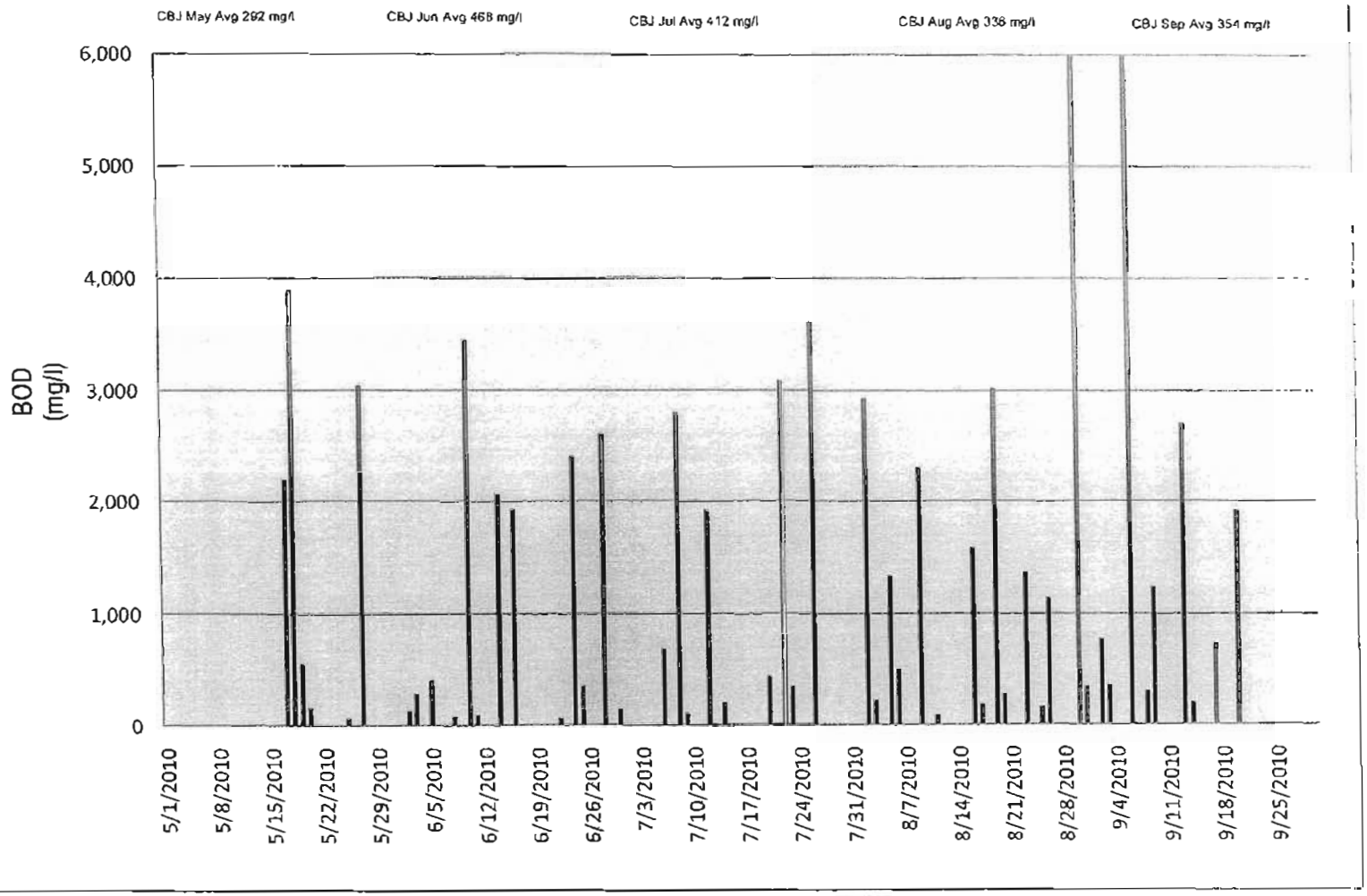
PROPOSED CRUISE SHIP WASTEWATER COLLECTION SYSTEM

APPENDIX A

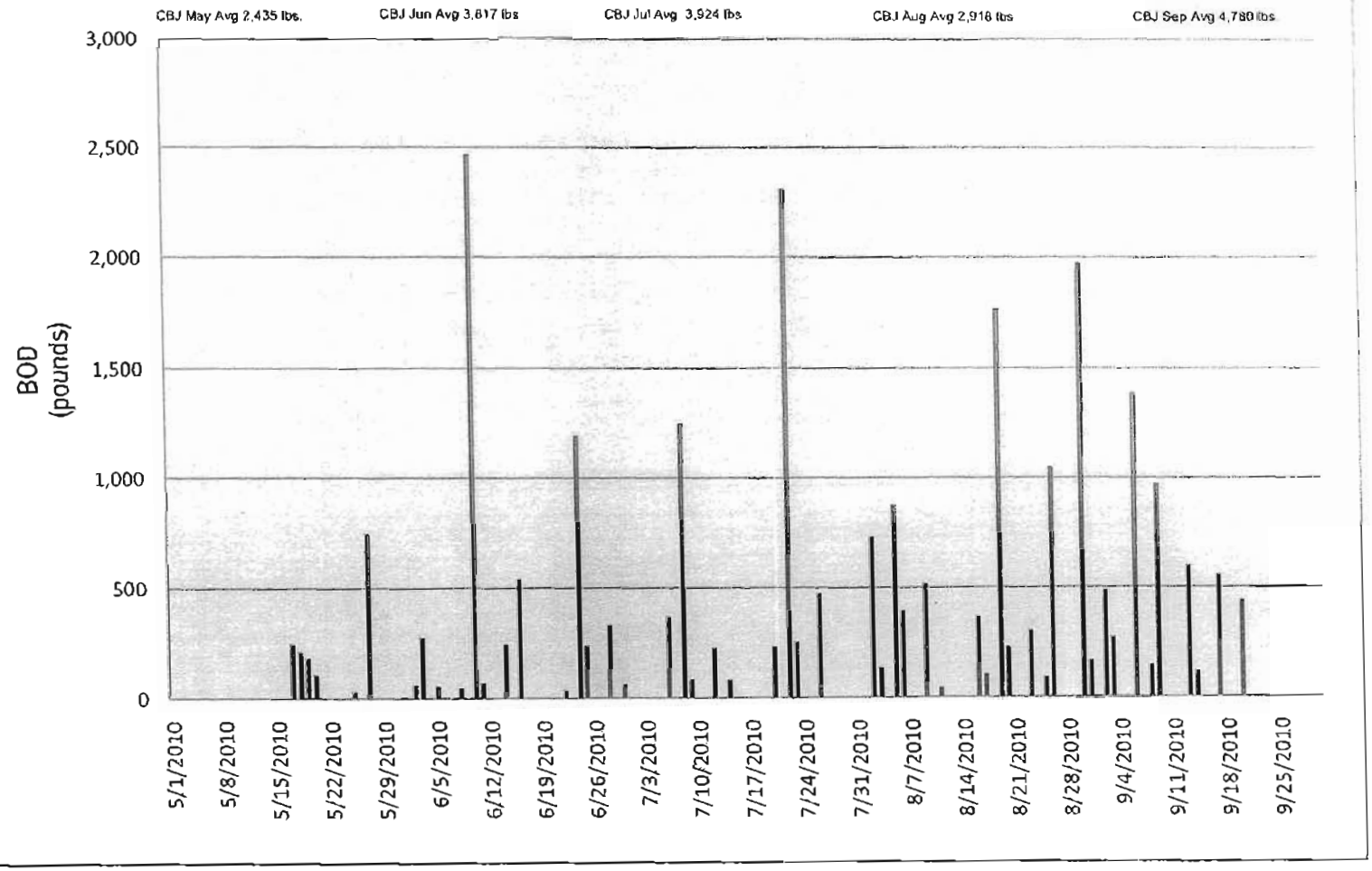
2010 South Franklin Street Dock
Wastewater Discharges
Volume (gallons)

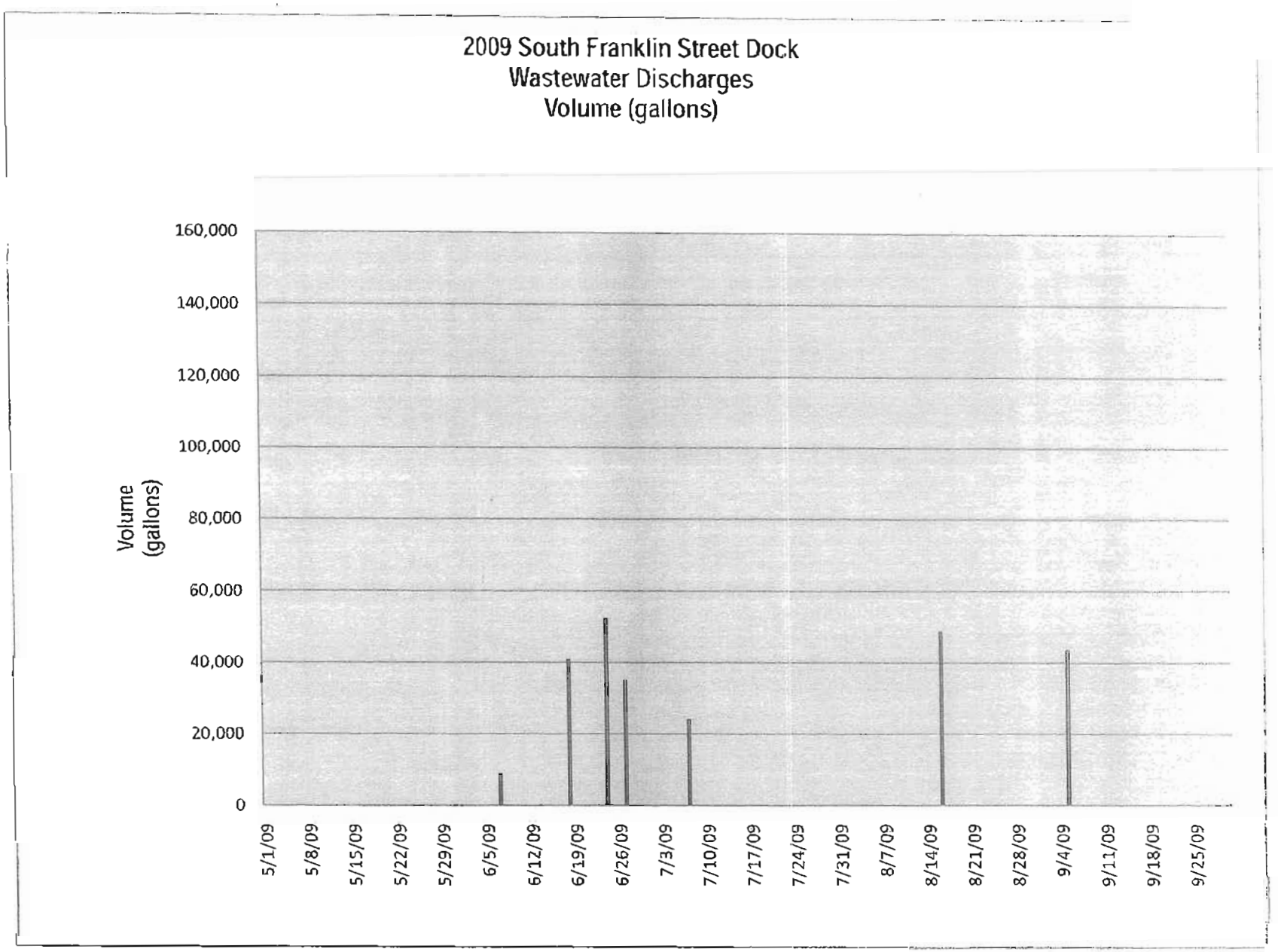


2010 South Franklin Street Dock
Wastewater Discharges
BOD (mg/l)

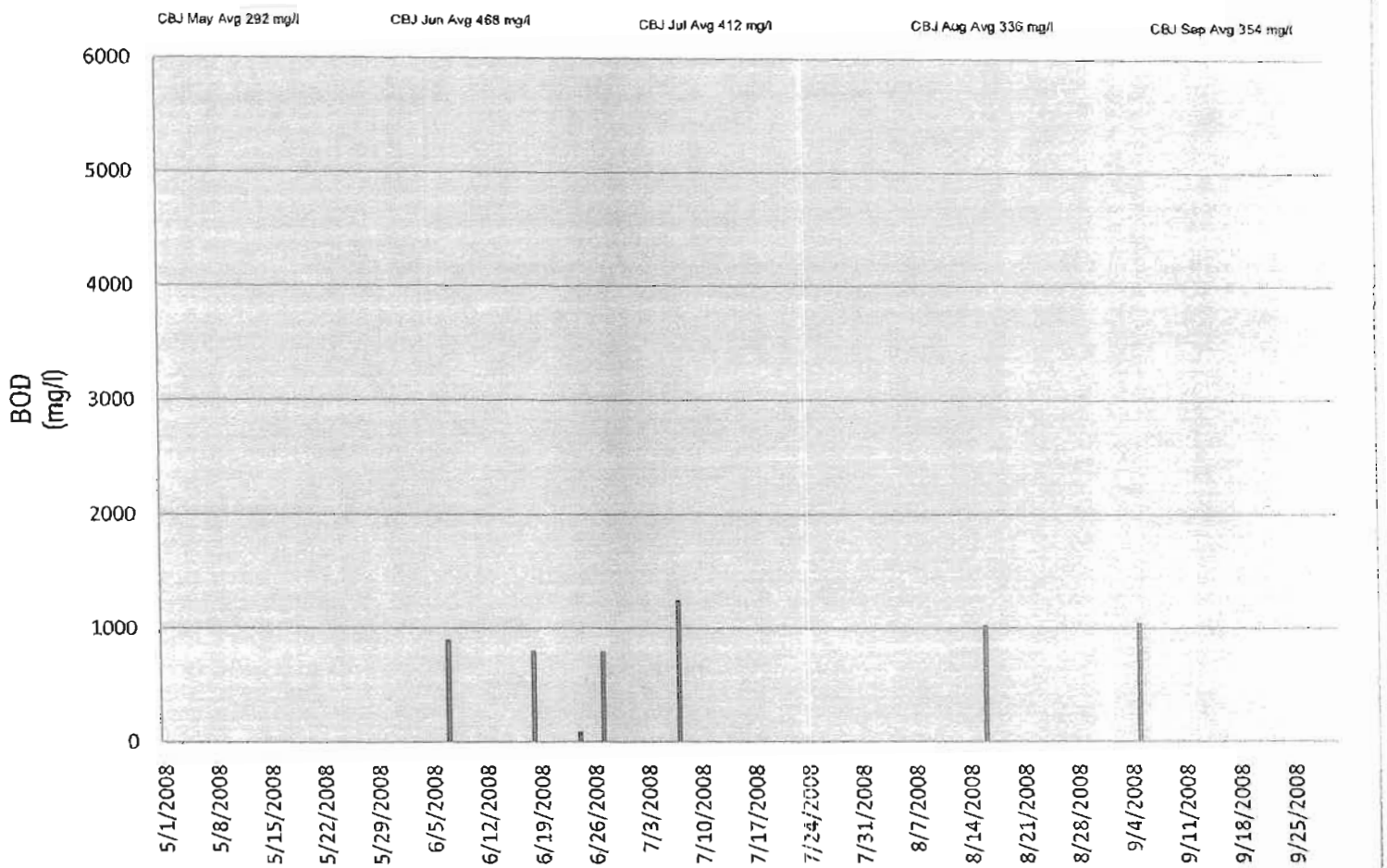


2010 South Franklin Street Dock
Wastewater Discharges
BOD (pounds)

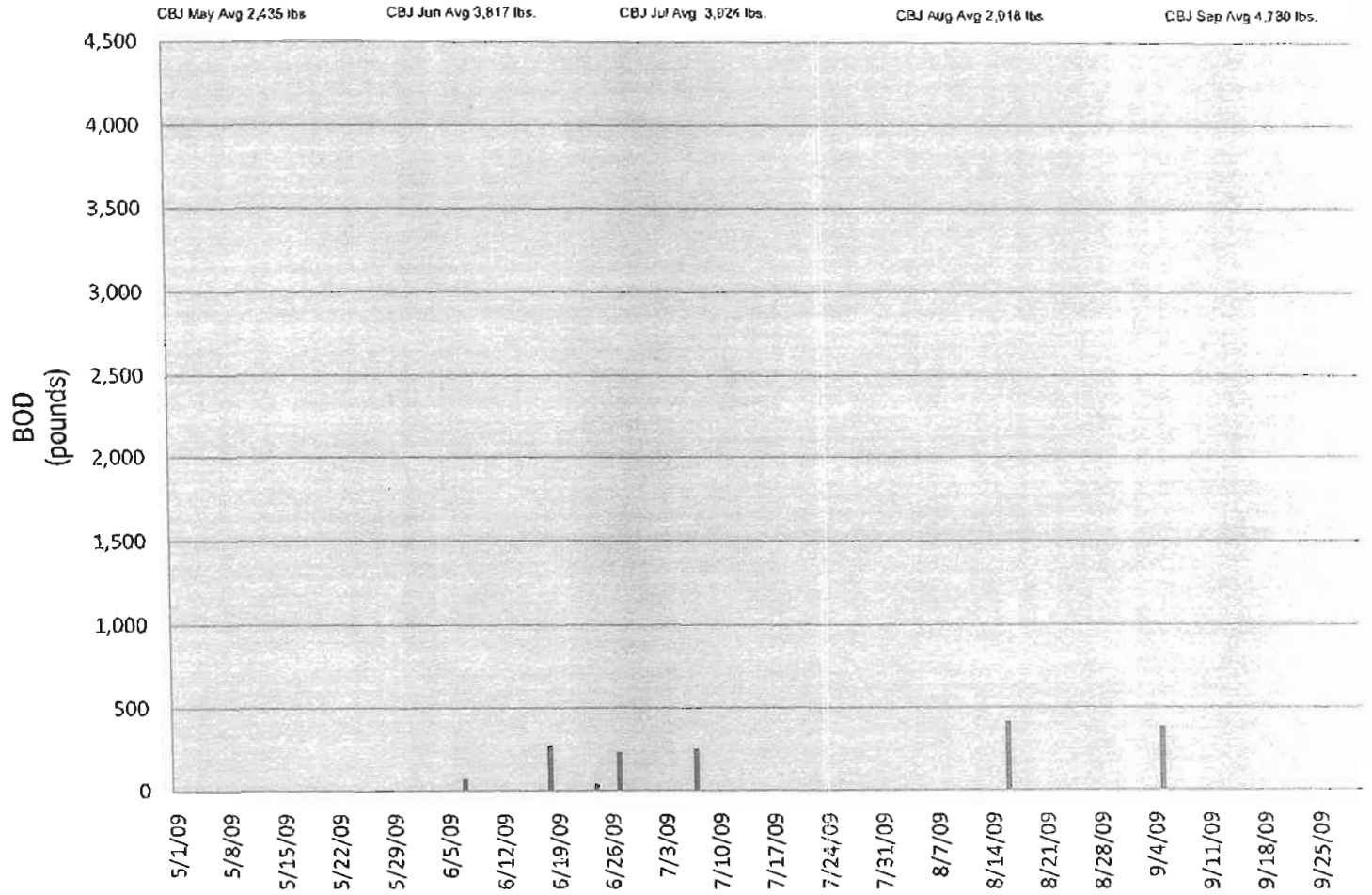



2009 South Franklin Street Dock
Wastewater Discharges
Volume (gallons)
Volume (gallons)
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
5/1/09
5/8/09
5/15/09
5/22/09
5/29/09
6/5/09
6/12/09
6/19/09
6/26/09
7/3/09
7/10/09
7/17/09
7/24/09
7/31/09
8/7/09
8/14/09
8/21/09
8/28/09
9/4/09
9/11/09
9/18/09
9/25/09

2009 South Franklin Street Dock
Wastewater Discharges
BOD (mg/l)



2009 South Franklin Street Dock
Wastewater Discharges
BOD (pounds)



APPENDIX B

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

EPA REPORT — Juneau, Alaska — May 2009

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	J-D TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	3	45	0.32	14.9	1.171	126	1231						58.0	566					0.0
MON	4	44	0.06	15.8	1.064	256	2272			25.0	6.0	4.5	60.0	532					0.0
TUE	5	47	0.00	16.7	0.972	252	2043	187	1516	14.1	6.2	3.6	70.0	567	23	186			0.0
WED	6	46	0.36	14.8	1.127	220	2068			13.8	6.3	3.1	38.5	362			1010		0.0
THU	7	44	0.21	17.3	0.979	151	1233			12.7	6.4	2.7	34.0	278					0.0
FRI	8	45	0.04	17.6	0.846					12.8	6.2	3.0							0.0
SAT	9	45	0.02	17.7	0.845														0.0
SUN	10	46	0.00	17.4	0.944	188	1480						40.0	315					0.0
MON	11	49	0.00	17.0	0.799	338	2252			12.8	6.0	3.8	44.0	293					0.0
TUE	12	47	0.00	16.4	0.708	200	1181			13.3	6.4	4.9	43.0	254					0.0
WED	13	47	0.00	15.6	0.779	241	1566			13.3	6.1	4.4	31.0	201			57		0.0
THU	14	46	0.00	14.6	0.729	208	1265			12.2	6.1	3.2	33.5	204					0.0
FRI	15	43	0.11	13.6	0.636					14.1	5.9	2.9							0.0
SAT	16	50	0.05	12.6	0.597														0.0
SUN	17	50	0.00	12.5	0.695	247	1432						52.0	301					0.0
MON	18	49	0.00	13.4	0.702	186	1089			14.6	5.3	3.4	30.5	179					0.0
TUE	19	51	0.00	14.4	0.574	192	919			13.2	6.3	3.3	27.0	129					0.0
WED	20	50	0.00	15.6	0.872	270	1964			14.4	6.2	3.4	20.5	149			68		0.0
THU	21	50	0.00	16.7	0.776	255	1650			14.8	6.2	3.0	12.0	78					0.0
FRI	22	50	0.00	14.3	0.747					14.5	6.0	3.5							0.0
SAT	23	50	0.00	17.7	0.747														0.0
SUN	24	54	0.00	18.5	0.796	206	1368						16.8	112					0.0
MON	25	54	0.00	19.0	0.937	197	1539			15.6	6.0	3.7	14.8	116					0.0
TUE	26	50	0.70	19.0	1.252	192	2005			16.8	6.1	3.6	15.8	165					0.0
WED	27	46	0.20	18.5	0.807	201	1353			15.1	6.3	4.1	8.4	57			37		0.0
THU	28	50	0.00	17.6	0.813	224	1519			15.2	6.0	3.7	9.0	61					0.0
FRI	29	44	0.76	16.3	1.273					14.8	5.9	3.8							0.0
SAT	30	47	0.27	14.8	0.758														0.0
TOTAL			3.10		23.945														
MAXIMUM		54	0.76	19.0	1.273	338	2272	187	1516	25.0	6.4	4.9	70.0	567	23	186	1010	N/A	N/A
MINIMUM		43	0.00	12.5	0.574	126	919	187	1516	12.2	5.3	2.7	8.4	57	23	186	37	N/A	N/A
AVERAGE		48	0.111	16.1	0.855	218	1571	187	1516	14.6	6.1	3.6	32.9	246	23	186	110	N/A	N/A

% REMOVAL	
B.O.D.	88
S.S	85

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS BOD Aver	TSS mg/l	TSS lbs	BOD mg/l	BOD lbs	Weekly Coliform Geo. Mean
WEEK1	52	461	23	186	1010
WEEK2	38	253			57
WEEK3	28	167			68
WEEK4	13	102			37
MAX	52	461	23	186	1010

EPA REPORT

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

Juneau, Alaska

June 2009

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	I-D TTL EFFL MGD.	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS.	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS.	FECAL Colform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	31	51	0.00	15.0	0.7730	190	1225						12.6	81					
MON	1	56	0.00	15.4	0.7250	235	1421			14.7	6.0	3.8	12.4	75					
TUE	2	58	0.00	15.8	0.7490	682	4260	190	1187	15.5	6.2	3.9	48.8	305	6.55	41			
WED	3	60	0.00	16.2	0.7690	232	1488			16.9	6.0	3.1	12.8	82			19.0		
THU	4	62	0.00	16.5	0.7810	226	1472			17.0	6.1	3.6	17.0	111					
FRI	5	63	0.00	13.7	0.7390					18.0	6.3	3.1							
SAT	6	62	0.00	16.7	0.7070														
SUN	7	62	0.00	16.7	0.8100	219	1479						11.6	78					
MON	8	57	0.00	16.7	0.7940	242	1603			17.4	6.5	3.7	11.6	77					
TUE	9	57	0.00	16.5	0.7890	262	1724			16.6	6.2	3.9	18.0	118					
WED	10	60	0.00	16.2	0.7880	224	1472			16.1	6.0	4.3	18.4	121			27.0		
THU	11	60	0.00	15.7	0.7920	225	1486			17.9	6.3	3.3	13.6	90					
FRI	12	51	0.11	15.0	0.6680					16.9	6.2	3.4							
SAT	13	53	0.02	14.1	0.6540														
SUN	14	54	0.01	13.4	0.6930	208	1202						18.0	104					
MON	15	53	0.15	13.7	0.9350	288	2246			17.4	6.0	3.6	23.2	181					
TUE	16	53	0.25	14.1	0.7500	232	1451			17.0	6.1	3.5	22.2	139					
WED	17	52	0.16	14.8	0.8100	291	1966			16.9	5.9	3.4	17.2	116			71.4		
THU	18	53	0.03	15.7	0.7600	226	1432			16.6	6.1	3.0	15.6	99					
FRI	19	52	0.03	16.7	0.7290					19.3	6.2	2.5							
SAT	20	54	0.02	17.7	0.7460														
SUN	21	52	0.06	14.4	0.8400	210	1471						12.8	90					
MON	22	51	0.58	18.5	1.3570	252	2852			16.2	7.0	2.7	23.2	263					
TUE	23	51	0.41	19.1	1.0420	176	1529			15.2	6.3	3.0	22.0	191					
WED	24	60	0.00	19.3	0.9330	170	1323			15.3	6.2	3.0	23.4	182			11.0		
THU	25	51	0.01	18.9	0.8330	256	1778			16.2	7.1	3.6	27.2	189					
FRI	26	51	0.03	17.9	0.8250					16.0	6.2	3.3							
SAT	27	52	0.09	16.6	0.8220														
TOTAL			1.94		22.6130														
MAXIMUM		63	0.58	19.3	1.3570	682	4260	190	1187	19.3	7.1	4.3	48.8	305	7	41	71	N/A	N/A
MINIMUM		51	0.00	13.4	0.6540	170	1202	190	1187	14.7	5.9	2.5	11.6	75	7	41	11	N/A	N/A
AVERAGE		55	0.069	16.1	0.8076	252	1744	190	1187	16.7	6.2	3.4	19.1	135	7	41	25	N/A	N/A

% REMOVAL	
B.O.D.	97
S.S.	92

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS BOD Aver	TSS mg/l.	TSS lbs.	BOD mg/l.	BOD lbs.	Weekly Coliform Geo. Mean
WEEK1	21	131	7	41	19
WEEK2	15	97			27
WEEK3	19	128			71
WEEK4	22	183			11
MAX	22	183	7	41	71

EPA REPORT

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

Juneau, Alaska

July 2009

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	I-D TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	28	51	0.21	16.0	1.0650	176	1563						34.4	306					
MON	29	49	0.42	15.6	0.8820	218	1604			15.9	6.3	4.4	21.0	154					
TUE	30	50	0.09	15.3	0.8040					16.7	6.1	3.2	19.6	131					
WED	1	52	0.03	15.2	0.7560	258	1627			16.6	6.2	2.6	16.0	101					
THU	2	57	0.00	15.2	0.7360	295	1811			17.1	6.3	3.1	20.0	123			18.0		
FRI	3	62	0.00	15.4	0.7920					16.8	6.2	2.9							
SAT	4	66	0.00	12.9	0.7840														
SUN	5	67	0.00	15.7	0.8140	240	1629						14.4	98					
MON	6	70	0.00	16.1	0.8060	218	1465			18.5	6.5	3.4	15.2	102					
TUE	7	69	0.00	16.3	0.8250	643	4424	244	1679	18.5	6.3	2.1	12.0	83	8.08	56			
WED	8	65	0.00	16.5	0.8970	186	1391			19.1	6.4	2.1	20.4	153			4.0		
THU	9	64	0.00	16.4	0.8780	237	1735			19.4	6.5	2.9	17.6	129					
FRI	10	62	0.00	16.1	0.6750					19.9	6.7	3.2							
SAT	11	61	0.00	15.5	0.7120														
SUN	12	63	0.00	14.8	0.7560	248	1564						16.4	103					
MON	13	68	0.00	14.8	0.7230	268	1616			18.6	6.3	2.9	23.2	140					
TUE	14	63	0.00	14.8	0.7270	177	1073			19.0	6.3	3.2	22.4	136					
WED	15	57	0.13	14.8	0.7520	168	1054			19.3	6.3	2.8	15.8	99			14.0		
THU	16	58	0.00	15.0	0.7470	275	1713			18.3	6.3	2.7	16.8	105					
FRI	17	58	0.26	15.5	0.8850					18.2	6.3	2.4							
SAT	18	57	0.18	16.3	0.8160														
SUN	19	57	0.36	17.4	1.2710	140	1484						21.4	227					
MON	20	56	0.41	14.5	1.3880	218	2524			17.4	6.3	3.2	30.5	237					
TUE	21	54	0.32	18.5	1.1950	456	4545			16.7	6.3	3.0	18.0	179					
WED	22	52	0.80	19.2	1.8410	179	2748			16.7	6.5	3.1	16.5	284			104		
THU	23	55	0.47	19.4	1.3390	136	1519			16.6	6.5	2.6	16.8	188					
FRI	24	53	0.01	19.1	0.9890					16.9	6.4	2.9							
SAT	25	58	0.00	18.1	0.8900														
SUN	26	59	0.00	17.4	0.8390	176	1232						12.2	85					
MON	27	61	0.02	16.6	0.8870	243	1798			17.0	6.2	3.5	15.2	112					
TUE	28	66	0.01	15.7	0.8020	32	214			17.8	6.2	3.6	14.4	96					
WED	29	68	0.00	14.8	0.8900	240	1781			18.1	6.0	2.5	12.8	95			17		
THU	30	68	0.00	14.2	0.7890	215	1415			19.1	6.3	2.7	13.6	89					
FRI	31	67	0.00	14.0	0.6620					19.1	6.4	2.6							
SAT	1	62	0.00	14.4	0.8720														
TOTAL			3.72		31.2860														
MAXIMUM		70	0.80	19.4	1.8410	643	4545	244	1679	19.9	6.7	4.4	34.4	306	8	56	104	N/A	N/A
MINIMUM		49	0.00	12.9	0.6620	32	214	244	1679	15.9	6.0	2.1	12.0	83	8	56	4	N/A	N/A
AVERAGE		59	0.132	16.1	0.9195	235	1814	244	1679	17.9	6.3	3.0	17.9	142	8	56	31	N/A	N/A

No Inf. Sample on 6-30-09 because of a bad suction hose.

% REMOVAL	
B.O.D.	97
S.S.	90

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS BOD Aver.	TSS		BOD		Weekly Coliform Geo. Mean
	mg/l	lbs	mg/l	lbs	
WEEK1	22	163			18
WEEK2	13	113	8	56	4
WEEK3	13	117			14
WEEK4	19	223			104
WEEK5	14	96			17

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

EPA REPORT — Juneau, Alaska — August 2009

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	I-D TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	2	58	0.00	15.1	0.6930	242	1399						8.8	51					0.0
MON	3	62	0.00	13.4	0.7630	271	1724			18.2	6.5	3.4	9.6	61					0.0
TUE	4	67	0.00	15.7	0.8120	178	1205	278	1883	18.7	6.1	3.0	8.6	58	4.49	30			0.0
WED	5	62	0.00	16.2	0.7990	282	1879			19.2	6.3	2.6	11.6	77			26.0		0.0
THU	6	61	0.00	16.6	0.8240	272	1869			18.8	6.5	2.5	9.0	62					0.0
FRI	7	58	0.06	16.7	0.8360					19.7	6.6	3.4							0.0
SAT	8	57	0.08	16.5	0.8550														0.0
SUN	9	56	0.22	16.1	0.8580	238	1705						11.2	80					0.0
MON	10	56	0.09	16.1	0.9310	279	2166			17.5	6.5	3.9	12.5	87					0.0
TUE	11	56	0.05	16.0	0.7880	240	1577			17.6	6.3	3.1	14.8	97					0.0
WED	12	56	0.00	15.6	0.7850	300	1984			17.8	6.3	3.1	15.2	100			45.0		0.0
THU	13	54	0.00	15.2	0.6870	328	1879			17.8	6.3	3.3	18.0	103					0.0
FRI	14	53	0.28	14.8	0.8140					18.1	6.5	4.2							0.0
SAT	15	54	0.24	15.0	1.1630														0.0
SUN	16	55	1.40	15.9	3.5420	88	2600						18.2	538					0.0
MON	17	56	1.46	17.1	3.0270	81	2045			15.7	6.5	3.8	10.4	263					0.0
TUE	18	56	0.01	15.2	1.4110	260	3060			16.6	6.3	3.9	10.0	118					0.0
WED	19	56	0.01	16.6	1.1920	267	2654			16.7	6.2	2.9	11.2	111			17.0		0.0
THU	20	55	0.07	19.0	1.4030	222	2598			16.8	6.5	2.8	12.0	140					0.0
FRI	21	54	0.31	18.2	1.2490					16.5	6.8	3.0							0.0
SAT	22	61	0.56	18.9	1.9270														0.0
SUN	23	51	0.40	18.8	1.7990	248	3721						12.4	186					0.0
MON	24	51	0.13	17.9	1.4300	179	2135			15.5	6.4	4.0	12.0	143					0.0
TUE	25	51	0.55	16.8	2.3670	162	3198			15.3	6.2	3.5	14.0	276					0.0
WED	26	61	0.53	15.4	1.7540	126	1843			14.7	6.4	4.3	11.2	164			44		0.0
THU	27	51	0.27	14.2	1.4410	196	2356			15.0	6.3	3.8	8.4	101					0.0
FRI	28	56	0.14	13.2	1.4740					16.1	6.3	3.3							0.0
SAT	29	56	0.67	13.1	1.7920														0.0
TOTAL			7.53		37.4170														
MAXIMUM		67	1.46	19.2	3.5420	328	3721	278	1883	19.7	6.6	4.3	18.2	538	4	30	45	N/A	N/A
MINIMUM		51	0.00	13.1	0.6870	81	1205	278	1883	14.7	6.1	2.5	8.4	51	4	30	17	N/A	N/A
AVERAGE		56	0.27	16.1	1.3363	223	2178	278	1883	17.1	6.4	3.4	12.0	141	4	30	31	N/A	N/A

% REMOVAL	
B.O.D.	98
S.S.	95

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS BOD Calc	TSS		BOD		Weekly Coliform
	mg/l	lbs	mg/l	lbs	Geo. Mean
WEEK1	10	62	4	30	26
WEEK2	14	95			45
WEEK3	12	234			17
WEEK4	12	174			44

EPA REPORT

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

Juneau, Alaska

September 2009

		WEATHER			INFLUENT					EFFLUENT								
DAY	DATE	TEMP. °F	RAIN FALL INCHES	HIGH TIDE FEET	I-D TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP. °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	30	54	0.00	13.7	1.0730	142	1271						7.8	70					
MON	31	54	0.00	14.5	0.9180	215	1646			15.4	6.3	2.8	7.6	58					
TUE	1	52	0.00	13.8	0.9040	224	1689	264	1990	16.0	6.1	4.5	10.2	77	5	38		0.3	2.3
WED	2	52	0.00	15.4	0.9290	348	2696			15.9	6.0	3.3	9.6	74			31.0		
THU	3	52	0.09	16.1	0.9830	226	1853			17.9	6.1	4.2	10.2	84					
FRI	4	52	0.09	16.5	0.8280					17.6	6.1	3.3							
SAT	5	60	0.00	16.8	0.9920														
SUN	6	56	0.02	17.2	0.9440	220	1732						16.8	132					
MON	7	53	0.00	17.3	0.8410	266	1866			18.2	6.2	3.0	16.0	112					
TUE	8	53	0.03	17.2	0.8330	243	1688			18.1	6.3	3.6	13.6	94					
WED	9	52	0.30	16.8	1.2400	226	2337			15.9	6.5	4.0	16.0	165			18.0		
THU	10	53	0.53	16.1	1.4010	202	2360			18.1	6.1	3.6	13.6	159					
FRI	11	52	0.22	15.2	0.8810					15.0	6.2	3.7							
SAT	12	47	0.67	14.5	1.8470														
SUN	13	49	0.11	14.5	1.1030	150	1380						5.2	48					
MON	14	48	0.00	15.4	0.8800	238	1747			17.0	6.4	3.0	5.8	41					
TUE	15	49	0.02	16.6	1.0030	223	1865			14.9	6.0	3.6	7.6	64					
WED	16	53	0.35	16.2	1.6710	228	3177			15.0	7.0	4.5	15.8	220			3		
THU	17	51	0.27	17.6	1.3190	176	1936			17.1	6.3	3.7	13.2	145					
FRI	18	51	0.12	18.7	1.2440					14.2	6.4	4.7							
SAT	19	49	0.15	19.2	1.2510														
SUN	20	49	0.54	19.3	1.8530	133	2055						23.2	359					
MON	21	49	0.37	18.8	1.9910	102	1694			17.2	6.2	3.9	17.8	292					
TUE	22	47	0.57	17.9	1.8500	155	2391			13.0	6.2	3.9	15.2	235					
WED	23	49	0.80	16.6	2.4280	160	3240			13.1	6.4	4.3	22.0	445			89		
THU	24	48	0.31	15.2	1.7270	134	1930			13.8	6.4	4.5	9.6	138					
FRI	25	48	0.54	13.8	1.9080					13.9	6.6	7.3							
SAT	26	49	0.47	12.7	1.6560														
SUN	27	45	0.04	12.4	1.0610	139	1230						9.6	85					
MON	28	43	0.00	12.9	0.8570	180	1287			13.3	6.5	4.0	6.4	60					
TUE	29	41	0.01	13.8	1.1530	207	1991			13.2	6.3	3.8	4.4	42					
WED	30	43	1.03	14.7	1.9650	126	2085			13.2	6.2	6.3	11.6	190			6		
THU	1	45	0.19	15.3	1.2400	161	1562			12.9	6.5	7.0	10.4	108					
FRI	2	42	0.00	16.3	0.9470					13.1	6.3	4.2							
SAT	3	41	0.00	17.1	0.9040														
TOTAL			7.84		44.6250														
MAXIMUM		60	1.03	19.3	2.4280	348	3240	264	1990	17.9	7.0	7.3	23.2	445	5	38	89	0.31	2.34
MINIMUM		41	0.00	12.4	0.8280	102	1271	264	1990	13.0	6.0	2.8	4.4	41	5	38	3	0.31	2.34
AVERAGE		51	0.235	16.2	1.3035	201	2028	264	1990	16.6	6.3	4.0	12.8	151	5	38	15	0.31	2.34

% REMOVAL	
B.O.D.	98
S.S.	94

Copper	N/A	ug/L
NH3	0.31	mg/L
NH3	2.34	lbs

Weekly TSS BOD Aver.	TSS mg/l	TSS lbs	BOD mg/l	BOD lbs	Weekly Coliform Geo. Mean
WEEK1	9	73	5	38	31
WEEK2	15	133			18
WEEK3	9	104			3
WEEK4	18	294			89
WEEK5	9	97			6

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

EPA REPORT

Juneau, Alaska

May 2010

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	I-D TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	2	39	0.20	16.8	0.8380														
MON	3	42	0.00	15.5	0.6710					10.1	6.6	6.7							
TUE	4	46	0.00	14.1	0.6400					12.6	6.6	6.1							
WED	5	46	0.00	12.9	0.6180					14.4	6.4	6.0							
THU	6	47	0.02	12.2	0.5760					16.5	6.2	5.2					6.0		
FRI	7	47	0.05	12.9	0.5860					15.1	6.0	6.0					1.0		
SAT	8	47	0.00	13.8	0.6690					15.3	5.8	5.9							
SUN	9	46	0.01	14.7	0.6440					15.1	5.8	5.8							
MON	10	47	0.38	15.6	0.7580					14.7	6.3	4.8							
TUE	11	47	0.00	13.9	0.7460					16.1	6.6	5.4							
WED	12	45	0.37	16.4	0.9840					11.1	6.6	6.3					2.0		
THU	13	45	0.02	17.1	0.7890					15.7	6.5	4.9							
FRI	14	48	0.00	17.6	0.8910					15.6	6.5	4.6					1.4		
SAT	15	46	0.67	17.9	1.1060					14.9	6.5	6.2							
SUN	16	46	0.00	17.8	0.8480					9.0	6.2	5.7							
MON	17	51	0.00	17.4	0.8100	170	1148			10.2	6.4	6.4							
TUE	18	54	0.03	16.6	0.8300					8.6	6.6	6.6	10.0	68					
WED	19	53	0.07	15.6	0.7700	281	1805			13.1	6.0	5.8							
THU	20	56	0.07	14.4	0.8600	240	1721	253	1815	15.6	6.2	5.3	19.0	122			15		
FRI	21	60	0.07	14.8	0.7220	338	2035			15.6	6.2	5.3	12.0	86	5.00	36	6		
SAT	22	54	0.00	15.6	0.7210	296	1780			18.3	6.2	5.6	14.0	84					
SUN	23	51	0.00	16.5	1.1270	252	2369			17.3	6.3	5.5	15.0	90					
MON	24	57	0.00	17.3	0.9600					18.7	6.5	5.6	9.0	85					
TUE	25	58	0.00	14.5	0.9300	142	1101	127	985	16.8	6.4	5.8							
WED	26	59	0.00	17.8	0.8250					16.5	6.4	4.8	10.0	78	5.00	39	1		
THU	27	65	0.00	18.1	0.8640	358	2580	224	1614	17.9	6.4	4.9					12		
FRI	28	61	0.00	18.1	0.7040					17.2	6.3	4.5	6.0	43	2.00	14			
SAT	29	60	0.00	17.7	0.6800					20.8	6.6	5.5							
										20.5	6.7	5.7							
TOTAL			1.96		22.1670														
MAXIMUM		65	0.67	18.1	1.1270	358	2580	253	1815	20.8	6.7	6.7	19.0	122	5	39	15	N/A	N/A
MINIMUM		39	0.00	12.2	0.5760	142	1101	127	985	8.6	5.8	4.5	6.0	43	2	14	1	N/A	N/A
AVERAGE		50	0.070	15.8	0.7917	260	1817	201	1471	15.1	6.3	5.6	11.9	82	4	30	3	N/A	N/A

% REMOVAL	
B.O.D.	98
S.S.	95

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS,BOD Aver	TSS		BOD		Weekly Coliform
	mg/l	lbs.	mg/l	lbs	Geo. Mean
WEEK1					2
WEEK2					2
WEEK3	14	90	5	36	9
WEEK4	8	68	4	27	3
MAX	14	90	5	36	9

EPA REPORT

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

Juneau, Alaska

June 2010

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	I-D TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	PH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180-days
SUN	30	58	0.00	17.2	0.7020														0.0
MON	31	61	0.00	16.4	0.7810					20.9	6.7	5.4							0.0
TUE	1	57	0.04	15.4	0.8150					21.2	6.7	5.3							0.0
WED	2	54	0.07	14.3	0.8540					18.4	6.4	4.7				0	5.0		0.0
THU	3	53	0.01	13.2	0.7800	529	3441	287	1867	17.1	6.5	4.4	11.0	72	4.00	26		0.9	5.7
FRI	4	54	0.02	13.0	0.6600					18.9	6.6	4.8							0.0
SAT	5	52	0.02	13.3	0.7430														0.0
SUN	6	56	0.00	13.9	0.6510														0.0
MON	7	56	0.00	14.6	0.6910					17.1	6.7	5.7							0.0
TUE	8	56	0.00	15.4	0.7460					19.1	6.8	4.8							0.0
WED	9	60	0.03	16.3	0.7050					18.6	6.8	4.4					1.0		0.0
THU	10	58	0.06	13.6	0.8200	436	2982	305	2086	18.3	6.8	4.2	4.0	27	3.00	21			0.0
FRI	11	49	0.56	17.1	1.1300					16.6	7.0	5.6							0.0
SAT	12	48	0.30	17.8	0.9200														0.0
SUN	13	48	0.06	18.2	0.8450														0.0
MON	14	50	0.04	18.3	0.8910					14.9	6.6	6.7							0.0
TUE	15	50	0.01	18.0	0.8300					14.8	6.9	6.3							0.0
WED	16	51	0.03	17.2	0.7500					16.1	6.4	5.1					1.0		0.0
THU	17	54	0.00	16.0	0.8700	388	2058	280	1565	16.3	6.6	4.7	8.0	45	3.00	17			0.0
FRI	18	53	0.00	15.6	0.6600		0			14.4	6.7	6.1		0					0.0
SAT	19	58	0.00	15.6	0.8600		0							0					0.0
SUN	20	59	0.00	15.9	0.7630		0							0					0.0
MON	21	57	0.00	16.2	0.6630		0			18.7	6.7	4.7		0					0.0
TUE	22	53	0.36	16.5	1.6490		0			18.2	6.6	4.8		0			2.0		0.0
WED	23	55	1.52	16.8	2.6150		0			17.6	6.8	4.9		0					0.0
THU	24	54	0.18	13.9	1.3850	136	1571	127	1467	16.0	6.7	5.7	135.0	1559	66.00	762			0.0
FRI	25	54	0.06	17.0	1.1030		0			16.2	6.7	4.7		0					0.0
SAT	26	53	0.05	17.2	0.9200		0							0					0.0
SUN	27	53	0.04	17.1	8.1600		0							0					0.0
MON	28	54	0.00	16.8	0.8450		0		0					0		0			0.0
TUE	29	53	0.01	16.4	0.8700		0							0.0					0.0
WED	30	48	0.69	15.7	1.2300		0							0.0					0.0
THU	1	48	0.08	14.7	0.8790	204	1495						8.0	58.6					0.0
FRI	2	51	0.20	14.2	1.0030														0.0
SAT	3	50	0.60	14.0	1.5880														0.0
TOTAL		4.93			39.9670														
MAXIMUM		61	1.52	18.3	8.1600	529	3441	305	2086	21	7	7	135	1559	66	762	5	1	6
MINIMUM		48	0.00	13.0	0.6510	136	0	127	0	14	6	4	4	0	3	0	1	1	0
AVERAGE		54	0.14	15.8	1.1419	335	679	250	1397	17	7	5	33	104	19	138	2	1	0

% REMOVAL	
B.O.D.	92
S.S.	90

Copper	N/A	ug/L
NH3	0.9	mg/L
NH3	5.7	lbs

Weekly TSS BOD Aver.	TSS mg/l	TSS lbs	BOD mg/l	BOD lbs	Weekly Coliform Geo. Mean
WEEK1	11	72	4	13	5
WEEK2	4	27	3	21	1
WEEK3	3	15	3	17	1
WEEK4	135	223	66	762	2
WEEK5	3	12	#DIV/0!	0	#NUM!

EPA REPORT

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

Juneau, Alaska

JULY 2010

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	T.D. TL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	4	50	0.22	13.9	1.0970														
MON	5	51	0.12	14.0	1.2030					20.4	6.3	5.6							
TUE	6	53	0.12	14.4	0.9910					16.4	6.8	6.3							
WED	7	60	0.00	15.1	0.8530					17.1	6.7	5.1					25		
THU	8	63	0.00	16.1	0.9230	248	1909	212	1632	17.4	6.9	5.4	6.0	46	3.00	23			
FRI	9	61	0.08	13.2	1.2190					18.0	7.1	6.5							
SAT	10	57	0.28	17.1	1.2360														
SUN	11	51	0.52	18.0	1.4480														
MON	12	53	0.04	18.7	1.0680														
TUE	13	53	0.14	19.0	1.2570					18.9	6.7	5.9							
WED	14	51	0.39	18.6	1.4580					17.4	6.8	6.4							
THU	15	50	0.15	17.8	1.0980					16.8	6.7	5.4							
FRI	16	62	0.08	17.3	0.9670					17.6	6.7	6.5					81		
SAT	17	58	0.01	16.8	0.7390														
SUN	18	56	0.00	16.2	0.7730														
MON	19	57	0.00	15.6	0.8990					17.3	6.4	6.3							
TUE	20	57	0.00	15.3	0.9960					18.2	6.4	6.4							
WED	21	54	0.17	15.4	0.8870					18.4	6.8	6.4							
THU	22	54	0.18	15.8	1.3060					18.0	6.5	6.4					8		
FRI	23	52	0.95	13.6	1.8610					17.9	6.8	5.6							
SAT	24	51	0.04	16.2	0.9610														
SUN	25	53	0.01	16.6	0.9810														
MON	26	56	0.00	16.8	0.8660					17.9	6.7	6.8							
TUE	27	59	0.00	16.7	0.8670					18.3	6.7	5.7							
WED	28	61	0.00	16.5	0.8440					18.4	6.5	6.3							
THU	29	58	0.00	16.0	0.8170					18.5	6.5	6.1					16		
FRI	30	58	0.00	16.4	0.8390					18.9	6.4	6.4							
SAT	31	56	0.32	15.2	0.9840														
TOTAL			3.48		27.2340														
MAXIMUM		63	0.95	19.0	1.8610	248	1909	212	1632	20.4	7.1	6.8	6.0	46	3	23	81	N/A	N/A
MINIMUM		50	0.00	13.2	0.7390	248	1909	212	1632	16.8	6.3	5.1	6.0	46	3	23	8	N/A	N/A
AVERAGE		55	0.134	16.3	1.0475	248	1909	212	1632	18.0	6.7	6.1	6.0	46	3	23	23	N/A	N/A

% REMOVAL	
B.O.D.	99
S.S.	98

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS,BOD Aver	TSS		BOD		Weekly Coliform
	mg/l	lbs	mg/l	lbs	Geo. Mean
WEEK1	6	46	3	23	26
WEEK2					81
WEEK3					8
WEEK4					16

EPA REPORT

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

Juneau, Alaska

August 2010

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	I-D TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Ammonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	1	68	0.08	14.9	0.8170														0.0
MON	2	61	0.00	14.5	0.8050					18.5	6.5	5.2							0.0
TUE	3	64	0.00	14.2	0.8330					17.2	6.2	2.0							0.0
WED	4	63	0.00	14.2	0.7800					18.8	6.8	5.3							0.0
THU	5	64	0.05	14.7	1.2220	292	2976	254	2589	19.7	6.8	5.0	7.0	71	10	102	42.0		0.0
FRI	6	58	0.56	15.8	1.0710					19.4	6.9	4.9							0.0
SAT	7	54	0.11	17.1	0.9140														0.0
SUN	8	54	0.23	15.0	1.2520														0.0
MON	9	55	0.06	16.2	1.0330					16.9	6.7	6.3							0.0
TUE	10	55	0.19	19.0	1.2360					17.7	6.7	5.5							0.0
WED	11	56	0.04	19.3	1.1640					19.1	6.5	5.6					35.0		0.0
THU	12	59	0.00	19.0	0.9490					17.2	6.5	5.4							0.0
FRI	13	59	0.00	18.6	0.8640					17.6	6.7	5.3							0.0
SAT	14	62	0.00	18.2	0.8330														0.0
SUN	15	62	0.00	17.1	0.8560														0.0
MON	16	63	0.00	15.9	0.7870					19.2	6.5	5.2							0.0
TUE	17	60	0.60	14.8	1.2460					19.7	6.8	5.2							0.0
WED	18	53	0.47	14.2	1.2420					18.3	6.7	5.6							0.0
THU	19	52	0.19	14.4	1.1120					17.6	6.6	6.0							0.0
FRI	20	53	0.14	14.9	0.9580					17.6	6.8	5.6					32		0.0
SAT	21	55	0.04	13.8	0.8040														0.0
SUN	22	53	0.13	15.6	1.1090														0.0
MON	23	52	0.34	16.1	1.3310					17.6	6.9	5.8							0.0
TUE	24	53	0.30	16.5	1.1710					17.2	6.7	5.1							0.0
WED	25	54	0.00	16.6	1.0180					18.8	6.5	5.1					32		0.0
THU	26	54	0.01	16.5	1.0670					17.9	6.7	5.3							0.0
FRI	27	54	0.01	16.5	0.7500					18.1	7.0	4.6							0.0
SAT	28	51	0.01	16.3	0.7190														0.0
TOTAL			3.56		27.9610														0.0
MAXIMUM		64	0.60	19.3	1.3310	292	2976	254	2589	19.8	7.0	6.3	7.0	71	10	102	42	N/A	N/A
MINIMUM		51	0.00	13.8	0.7190	292	2976	254	2589	16.9	6.2	2.0	7.0	71	10	102	32	N/A	N/A
AVERAGE		57	0.127	16.1	0.9986	292	2976	254	2589	18.3	6.7	5.2	7.0	71	10	102	35	N/A	N/A

% REMOVAL	
B.O.D.	96
S.S.	98

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS,BOD Aver.	TSS		BOD		Weekly Coliform Geo. Mean
	mg/l	lbs.	mg/l	lbs	
WEEK1	7	71	10	102	42
WEEK2					35
WEEK3					32
WEEK4					32

EPA REPORT

JUNEAU-DOUGLAS WASTEWATER TREATMENT FACILITY

Juneau, Alaska

September 2010

		WEATHER			INFLUENT					EFFLUENT									
DAY	DATE	TEMP °F	RAIN FALL INCHES	HIGH TIDE FEET	I.D. TTL EFFL MGD	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	TEMP °C	pH	D.O. mg/L	S.S. mg/L	S.S. LBS	B.O.D. mg/L	B.O.D. LBS	FECAL Coliform /100 ml	Amonia as N mg/l 1/180 days	Ammonia as N lbs/day 1/180 days
SUN	29	51	0.01	14.6	0.7190														0.0
MON	30	54	0.01	13.5	0.7660														0.0
TUE	31	54	0.01	12.4	0.9840					17.7	6.6	5.8							0.0
WED	1	54	0.28	14.2	1.3000					17.4	6.9	5.4							0.0
THU	2	51	0.69	13.9	1.6540	284	3918	194	2676	17.8	6.8	5.7							0.0
FRI	3	53	0.09	14.3	0.9200					17.0	6.8	5.8	10	138	8.20	113	310		0.0
SAT	4	53	0.01	15.5	0.8210					16.7	6.9	5.6							0.0
SUN	5	50	0.74	16.8	1.4180														0.0
MON	6	54	0.00	16.0	1.1640														0.0
TUE	7	55	0.00	17.6	1.1600					17.1	6.8	5.9							0.0
WED	8	54	0.04	18.9	1.0030					16.3	7.0	5.5							0.0
THU	9	52	0.65	19.7	1.4550					16.4	6.7	6.1							0.0
FRI	10	52	0.01	19.8	0.9400					16.5	6.7	6.0					30		0.0
SAT	11	53	0.00	19.4	0.8990					16.1	6.8	6.2							0.0
SUN	12	56	0.00	18.4	0.8690														0.0
MON	13	53	0.00	17.0	0.8240														0.0
TUE	14	53	0.00	15.4	0.7630					17.4	6.6	6.1							0.0
WED	15	56	0.00	14.0	0.7250					18.6	6.8	5.8					68		0.0
THU	16	53	0.00	13.3	0.7340					18.7	6.7	5.0							0.0
FRI	17	51	0.00	13.5	0.6670					18.5	6.7	5.2							0.0
SAT	18	56	0.00	14.1	0.6810					19.2	6.7	4.8							0.0
SUN	19	57	0.00	14.9	0.7100														0.0
MON	20	51	0.00	15.0	0.7270														0.0
TUE	21	44	0.00	15.8	0.6700					18.3	6.6	6.3							0.0
WED	22	46	0.00	16.4	0.7650					17.7	6.7	5.4							0.0
THU	23	47	0.15	16.9	0.8600					16.9	6.4	6.3							0.0
FRI	24	48	0.67	17.2	1.4320					16.4	6.3	6.0							0.0
SAT	25	50	0.78	17.2	1.6410					16.0	6.4	6.4					7		0.0
TOTAL			4.14		27.2390														0.0
MAXIMUM		57	0.78	19.8	1.6540	284	3918	194	2676	19.2	7.0	6.4	10.0	138	8	113	310	N/A	N/A
MINIMUM		44	0.00	12.4	0.8610	284	3918	194	2676	16.0	6.3	4.8	10.0	138	8	113	7	N/A	N/A
AVERAGE		52	0.148	15.9	0.9728	284	3918	194	2676	17.3	6.7	5.8	10.0	138	8	113	48	N/A	N/A

% REMOVAL	
B.O.D.	96
S.S.	96

Copper	N/A	ug/L
NH3	N/A	mg/L
NH3	N/A	lbs

Weekly TSS,BOD Aver	TSS		BOD		Weekly Coliform Geo. Mean
	mg/l	lbs	mg/l	lbs	
WEEK1	10	138	8	113	310
WEEK2					30
WEEK3					68
WEEK4					7

Juneau Cruise Ship Docks
Electrical Systems

Conceptual Design **February 2011**

Shore Power:

Existing Shore Power Facility, South Franklin Dock (Princess Cruises): The existing shore power facility at the South Franklin Dock was placed in operation in 2001 for Princess Cruises. The facility is configured with a substation on the mountainside above the dock, adjacent to the two 69 KV transmission lines routed from the Thane Substation to distribution substations in downtown Juneau. A transformer at this substation provides either 11.2 KV or 6.6 KV power to the shore power stations dependent on the vessel requirements. The power is transmitted through underground cables to a switch at the dock where the cables become large, flexible mining type cables laid in cable trays up and onto the festooning system where the cables are suspended to the ship. The system is capable of supporting a 16.25 MVA[1] load.

The energy consumption for each ship visit has been recorded since the beginning of operations on 10 July 2001. The energy consumed varies from year-to-year dependent primarily on the amount of energy available from AEL&P. AEL&P provides this energy to Princess Cruises on a "non-firm" rate[2]. The energy consumed is graphically illustrated over the past ten year period – see Attachment A. The average consumption over the past nine years[3] was 4,107 MWh[4], while last year (2010) 4,266 MWh was consumed.

Last year, AEL&P began recording the load demand at the South Franklin Dock. Six different vessels visited Juneau and demanded peak loads varying from 7.24 MW (Sea Princess) to 10.6 MW (Diamond Princess). Most of the loads were between 8 and 10 MW – see Attachment B.

The vessels' connection to shore power requires cooperative coordination between the AEL&P staff and the vessel crew. This involves synchronizing the generators on the ships to the utility frequency and voltage before closing the switch allowing connection, and then removing operation of the vessel's generators. Vessel departure involves a reverse procedure. The connection of the vessel is monitored with protective relays and interlocks which open the vessel's connection with any problematic conditions.

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[1] MVA = Mega Volt-Amperes, a measure of apparent power.

[2] AEL&P utilizes this rate structure allowing them to provide excess energy to specific customers when it is available. These customers utilize this energy in lieu of producing electricity with their own generators. With this rate structure, AEL&P is not required to maintain additional standby generators supporting "firm" capacity as stipulated by the regulatory commission.

[3] The first year (2001) was not a full year, thus the consumption for that year was not included in the average.

[4] MWh = Mega Watt hours, a measure of real energy.

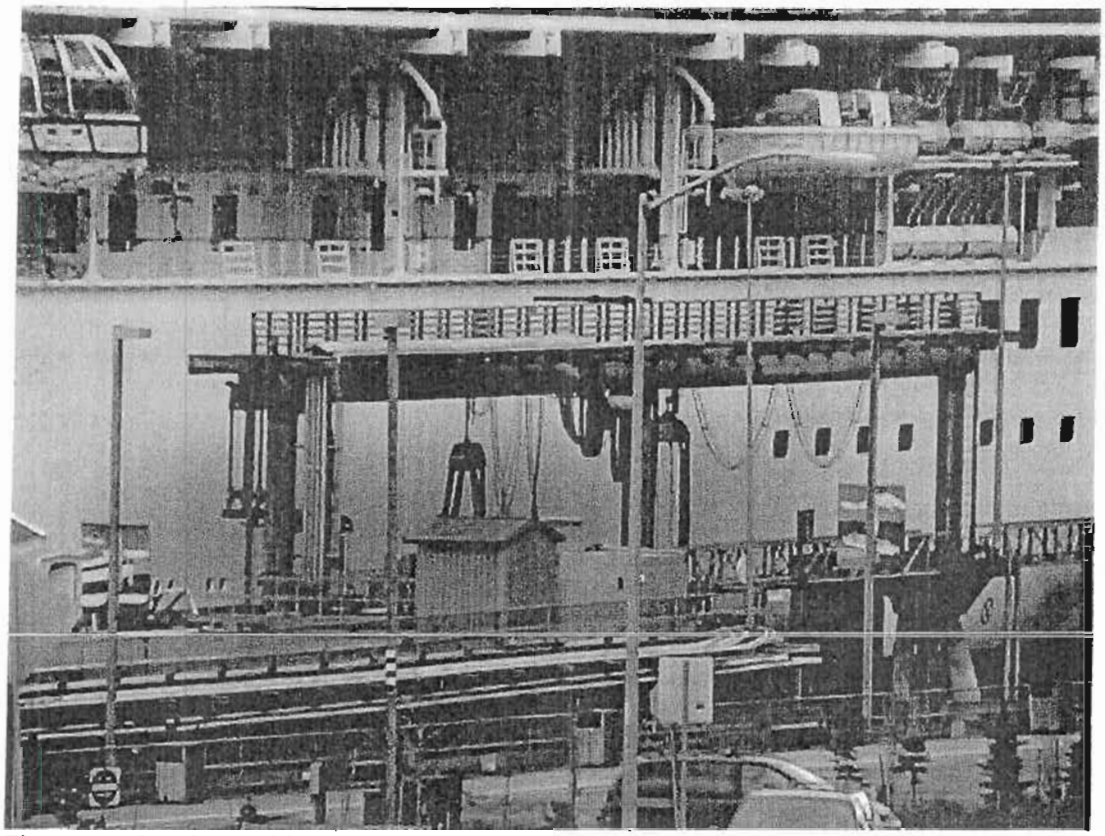


Figure 1 - South Franklin Dock Shore Power

Future Shore Power Facilities, Downtown Docks: AEL&P officials state that they currently lack capacity to support additional "non-firm" shore power facilities. When the second phase of the Dorothy Lake facility is constructed, their capacity will be improved with likely allowance for additional shore power facilities.

When implemented, the shore power facilities should be constructed at both docks. As illustrated in the site drawings, the ships will be moored stern-to-stern. From recent meetings with the cruise ship agencies, it was learned that the vessels are configured with their shore tie connections near their sterns, on one side or the other, but not on both sides.

The new shore tie facilities will involve the construction of a new substation on the mountainside, south of Gastineau Avenue. Again, this substation will be close to the 69KV transmission lines, located on land owned by an AEL&P sister company. It is probable that it will utilize two transformers, allowing selection of either 6.6KV or 11.2KV power to the each dock. The feeders from the substation will be parallel to the shoreline where they will separate direction to the individual docks.

The feeders from the dock will traverse down the transfer bridges to the floating docks. The cables will pass within the docks to the ends to the most strategic location for connecting to the vessels. The cables will terminate on a festooning type of structure allowing the cables with connectors to be suspended and swung out to the vessel.

The feeders on shore will utilize single conductors with 15KV rated insulation. These conductors typically utilize large strands with little flexibility. Before crossing from the stationary dock to the floating docks, the conductors will probably have to change to a finely-stranded type with much greater flexibility. And these cables will probably be a mine type cable encompassing the conductors for all three phases. The transition from one conductor type to the other will occur at a control switch or a pedestal type junction. This detail will be better studied during design.

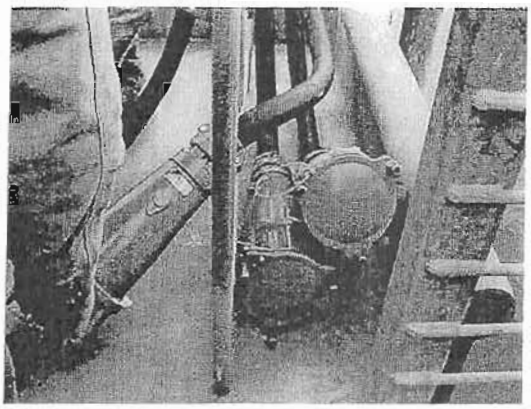


Figure 2 - Shore Tie Connectors

When energy becomes available, the first phase of the facility to be constructed may be adequate to just power one shore tie. In this case, the system will be configured with a single transformer at the substation and a single feeder[5] to a switch at the shore. The switch will be configured to select the dock to be powered as well as provide synchronizing control.

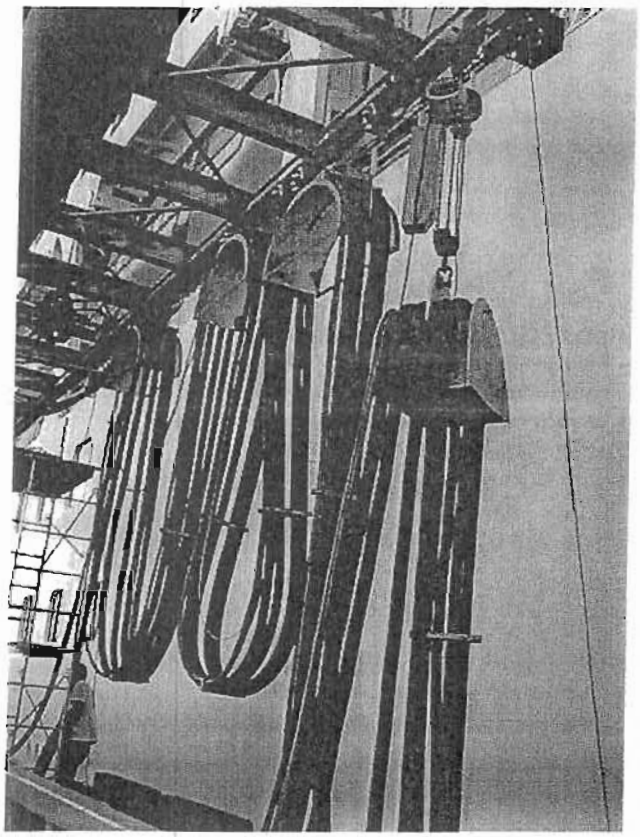


Figure 3 - Shore tie Cable Festoon

When it is determined that an adequate supply of energy is available to serve to shore ties simultaneously, the second transformer will be installed in the substation with a second feeder similar to the first installed to the switch at the shore. The switch bank will be reconfigured such that each switch individually controls synchronization to the associated dock. The cables from the switches to the festoons and connectors on the floating docks will remain the same.

With the understanding that excess energy is unavailable for the shore power facilities at this time, it is prudent to only install the required raceways, manholes, and vaults. The raceways constructed in duct banks will be installed from the hillside above South Franklin Street down to the shore line, first crossing beneath the street and then transitioning beneath the new

[5] Four sets of conduits with three conductors.

parking area to the new portion of dock where the old ferry transfer bridge was once located. One or two manholes will be located on the shore side of South Franklin Street to provide access to install new cables. The duct bank will terminate in a vault at the shore with ten ducts stubbed through the retaining wall at the shore. There will be ten, 6 inch diameter raceways in the duct bank for the entire route.

Installing the infrastructure at this time will minimize future disturbances to the new uplands area. Along with the installation of an infrastructure on shore, some raceways, or support structures for raceways will be installed on the transfer bridges and within the floating docks.

Attachment C illustrates the layout of the shore power system. It defines the portion to be installed initially, and the portion, or portions, to be installed in the future.

Facility Power:

A power distribution system will be installed for both floating docks to support lighting, capstans, pumps, small vessel shore tie equipment, and miscellaneous equipment. The system will be powered at 480 volts, wye connected three phase.

The system will involve the installation of a feeder from shore to each floating dock. The feeders will terminate in distribution panels constructed for a marine environment with stainless steel enclosures and hardware. Step-down transformers will provide reduced voltage power (208Y/120 volt, three phase) to a second panel for small loads and maintenance receptacles.

The feeder to the dock will be a mining type cable (Type W). The circuits on the floating dock will be single conductors installed in Hot-Dipped Galvanized Steel Conduit. Connections to vibrating or shifting equipment will be flexible cable, either Type W or a type of SO.

All boxes will be cast metal suitable for a marine environment. Cabinets will be stainless steel with drip shields, gaskets, and stainless steel hardware. All support structures and materials will be stainless steel or Hot-Dipped Galvanized Steel.

The system will be metered a single point on shore with separate circuit protection for the feeder to each floating dock.

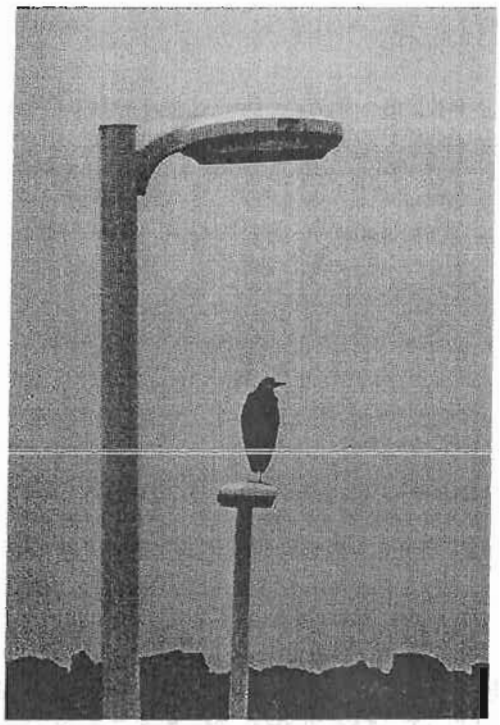
Grounding:

A grounding system will be installed to support both the medium voltage shore power facilities and the low voltage distribution system. It will incorporate bare copper conductors installed in the duct banks, ground rod type electrodes in the manholes and vaults, and insulated conductors beneath the stationary docks.

Grounding conductors will be incorporated into the feeders from the shore meter/load center to the distribution panels on the floating docks. Ground bars will be incorporated into the distribution panels with bonding to the floating docks and equipment. Additionally, sea water ground rod electrodes will be installed and bonded to the same distribution panel ground buses.

The grounding system on the floating docks will be constructed to allow integration to the medium voltage ground grid component of the shore power facility in the future.

Lighting:



Luminaires will be installed to illuminate the transfer bridges, gangways, catwalks, dolphins, and the floating docks. The luminaires will all utilize LED type lamps with night-time and motion sensing control. The lighting will only operate during night-time hours. The motion sensors will control the illumination levels from a partial output to full output when human activity is recognized within their sensing area. All luminaires will be manufactured with glare control features.

The luminaires on the transfer bridge will be small fixtures mounted beneath canopies where provided, to protect pedestrians. The illumination of the vehicle lane will be small fixtures mounted to the rails.

The luminaires on the floating dock will be area lights mounted to posts 15 to 20 feet in height, mounted along the shore side of the dock.

The luminaires on the catwalks and dolphins will be small fixtures mounted to the rails, not obstructing movement or line handling.

Navigational lighting will be installed as required.

Surveillance Cameras:

Surveillance cameras will be installed to observe problematic activities on the floating docks, catwalks and dolphins, and on the transfer bridges. The cameras will utilize Ethernet technology with wireless communications to a central DVR[6] and monitor.

The cameras will be small and relatively inconspicuous with fixed lenses. Some cameras will also have infrared capability for night time observations. The cameras will be mounted to poles supporting area luminaires.

The DVR may be installed in the Downtown Library with connection to the CBJ network. The DVR may be programmed to collect images at designated intervals from specific cameras, or in video streams during specific times as initiated by camera motion sensing. The DVR will include storage capacity for a minimum of 30 days of images and video. It will have the capability of automatically erasing images and video stored for more than 30 days.

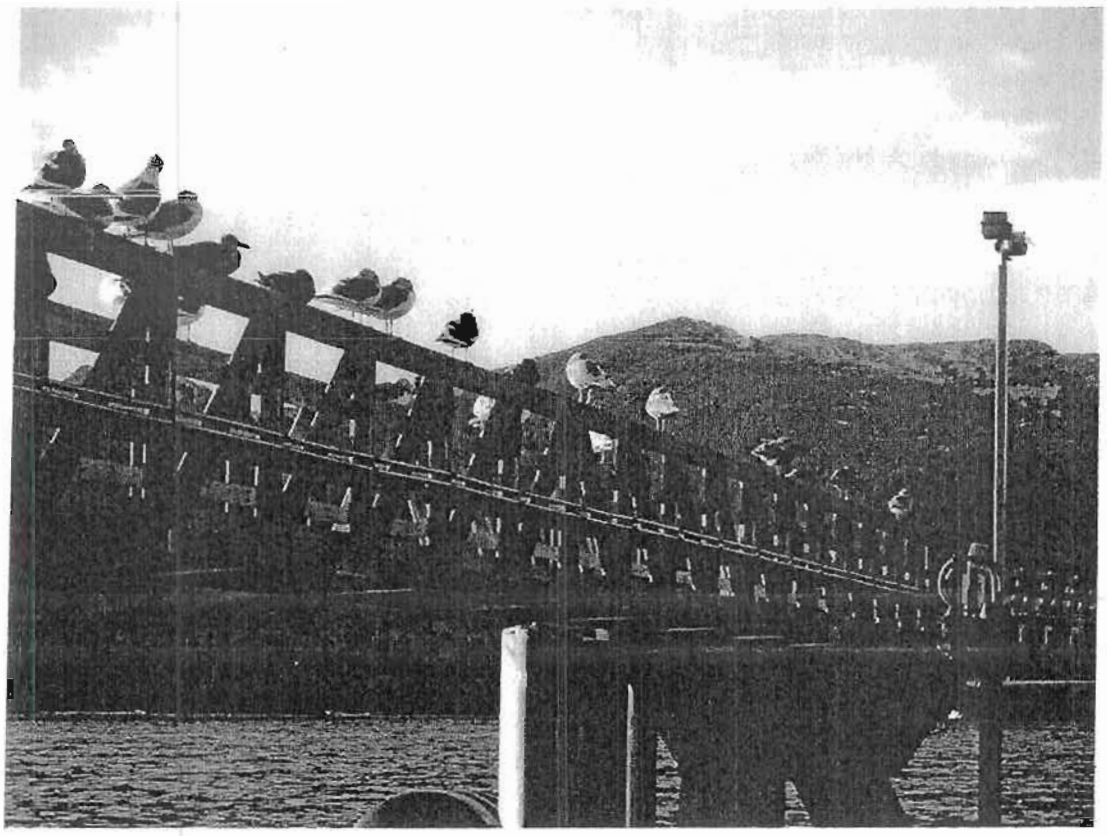
[6] DVR = Digital Video Recorder

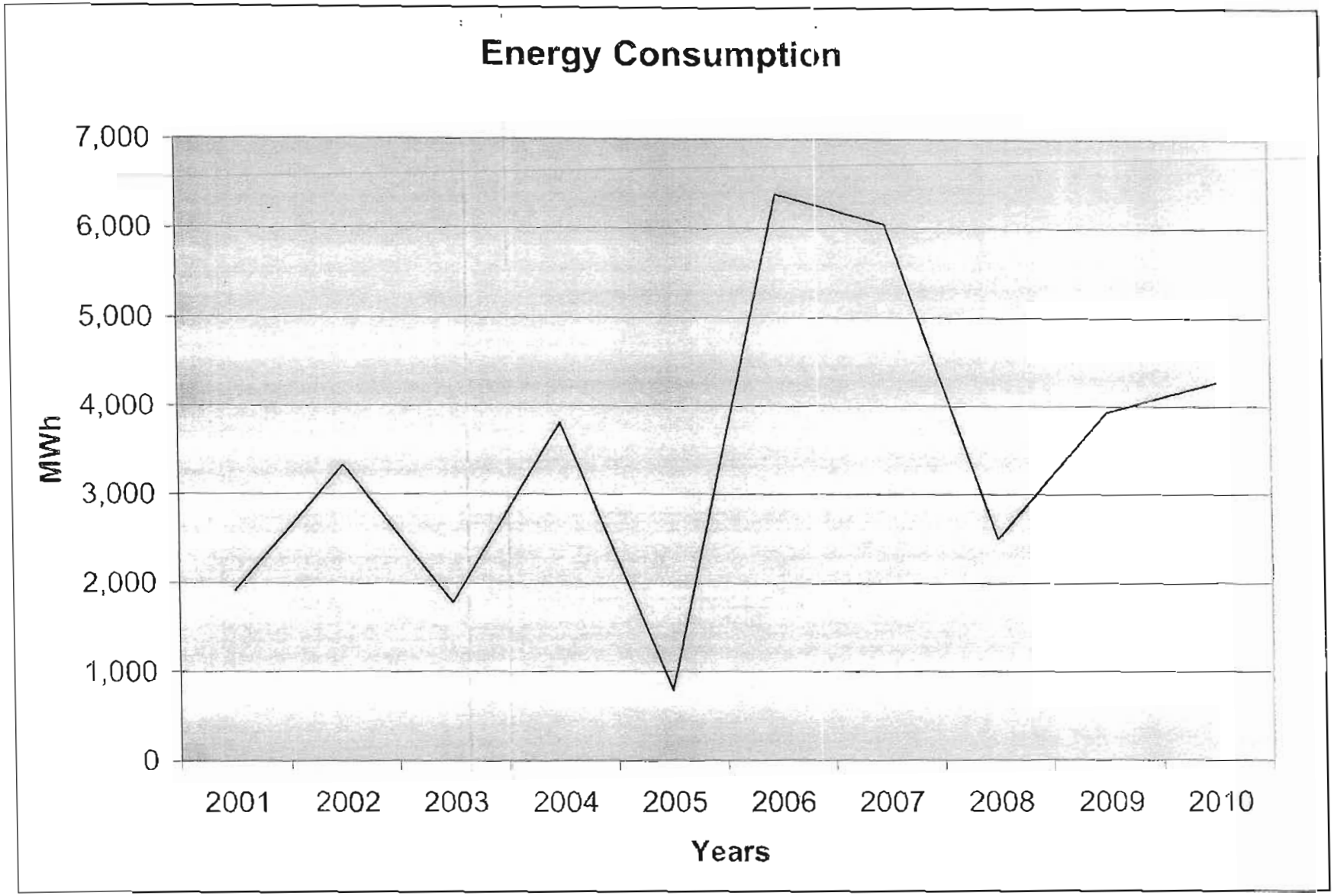
Applicable Codes:

Shore Power Facilities – National Electrical Safety Code and National Electrical Code

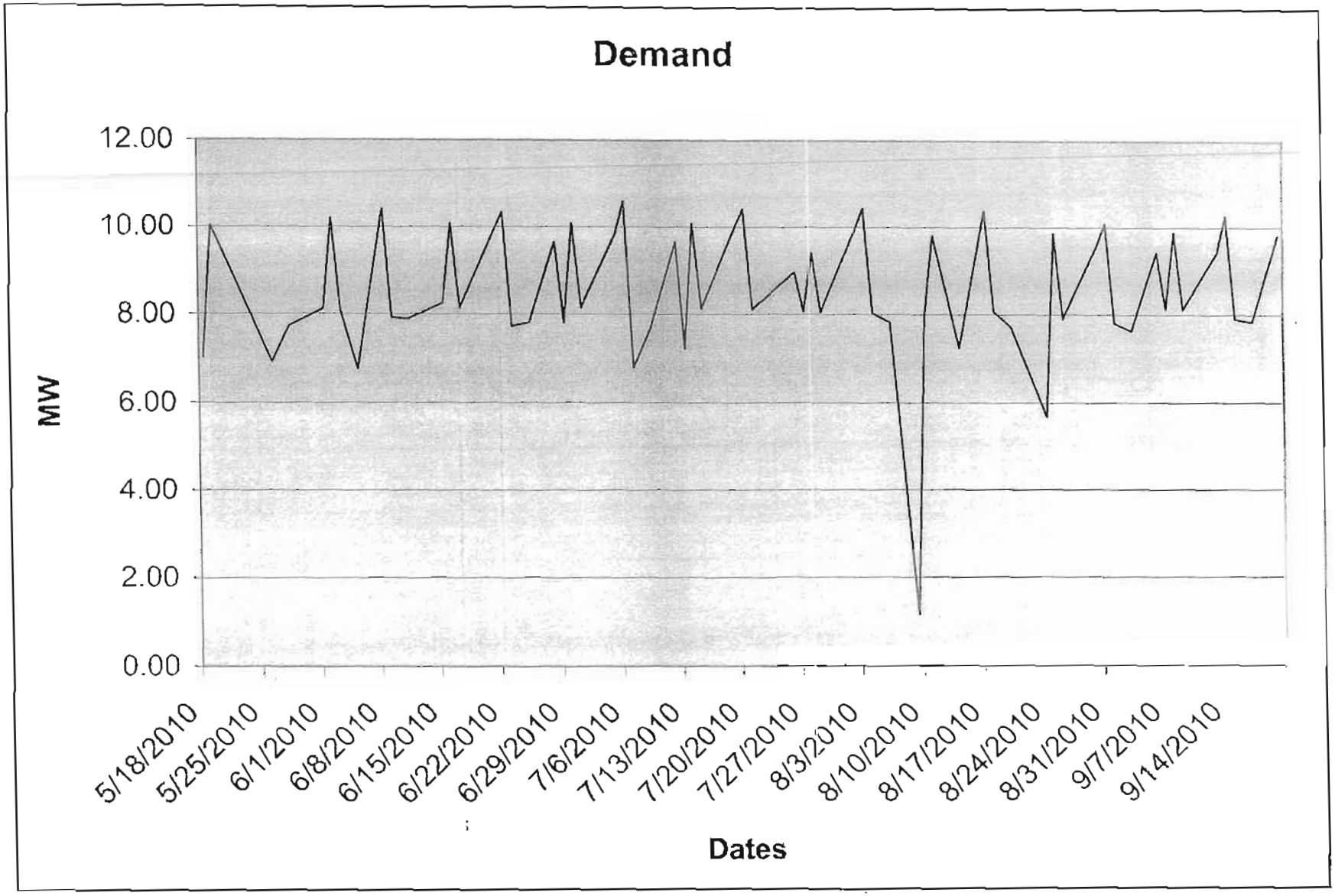
Low Voltage Distribution Facilities – National Electrical Code

Lighting – Illuminating Engineers Society of North America

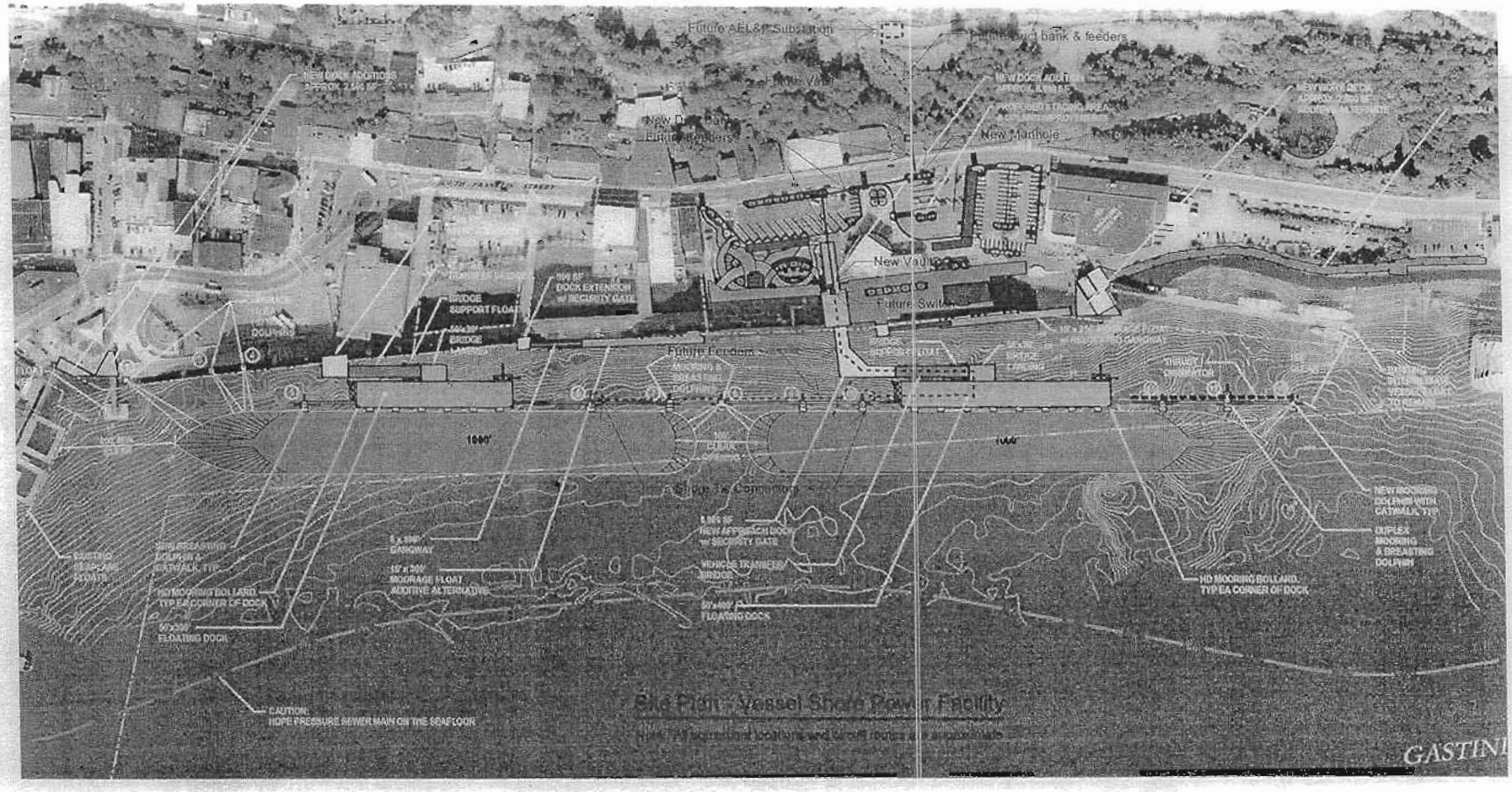




Attachment A



Attachment B



Attachment C

P | N | D

ENGINEERS, INC.

December 14, 2010

PND 102050.01

John Stone, P.E.
Port Director
CBJ Docks & Harbors Department
155 South Seward Street
Juneau, Alaska 99801

Subject: Downtown Cruise Ship Docks
Pontoon Barge Alternative Analysis

Dear Mr. Stone:

The following alternative analysis is intended to assist CBJ with making an informed decision on whether to utilize concrete pontoon barges or steel pontoon barges for the proposed Downtown Cruise Ship Docks project. The goal is to provide adequate information with which to evaluate important design and operational elements as well as assess key financial considerations including initial costs and long term maintenance costs.

To accomplish this, PND has researched and utilized our past experience with the design, fabrication and construction of floating dock facilities that employ each type of pontoon barge under consideration. Examples of PND designed cruise ship facilities that have floating concrete pontoon barges include the Whitter Tour Ship Facility and the Nanaimo, BC, Cruise Ship Facility. Other floating concrete dock projects that PND designed, or has extensive knowledge of, include the Servs Veoc Facility and the City of Valdez Container Terminal, both in Valdez, Alaska. Examples of PND designed cruise ship facilities that have floating steel pontoon barges include the Jacobsen Drive Dock in Juneau, and Ketchikan's Berth III and Berth IV Facilities. In addition, as part of this analysis, PND has researched and incorporated information obtained from conversations with the Ketchikan Shipyard for dry dock maintenance work anticipated for the steel pontoon barge alternative. Both alternatives were evaluated for a 50-year life.

Steel Pontoon Barge

Steel pontoon barges have many positive attributes that make them attractive as a viable alternative with the main disadvantage being the regular maintenance required to keep them in good condition.

There are a number of qualified steel fabricators in the Northwest with the experience and competence required for such a project. Different bollard, cleat, access hatch, and railing configurations for the pontoon barge are all easily installed initially and subsequently repaired or modified by welding. Also, PND has worked successfully on several projects in the past with Columbia-Sentinel Engineers, a naval architect and marine engineering firm with a vast amount of experience in the design of steel barges capable of resisting the magnitude of lateral loads associated with the berthing of cruise ships.

In general, a steel pontoon barge provides a lower risk of severe damage than a concrete pontoon barge. Should an extreme event occur, such as a vessel impact, the ductile nature of steel material enables it to

absorb energy by local crushing. If damage is below waterline, the use of multiple internal chambers will prevent the pontoon barge from sinking. Depending on the extent of damage, temporary repairs could be made on-site, with the pontoon barge remaining in place, and the facility could be returned to service in a relatively short period of time. Permanent repairs could then be made during a future dry dock maintenance interval. Cruise Ships would need to be anchored out during this period, and lightering boats utilized until the facility is returned to service. The current design concepts include a mooring float behind the South Berth that could accommodate the lightering boats.

Similarly, after fabrication is complete, the risk associated with transporting a steel pontoon barge from Seattle to Juneau is less due to the inherent ability of a steel structure to absorb and withstand potential storm wave activity that may be encountered during transport. The Whitter Tour Ship Facility has one steel pontoon barge and one concrete pontoon barge because one of the originally designed concrete pontoon barges did not survive the winter season transport across the Gulf of Alaska. The pontoon barge sustained heavy damage, broke up and eventually sank. In addition, the transport costs would be less for a steel pontoon barge because the overall mass would be less than a concrete pontoon barge. A steel pontoon barge would likely draft about 3 ft and consequently be easier to tow and take less time to transport.

The key to longevity of a steel pontoon barge is the quality and maintenance of the coating system. Steel structures provide years of service as long as the protective coatings remain in good condition. This however, presents the main drawback of a steel pontoon barge alternative. It is anticipated that a steel pontoon barge would need to go into dry dock at a regular interval of every five years and periodic topside and interior inspections by qualified structural and corrosion engineers would be necessary. During dry dock, the bottom of the pontoon barge would be cleaned of marine growth, inspected, blasted, solvent washed and new bottom paint applied. Other top side coatings would be inspected and repaired as necessary, including deck coatings. All anodes would be replaced with new materials. It is also anticipated that every ten years coatings internal to the pontoon barge may need to be repaired.

As part of the dry dock operation, the pontoon barges would need to be removed and towed to a shipyard. This would involve temporarily supporting the access bridge to the pontoon barge, disassembly of all utilities, and disconnecting the pile hoops that connect the pontoon barge to the mooring pile frames. Following dry dock activities, the process would be reversed.

There will be general wear-and-tear, but overall, if the maintenance schedule discussed above is followed, the steel pontoon barges will provide a minimum service life of 50 years. At the end of that time, if the CBJ elects to replace them, they will likely have a significant salvage value.

Based upon bids received for a similar, recent project in Nanaimo, BC, the initial fabrication cost for a steel pontoon barge would be approximately $4,000,000. A 50 year life cycle cost analysis indicates that the average annual maintenance costs for a steel pontoon barge would be approximately $100,000/year. The total Present Value of anticipated maintenance costs over the 50 year service life is approximately $2,000,000. See attached Life Cycle Cost Assessment for detail.

Concrete Pontoon Barge

While initial costs for fabrication are higher, concrete pontoon barges excel in the area of reduced maintenance costs. When designed properly, with minimizing maintenance as a primary goal, a concrete pontoon barge can be expected to have a minimum service life of 50 years, similar to the steel pontoon barge, but with significantly less costs associated with maintenance.

Collectively, the Northwest and Canada have a small number of qualified, experienced and competent concrete fabricators that have both the professional staff and graving yard facilities necessary for constructing pontoon barges of the size proposed for this project.

As already mentioned, special attention needs to be given during the design phase to incorporate materials and details into the fabrication process that will ensure minimal maintenance over the service life of the pontoon barge. While these add to the initial capital costs, the savings in life cycle maintenance costs validates this approach.

A major consideration in the evaluation of a concrete pontoon barge alternative is whether or not to allow fabrication of the pontoon barge in one piece or two pieces, with a splice connection. Only one fabricator has the facilities to construct a 50'x350' pontoon barge in one piece, without splices. Again, the initial cost of this option would likely be higher, but the long term maintenance costs would be reduced. If it is determined that a spliced connection would be allowed, PND recommends the pontoon barge be dry docked and all connection hardware be replaced at the 25 year point. This operation is estimated to cost approximately $750,000 to $1 million.

A concrete pontoon barge would generally have a higher risk of being severely damaged as the result of an extreme event such as an impact from a vessel or other significantly large, floating objects. Although concrete is both durable and strong, it is also brittle by nature. The ability to absorb significant amounts of energy does not exist with concrete. If damage is minor, and depending on the location of the damage, field repairs can be made; however, if damage is significant enough, the pontoon barge may need to be replaced and could be potentially lost for the season. Like the steel pontoon barge alternative, the concrete pontoon barge would incorporate the use of multiple internal chambers to prevent it from sinking if damage occurs below waterline. Again, cruise ships would need to be anchored out during this period, and lightering boats utilized until the facility is returned to service.

As indicated earlier, the risk associated with transporting a concrete pontoon barge from Seattle to Juneau is higher, as would be the cost of towing. A concrete pontoon barge would be substantially heavier than a steel pontoon barge, and would likely draft about 8-10 ft. The time required to tow a concrete pontoon barge would likely be an additional 2 to 3 days. The potential for damage due to weather could be reduced by means of scheduling the transport operation during a favorable time of the year. In addition, the likelihood of severe weather is less within the Inside Passage.

While routine maintenance for a concrete pontoon barge is significantly less than a steel pontoon barge, concrete pontoon barges would not be maintenance-free. It is anticipated that the concrete pontoon barges will have a nominal annual maintenance cost, as well as require periodic topside and interior inspections by qualified structural and corrosion engineers. Dive inspections every 5 years, performed in conjunction with a qualified structural engineer, are anticipated to be necessary to ensure damage does not exist below waterline. Based on similar floating concrete structures, hair line cracks may develop in the concrete as it ages. These cracks may require epoxy-injection treatment to maintain the condition of the pontoon barge.

Unlike steel pontoon barges, it is not anticipated that concrete pontoon barges would need to be dry docked for routine maintenance (assuming one piece pontoon). This results in another significant reduction in life cycle costs, as all costs associated with removing, towing, and replacing the pontoons are eliminated, not to mention the reduced risk of some unforeseen damage occurring during such operations.

It is anticipated that the salvage value of concrete pontoon barges at the end of their 50 year service life will be minimal.

Based upon bids received for a similar, recent project in Nanaimo, BC, the initial fabrication cost for a concrete pontoon barge would be approximately $5,000,000. A 50 year life cycle cost analysis indicates that the average annual maintenance costs for a concrete pontoon barge would be approximately $15,000/year. The total Net Present Value of anticipated maintenance costs over the 50 year service life is approximately $300,000. See attached Life Cycle Cost Assessment for detail.

Conclusion

Summary of Evaluation Criteria

A. Initial Fabrication Cost
    1. Qualified, available fabricators in Northwest w/ necessary facilities
    2. Concrete – One piece or two pieces spliced together
B. Damage Risk
    1. Overall – General reparability of Steel vs. Concrete
    2. Severe Event Damage – Time w/o use of Facility
C. Transport
    1. Damage Risk – Time of Year (Weather)
    2. Time – Number of Days
D. Maintenance
    1. General Wear-and-Tear from typical operations
    2. Concrete
        a. One piece Pontoon
        b. Two piece Pontoon w/ splice connection
    3. Removal from Service
        a. Temporary support of Access Bridge
        b. Disconnect/Connect all utilities and Pile Connections (Electrical, sewer, water, etc.)
        c. Transport to and from Dry Dock Facility
E. Salvage Value

As discussed and illustrated in the attached life cycle cost analysis, the estimated initial cost for fabrication of concrete pontoon barges is approximately 20% higher than the fabrication costs estimated for steel pontoon barges. However, the average annual maintenance costs are anticipated to be substantially less. While the other criteria listed above are important to consider and thus included in this analysis, these two evaluation criteria are the most significant from a cost standpoint. Based upon initial input from CBJ regarding the importance of having a facility that requires the least amount of maintenance, PND recommends CBJ utilize concrete pontoon barges for the proposed Downtown Cruise Ship Docks project, if initial capital funds are available and concrete fabrication facilities are available.

With regard to the availability of concrete fabricators, PND contacted Mr. Millard Barney with Concrete Technology Corporation (CTC) in Tacoma, WA, and Mr. Freddy McMaster with Vancouver Pile Driving in Vancouver, BC. Both fabricators indicated that they would be available to fabricate the concrete pontoon barges for this project beginning in January, 2012, with completion by fall of 2012. Both fabricators also indicated that their schedules and facilities would enable them to produce two pontoon barges in a single construction season, if CBJ elects to attempt that option.

PND appreciates the opportunity we have had to assist you with this work, and we hope this information serves your needs. Should you have any questions, please feel free to contact us.

Sincerely,
PND Engineers, Inc. | Juneau Office

John DeMuth, P.E.
Senior Engineer

Attachments

LIFE-CYCLE MAINTENANCE COST ASSESSMENT OF PONTOON BARGE ALTERNATIVES
JUNEAU CRUISE SHIP TERMINAL

PND ENGINEERS, INC.

CONCRETE PONTOON BARGE COST ASSESSMENT: (Single - 50' x 350' Pontoon/Barge)

Concrete Pontoon Barge Estimated Initial Cost - $5,000,000

CONCRETE PONTOON BARGE LIFE CYCLE COSTS - MAINTENANCE

ASSUMPTIONS:
1. 50 YEAR LIFE - SINGLE PIECE PONTOON
2. INTEREST = 4% (see note below)
3. ANNUAL REPAIRS = $6,000
4. PERIODIC INSPECTION = $20,000
5. PERIODIC DIVE INSPECTION = $30,000

$PV = FV \times 1/(1+i)^n$

i = INTEREST RATE (see note below)
n = YEAR
PV = Present Value of a future payment or series of future payments discounted to reflect the time value of money

COSTS	YEAR	5	10	15	20	25	30	35	40	45	50	TOTALS
	REPAIRS	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	
	INSPECTION	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$800,000
	DIVE	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	
	PRESENT VALUE	$65,754	$54,045	$44,421	$36,511	$30,009	$24,665	$20,273	$16,663	$13,696	$11,257	$317,295

AVG EQUIVALENT ANNUAL MAINTENANCE COST: $15,000

STEEL PONTOON BARGE COST ASSESSMENT: (Single - 50' x 350' Pontoon/Barge)

Steel Pontoon Barge Estimated Initial Cost - $4,000,000

STEEL PONTOON BARGE LIFE CYCLE COSTS - MAINTENANCE

ASSUMPTIONS
1. 50 YEAR LIFE
2. INTEREST = 4% (see note below)
3. ANNUAL REPAIRS = $5,000
4. PERIODIC INSPECTION = $20,000

COSTS	YEAR	5	10	15	20	25	30	35	40	45	50	TOTALS
	REPAIRS	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	
	INSPECTION	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00	
	REMOVE/REPLACE	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	
	TUG	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	
	DRY DOCK	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$4,775,000
	ANODES	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00	
	OUTSIDE PAINT	$100,000.00	$150,000.00	$100,000.00	$150,000.00	$100,000.00	$150,000.00	$100,000.00	$150,000.00	$100,000.00	$150,000.00	
	INSIDE PAINT	$0.00	$30,000.00	$0.00	$30,000.00	$0.00	$30,000.00	$0.00	$30,000.00	$0.00	$30,000.00	
	PRESENT VALUE	$406,854	$388,449	$274,856	$262,422	$185,683	$177,283	$125,441	$119,766	$84,743	$80,910	$2,106,408

AVG EQUIVALENT ANNUAL MAINTENANCE COST: $98,000

** Notes: 1) Costs shown are ROM costs used to compare the different pontoon types, and do not represent actual total cost associated with maintenance and operation of complete facility.
2) Interest rate shown was used only to convert future expenses into present value; it does not represent an anticipated interest value nor does it attempt to account for inflation.
3) Concrete pontoon assumed to be single piece, w/o splices; additional maintenance cost would be incurred if pontoon is two pieces. Recommend two piece pontoon be dry docked at 25 years to replace splice connection hardware.

P | N | D
ENGINEERS, INC.

March 18, 2011

PND 102050.03

Mr. John Stone, P.E.
Port Director
CBJ Docks and Harbors Department
155 South Seward Street
Juneau, Alaska 99801

Re: Cruise Ship Dock Reconfiguration – Concept 16B3
Design Phase Proposal

Dear Mr. Stone:

PND Engineers, Inc. (PND) is pleased to provide this fee proposal for engineering services on the proposed Cruise Ship Dock Reconfiguration project. The scope of services under this proposal includes environmental permitting assistance, final designs, bid ready contract documents and bid phase support services. Construction phase engineering services are not included in this proposal however can be negotiated at a future date following successful completion of the design and bid phases.

Scope of Improvements

The scope of construction improvements anticipated under this proposal is illustrated by the enclosed drawing entitled "Concept No. 16B-3 Proposed Dock Project" dated March 8, 2001. The specific improvements are further listed in the attached Schematic Design Budget dated March 14, 2011. We do not anticipate significant changes to this proposed plan since the layout has already been vetted through the public process over the course of several years.

Project Schedule

The proposed improvements will be implemented under two separate construction contracts with a three year completion schedule as outlined in the enclosed project schedule. The first set of contract documents will be prepared for the Phase 1 work scope. It will include removal of the CST transfer bridge and construction of specific pile supported decks and retaining wall structures adjacent to the South Berth. That work will be combined with shoreside electrical utilidors crossing Franklin Street and other upland improvements proposed under the Cruise Ship Terminal Staging Area Project, No. DH10-749. Phase 1 is designated for completion by May 2013.

The second set of contract documents will be prepared for the combined work contemplated under Phase 2 and Phase 3. It will include the two new floating berths, vehicle transfer bridges, mooring and breasting dolphins, remaining pile supported decks, small vessel moorage facilities, gangways, catwalks and various dockside water, sewer and electrical utilities. Phases 2 and 3 will be combined under one construction contract with separate completion schedules for each of the two new berths. The South Berth will be completed by May 2014 and the North Berth will be completed by May 2015. One general contractor will be awarded this work.

PND's engineering services shall be performed in accordance with the proposed schedule to allow construction to be completed for each phase of work within the timeframes indicated.

Fee Proposal

PND's proposal assumes the scope of improvements and completion schedule for each phase are now firm. We will provide engineering services under two primary tasks.

1. Design and Bid Phase services shall be provided on a fixed fee basis in accordance with the enclosed breakdown. The fee is broken down into four distinct design deliverables – 35%, 65%, 95% and 100% bid ready documents for two projects. Total fixed fee is proposed at $2,747,500.

2. Environmental permitting services shall be provided on a Time and Expenses reimbursable basis with an estimated fee not to exceed $100,000. All consultants will invoice labor at their standard billing rates at time of service. Mark ups on all third party consultants and reimbursable expenses shall be at a mutually agreeable rate negotiated with the CBJ.

The PND Team includes seven local engineering and architectural firms all dedicated to the successful completion of these exciting waterfront improvements. We appreciate the opportunity to provide services to the CBJ on this important project. Thank you for reviewing our fee proposal and let me know if we have scoped your needs appropriately for this project. We are available to commence immediately with this work and look forward to working with you.

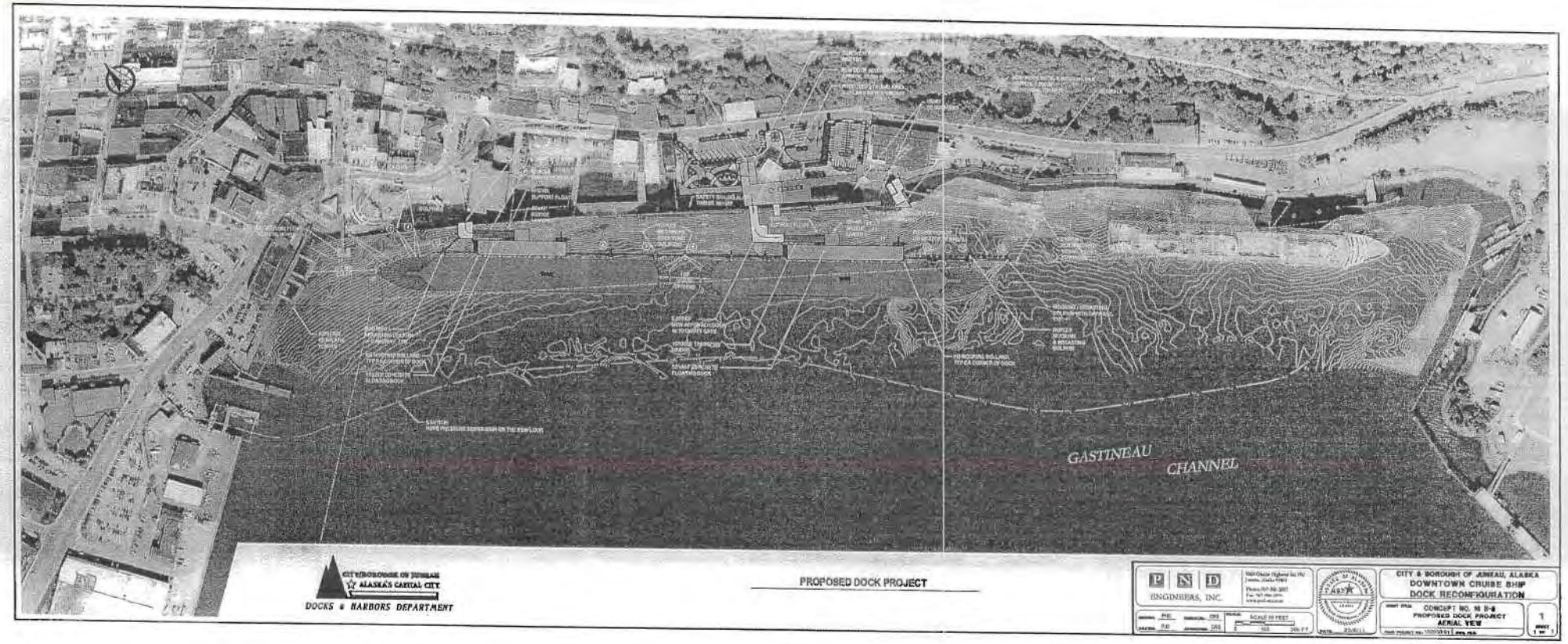
Sincerely,
PND Engineers, Inc. | Juneau Office

Dick Somerville, P.E.
Vice President

Enclosures

CBJ DOWNTOWN CRUISE SHIP DOCK RECONFIGURATION
CONCEPT 16B-3
DESIGN & BID PHASE SERVICES FEE PROPOSAL
18-Mar-11
Prepared by: PND Engineers, Inc.

Item	Design Scope Description	35% Prelim. Design	65% Design Dev.	95% Final Design	100% Bid Ready Docs.	Total Line Item Fee
1	Contract Mgmt, Subcontracts, Work Sessions, Tech Specs, Bid & Contract Docs	$25,000	$25,000	$25,000	$10,000	$85,000
2	Demolition	$15,000	$12,500	$12,500	$5,000	$45,000
3	South Berth Retaining Walls, Earthwork and Concrete Paving	$30,000	$30,000	$30,000	$5,000	$95,000
4	North Berth Pile Supported Approach Docks	$20,000	$20,000	$20,000	$2,500	$62,500
5	South Berth Pile Supported Approach Docks	$100,000	$90,000	$90,000	$10,000	$290,000
6	North Berth Floating Concrete Pontoon 50'x300'	$70,000	$70,000	$70,000	$7,500	$217,500
7	South Berth Floating Concrete Pontoon 50'x400'	$70,000	$70,000	$70,000	$7,500	$217,500
8	Floating Dock Pile Restraints	$80,000	$75,000	$75,000	$10,000	$240,000
9	Floating Dock Marine Fenders	$20,000	$15,000	$15,000	$2,500	$52,500
10	Vehicle Transfer Bridges & Pile Supported Abutments	$75,000	$70,000	$70,000	$10,000	$225,000
11	Transfer Bridge Support Floats	$15,000	$10,000	$10,000	$5,000	$40,000
12	Transfer Bridge Landing Floats	$20,000	$15,000	$15,000	$5,000	$55,000
13	Transfer Bridge End Support Structures	$15,000	$10,000	$10,000	$2,500	$37,500
14	Breasting & Mooring Dolphins	$175,000	$150,000	$150,000	$10,000	$485,000
15	Upgrade Existing Mooring Dolphins	$20,000	$10,000	$10,000	$2,500	$42,500
16	Catwalks	$15,000	$10,000	$10,000	$2,500	$37,500
17	Catwalk Access Gangways	$15,000	$10,000	$10,000	$2,500	$37,500
18	Water Services (Seasonal Use)	$20,000	$12,500	$12,500	$5,000	$50,000
19	Electrical & Lighting	$25,000	$15,000	$15,000	$5,000	$60,000
20	Port Security Gates & Cameras	$10,000	$7,500	$7,500	$2,500	$27,500
21	Safety Railings Along Wharf & Visual Enhancements	$30,000	$25,000	$25,000	$5,000	$85,000
22	Pile Anodes	$15,000	$10,000	$10,000	$2,500	$37,500
23	16' x 250' Small Vessel Moorage Float	$20,000	$15,000	$15,000	$5,000	$55,000
24	Moorage Float Piles	$5,000	$4,000	$4,000	$1,500	$14,500
25	New Pedestrian Gangway & Deck at Moorage Float	$10,000	$7,500	$7,500	$1,500	$26,500
26	Moorage Float Power & Lighting	$7,500	$5,000	$5,000	$2,000	$19,500
27	Sewer Service Discharge Piping & Utility Connection	$20,000	$15,000	$15,000	$2,500	$52,500
28	Taku Fisheries Deck Expansion (Add. Alt)	$20,000	$15,000	$15,000	$4,500	$54,500
	Proposed Fixed Fee Design Costs (Excludes Permitting)	**$962,500**	**$824,000**	**$824,000**	**$137,000**	$2,747,500



CITY & BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DOCKS & HARBORS DEPARTMENT

PROPOSED DOCK PROJECT

PND ENGINEERS, INC.

CITY & BOROUGH OF JUNEAU, ALASKA
DOWNTOWN CRUISE SHIP
DOCK RECONFIGURATION

CONCEPT NO. 16 R-2
PROPOSED DOCK PROJECT
AERIAL VEW

1

CBJ DOWNTOWN CRUISE SHIP DOCK RECONFIGURATION
CONCEPT 16B-3
SCHEMATIC DESIGN BUDGET - MARINE FACILITIES
14-Mar-11
Prepared by: PND Engineers, Inc.

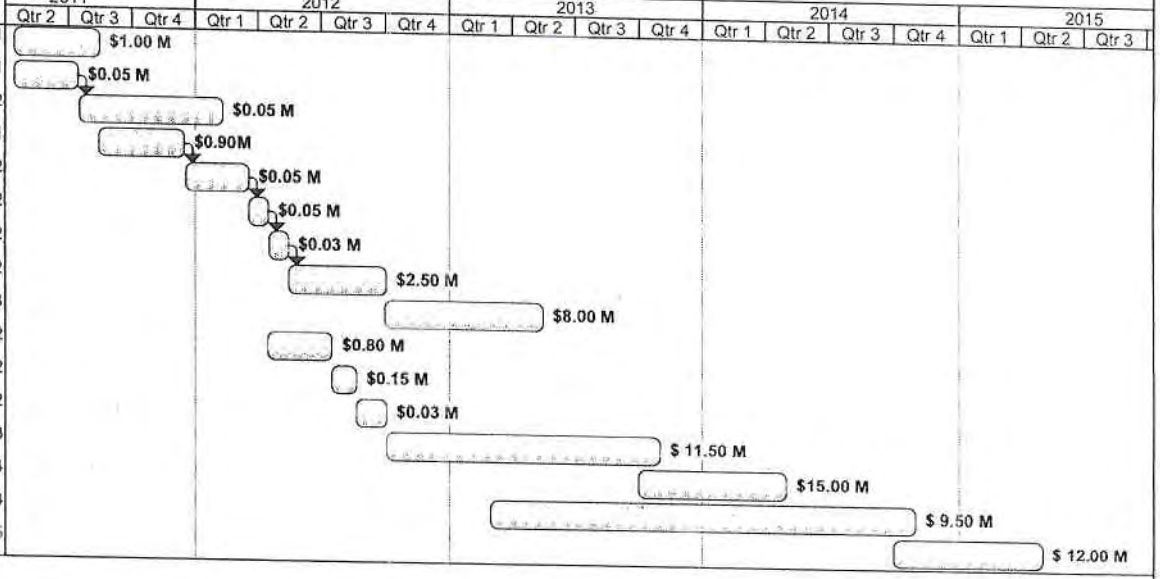
Item	Item Description	Units	Quantity	Unit Cost	Item Cost	Phase 1 Uplands/Decks	Phase 2 South Berth	Phase 3 North Berth	Check
	Base Bid								
1.01	Mobilization	LS	All Reqd	10%	$4,349,200	$582,500	$2,082,450	$1,684,250	
1.02	Demolition	LS	All Reqd	$750,000	$750,000	$700,000		$50,000	
1.03	South Berth Retaining Walls, Earthwork and Concrete Paving	LS	All Reqd	$950,000	$950,000	$950,000			
1.04	North Berth Pile Supported Approach Docks	SF	2,500	$250	$625,000			$625,000	
1.05	South Berth Pile Supported Approach Docks	SF	17,000	$250	$4,250,000	$2,975,000	$1,275,000		
1.06	North Berth Floating Concrete Pontoon 50'x300'	SF	15,000	$290	$4,350,000			$4,350,000	
1.07	South Berth Floating Concrete Pontoon 50'x400'	SF	20,000	$290	$5,800,000		$5,800,000		
1.08	Floating Dock Pile Restraints	EA	4	$1,200,000	$4,800,000		$2,400,000	$2,400,000	
1.09	Floating Dock Marine Fenders	LF	700	$1,000	$700,000		$400,000	$300,000	
1.10	Vehicle Transfer Bridge & Pile Supported Abutment	EA	2	$1,350,000	$2,700,000		$1,350,000	$1,350,000	
1.11	Transfer Bridge Support Float	EA	2	$200,000	$400,000		$200,000	$200,000	
1.12	Transfer Bridge Landing Float	EA	2	$580,000	$1,160,000		$580,000	$580,000	
1.13	Transfer Bridge End Support Structure	EA	2	$250,000	$500,000		$250,000	$250,000	
1.14	Breasting & Mooring Dolphins	EA	9	$1,000,000	$9,000,000		$6,000,000	$3,000,000	
1.15	Upgrade Existing Mooring Dolphins	EA	2	$250,000	$500,000			$500,000	
1.16	Catwalks	LF	900	$550	$495,000		$247,500	$247,500	
1.17	Catwalk Access Gangways	EA	4	$120,000	$480,000		$240,000	$240,000	
1.18	Water Service (Seasonal Use)	EA	2	$300,000	$600,000	$100,000	$250,000	$250,000	
1.19	Electrical & Lighting	EA	2	$250,000	$500,000	$100,000	$200,000	$200,000	
1.20	Port Security Gates & Cameras	LS	All Reqd	$200,000	$200,000		$100,000	$100,000	
1.21	Safety Railings Along Wharf & Visual Enhancements	LS	All Reqd	$1,000,000	$1,000,000			$1,000,000	
1.22	Pile Anodes	EA	400	$2,000	$800,000		$400,000	$400,000	
1.23	16' x 250' Small Vessel Moorage Float	SF	4,000	$150	$600,000		$600,000		
1.24	Moorage Float Piles	EA	11	$12,000	$132,000		$132,000		
1.25	New Pedestrian Gangway & Deck at Moorage Float	EA	1	$250,000	$250,000		$250,000		
1.26	Moorage Float Power & Lighting	EA	1	$150,000	$150,000		$150,000		
1.27	Sewer Service Discharge Piping & Utility Connection	EA	2	$400,000	$800,000			$800,000	
1.28	Shore Tie Power Utilidor to Dock	EA	1	$1,000,000	$1,000,000	$1,000,000			
	Estimated Construction Costs				**$47,841,200**	**$6,407,500**	**$22,906,950**	**$18,526,750**	**$47,841,200**
	Contingency (10%)				$4,784,120	$640,750	$2,290,695	$1,852,675	$4,784,120
	Local, State and Federal Permits & Lease Applications				$100,000	$100,000			**$100,000**
	Final Design - P, S & E, Contract Documents				$2,693,000	$486,919	$1,219,649	$986,432	**$2,693,000**
	Contract Administration & Construction Inspection				$2,693,000	$486,919	$1,219,649	$986,432	**$2,693,000**
	2011 Project Budget				$58,111,320	$3,122,088	**$27,636,944**	**$22,352,288**	**$58,111,320**
	Additive Alternatives								
	Taku Fisheries Deck Expansion	LS	All Reqd	$546,425	$546,425	$546,425			
	Estimated Construction Costs				**$546,425**	**$546,425**			$546,425
	Contingency (10%)				$54,643	$54,643			$54,643
	Final Design - P, S & E, Contract Documents				$54,643	$54,643			$54,643
	Contract Administration & Construction Inspection				$54,643	$54,643			$54,643
	2011 Project Budget				$710,353	$710,353			$710,353
	Uplands Staging Area								
	Estimated Construction Costs (see separate cost breakdown)				**$2,096,600**	**$2,096,600**			**$2,096,600**
	Contingency (10%)				$209,660	$209,660			$209,660
	Local, State and Federal Permits & Lease Applications				$15,000	$15,000			$15,000
	Site Investigations - Survey & Geotechnical				$40,000	$40,000			$40,000
	Final Design - P, S & E, Contract Documents				$188,694	$188,694			$188,694
	Contract Administration & Construction Inspection				$188,694	$188,694			$188,694
	2011 Project Budget				$2,738,648	**$2,738,648**			$2,738,648
				Total	**$61,560,321**				

Notes: Final scope of improvements under Base Bid, Add. Alts and Phasing Sequences subject to change based on CBJ direction. Cost of thrust dissipator structure and Marine Park Seawalk not included in this budget. Cost of Uplands Staging Area project added to budget. Inflationary costs not included.

Total Project Budget	$1,571,088	$27,636,944	$22,352,288	$61,560,321
Phase	Ph 1	Ph 2	Ph 3	Total
Scope of Work	Uplands/Decks	South Berth	North Berth	All
Completion Date	May-13	May-14	May-15	May-15

DOWNTOWN CRUISESHIP DOCKS CONCEPT 16B-3
3 SEASON - UPLANDS AND MARINE FACILITIES
PROJECT SCHEDULE & CASH FLOW PROJECTION

ID	Task Name	Start	Finish
1	Preliminary Design Ph 1, 2 & 3 - 35%	Fri 4/15/11	Mon 8/15/11
2	Prepare Permit Applications / Agency Mtgs	Fri 4/15/11	Fri 7/15/11
3	Environmental Review & Permit Authorizations	Mon 7/18/11	Fri 2/10/12
4	Design Development Ph 1, 2 & 3 - 65%	Mon 8/15/11	Fri 12/16/11
5	Final Design Ph 1 - 95%	Mon 12/19/11	Mon 3/19/12
6	Stamped Bid Ready Contract Docs - Ph 1	Tue 3/20/12	Mon 4/16/12
7	Advertise & Award Construction Contract - Ph 1	Wed 4/18/12	Tue 5/15/12
8	Submittals, Material Fabrication & Delivery Ph 1	Wed 5/16/12	Tue 10/2/12
9	On Site Construction - Ph 1 Uplands & Decks	Mon 10/1/12	Wed 5/15/13
10	Final Design Ph 2 & 3 - 95%	Mon 4/16/12	Mon 7/16/12
11	Stamped Bid Ready Contract Docs - Ph 2 & 3	Tue 7/17/12	Mon 8/20/12
12	Advertise & Award Construction Contract - Ph 2 & 3	Tue 8/21/12	Tue 10/2/12
13	Submittals, Material Fabrication & Delivery Ph 2	Wed 10/3/12	Thu 10/31/13
14	On Site Construction - Ph 2 South Berth	Tue 10/1/13	Thu 5/1/14
15	Submittals, Material Fabrication & Delivery Ph 3	Fri 3/1/13	Fri 10/31/14
16	On Site Construction - Ph 3 North Berth	Wed 10/1/14	Fri 5/1/15



Project: PND No. 102050.01
March 18, 2011

Task		Summary		Rolled Up Progress	Deadline
Split		Rolled Up Task		External Tasks	
Progress		Rolled Up Split		Project Summary	
Milestone		Rolled Up Milestone		External Milestone	

P | N | D
ENGINEERS, INC.

February 25, 2011

PND 102081.02

Mr. Gary Gillette, AIA
Port Engineer
CBJ Docks and Harbors Department
155 South Seward Street
Juneau, Alaska 99801

Re: Cruise Ship Terminal Staging Area
RFP No. DH10-749
Fee Proposal – Electrical Utilidor

Dear Mr. Gillette:

PND Engineers, Inc. (PND) is pleased to provide this fee proposal for additional design phase engineering services on the Cruise Ship Terminal Staging Area project. The scope of services under this proposal includes surveying, permitting, preliminary design, final design, bid ready contract documents and bid phase services associated with a proposed electrical raceway/utilidor crossing South Franklin Street to a location near the new dock improvements. The utilidor will consist of approximately ten (10) each six inch ducts encased in concrete to service future shore tie power to the new cruise ship docks.

The scope of construction improvements anticipated under this proposal is illustrated on the enclosed drawing entitled *Site Plan – Vessel Shore Power Facility*. The limits of final design work under this proposal extend from a future vault location on the east side of South Franklin Street to a new vault located adjacent to the Tram Building in the vicinity of a proposed retaining wall under the Cruise Ship Dock project.

Enclosed please find a detailed breakdown of PND's fixed price proposal to complete the work described along with backup from Haight & Associates, our electrical engineering subconsultant.

The PND Team appreciates the opportunity to provide engineering services on this important project. Thank you for reviewing our fee proposal and let me know if we have perceived your needs appropriately for this project.

Sincerely,
PND Engineers, Inc. | Juneau Office

Dick Somerville, P.E.
Vice President

Enclosures

CBJ Cruise Ship Dock Staging Areas
DH 10-749
Fixed Fee Proposal for Final Design Services - Amendment No.1 Electrical Raceway/Utilidor Design
South Franklin St Crossing to CSD Retaining Wall
February 25, 2011

	Senior Engineer VII	Senior Engineer II	Senior Land Surveyor	Staff Engineer IV	Staff Engineer III	CAD Designer V	Tech IV	Line Item Costs	Task Subtotal Costs
	$160.00	$120.00	$105.00	$95.00	$90.00	$90.00	$90.00		
TASK 1: Pre-Design - Project Management, Surveying, Work Session, Schematic Design Updates & Permitting									
1.1 Project Management - subcontracts, clerical and admin.	8						16	$2,720	
1.2 Field topographic survey and base map preparation - Franklin St ROW and hillside to future AELP substation, locate property boundaries (easements & conveyances to be proposed separately at later date if required)	4		20	24		8		$5,740	
1.3 CBJ, AELP, DOT/PF & HAI coordination meetings	8			4				$1,660	
1.4 Prepare schematic design budget	2			4				$700	
1.5 Permits: ADOTPF Electrical Utility Permit	2			8		4		$1,440	**$12,260**
TASK 2: Preliminary Design - 65% Design Review Submittal (Plans, Outline Specifications & Cost Estimate)									
2.1 Civil site plan - utilidor layout	2			16		4		$2,200	
2.2 Utilidor profile design	2			16		4		$2,200	
2.3 Typical trench, vaults and utilidor sections and details	2			16		4		$2,200	
2.4 Technical specifications & contract document outline format	2			8			4	$1,440	
2.5 Material quantities & 65% cost estimate	1			4				$540	**$8,580**
TASK 3: Final Design - 95% Review Submittal (Plans, Specifications, Bid Documents & Cost Estimate)									
3.1 Civil site plan - utilidor layout	2			12		4		$1,820	
3.2 Utilidor profile design	2			12		4		$1,820	
3.3 Typical trench, vaults and utilidor sections and details	2			12		4		$1,820	
3.4 Technical specifications & contract document outline format	2			4			2	$880	
3.5 Material quantities & 95% cost estimate	1			2				$350	**$6,690**
TASK 4: Bid Ready Stamped Contract Documents									
4.1 PND Internal QC/QA Audit	2			4		2	2	$1,060	
4.2 Address final review comments	2			4		4		$1,060	
4.3 Prepare final bid ready stamped deliverables	2			4		4	2	$1,240	**$3,360**
TASK 5: Bid Phase Assistance									
5.1 Participate w/ prebid conference	1			1				$255	
5.2 Respond to bidder questions	2			2				$510	
5.3 Assist w/ addenda preparation	1			4		2		$720	**$1,485**
Estimated Third Party Expenses									
Haight & Assocs	Electrical Engineering							$55,015	**$55,015**
								Total Estimated Fee	**$87,390**

FEE ESTIMATE

PROJECT NAME: Cruise Ship Terminal Uplands - Raceway Design

HAIGHT & ASSOCIATES, INC.
JUNEAU, ALASKA

CLIENT: PND Engineers, Inc.
PROJECT NO.: 137-80

DATE: January 27, 2011

FEE SCHEDULE [$/HR]	165	155	115	95	65	65	85		0.9
X TASK DESCRIPTION	Ben [HRS]	Barry [HRS]	Ryan [HRS]	CAD/Dsr [HRS]	CAD [HRS]	Clerical [HRS]	Admin [HRS]	TIME [$]	EXPENSE [$]
SCHEMATIC DESIGN (LUMP SUM):									
100 Project administration		6				1	2	1,165	
101 Site/asbuilt review		12						1,860	
102 Utility coordination		8						1,240	
120 Construction cost estimate		6						930	
SUB SUBTOTAL	0	32	0	0	0	1	2	$5,195	
SUB CBJ Sales Tax (5%)								$0	
SUBTOTAL (Reimbursable Expenses)								$0	
TOTAL - SCHEMATIC DESIGN								**$5,195**	
DESIGN DEVELOPMENT (LUMP SUM):									
200 Project administration		10				2	2	1,850	
205 Plan development		2		4				690	
208 Site plan layout		1		4				535	
210 Power layout		12		6				2,430	
220 Utility coordination		8						1,240	
221 CBJ coordination		4						620	
260 Specification draft		8				1		1,305	
270 Coordination meetings		6						930	
275 Client review		2						310	
280 Construction cost estimate		8						1,240	
290 Review revisions		1		2				345	
295 Document production		1		2		1		410	
SUBTOTAL (time)	0	63	0	18	0	4	2	$11,905	
SUBTOTAL (CBJ Sales Tax - 5%)								$0	
SUBTOTAL (Reimbursable Expenses)								$0	
TOTAL - DESIGN DEVELOPMENT								**$11,905**	
CONTRACT DOCUMENTS (LUMP SUM):									
300 Project administration		20				4	4	3,700	
301 Final power layout		30		20				6,550	
302 Utility coordination		8						1,240	
303 CBJ coordination		4						620	
304 Raceway design calcuations		30						4,650	
350 Special details		40		60				11,900	
360 95% specification		6				1		995	
365 95% document production		1		2		1		410	
370 Coordination meetings		6						930	
380 Construction cost estimate		4						620	
390 Client review		2						310	
391 Q A review	4							660	
392 Drawing revisions		2		4				690	
393 Final specification		2				1		375	
395 Final production		2		2		1		565	
SUBTOTAL (time)	4	157	0	88	0	8	4	$34,215	
SUBTOTAL (CBJ Sales Tax - 5%)								$0	
SUBTOTAL (Reimbursable Expenses)								$0	
TOTAL - CONTRACT DOCUMENTS								**$34,215**	

FEE ESTIMATE

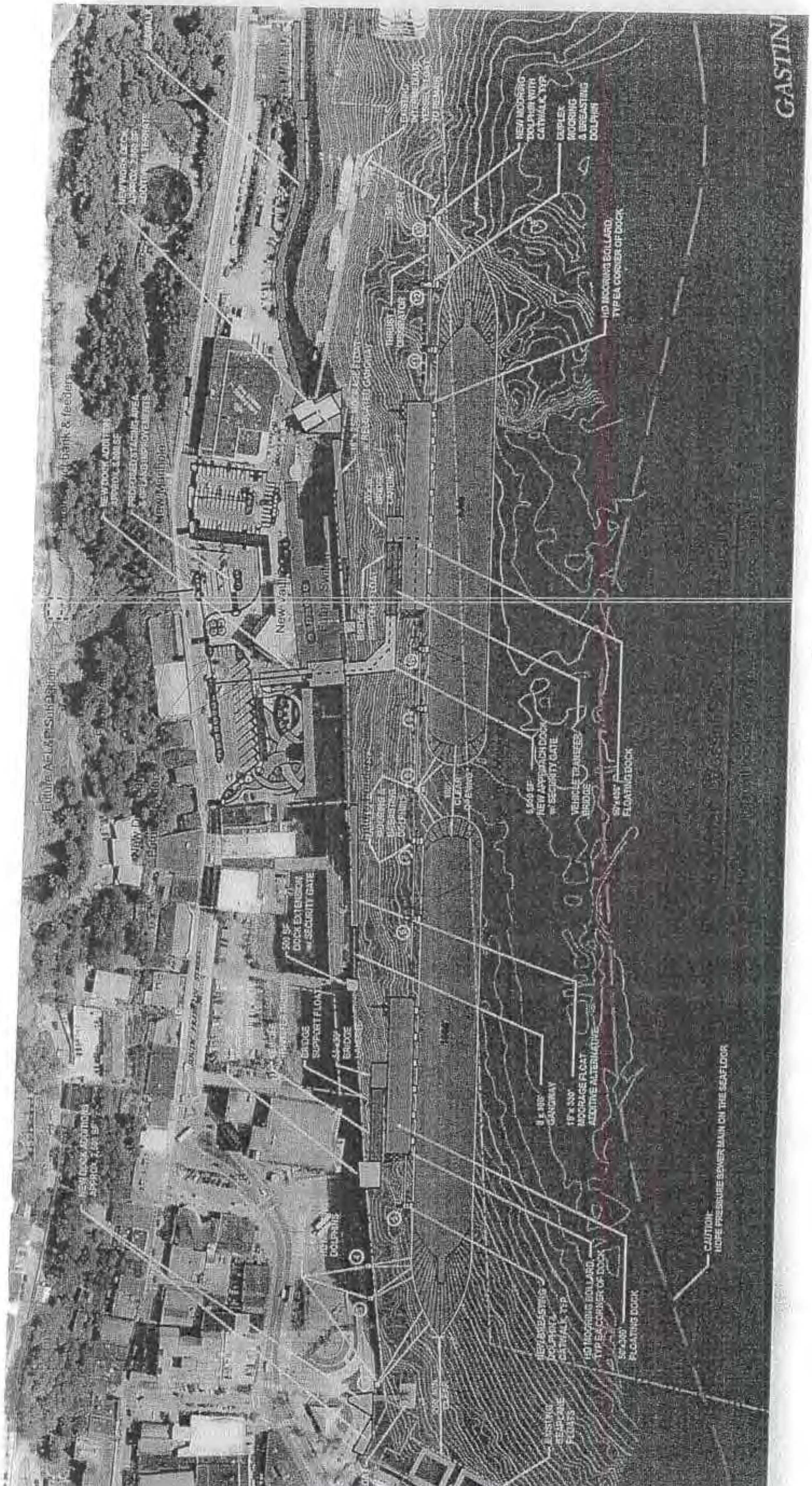
PROJECT NAME: Cruise Ship Terminal Uplands - Raceway Design

HAIGHT & ASSOCIATES, INC.
JUNEAU, ALASKA

CLIENT: PND Engineers, Inc.
PROJECT NO.: 137-80

DATE: January 27, 2011

FEE SCHEDULE [$/HR]	165	155	115	95	65	65	85		0.9
X TASK DESCRIPTION	Ben [HRS]	Barry [HRS]	Ryan [HRS]	CAD/Dsr [HRS]	CAD [HRS]	Clerical [HRS]	Admin [HRS]	TIME [$]	EXPENSE [$]
BIDDING (T&E):									
400 Project administration		2					1	395	
405 Prebid meeting (in basic agreement)								0	
410 Document interpretation		6						930	
430 Addendum development		4		2				810	
490 Bid review		2						310	
495 Conforming documents		4		6		1		1,255	
SUBTOTAL (time)	0	18	0	8	0	1	1	$3,700	
SUBTOTAL (CBJ Sales Tax - 5%)								$0	
SUBTOTAL (Reimbursable Expenses)								$0	
TOTAL - BIDDING								**$3,700**	
PROJECT TOTAL (time):	4	270	0	114	0	14	9	$55,015	
PROJECT TOTAL (CBJ Sales Tax - 5%):								$0	
PROJECT TOTAL (Reimbursable Expenses)								$0	
**GRAND TOTAL==========> **								**$55,015**	



Attachment C

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

City & Borough of Juneau • Docks & Harbors
155 S. Seward Street • Juneau, AK 99801
(907) 586-0292 Phone • (907) 586-0295 Fax

Port of Juneau

MEMORANDUM

To: Harbor Board CIP and Planning Committee
From: Gary Gillette, Port Engineer
Date: March 10, 2011
Re: Account Close Out - Amalga Harbor Launch Ramp Upgrade

The Amalga Harbor Launch Ramp Upgrade project began back in 2003 and was completed in phases over the past years. The most recent work of the project was the installation of a kayak launch ramp which was completed in 2009. The Alaska Department of Fish & Game (ADF&G) provided funding for this project. They inspected the recent work in 2010 and directed that a sign be erected acknowledging the funding contributions by ADF&G and US Fish and Wildlife Service. The sign has been installed thus the project is officially complete and the CIP account (H354-79) may now be closed.

ADF&G funds were provided for design, permitting, construction, and construction inspection. The funds were not allowed to be used for CBJ staff time to manage and administer the project. The state of the account at this time shows approximately $65,800 of ADF&G funding remaining. This amount is no longer eligible for reimbursement and must be de-appropriated by the Assembly in order to close out the account.

The total overall CBJ administrative/management costs from 2003 to date are more than the CBJ portion of the account balance resulting in a funding shortfall of approximately $28,000. A funding transfer ordinance is required in order to close the CIP account. We recommend this amount be taken from the Harbors fund balance which currently has approximately $3.7M remaining.

CITY AND BOROUGH OF JUNEAU DOCKS AND HARBORS
CIP ACCOUNTS SUMMARY
As Of March 15, 2010

CIP #	Project	Revenues	Expenditures & Encumberances	Balance	Notes
H354-79	**Amalga Harbor Launch Ramp Upgrade**				Project Complete
	ADF&G Grants	$2,535,000.00	$2,469,205.00	$65,795.00	Funds to be returned to ADF&G
	Harbor Funds	$300,000.00	$327,999.00	($27,999.00)	Fund transfer needed to close account
H354-84	**Douglas Harbor Phase III**				Breakwater
	ADOT Breakwater MOU	$800,000.00			
	2003 GO Bond	$3,500,000.00			
	2003 GO Bond Interest (yet to be appropiated)	$67,145.00			
		$4,367,145.00	$4,306,986.00	$60,159.00	
H354-74	**Auke Bay Loading Facility-Phase I**				Mitigation Phase
	ADCCED Grant	$50,778.00			
	Denali Commission	$1,000,000.00			
	FY01 Marine Passenger Fees	$100,000.00			
	FY02 Marine Passenger Fees	$411,500.00			
	FY02 Harbor Funds	$175,000.00			
	FY02 Dock Funds	$175,000.00			
	FY04 Marine Passenger Fees	$50,000.00			
	FY05 Marine Passenger Fees	$300,000.00			
	FY05 Dock Funds	$150,000.00			
	FY06 Marine Passenger Fees	$500,000.00			
	FY08 F326	$4,411,351.00			
	FY09 Harbor Funds	$292,514.00			
	FY11 Harbor Funds	$130,000.00			
	2003 GO Bond	$3,250,000.00			
	2003 GO Bond Interest	$328,598.00			
		$11,324,741.00	$11,209,065.00	$115,676.00	
H354-85	**Juneau Harbors Deferred Maintenance**				Old Douglas Harbor Re-Build
	ADOT - Bonds for Harbors	$7,047,810.00			
	ADF&G Coop #04-003	$180,000.00			
	ADF&G Coop #05-071	$900,105.00			
	NFF In-Kiind Douglas Pump-out	$73,000.00			

CITY AND BOROUGH OF JUNEAU DOCKS AND HARBORS
CIP ACCOUNTS SUMMARY
As Of March 15, 2010

	FY02 Harbor Funds	$13,508.00		
	FY06 Marine Passenger Fees	$500,000.00		
	FY06 Harbor Funds	$15,606.00		
	FY08 F326	$4,411,351.00		
	FY99 Temp Sales Tax	$6,631.00		
	2003 GO Bonds	$2,500,000.00		
	FY2003 GO Bond Interest	$40,000.00		
		$15,688,011.00	$11,823,591.00	$3,864,420.00
H354-93	**Statter Harbor Improvements**			
	FY08 ADF&G Grant	$900,000.00		New Launch Ramp
	DCCED Grant	$800,000.00		Statter Float Repairs
	FY06 Marine Passenger Fees	$250,000.00		
	FY07 Marine Passenger Fees	$250,000.00		
	FY09 1% Prop 2 Sales Tax	$2,500,000.00		
	Sales Tax	$400,000.00		
	FY11 Temp 1% Sales Tax	$3,804,600.00		
		$8,904,600.00	$1,867,070.00	$7,037,530.00
H354-95	**Cruise Ship Berth Enhancements**			
	DCCED 09 Grant	$1,500,000.00		New Cruise Berths
	DCCED 10 Grant	$2,500,000.00		Port/Cusotms/Visitor Center
	DCCED 11 Grant	$9,000,000.00		CT Staging Reconfiguration
	FY02 Port Development Fees	$20,124.00		
	Fy03 AW Sales Tax	$3,018.00		
	FY03 Docks	$9,755.00		
	FY03 Port Development Fees	$203,043.00		
	FY05 Docks	$24,194.00		
	FY06 Docks	$30,000.00		
	FY07 Docks	$32,280.00		
	FY08 Marine Passenger Fees	$1,000,000.00		
	FY09 Marine Passenger Fees	$379,520.00		
	FY09 Marine Passenger Fees	$924,200.00		
	FY09 Port Development Fees	$1,750,000.00		
	FY10 Marine Passenger Fees	$1,443,800.00		
	FY10 Port Development Fees	$1,750,000.00		
	FY11 Marine Passenger Fees	$1,023,900.00		

CITY AND BOROUGH OF JUNEAU DOCKS AND HARBORS
CIP ACCOUNTS SUMMARY
As Of March 15, 2010

	FY11 Port Development Fees	$1,500,000.00			
		$23,093,834.00	$11,254,121.00	$11,839,713.00	
H354-96	**Cruise Ship Tug Moorage Rehabilitation**				Aurora Harbor Re-Build
	FY08 Marine Passenger Fees	$500,000.00			
		$500,000.00	$0.00	$500,000.00	
H354-97	**Landing Craft & Security Cameras**				Harbor Security Cameras
	Federal Security Grant	$219,000.00	$140,066.00	$78,934.00	
H354-99	**Auke Bay Loading Facility - Phase II**				ABLF - Phase II
	TIGER Grant	$3,640,000.00	$2,602,360.00	$1,037,640.00	

City & Borough of Juneau • Docks & Harbors
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CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

Port of Juneau

To: Docks and Harbors Finance Committee
CC:
From: John M. Stone, P.E. Port Director
Date: March 24, 2011
Re: Amendments to Docks and Harbors FY 11 Budget

The FY 11 actual and budgeted revenue and expense reports for the docks and harbors enterprises are attached. I highlight the reports in this memo and set out budget adjustments the Board must request from the Assembly in order to have our FY 11 expenses remain below the FY 11 approved budget.

Docks

FY 11 docks revenues are off target and we expect waterfront sales permit and cruise ship revenues will be about 10% less than budgeted.

We are projecting FY 11 personnel expenses will be over budget by 9%. This is primarily due to keeping the seasonal employees on an additional month. The rest of the expenses are below budget. The net result is that we need to ask the Assembly to increase our expense budget by 2% or $27,900.

Revenues will only exceed expenses by about $277,000 which is less than the $500,000 target established by the Board when it adopted the port maintenance fee.

Harbors

FY 11 harbor revenues are ahead of target. We expect actual revenues to exceed budgeted revenues by about 5%.

We are projecting FY 11 personnel expenses will be significantly over budget. However, this is attributable to our decision to keep the seasonal staff on for an additional two months to do harbor maintenance projects. We are projecting personnel expenses through the remainder of the fiscal year will be about 15% over budget. This means that we will need to ask the Assembly to adjust our

expense budget upwards by $127,400. Overall, harbor revenues are expected slightly exceed expenses. However, it does not appear we will meet the revenue bond requirement of 20% surplus revenue to debt service ratio. I am working with the CBJ Finance Director on how to resolve this issue.

Please call me at 586-0294 if you have questions.

Attachments

						Budget Level		946	954
HARBORS							**FY11 BUDGET**	**PROJECTED FY11**	**Revised FY12**
Expenditures									
PERSONNEL									
530	40	5	01	01	110	Salaries - Regu		815,000	833,500
530	40	5	01	01	111	Salaries - Over		35,000	30,000
530	40	5	01	01	116	Leave Accrual			
530	40	5	01	01	120	Benefits		586,000	503,000
530	40	5	01	01	121	Seasonal Benefi			
530	40	5	01	01	130	Worker's Comp		14,100	14,100
						PERSONNEL	1,266,500	1,450,100	1,380,600
SUPPLIES									
530	40	5	01	01	389	Fleet Gasoline		20,300	20,000
530	40	5	01	01	480	Office Supplies		10,000	12,000
530	40	5	01	01	490	Materials & Com		75,000	100,000
530	40	5	01	01	491	Safety Prog & E		6,000	3,000
530	40	5	01	01	492	Gasoline & Oil		2,000	2,000
530	40	5	01	01	496	Minor Equipment		12,500	7,500
530	40	5	01	01	497	Minor Furniture		0	1,000
530	40	5	01	02	490	Fire Extinguish		2,500	1,000
530	40	5	01	04	490	Paint & Related		4,500	3,500
530	40	5	01	05	490	Special Clothin		2,500	1,000
530	40	5	01	06	490	Janitorial Supp		3,000	3,000
530	40	5	01	10	490	M&C - Signage		5,000	5,000
						SUPPLIES	149,000	143,300	159,000

SERVICES & CHARGES								
530	40	5 01	01	310	Telephone		15,000	17,000
530	40	5 01	01	320	Printing		3,000	1,000
530	40	5 01	01	322	Advertising		4,000	2,500
530	40	5 01	01	330	Rents		10,000	2,000
530	40	5 01	01	332	Electricity		110,000	140,000
530	40	5 01	01	333	Fuel Oil		12,000	14,000
530	40	5 01	01	334	Disposal Servic		110,000	130,000
530	40	5 01	01	335	Water Service		35,000	40,000
530	40	5 01	01	336	Sewer Service		1,500	2,000
530	40	5 01	01	337	Lease Related Prof Service		20,000	5,000
530	40	5 01	01	340	Repairs-Vehicle		15,000	20,000
530	40	5 01	01	342	Equip Maintenance Con		6,000	9,500
530	40	5 01	01	345	Bldg Mnt Div Ch		13,000	15,000
530	40	5 01	01	360	Equipment Renta		3,000	3,000
530	40	5 01	01	362	Harbor's Fleet Contr		18,000	18,000
530	40	5 01	01	370	Insurance & Bon		67,000	67,000
530	40	5 01	01	375	General Liabili		8,300	8,300
530	40	5 01	01	380	Dues & Subscrip		3,500	3,500
530	40	5 01	01	390	Contract Serv-Porta Potties		65,000	75,000
530	40	5 01	01	394	Full Cost Alloc		147,600	147,600
530	40	5 01	01	397	Bank Card Fees		40,000	40,000
530	40	5 01	01	481	Postage		7,500	9,000
530	40	5 01	01		Accident Contin			
530	40	5 01	03	340	Float Maint & Repairs		10,000	10,000
530	40	5 01	03	390	Derelict Vessel Mgnt		60,000	50,000
530	40	5 01	04	340	Repairs-Electric		9,000	7,500
530	40	5 01	04	390	Pkg lot Mtn & Repair Svc		2,500	2,500
530	40	5 01	05	340	Repairs-Harbor		6,000	2,000
530	40	5 01	06	340	Repairs-Snow Bl		500	1,000
530	40	5 01	07	390	Board Contingen		20,000	1,000
530	40	5 01	11	340	Repairs-Water System		7,000	7,500
530	40	5 01	12	340	Repairs-Cranes		6,000	4,000
					SERVICES & CHARGES	849,900	835,400	854,900

TRAVEL & TRAINING								
530	40	5	01	01	200	Travel		5,000	5,000
530	40	5	01	01	201	Mileage		5,000	5,000
530	40	5	01	01	202	Training & Educ		3,000	3,000
						TRAVEL & TRAINING	9,000	13,000	13,000
CAPITAL OUTLAY								
530	40	5	01	01	510	Machinery & Equ		10,000	10,000
						CAPITAL OUTLAY	10,000	10,000	10,000
MISCELLANEOUS								
530	00	3	00	00	036	Bad Debts		10,000	10,000
530	40	5	01	01		Recruitment & R			
						MISCELLANEOUS	50,000	10,000	10,000
TRANSFERS								
530	99	5	32	60	950	Transfer Out to 326		752,200	751,400
530	99	5	35	41	950	Transfer Out to CIP354		130,000	
						TRANSFERS	882,200	882,200	751,400
						Harbors Expenditures	3,216,600	3,344,000	3,178,900
						Under (Over) Budget		**(127,400)**	

Revenues

STATE REVENUES									
530	00	3	00	00	502	Fish tax-Inside		-350,000	-350,000
530	00	3	00	00	010	FY10 AK Fisheries		-25,000	
						STATE REVENUES	-375,000	-375,000	-350,000
USER FEES									
530	00	3	10	00	001	Moorage, Annual		-810,000	-875,000
530	00	3	10	00	002	DeHart's Assigned Moorage Fees		-150,000	-150,000
530	00	3	10	00	003	Downtown Daily Moorage Fees		-90,000	-100,000
530	00	3	10	00	004	Auke Bay Daily Moorage Fees		-300,000	-275,000
530	00	3	10	00	005	Downtown Monthly Moorage Fees		-210,000	-200,000
530	00	3	10	00	006	Auke Bay Monthly Moorage Fees		-180,000	-180,000
530	00	3	10	00	008	Residence Surcharge		-72,000	-70,000
530	00	3	10	00	009	Recreational Boat Launch Permit Fees		-145,000	-145,000
530	00	3	10	00	010	Commercial Boat Launch Permit Fees		-1,500	-1,000
530	00	3	10	00	011	Freight Use Fees		-20,000	-8,000
530	00	3	10	00	012	Freight Staging Fees		-100	-100
530	00	3	10	00	014	Inspected Vessel Psngr for Hire Fees		-40,000	-45,000
530	00	3	10	00	015	Un-inspected Vessel Psngr for Hire Fees		-500	-500
530	00	3	10	00	016	Statter Harbor Parking Lot Permit Fees		-5,000	-5,000
530	00	3	10	00	017	Statter Harbor Parking Lot Fees		-40,000	-40,000
530	00	3	10	00	642	Shorepower Access Fees		-90,000	-80,000
530	00	3	40	00	634	Grid Fees		-4,000	-4,000
530	00	3	40	00	640	Crane Use Fee		-10,000	-10,000
						USER FEES	-2,113,900	-2,168,100	-2,188,600
INTEREST AND PENALTIES									
530	00	3	00	00	401	Interest Alloca		-144,400	-124,000
530	00	3	40	00	101	Late Fee Interest		-13,000	-15,000
						INTEREST AND PENALTIES	-134,000	-157,400	-139,000

RENTALS								
530	00	3	10	00	019	Pump Rental	-200	-200
530	00	3	10	00	020	Storage Rentals	-21,000	-20,000
530	00	3	10	00	021	Private Boathouse Fees	-3,700	-3,700
530	00	3	40	00	412	Land Lease Rentals	-600,000	-600,000
						RENTALS	-556,500	-624,900	-623,900
FEES								
530	00	3	10	00	023	Staff Labor Fees	-3,500	-1,000
530	00	3	10	00	024	Towing Fees	-3,000	-1,000
530	00	3	40	00	201	Moorage Waitlist Fees	-2,000	-2,000
530	00	3	40	00	699	Other Misc Fees	-30,000	-30,000
						FEES	-32,800	-38,500	-34,000
FINES AND PENALTIES								
530	00	3	00	00	301	0rd Violations	-15,000	-15,000
530	00	3	00	00	302	Minor Offense F	-500	-1,000
						FINES AND PENALTIES	-12,000	-15,500	-16,000
OTHER								
530	00	3	00	00		GCI Miscellaneo		
530	00	3	00	00		Proceeds Sale		
530	00	3	01	00		Harbor Cash Ove		
						OTHER		0	0
530	00	3	99	00		Transfer In - F326			
						Harbor Revenues	-3,224,200	-3,379,400	-3,351,500
						Net Gain (loss)/Increasing (Decreasing) Fund Balance:	7,600	35,400	172,600

DOCKS

Budget Level

946 954

DOCKS **Expenditures**					**FY11 BUDGET**	**PROJECTED FY11**	**Revised FY12**
531	52 5 01 01	110	Salaries-Regula			500,000	487,100
531	52 5 01 01	111	Overtime-Regula			25,000	20,000
531	52 5 01 01	120	Benefits-Regula			364,800	312,400
531	52 5 01 01	130	Worker's Comp			14,200	14,200
531	52 5 01 03	110	CIP Salaries-Regula			12,000	192,100
531	52 5 01 03	120	CIP Benefits-Regula			6,000	98,900
531	52 5 01 03	141	CIP Dock OH to CIPs			-18,000	-291,000
			PERSONNEL		829,300	904,000	833,700
531	52 5 01 01	480	Office Supplies			2,000	2,000
531	52 5 01 01	490	Materials & Com			50,000	50,000
531	52 5 01 01	491	Safety Program			3,000	2,000
531	52 5 01 01	496	Minor Equipment			5,000	8,000
			SUPPLIES		62,000	60,000	62,000
531	52 5 01 01		Telephone			900	
531	52 5 01 01	320	Printing			1,000	1,000
531	52 5 01 01	322	Advertising			7,500	2,000
531	52 5 01 01	330	Rents			55,000	60,000
531	52 5 01 01	332	Electricity			25,000	20,000
531	52 5 01 01	333	Fuel Oil			3,500	2,000
531	52 5 01 01	334	Waste Disposal			12,500	15,000
531	52 5 01 01	335	Water Service			100,000	100,000
531	52 5 01 01	336	Sewer Service			800	800
531	52 5 01 01	340	Repairs			5,000	20,000
531	52 5 01 01		Maintenance Bui			500	

531	52	5 01 01	345	Bldg. Maint Div			2,000	2,000
531	52	5 01 01	362	Docks Fleet Replac Contr			9,000	9,000
531	52	5 01 01	370	Insurance & Bon			67,100	67,100
531	52	5 01 01	375	General Liabili			4,600	4,600
531	52	5 01 01	380	Dues and Subscr			1,500	1,000
531	52	5 01 01	390	Contractual Ser			10,000	15,000
531	52	5 01 01	394	Full Cost Alloc			147,700	147,700
531	52	5 01 01	397	Bankcard Fees				1,000
531	52	5 01 02	390	Board Contingen			20,000	20,000
531	52	5 01 03	390	Contractual SErv-CIP			1,000	6,000
531	52	7 01 01	001	Port & MPF Fees Reimb			-8,300	-11,000
				SERVICES & CHARGES	508,100		466,300	483,200
531	52	5 01 01	200	Travel			2,500	2,500
531	52	5 01 01	201	Mileage			5,000	5,000
531	52	5 01 01	202	Training & Educ			2,500	2,500
				TRAVEL & TRAINING	8,000		10,000	10,000
531	52	5 01 01	510	Vehicles & Equi			5,000	10,000
				CAPITAL OUTLAY	10,000		5,000	10,000
531	52	5 01 04		Materials & Com-CG				
				MISCELLANEOUS			0	0
531	99	5 22 50		Transfers In &				
				TRANSFERS OUT TO:			0	0

				Docks Expenditures	1,417,400	1,445,300	1,398,900
				Under (Over) Budget		**(27,900)**	

Revenues

STATE REVENUES							
531	00	3 01 00		State Shared Revenues			
				STATE REVENUES		0	0
USER FEES							
531	00	3 01 00	420	Tour Sales Permit Fees		-375,000	-375,000
531	00	3 01 00	610	Cruiseship Lightering Fees		-7,800	-3,000
531	00	3 01 00	616	Loading Zone Permit Fees		-66,000	-66,000
531	00	3 01 00	620	Potable Water Fees		-100,000	-100,000
531	00	3 01 00	624	Misc. User Fees			-1,000
531	00	3 01 00	636	Shorepower Access Fees		-10,000	-10,000
531	00	3 01 00	638	IVF Moorage Fees		-8,000	-10,000
531	00	3 01 00	641	Cruiseship Dock Fees		-500,000	-500,000
531	00	3 01 00	646	Port Maintenance Fees		-400,000	-450,000
				USER FEES	-1,660,400	-1,466,800	-1,515,000
INTEREST AND PENALTIES							
531	00	3 01 00	401	Interest Income		-101,400	-101,600
531	00	3 01 00		Late Fee Interest			
				INTEREST AND PENALT	-100,000	-101,400	-101,600
RENTALS							
531	00	3 01 00		Cultural Preservation			
531	00	3 01 00		Frankling Dock Lease			
531	00	3 01 00		Taku Smokeries			
531	00	3 01 00		Other Land Lease			

				RENTALS		0	0
FEES							
531	00	3 01 00		Staff labor Fees			
531	00	3 01 00		Misc. Fees			
531	00	3 01 00		Misc. Fees			
				FEES		0	0
FINES & PENALTIES							
531	00	3 01 00		Ord. Violations			
531	00	3 01 00		Minor Offenses			
				FINES & PENALTIES		0	0
TRANSFERS IN FROM:							
531	00	3 99 00	225	Transfer In - F		-154,100	-154,000
				TRANSFERS IN FROM:	-154,100	-154,100	-154,000
				Total Revenues	-1,914,500	-1,722,300	-1,770,600
				Docks Gain (Loss):	497,100	277,000	371,700

Draft

SEAFOOD DIRECT MARKET PLANNING STUDY

3/24/2011

CBJ - Juneau Docks & Harbors Department

Our objective is to develop a coherent approach to help fishermen direct market their catch to the Juneau public; to help improve access for area residents and visitors to high quality, "right off the boat", locally caught Alaskan seafood.

This study was made possible by a grant from AFDF.

AFDF
Alaska Fisheries Development Foundation, Inc.

DRAFT

NorthWind
Architects, LLC

Seafood Direct Market Planning Study

CBJ - JUNEAU DOCKS & HARBORS DEPARTMENT

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1 – INTRODUCTION

In September of 2010 the City and Borough of Juneau (CBJ) Docks and Harbors Department was awarded a grant from the Alaska Fisheries Development Foundation (AFDF) to perform a planning study to determine the need and feasibility of developing a direct market fish sales facility. The objective of the project is to develop a coherent approach to helping fishermen direct market salmon and other seafood species to the general public. The overall goal is to improve access for Juneau residents and visitors to high quality "right off the boat" locally caught Alaskan seafood.

2 – BACKGROUND

For many years there have been discussions of providing area salmon fishermen with improved facilities from which to sell their product direct to the public. Juneau represents the largest market in Southeast Alaska, with some 30,000 residents. This represents a substantial opportunity for fishermen to sell direct for local consumption. Many locals have also expressed interest in purchasing fish directly from fishermen to ship to relatives and friends in the Lower '48. We also receive more than 1 million visitors each year. If a fishermen's

direct marketing location becomes well established, it could become an attraction for some of those visitors, and therefore adding additional direct market opportunities for the fishermen. There is already a certain amount of direct sales taking place off vessels in our harbors. However, there are problems with lack of dedicated spaces and facilities, and poor communication / advertising with the potential buying public. Typically, fishermen put up "jury rigged" cardboard signs on the highway near harbor facilities to direct customers to their sales location.

This study is a first step in understanding how the community can aid in making the connection between the seafood fishers and the buying public. It is an opportunity to not only increase higher value retail sales of seafood for the fishermen, but also enhance community awareness of the local fisheries through better access to top quality, locally harvested seafood.

3 – DIRECT MARKETER SURVEY

- Developed survey.
- Obtained list of direct marketers registered in the southeast Alaska.
- Worked with fisheries consultant to develop questions.
- Survey distributed by mail with return envelope.
- Summary of direct marketer types.

In conjunction with a local fisheries consultant, a list of questions was developed for the survey that sought to gain insight into how the direct market operations are presently working her in Juneau and how they might be improved.

The survey was mailed out to our target group consisting of all direct market fishermen in southeast Alaska that are registered with ADF&G. Surveys were distributed with stamped return envelopes to encourage participants to return the surveys. We were encouraged to receive over 1/3 of the surveys back over a two month period.

A summary of this target group was provided by one of the persons we worked with that is very active in the Alaskan fisheries community:

> The list of direct marketers was generated from a data list generated in December 2010 from the Alaska Department of Fish & Game (ADF&G) with the names and addresses of all the licensed fishermen who are direct marketers in the Juneau area, including Juneau, Douglas and Auke Bay, as well as in nearby communities (Gustavus, Haines, Hoonah, Skagway and Tenakee). 112 individuals in all - 68 in Juneau, 5 in Gustavus, 24 in Haines, 8 in Hoonah, 2 in Skagway and 5 in Tenakee.
>
> There are three classes of licenses - Catcher Processor (CAPR), Direct Marketer (DMCP), and Catcher Seller (CASO). Catcher Sellers are by far the most common (74). Catcher Sellers are essentially restricted to only sell off their vessels. I say essentially, because there is an exception if selling to a buyer (ie a grocery store or a restaurant) if that buyer has a DEC approved waiver. Also, there is some gray area as to whether a Catcher seller can deliver product to somebody so long as the sale is concluded at the boat. In the past a lot of Catcher Sellers got their permits (which are free) for the purpose of roe stripping. We will need to do some careful surveying to determine what people are doing with their permits (which have to be renewed annually) now. I suspect most get only sporadic, limited use for direct marketing sales...but, we'll find out.
>
> There are 35 DMCPs and 3 CAPRs. I would lump these all together. I know the three boats that are licensed as CAPRs and don't see what they are doing that could not be done with DMCP license, which is

considerably cheaper. In any case, all of these 38 operations are, I'd say, serious businesses that process at least minimally onboard - typically freezing, which is deemed to be processing. Again, we'll see what turns up in the survey.

Survey Results

The Survey was comprised of 2 pages with 11 questions. Of the 104 surveys mailed out, we received 35 back with all questions answered and some comments, both positive and negative. (A copy of the survey and the tabulation results are included in the Appendix.)

The Survey asked about type of seller permit, how active they were with direct sales, what type of seafood they are currently or planning to market, and if they would utilize a special area that might be set up to better facilitate their sales activities here in Juneau's harbor system. If provided with a dedicated direct market float, it was noted by the majority of the responders that they would use it to some extent.

The predominate species of seafood being sold were Salmon, Shrimp & Dungeness Crab. The primary sales seasons are Summer & Fall.

Of the four Juneau area harbors, Auke Bay's Statter Harbor was ranked first with the downtown Harris Harbor ranked next for a preferred use as a sales location. Many of the responders that were from out of town like Haines or Gustavus preferred an Auke Bay location.

Available or provided services at a direct market float – fresh water, power, cleaning table, covered customer areas – had a mixed response but appeared that if provided, they would be used. The availability of packing ice in the area as a service was not asked but may be important and should be considered in future planning.

The final main question asked about a usage fee. Although some (about 40%) indicated they would be willing to pay a fee, it was requested that it not be very much and possibly not more than a launch permit (currently under $100). Others thought that it should be included with the stall fee. One specific request was to not make it any more difficult or costly to sell. Another comment noted that this is a good service to the community and that it should not cost more, especially if the fee is difficult to pass on to the customers. Generally, an additional float use fee is not preferred.

4 – CRITERIA FOR DIRECT MARKET FACILITY

A list of criteria was generated with which to evaluate the different locations identified for a Direct Marketing Facility.

Criteria

- **Access for the boats.** How convenient or difficult is it to get to the dock? Is there room to maneuver? How many boats will it accommodate (1-8) with an average length of 45' per boat? How close to the core slips is the dock?
- **Access for the Cars.** How many access points are there off of the Highway (Egan Drive) to conveniently gain access to the dock? Is there short term, non-permit-only parking nearby?
- **Visibility to Dock.** Are the selling boats or dock visible from the highway? Can motorists see the boats and decide to turn into the harbor? Is the dock visible from the parking or some upland area that would permit viewing or an overlook to the selling activities? Can the operations be watched by incidental passersby?

- **Visibility to Signage.** Can fish sales signage be seen at or near the dock from the highway? Can a sign be located out of the highway right-of-way and still allow motorists time to turn into the harbor area? Is it a fixed fish sign or a neon flashing fish sign?
- **What is the potential for adjacent or existing services?** Is there more than one reason to go to the dock area? Is there room on the uplands areas for future facilities or structures that may be used to support the fish sales activities on the boats? Is the direct sales activities conflicting with any existing activities?
- **What other activities** can be served by the dock area? Can the dock be used for net repair, sea plane float tie ups, loading or unloading?
- **Pedestrian access.** What is the available access by walking or biking to the site? Is it accessible for public to view or community/tourist/summer view to the dock activities?
- **Existing or new facility?** If it is an existing facility, can it be put into service immediately or will there need to be a funding, design & construction time-frame?
- **Direct market dock amenities.** What is needed or preferred at the direct market dock for amenities? Water, power, ice, cleaning table, covered waiting area?
- **Upland facilities.** Is a facility needed? Is there a typical "fish market" area? Or sheltered area? Tent or building?
- **Advantages.** What are the advantages of using the designated float in this location vs. selling out of an individual's assigned slip.

It is anticipated that this list of criteria will expand & evolve over time and also that it will be useful in evaluating other floats or dock areas in the area wide harbor system for use as fisheries direct sales areas.

5 – POTENTIAL LOCATIONS

The Juneau harbor system has a number of potential locations that might support a direct market fish sales facility including Statter, Aurora, Harris, and Douglas Harbors. All of these harbors currently host some level of direct market fish sales but each has various levels of supporting elements. In an effort to focus the scope of this project to a manageable level, a review of the various harbors was undertaken to select a harbor area that has the best potential for development of a dedicated direct market fish sales facility.

Statter Harbor is currently used for direct market fish sales ~~as well~~. Fishermen typically tie up at the floats close by the main ramp. There is a limited number of free, short-term parking spaces in the immediate area but the bulk of the parking requires payment. The dock area adjacent to the ramp is heavily congested with harbor moorage users, commercial charter boat operations, and some local businesses in the area. The CBJ Docks and Harbors Department is currently in a planning effort that would significantly alter the use patterns when implemented. The direct market fish sales element should be addressed as part of this overall planning effort. For these reasons Statter Harbor was not considered for inclusion in this study.

Douglas Harbor currently features direct market fish sales but it is on a low level. Occasionally fishermen sell directly off their vessels typically at their moorage stalls. Because this is a very limited use, Douglas Harbor was not considered for inclusion in this study.

Based on the current situation at Statter and Douglas Harbors, it was determined that the focus of this study would be at Aurora and Harris Harbors. These two harbors are adjacent to each other and directly accessed from Egan Drive which is the main 4-lane thoroughfare connecting downtown Juneau and the Mendenhall Valley. The Aurora/Harris Harbor basin stretches from Norway Point at the north end, to the Juneau/Douglas

Bridge at the south end. The following discussions focus on the Aurora/Harris Harbor basin for the planning effort of a direct market fish sales facility.

4 – DOWNTOWN HARBORS OVERVIEW

Harris & Aurora Harbors are the two primary downtown harbors that were considered for a direct marketing float. These harbors stretch from the Douglas Bridge and the proposed Bridge Park area north to Norway Point. The harbor master's office and a boat service/haul-out area is located between the two harbors along with a large University of Alaska Southeast building. They two harbors and related CBJ uplands cover nearly 84 acres of land and water.

Douglas Harbor and the Intermediate Vessel Float in downtown play a minor role in the direct sales activities. Douglas Harbor occasionally has a vessel moored and selling from the dock. It appears more difficult to sign and direct customers to that more out of the way location. The IVF in downtown, rarely if ever sees boat sales at the dock. There is a fair amount of activity in the area with Taku Smokeries ice house & offloading facilities for commercial fish sales to the processing facility. Since the major fish processor is located adjacent to the IVF, direct sales is likely not preferred, but it is possible barring any CBJ preference or ordinance otherwise. The criteria could just as easily be applied or evaluated on both Douglas & the IVF float to see how they stand against the Harris/Aurora Harbor area.

- DM 1 – Bridge Park New Float
- DM 2 – Harris Harbor
- DM 3 – Aurora Harbor
- DM 4 – Norway Point

5 – EVALUATION OF EACH HARBOR SITE

DIRECT MARKET AREA – 1: BRIDGE PARK

Bridge Park: This area requires a new float and possibly new upland wharf/deck-over along the shore, and a new gangway. The existing seaplane floats will be removed. This is a good location in that it will spark development of the soon to be reclaimed industrial usage area under the bridge and the planned development of a new park area. The park is the terminus node for the proposed seawalk trail that is a new pedestrian path & elevated walk along the channels edge, and is parallel to the highway. By having the direct marketing sales dock, it provides a destination and additional purpose to the other activities at the park to draw people to the area. The location the top of the ramp can be tied into the overlaying grid patterns of the park development, tying it into the park & seawalk nodes.

A new, defined parking area can be constructed to facilitate close access to the direct market dock. It is preferred that roadways be through-streets to allow for multiple vehicular approaches to the new float. The highway access points for this site are on either side of the main Douglas Bridge roadway. **The success of this area will be greatly enhanced by having multiple, clear access points.** Fish sales signage can be incorporated into the highway access points as well as at the top of the gangway.

A review of the existing float area shows the deterioration of the float plane ramps with a smaller float off to the channel side that currently is occasionally used by commercial boats for net & rigging repair during the summer season. Float planes should still be allowed to side-tie when needed, sizing of the dock and arrangement of piles should be taken into consideration during the design.

View of existing float at Bridge.

DIRECT MARKET AREA–2: HARRIS HARBOR

Harris Harbor: We have included this location as it is an existing, frequently used & popular sales location. However, the current "loading area" that is used is only 65-feet long between boats x 12' wide, and is only accessible on the water side as there is minimal draft & maneuvering clearances on the land side of the dock. Therefore, due to the tidal variation and shallow water depths, it is really only useful on the outer side of the float. The anchoring pilings are also outboard of the dock on the back side of the float and do not allow for good moorage on that side.

Although not always clearly visible or evident, sales often occur from an individual boat moored at their assigned slip within Harris harbor. This method can work and allows the boat to be in a familiar location, but it is more of a challenge for the customers to find a boat that is not visible from the top of the ramp, or in a regular/familiar location.

Parking for this area could be reconfigured slightly to allow for short term parking directly at the top of the gangway to allow for visual connection and loading of the fresh seafood purchases in to customers' vehicles.

Signage could be installed at the top of the ramp both to indicate that this is Harris Harbor and another sign or indicator that will announce that a vessel is in port and available for sales, and possibly announcing the type of seafood available.

Harris Harbor loading zone & sales area.

DIRECT MARKET AREA—3: AURORA HARBOR

Aurora Harbor: This existing float would accommodate four fishing boats, with access on either side. The float is 12'x73'. The gangway & float are both new and in excellent condition. There is potential for signage at the top of the ramp on the existing access ramp to announce that it is both Aurora Harbor and to indicate that seafood is available for sale. This area has good visibility from Egan Drive and good vehicle access at the parking lots adjacent to the Harbor Master's office building, in the regular harbor use parking stalls. A short term loading/parking zone could be created directly above the float to allow for visibility to the selling vessel on the float. There is potential for future upland services/ facilities expansion that would support and enhance the direct market seafood sales in this area. There is fresh water and electrical power service to this float. The location for the boats is central to the harbors, and adjacent to the current ice supply source.

A downside to the use of this float for direct marketing sales is that it is currently heavily used by the Nordic Tug Charters vender and is a key component in their charter loading & maintenance operations during the summer months. During the winter months, four of the charter vessels are moored at this float.

DIRECT MARKET AREA—4: NORWAY POINT

Norway Point: This is an existing float with moderate to good visibility from Egan Drive in the inbound lanes. There is an opportunity for advertisement and signage at the top of the ramp. The float is in new to excellent condition. It is a 10'x210' wood float installed within the past 10 years. A key advantage for this location is that it is an existing and underutilized float, and could be put into service immediately as the temporarily designated direct marketing float. There are only a few boats that use this float during the summer season and 1-2 houseboats that use it during the winter.

The summer usage by the Juneau Youth Sailing classes & boating activities are located to the end nearest the gangway and are typically out of the way of the main float traffic. There is plenty of parking, and sales activities are visible from the top of the ramp and parking lot. Parking is not restricted. Seafood sales activities would not conflict with any other activities on the float. This float would accommodate up to eight fishing vessels.

There is no water or electricity to this float at present. This float is furthest from the core of the harbors for fishing vessel access and is out of the way for vehicle or pedestrian traffic; however, not impossible to access. The community is familiar with this location from its proximity to Aurora Harbor and the Juneau Yacht Club building.

Norway Point float.

7 – PROCESS, COMMENTS RECEIVED

Several in-house meetings and charrettes were held with DH staff, PND Engineers, and local fish marketing enthusiasts.

The most numerous comments on the development of the direct marketing areas were received in the written comments on the Seafood Direct Marketer Survey. A mix of positive & negative comments was received. The full results of that survey are detailed later in this report.

In conjunction with an adjacent project, the Bridge Park & Sea walk planning project, a site visit to the future Bridge Park area was organized by CBJ Parks & Rec. and was well attended. In attendance were representatives from the JEDC, Juneau Fisheries Development Committee, Alaska Dept. of Fish & Game, Juneau Docks & Harbors and several of their board members, NorthWind Architects, and the CBJ Engineering and Parks & Recreation Departments to speak and lead the tour. A summary of their desires and design work to-date in the area was explained.

8 – PUBLIC INVOLVEMENT

A presentation was made to the CBJ-Docks & Harbors CIP committee at their regular meetings in February 2011. The Juneau Fisheries Advisory Board was invited to this presentation and sent a representative. The Juneau Economic Development Council representatives have been invited to comment on the ongoing planning process as well.

Additional presentations will be made to show these plans as well as the results from the survey to both of these CBJ boards again at one of their regular meetings in late March 2011 to further discuss the possibilities for a direct marketing area and what we have discovered in our investigations throughout this exploratory planning project.

9 – EFFECTIVE SIGNAGE

Effective signage will be a key aspect of notifying & luring potential customers to the boats.

Currently, makeshift signage is taped precariously to light poles and signposts along the main highways and at major intersections.

They are also attached to parked vehicles in a roadside parking lot to announce the presence of seafood currently available at one harbor or another. We would recommend a more permanent & effective solution that would indicate the presence of vessels selling at a designated float and possibly what type of seafood they may have available.

Examples from other communities we have seen have used a narrow tower sign with some fashion of illumination. A series of these signs could be installed along the highway, but outboard of the highway right-of-way.

A common location and format is desired. A series of signs that can be turned on when a boat is selling would aid in drawing attention to the sales float. There are examples of illuminated towers at dock side locations in other communities that are used in similar fashions. A simple neon or LED illuminated sign could be placed at the head to of the gangway, or along the harbors to unify the area. Different icons for salmon, crab, or shrimp may be used to indicate types of seafood available.

10 – CONNECTION TO LOCAL MARKETS

Another avenue for the sales of seafood to the Juneau area customers is through the seasonal public or Saturday markets. Currently, these markets are held only occasionally and are small in scale, unlike the much larger and familiar example in Seattle's Pike Street market area.

Juneau's new Maritime Festival is held in May and was a success in 2010, its first year. There was a mix of maritime related booths and venders. The theme as presented by the primary organizer, the Juneau Economic Development Council (JEDC), is to support and celebrate our "Maritime History, Culture, and Commerce." Although early in the season, this is a venue that could, if nothing else, introduce the direct marketers to the public.

The Saturday Market is held in November for 3 days just after Thanksgiving. At this market there has been only a single vender selling ocean-frozen prawns.

A Farmers Market is held in August and is usually just a single day of fresh & locally grown produce or seafood.

In addition to seafood caught by fishing vessels in and around Juneau, there are sources in outlying communities that harvest seafood such as oysters that could be brought to public seafood markets when they occur. Through these partnerships with other communities, the variety of seafood offered at an event could be expanded.

Although we may be a long way from being able to support or operate a daily public farmers market similar to that found in Seattle, there may be ways to enhance what is being done with the local grocery stores to let locals know that they have a variety of fresh, locally harvested seafood available for sale.

Certainly having a tent or seasonal facility selling fresh seafood along the waterfront does not exist at present. And it would require much more infrastructure & labor to operate. It is quite a step to advance from selling the products off the boat - out of the hold & into a bag - to selling out of a fully staffed facility with lights, power, water and ice similar to that found at a Pike Street Public Market type of facility. Permits change and become more expensive if this work is done by the fishermen themselves. A system like a coop or completely separate business may need to be set up to handle this type of operation.

For now, if we can accommodate and enhance the operations of the fishermen selling directly off the boats, we would be meeting our initial goal and improving the existing service to the community. From the survey, we saw that many of the responding persons anticipated starting or enhancing their direct market selling in the upcoming season.

An upland **dock area** could be used to set up fish & seafood sales tents, allowing the sales to expand off the boats if desired. This would allow vessels to offload fish and have it sold in a 'market' setting. This would depend on having a facility that can be permitted by DEC & what is allowed by other permits held by the

fishermen. This adds another layer to the seafood sales program having an on-shore sales facility. No local fish market exists like this at present, but could be included in planning for future consideration as the seafood sales programs develops and new dock facility options are planned.

Seafood markets away from the boats.

14 – SUMMARY

In reading through the marketing reports, guidelines and informational training documents, direct market catching & selling appears to be a broad business. All of the manuals talk about the quality of the product, the gear used to catch & process, and what is required for the business end, branding or marketing end, but not how or where the exchange occurs. For the fishermen, the ultimate connection to the customer is the point of sale where the product meets the customer at the dock.

For the City & Borough of Juneau Docks & Harbors Department, the organization who owns & operates the docks and controls the majority of the waterfront with a public connection, they are the ones that are providing that platform for these sales to occur. How can CBJ help? What can CBJ do to assist this growing corner of the market; to improve these connections to the water and the platforms for the boats to either sell or offload their product in a way that enhances the transaction?

This is what we have begun to develop here in this study. We have looked at the need and we have looked at the existing facilities and how they may or may not work to provide a platform for direct market sales.

We have looked at what the possibilities are and what will be required to put one or more of the sites into operation. We have looked at how to enhance the connection between consumer and the fishermen selling their products.

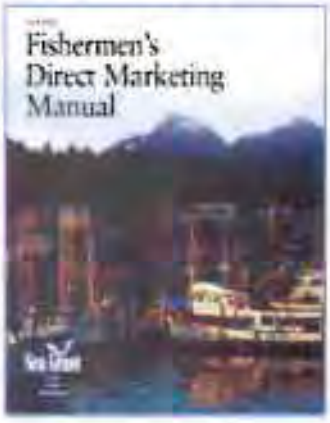
15 – NEXT STEPS

Text.....

APPENDEX

Applicable Regulations and Direct Marketing References

Several documents were readily available that guide a potential direct marketer through the process of getting a permit to sell, and also to manage the business once it is up & running. The primary permit that was held by the folks that responded to the survey was a permit that restricted sales to the boat. Very few held permits to sell their products off boat or away from the dock.



In order to best accommodate the fishermen in their sales efforts, providing a formal location with enhanced signage, visibility and safe float accommodations would be to provide a common location where they can sell directly off the boat.

LINKS TO DOCUMENTS ON DIRECT MARKETING:

Fishermen's Direct Marketing Manual:

Alaska Direct Marketing Fisheries application:

State of Alaska, Office of Fisheries Development:

JUNEAU AREA FISHERIES - DIRECT MARKETING SURVEY

Dear Juneau Area Direct Marketer,

With a population of 30,000 people Juneau is the largest market in coastal Alaska where fishermen can interact directly with the buying public. Many fishermen already sell to the public within the **Juneau harbor system**. But, the situation is far from ideal. Jockeying for positions in loading zones with competing harbor uses... posting makeshift signs on the highway...selling from stalls that are a long walk from parking lots... *These things don't make your selling job easier, and discourage the buying public. We'd like to help!*

Now, with the help of a planning grant from the **Alaska Fisheries Development Foundation**, the *City and Borough of Juneau's Docks and Harbors Department* is investigating the idea of incorporating **dedicated facilities** in the harbor system where fishermen can sell direct to the public.

Your answers to a few questions can help us focus our efforts! Please complete the following questionnaire and mail it back to us (postage paid) as soon as you can.

Thanks for your help!

Name _____ (optional) Vessel Name _____ (optional)

Length _____

1.) What type of direct market license / permit do you have? (check all that apply)
☐ Catcher Seller ☐ Direct Market Vessel ☐ Other _____

2.) What is your status as a direct marketer?
☐ Permitted but not active – in the planning stage
☐ Direct marketing is just a sideline to my regular fishing activity
☐ Direct marketing is an important part of my fishing business

3.) What species do you direct market now, or plan to direct market in the future?

Salmon	☐ Market now	☐ Planning to market
Halibut	☐ Market now	☐ Planning to market
Dungeness crab	☐ Market now	☐ Planning to market
King crab	☐ Market now	☐ Planning to market
Shrimp	☐ Market now	☐ Planning to market
Other fish _____	☐ Market now	☐ Planning to market
Other Shellfish _____	☐ Market now	☐ Planning to market

4.) Do you use the Juneau harbor system in your direct market activities?
☐ No
☐ Yes. I sell directly off my boat.
☐ Yes. I moor in Juneau, but conduct direct marketing activities away from my boat.

5.) If you sell off your boat, during what season(s) and how frequently do you do so?

Winter (Dec, Jan, Feb)	☐every week	☐few times per month	☐seldom	☐never
Spring (Mar, Apr, May)	☐every week	☐few times per month	☐seldom	☐never
Summer (Jun, Jul, Aug)	☐every week	☐few times per month	☐seldom	☐never
Fall (Sep, Oct, Nov)	☐every week	☐few times per month	☐seldom	☐never

6.) If Juneau created a dedicated direct marketing float, how likely is it that you would you use the facility?

☐ Very likely ☐ Somewhat likely ☐ Not very likely ☐ I would not use it

If you answered "I would not use it" to Question 5, please move to the final item, number 10 and give us any additional comments you may have. Thanks.
If you are "Very likely", "Somewhat likely" or even "Not very likely" to use the facility, we would appreciate your answers to a few more questions.

7.) CBJ Docks and Harbors is analyzing several possible sites for a direct market facility. What is the best site from your perspective? Please rank the following options in order of favorability. (1 being most favorable)

☐ Auke Bay / Statter Harbor ☐ Aurora Harbor ☐ Harris Harbor ☐ Douglas Harbor
☐ Other _____

8.) Have you direct marketed in other communities? ☐ Yes ☐ No
If "yes" Have you had good or bad experiences with it? Are there good examples of docks or locations that worked particularly well, or particularly poorly? Please comment_____

_____

_____

_____

9.) Are there dock accessories that would be handy?

Cleaning tables	☐very important	☐somewhat important	☐not important
Shore power	☐very important	☐somewhat important	☐not important
City Water	☐very important	☐somewhat important	☐not important
Customer covered area	☐very important	☐somewhat important	☐not important

Other_____

_____

_____

10.) Would you pay a fee for use of a direct marketing facility? ☐ Yes ☐ No
If you answered "Yes" please give us your thoughts on a fair fee structure. If you answered "No", why do you think a user fee is not justified?_____

_____

_____

_____

_____

11.) If you have additional comments or ideas, please lets us know._____

_____

_____

_____

_____

_____

Place your completed survey in the self-addressed stamped envelope provided, and return it to us by January 30, 2011.

Thanks again for your help!

*If you would like to be kept **up to date** on this project, please provide your name & address:* _____

JUNEAU AREA FISHERIES - DIRECT MARKETING SURVEY

Updated: 2/22/2011

Results

0 Boat Length:

<20-30	30-35	36-39	40-45	46-50+
3 of 33	8 of 33	8 of 33	8 of 33	4 of 33

1 What type of direct market license / permit do you have?

Catcher Seller	17
Direct Market Vessel	5
Other	3
Both	8

2 What is your status as a direct marketer?

Permitted but not active – in the planning stage	3
Direct marketing is just a sideline to my regular fishing	13
Direct marketing is an important part of my fishing business	14
None	11

3 What species do you direct market now, or plan to direct market in the future?

	Now	Planning
Salmon	20	7
Halibut	3	3
Dungeness crab	6	3
King crab	1	1
Shrimp	5	4
Other fish	0	2
Other Shellfish	2	1

4 Do you use the Juneau harbor system in your direct market activities?

No.	13
Yes. I sell directly off my boat.	17
Yes. I moor in Juneau, but conduct direct marketing activities away from my boat.	7

5 If you sell off your boat, during what season(s) and how frequently do you do so?

	Week	Month	Seldom	Never
Winter	0	4	2	2
Spring	1	5	2	2
Summer	4	10	11	1
Fall	1	9	14	1

6 If Juneau created a dedicated direct marketing float, how likely is it that you would you use the facility?

Very Likely	12
Somewhat likely	11
Not very likely	8
I would not use it	2

7 CBJ Docks and Harbors is analyzing several possible sites for a direct market facility. What is the best site from your perspective? Please rank the following options in order of

Auke Bay / Statter Harbor	20
Aurora Harbor	3
Harris Harbor	6
Douglas Harbor	0
Other	4

8 Have you direct marketed in other communities?

Yes	13
No	20

If "yes" Have you had good or bad experiences with it? Are there good examples of docks or locations that worked particularly well, or particularly poorly?

9 Are there dock accessories that would be handy

	Very	Some	Not
Cleaning tables	12	6	8
Shore power	14	9	9
City Water	13	5	6
Customer covered area	13	8	6
Other	0	0	0
None	7		

**Scale

10 Would you pay a fee for use of a direct marketing facility?

Yes	14
No	17

If you answered "Yes" please give us your thoughts on a fair fee structure. If you answered "No", why do you think a user fee is not justified?

(Yes)

"A permit to operate fee should be required."
"Per day fee- may $10.00 extra or $25.00 per reservation."
"The same fee as we pay now on the transit dock.
"Based on length of vessle and time used is probably best. If based on dollar amount on product it will be avoided, too intrusive for most."
"This all depends! Harbor fees are very expensive now."
"It would depend on the amount of product processed, water usage, convenience for selling and amount of time facility would be tied up."

"One time rate, a year is only option like boat launch. Fishermans are already penalized for doing business in CBJ by CBJ tax that does not apply on the fishing grounds. Tax only applies weh a person comes back to Juneau to sell fish."
"Fee would have to be nominal or I'll sell from my my ship."
"Regular moorage rate."
"Maybe a one time permit $75.00/ Business."
"Daily fee to help maintain site."

(No)

"Because you could just tie in the transient area and sell from there."
"We can already sell at the loading zones, I would not agree to a price.
"Maybe, it depends again, I have an established enough customer base that I could do direct deliveries, if need be lie if it was not economical for me to pay the fee."
"Juneau Harbors charges for everything and doesn't really do much to help commercial fisherman and when they try to they always go overboard. Give us a simple drive down a dock in Harris instead."
"I cant charge enough to customers to justify an additional fee. The only reason to direct market is for more income, the extra work and risk involved in direct marketing have to be worth my time and effor."
"I do not do very much Direct Marketing and couldn't afford to pay a lot. I Direct Market mostly as a service to the community it is a lot more work and not a lot of money."
"I believe that if wouldn't cost much once set up and we already pay harbor fees also it adds to the community and harbor visitors to our state love this kind of thing."
"I already pay marketing fees."

"This is a thing that benefits the people of Juneau it is a bonus for the costumer to be able to get this make my day and make it harder to sell fish to my friends and neighbors for "cost" and it only hurts the people of Juneau."

11 If you have additional comments or ideas, please lets us know.

"Reserved moorage - Ability to call and reserve on way into Auke Bay. High visibility essential."

"Parking for free for folks buying fish."

"The city geraly makes things more expensive and difficult I hope they focus on affordability more than frills."

"Auke Bay has confiscatory moorage rates for commercial vessels."

"I think its great you all are looking into this its id done other places successfully."

"As with everything the harbor does. They will charge too much and over regulate it and will kill direct marketing in Juneau."

"Frankly I don't think there is enough of this type of activity in Juneau to warrant a designated area, at least not during the times that I'am present. Most of my experience is with Auke Bay Harbor and that harbor is mostly empty in fall/winter. I also think that creating a designated area would commercialize the process of buying and selling more. That would run the risk of negatively changing the experience for customers."

"Sounds good for the buying public, fisherman and other harbor users wont interfer with other users trying to work or carry stuff back and forth."

"Juneau Harbors always wants a fee and over does it, maybe we should take care of what we have or create some kind of signage to show what kinds of fish products are for sale and in what areas of the harbor."

PORT ENGINEER'S PROJECT STATUS REPORT

Gary Gillette, Port Engineer

Project	Status	Schedule	Contractor	Notes
Auke Bay Loading Facility - Phase I				
Conveyance - ADNR Land - Facility	Submitted	Spring 2011		Awaiting survey for land conveyance
Conveyance - ADNR Land - Mitigation	Submitted	Spring 2011		Preparing application amendment
Modification to CU for fuel bunkering				Preparing Planning Commission application
Auke Bay Loading Facility - Phase II				
Construction	In Progress	Feb 2011-Aug 2011	SE Earthmovers	
Douglas Floating Breakwater	Construction	Spring 2011	Trucano	Corps funded project
Old Douglas Harbor Reconstruction				
Permitting	Hold	Winter 2010/11	PND	Preparing further documentation per Agency request
Final Engineering and Design	Design	Winter 2010/11	PND	Hold for permit
Construction		Fall 2011		
Statter Harbor Launch Ramp				
EA Process	In Progress	Winter 2010/11	PND	Completing response to agency request for more info
Conveyance - DNR Property at Glacier	In Progress	Winter 2010/11		Survey in progress
Conveyance - DNR Tideland	In Progress			Application Submitted - Awaiting response
Demolition of Lehnart House	Complete		Channel Const	Awaiting final invoice from contractor
Permitting	Hold	Winter 2010/11	PND	Awaiting EA completion
Final Engineering and Design	Hold	Winter 2010/11	PND	Awaiting EA completion
Begin Construction		Fall 2012	TBD	Awaiting fulll funding
Statter Harbor Moorage Improvements				
Design	In Progress	Summer 2011	PND	
New Cruise Berths				
Final Design/Bid Documents		Spring 2011	PND	Awaiting Board and Assembly Approval
Preliminary Design Services	In Progress	Winter 2010/11	PND	
Geotech Investigation	In Progress	Winter 2010/11	PND	Awaiting report
Fishermen's Memorial				Evaluating response from Memorial group to move
Port-Customs-Visitor Center Project				
Phase I - Port/Customs Building	Construction	Oct 1, 2010	NPE	On Schedule
Phase II - Visitor Center	Hold	Oct 1, 2011	NPE	
Visitor Center Demolition	Hold	Oct 1, 2011	NPE	
1% for Art	In Progress	March 16, 2011		Awaiting Selection Panel meeting
Cruise Staging Area Reconfiguration	Design	Fall 2010/11	PND	
City Project Review		April 12, 2011		Awaiting decision by Planning Commission
Cathodic Protection	Design	Fall 2010	Tinnea & Assoc	Awaiting inspection report

PORT ENGINEER'S PROJECT STATUS REPORT

Gary Gillette, Port Engineer

Harbor Upland Improvements	Construction	Winter 2010/11	Admiralty Const.	Awaiting final inspection and acceptance
Aurora Harbor Reconfiguration				
Municipal Harbor Matching Grant	Application	July 15, 2010	PND	Submitted application for $2M-Awaiting legislative approval
Norway Point Net Float	Design	Plans Complete		No funds to construct - Est. $50K+/-
Cruise Dock Restroom Study	In Progress		JYL	
Archipelago Property Purchase	In Progress			Lands Department is leading the process
Fishermen's Sales Facility Study	In Progress	March 31, 2011	Northwind	Awaiting comments on draft report
Statter Harbor Site Furniture	Planning			Work with Dwight on site options
New USS Juneau Memorial	Planning			Identify support group
Marine Services Center	Programming	Spring 2011	Northwind	Awaiting contract amendment

CITY AND BOROUGH OF JUNEAU DOCKS AND HARBORS
CIP ACCOUNTS SUMMARY
As Of March 15, 2010

CIP #	Project	Revenues	Expenditures & Encumberances	Balance	Notes
H354-79	**Amalga Harbor Launch Ramp Upgrade**				Project Complete
	ADF&G Grants	$2,536,000.00	$2,469,205.00	$65,795.00	Funds to be returned to ADF&G
	Harbor Funds	$300,000.00	$327,999.00	($27,999.00)	Fund transfer needed to close account
H354-84	**Douglas Harbor Phase III**				Breakwater
	ADOT Breakwater MOU	$800,000.00			
	2003 GO Bond	$3,500,000.00			
	2003 GO Bond Interest (yet to be appropiated)	$67,145.00			
		$4,367,145.00	$4,306,986.00	$60,159.00	
H354-74	**Auke Bay Loading Facility-Phase I**				Mitigation Phase
	ADCCED Grant	$50,778.00			
	Denali Commission	$1,000,000.00			
	FY01 Marine Passenger Fees	$100,000.00			
	FY02 Marine Passenger Fees	$411,500.00			
	FY02 Harbor Funds	$175,000.00			
	FY02 Dock Funds	$175,000.00			
	FY04 Marine Passenger Fees	$50,000.00			
	FY05 Marine Passenger Fees	$300,000.00			
	FY05 Dock Funds	$150,000.00			
	FY06 Marine Passenger Fees	$500,000.00			
	FY08 F326	$4,411,351.00			
	FY09 Harbor Funds	$292,514.00			
	FY11 Harbor Funds	$130,000.00			
	2003 GO Bond	$3,250,000.00			
	2003 GO Bond Interest	$328,598.00			
		$11,324,741.00	$11,209,065.00	$115,676.00	
H354-85	**Juneau Harbors Deferred Maintenance**				Old Douglas Harbor Re-Build
	ADOT - Bonds for Harbors	$7,047,810.00			
	ADF&G Coop #04-003	$180,000.00			
	ADF&G Coop #05-071	$900,105.00			
	NFF In-Kiind Douglas Pump-out	$73,000.00			

CITY AND BOROUGH OF JUNEAU DOCKS AND HARBORS
CIP ACCOUNTS SUMMARY
As Of March 15, 2010

	FY02 Harbor Funds	$13,508.00		
	FY06 Marine Passenger Fees	$500,000.00		
	FY06 Harbor Funds	$15,606.00		
	FY08 F326	$4,411,351.00		
	FY99 Temp Sales Tax	$6,631.00		
	2003 GO Bonds	$2,500,000.00		
	FY2003 GO Bond Interest	$40,000.00		
		$15,688,011.00	$11,823,591.00	$3,864,420.00
H354-93	**Statter Harbor Improvements**			New Launch Ramp
				Statter Float Repairs
	FY08 ADF&G Grant	$900,000.00		
	DCCED Grant	$800,000.00		
	FY06 Marine Passenger Fees	$250,000.00		
	FY07 Marine Passenger Fees	$250,000.00		
	FY09 1% Prop 2 Sales Tax	$2,500,000.00		
	Sales Tax	$400,000.00		
	FY11 Temp 1% Sales Tax	$3,804,600.00		
		$8,904,600.00	$1,867,070.00	$7,037,530.00
H354-95	**Cruise Ship Berth Enhancements**			New Cruise Berths
				Port/Cusotms/Visitor Center
				CT Staging Reconfiguration
	DCCED 09 Grant	$1,500,000.00		
	DCCED 10 Grant	$2,500,000.00		
	DCCED 11 Grant	$9,000,000.00		
	FY02 Port Development Fees	$20,124.00		
	Fy03 AW Sales Tax	$3,018.00		
	FY03 Docks	$9,755.00		
	FY03 Port Development Fees	$203,043.00		
	FY05 Docks	$24,194.00		
	FY06 Docks	$30,000.00		
	FY07 Docks	$32,280.00		
	FY08 Marine Passenger Fees	$1,000,000.00		
	FY09 Marine Passenger Fees	$379,520.00		
	FY09 Marine Passenger Fees	$924,200.00		
	FY09 Port Development Fees	$1,750,000.00		
	FY10 Marine Passenger Fees	$1,443,800.00		
	FY10 Port Development Fees	$1,750,000.00		
	FY11 Marine Passenger Fees	$1,023,900.00		

CITY AND BOROUGH OF JUNEAU DOCKS AND HARBORS
CIP ACCOUNTS SUMMARY
As Of March 15, 2010

	FY11 Port Development Fees	$1,500,000.00			
		$23,093,834.00	$11,254,121.00	$11,839,713.00	
H354-96	**Cruise Ship Tug Moorage Rehabilitation**				Aurora Harbor Re-Build
	FY08 Marine Passenger Fees	$500,000.00			
		$500,000.00	$0.00	$500,000.00	
H354-97	**Landing Craft & Security Cameras**				Harbor Security Cameras
	Federal Security Grant	$219,000.00	$140,066.00	$78,934.00	
H354-99	**Auke Bay Loading Facility - Phase II**				ABLF - Phase II
	TIGER Grant	$3,640,000.00	$2,602,360.00	$1,037,640.00	