



MEETING MINUTES – AQUATIC

PROJECT NAME: **Ketchikan Aquatic Center**

JOB NO.: **10015.01**

DATE: **April 20, 2010**

ATTENDEES

Name	Title	Company
Dan Bockhorst	Borough Manager	KGB
Agnes Moran	Borough Assembly Member	KGB
Todd Phillips	Borough Assembly Member	KGB
Jonathan Lappin	Lands Manager, Planning Dept.	KGB
Karen Taylor	Aquatic Supervisor, Parks & Recreation	KGB
Wendy Mackie	Supervisor, Parks & Recreation	KGB
Ericka Rud	Asst. Aquatic Supervisor, Parks & Recreation	KGB
Scott Brandt-Ericksen	Borough Attorney	KGB
Mike Houts	Finance Director	KGB
Mike Carney	Airport Manager/ Public Works Project Manager	KGB
Dan Kelley	Public Works	KGB
Joe May	Public Works	KGB
Martin Reichgott	Killer Whales Swim Club	Ketchikan School
Kent Crandall	Project Manager	RISE Alaska
David Moore	Architect PM / PIC	Architects Alaska Inc
Larz Hitchcock	Architect PA / LEED AP	Architects Alaska Inc
Doug Cook	PE / LEED AP	Counsilman Hunsaker

- 1) On 20 April 2010 the listed attendees met to discuss the following:
 - A. Introductions
 - B. Project Overview
 - C. Aquatics Program

- 2) The following discussion occurred (← indicates action items):
 - A. Introductions.

 - B. Project Overview
 - (1) Broad Goals & Objectives



- (a) KGB distributed Exhibit A: Scope of Services for Architectural and Engineering Services for the KGB Aquatic Center.
- (b) The RFP was briefly discussed, all parties knowledgeable of the document.
- (2) Identification of key user groups/ stakeholders.
 - (a) Steering Committee was identified as the decision makers for the project.
 - (b) Emphasis put on open communication and expediency for resolution of action items.
 - (c) KGB to put drawings and other information on the web for public review.
- (3) Schedule of Meetings
 - (a) The purpose of these April 21-22 workshops is to facilitate fact finding and documentation of existing conditions for creation of the project program.
 - 1. Aquatic Design Considerations – Tuesday, April 20th, 1-4pm
 - 2. Programming – Wednesday, April 21st, 8-11:30am
 - 3. Site Design – Wednesday, April 21st, 1:30-4:30pm
 - 4. Executive Summary – Wednesday, April 21st, 4:30-6:00pm
 - (b) Thursday, May 6th, 1-5pm Program Review, Preliminary Site Layout & Building layout diagrams
 - (c) Thursday, May 6th, 5:00-6:30pm, Executive Summary
 - (d) Thursday, June 11th, Submittal for KGB, DEED & Cost Estimation Reviews
 - (e) Thursday, June 24th, 1-4pm Schematic Design Presentation
 - (f) Thursday, June 24th, 4:00-5:30pm, Executive Summary
- (4) Construction Budget
 - (a) Brief review of project budget, \$23.5 million, \$18.4 million construction cost.
 - (b) Existing Recreation Center building has a roofing issue and ideally will receive a new roof at the same time as the new facility. This is a separate cost from the project budget.
 - (c) There may be other funding available to resolve some site issues in the school / maintenance areas TBD. ←

C. Aquatics Program

- (1) Uses:
 - (a) Recreational Swimming
 - 1. Recreation pool should have lane lines
 - 2. Poolside seating for parents/users would be ideal (50+/- people)
 - (b) Swimming Lessons
 - (c) Lap Swimming (8 Lanes – 25 yards is typical but 25 meters would be nice)



- (d) Wellness / Fitness / Water Aerobics / Arthritis Class
- (e) Organized Water Exercise
- (f) Scuba Training
- (g) Kayak / Canoes
- (h) Organized Water Sporting Events (Current Swim Meets & Future Diving Meets)
 - 1. 300-350 Spectators with elevated seating for better view
 - a. Discussion of line of sight limitations. Higher seating is not always optimal for viewing, design team to review. ←
 - b. Seating should be durable. Some felt concrete benches would suffice, but for comfort most agreed a topping over the concrete would be preferred.
 - (i) Water Volleyball / Basketball
 - (j) Life Boat Training
 - (k) Log Rolling
- (2) User Groups:
 - (a) Lifeguard Training
 - (b) Swim Team Training (130 People)
 - (c) Rentals (up to 30 people)
 - (d) Coast Guard / Cruise Ship Training / Law Enforcement
 - (e) Senior Activities
 - (f) Disabled Peoples Activities (6-8 People)
 - 1. Ramps – PRO: ease of use, safest option CON: Takes a lot of room from pool.
 - 2. ADA stairs – Used in current facility and have worked fairly well.
 - 3. Booms – Mobile booms are convenient, but age faster. Fixed locations do not allow for flexibility but are more dependable and last longer.
 - 4. **KGB prefers the latter two options (ADA stairs and Fixed Booms)**
- (3) Features:
 - (a) Pools
 - 1. Competition Pool (8 Lanes – 6,800+/- Square Feet) 78-82°.
 - 2. Recreational Pool (3,200+/- Square Feet) 88-90° It is noted this water temperature is slightly higher than an average recreational pool but this is due to the amount of children, seniors and disabled people using the facility.
 - 3. Two diving boards – one at 1 meter and another at 3 meters are a must. After reviewing various design configurations, all agreed a fixed stair at a gentle rise/run is preferred and the slide element could be tied into this system.



4. Slide – also a “must” feature of the recreational pool.
- Doug Cook presented various pool features. The committee’s reaction is noted after the item:
 5. Dripping Elements / Sprinkler – No one saw value to these.
 6. Spa – No.
 7. Sauna – Yes (8+/- people).
 8. Suburban / Urban Design Features – No comments.
 9. Space Saver Slides – No.
 10. Drop Slide – Several people expressed interest, but noted this requires deeper water . Designers should consider a platform possibly with two slides, one a drop-side into diving area and one into the recreation pool.
 11. Family Slide – “Not likely, space eater”.
 12. Vortex – Numerous people liked this, community space / fun, can be used as a volleyball space (If using the larger vortex model).
 13. Current Channel – “No, takes too much room.”
 14. Play Features – Several people expressed these play features are great for younger kids and would be a strong draw feature for the recreational pool. In particular KGB likes the “tipping bucket” play feature.
 15. Static Features – They had mushrooms in previous facility and were ok with them.
 16. Floatables – No comments.
 17. Underwater Shelf – Everyone liked this and felt it was great feature for training kids.
 18. Zero Depth Entry – Generally approved, but concerns over space.
 19. Sprayer and Wet Decks – Cool response to these items.
 20. Climbing Wall – Numerous people liked as this feature would be a draw to older kids. General consensus was that this feature was liked as a movable feature.
 21. Ziplines and rope swings – few liked, most saw this as liability.
 22. Water Agitator – helps divers to see surface; all agreed it was a good idea.
 23. Air Bubbler – “softens” diving by introducing air into the pool. KGB willing to explore this as an option.
- (b) Configuration: Several design options were presented:
 1. L Shaped pool- KGB was familiar with and likes this configuration.
 2. 25 Yard x 25 Meter pool – very flexible, allows possible competitions with Canadian teams – KGB showed interest in this as a design possibility.

3. Stretch 25 – Movable bulkhead with air bladder– Several people liked, others expressed concern about kids swimming under bulkhead, extra lifeguard duty, and more movable parts for wear and tear. Group agreed that due to site constraints, both the ‘L’ shape or box shaped (25y X 25m) may not be as effective a use of space and thus would be willing to consider the Stretch as an option. KGB’s preferred layout is an L-shape pool.
4. Lane width: Minimal lane width is 7’ with 9’ max. After some discussion, **it was decided 7’-6” would be typical lane width and 8’-6” would be used for the side lanes.**

(c) Other Items:

1. Timing System: Existing system is aging and may not handle 8 swimmers. It was agreed rather than try to repair / update existing to provide a new system.
2. PA: Ideally the PA speakers could be switched from one pool to another or both. Speakers also needed in restrooms and locker rooms. Flexibility in design desired and additional conduit for future features appreciated.
3. Starting Blocks – KGB prefers double leg starting blocks.
4. Seating – KGB agreed that fixed seating (built-in instead of movable) was preferred due to longer life / less maintenance.

(d) Pool Mechanical Systems:

1. Gutters:
 - a. Deck Level - 20” depth, Easy pool access, but creates wetter deck
 - b. Roll Out – 20” depth, 5” drop from deck, dryer deck
 - c. Fully Recessed – Dry Deck, but harder to exit pool
 - d. Recessed with Parapet – Roll out with recessed feature
 - e. Stainless Steel – Captures surge, can act as a feed, requires maintenance, 20 year life
 - f. Concrete- long life, less aesthetic

KGB decided concrete roll out is the preferred gutter system.

2. Pools:
 - a. Aluminum – limited life span, easy install
 - b. Prefab – very easy install, economical, short life span
 - c. Concrete – durable

KGB decided on concrete pools.

3. Sanitizing systems:

NOTE: ALL cleaning systems require chlorine in water for cleaning at source. While UV and Ozone cannot be used as the primary treatment of the

pool, they can be added elements to reduce chloramines from the pool and thus making the water and air cleaner.

- a. Liquid Chlorine – Dillutes over time, classified as an irritant.
- b. Chlorine Pellets – Long shelf life, is corrosive.
- c. Chlorine Gas – Extremely corrosive, typically not allowed by health dept.
- d. Salt water pool – chlorine is generated within the water but require larger amounts of treatment / larger storage, more maintenance.
- e. UV System – augments the above by removing chloramines from water, improves indoor air quality (especially just above pool surface).
- f. Ozone- Very effective. but very expensive.
- g. Co2 or Muriatic Acid – depends on Ph of water. Current pool has Co2 (preferred) but water of new facility is currently unknown. KGB to have water information sent to design team. ←
- h. KGB requests a white paper on cleaning systems, Counsilman Hunsaker to provide by next meeting. ←

General Consensus was a pellet system with UV add-on. This solution will have the least maintenance while creating the cleanest water.

4. Filtration System to be automated
 - a. High Rate Sand takes room, but is standard system in older pools
 - b. Regenerative Media Filter is newer technology and takes less room, to date has great track record. **KGB interested** in this as a potential system. **KGB wants** separation of chemical and filter rooms for design.
5. Covering Systems:
 - a. Automated: KGB has a bad history with these systems.
 - b. Manual: All agreed that the cost savings of the system should be looked at in terms of the cost of the labor to implement this system. ←
6. Pool Deck:
 - a. Tile: KGB has a bad history with tiles and does not want additional maintenance.
 - b. Concrete: All agreed concrete to be used, can have color, textures.
7. Electrical Systems:
 - a. Everyone agreed NO underwater lights
 - b. Pace clocks are a must.
 - c. Timing system to be roughed in below pool deck.
 - d. Record board required.



The proceeding indicates the events of the meeting to our understanding. The noted attendees are asked to review the information and submit any omissions or corrections, no later than the 5th working day after issuance of these meeting minutes.

Sincerely,
Larz Hitchcock
Registered Architect (AK) / LEED AP (BDC)

Cc: Dan Bockhorst, RISE Alaska, Consultants, File



MEETING MINUTES – GENERAL FACILITY REQUIREMENTS

PROJECT NAME: **Ketchikan Aquatic Center**

JOB NO.: **10015.01**

DATE: **April 21, 2010**

ATTENDEES

Name	Title	Company
Dan Bockhorst	Borough Manager	KGB
Amy Briggs	Administrative Asst. Lands, Planning Dept.	KGB
Jonathan Lappin	Lands Manager, Planning Dept.	KGB
Todd Phillips	Borough Assembly Member	KGB
Karen Taylor	Aquatic Supervisor, Parks & Recreation	KGB
Wendy Mackie	Supervisor, Parks & Recreation	KGB
Ericka Rud	Asst. Aquatic Supervisor, Parks & Recreation	KGB
Scott Brandt-Ericksen	Borough Attorney	KGB
Mike Houts	Finance Director	KGB
Dan Kelley	Public Works	KGB
Joe May	Public Works Director	KGB
Kent Crandall	Project Manager	RISE Alaska
David Moore	Architect PM / PIC	Architects Alaska Inc
Larz Hitchcock	Architect PA / LEED AP	Architects Alaska Inc
Ed Peck	Electrical PE	AMC
Mark Langberg	Mechanical PE	AMC
Greg Bjork		KGB

- 1) On 21 April 2010 the listed attendees met to discuss the following:
 - A. Introductions
 - B. Architectural Program Requirements
 - C. Mechanical Program Requirements
 - D. Alternative Energy Analysis
 - E. Electrical Program Requirements

- 2) The following discussion occurred (← indicates action items):
 - A. Introductions.

 - B. Architectural Program Requirements
 - (1) Summary of Building Spaces (What spaces are needed)
 - (a) Addition to the Children's Area in existing building



- (b) Addition to reception desk (“oval office”)
- (c) Addition to storage near ball courts (Eliminate Storage under stair)
- (d) Work area (Pool Reception)
- (e) Natatorium (Pools)
- (f) Spectator Seating
- (g) Locker Rooms
- (h) Restrooms
- (i) Showers
- (j) Family Changing Rooms
- (k) Sauna
- (l) Classroom
- (m) Break Room / Swim Meet Prep Room / Judges Area
- (n) Swim Club Office
- (o) Fitness Room
- (p) Pool Mechanical Room
- (q) Pool Chemical Room
- (r) Janitors Closet
- (s) Pool Storage
- (t) Mechanical
- (u) Fan Room
- (v) Electrical / Communications Room

(2) Individual Room Requirements

AAI to create Room Functional Data Sheets (These itemize the requirements of each room) ←

C. Mechanical Program Requirements

(1) Heating

- (a) **KGB prefers Weil-McLain boilers and Grundfos pumps.** These will be basis of design.
- (b) In floor radiant heat is preferred throughout; air system is required in pool but radiant heat would be nice if it is affordable.

(2) Ventilation

- (a) **KGB expressed no preference of fan system.**

(3) Building Automation

- (a) Direct Digital Control (DDC) system in existing building is currently from Control Contractors Inc. (CCI). CCI may require a system-wide upgrade (current system is 13 years old). KGB is open to other systems (Seimens, Johnson Controls, etc.). Sole source vs. competitive bid for controls (and other items) was discussed.
- (b) Automatic systems vs. conventional systems:
 - 1. Automatic systems have a higher level of performance, but require personnel with training to use it.
 - 2. Service for most building automation systems is better from Seattle.
 - 3. Quality vs. Service is a real consideration. (Ideally both!)



4. Networked system in Public Works is DDC.
5. Electrical lighting controls can be tied into an Automatic system, including photosensitive controls (the ability to detect light levels and adjust which fixtures are on/off).

(4) Plumbing

- (a) Water Softening is not required.
- (b) There is good water pressure from 1 million gallon tank. Pressure reducing station may be needed.
- (c) Water Drainage will not happen through the strainer; pool will have a separate drain system.

(5) Fire Protection

- (a) Wet Sprinklers will be positioned throughout new facility
- (b) KGB is open to the possibility of utilizing the pool systems as a water source for fire trucks, but it will require automation tie-ins to shut off equipment. This option may not be feasible from a cost perspective, but will be considered and determined.

D. Alternative Energy Analysis

(1) Ground Source Heat Pumps (GSHP)

- (a) Analysis of pool building heating loads is not yet accomplished, but here are a few data points for reference:
- (b) Due to site constraint, this would likely need to be a vertical system.
- (c) Drilling for vertical GSHP system typically requires depth of 200-300', to get 1 ton of heating.
- (d) Bedrock is short distance below grade, which will impact drilling costs.
- (e) To produce 100 tons (1.2 million BTUs) there would need to be about 100 holes drilled. 100 wells would require roughly $\frac{3}{4}$ acre of land, as well spacing needs to be 15-25 feet apart, typically 20 feet.
- (f) Building loads will be a multiple of the 100 ton increment.
- (g) Wells should not be located under a building. It is possible (but not ideal) to have them under the parking lot. The further the wells are located from building, the greater the reduction of the efficiency of the system.
- (h) Joe May asked about installing a vertical system sideways into the hillside.
- (i) GSHPs could affect electrical utility loads.
- (j) All agreed that the numbers should be crunched to verify the feasibility of this system but not optimistic due to the depth, quantity, bedrock and site limitations.

(2) Bio-Fuel Boiler Systems



- (a) The Borough Assembly and a number of constituents have strong interest in Bio-Fuel option.
- (b) While some additional funding through AEA is possible, even if approved, it would not be available until June 2011. This would affect construction schedule / building cost. AEA has an open website describing the application process.
- (c) If an AEA application is submitted, there is no guarantee that Ketchikan will receive funding and thus full costs of this system could end up being paid for by the people of Ketchikan.
- (d) Communities relying on hydropower are handicapped in the AEA application.
- (e) Currently in Alaska, the payback on some Bio-Fuel systems is low. Craig's pool system is targeting a 36-year period of bonds for payback.
- (f) Deadline for application with AEA is August – AMC's research into the feasibility of this system needs to be completed *prior* to then. ←
- (g) KGB provided a list of three key proponents for Bio Based Fuels. AMC to coordinate their research with these people (Wade Zammit, Sealaska; Trevor Sande, R&M Engineering; Larry Jackson, Tongass Forest Enterprises in Ward Cove - sawmill owner). ←
- (h) Bio-Fuel Systems come in three forms:
 1. Cord Wood – Large land requirements; moisture content a big issue, as is keeping the wood dry when on site; feeding wood is labor intensive. This type system more feasible for smaller scale projects (more like residential size).
 2. Wood Chips – Large land requirements; moisture content also a big issue, as is keeping the chips dry when on site; somewhat labor intensive. This type system more suitable for larger scale projects.
 3. Wood Pellets – Most consistent in wood dryness. Pellets are a commodity and consistent between sources. Smallest amount of storage requirement. Silo is currently estimated to be 24' in diameter and 30-40' tall, on a 30' x 30' concrete pad. Requires special grain-type truck to load silo – unlikely one currently exists in Ketchikan.
 4. Pellet systems cannot accept chips or raw wood.
 5. It's more economical if all the buildings on the site are utilizing this energy rather than just the Recreation Center (a central plant).
 6. Pellet boilers require regular cleaning due to creosote buildup. This equates to roughly one week of down time every 3-4 months (additional operational costs / maintenance). A minimum of one back up boiler of any type will be required during these periods.

E. Electrical Program Requirements

(1) Power



- (a) Utility rates for electricity are on the order of 9.5 cents/kWhr.
 - (b) AMC has performed preliminary load calculations for the pool addition and obtained historical load data for the Recreation Center from KPU. Calculations show the existing service may not have adequate capacity to serve the new addition. Further analysis needs to be completed after better building and mechanical systems information is available. Options include a new electrical service for the addition or upgrading the existing service. Upgrading the existing service was the favored methodology.
 - (c) Loads estimated do not include heating the pool electrically.
 - (d) **KGB – Square D electrical gear is preferred** and is used at the existing Recreation Center. Gear does not need to be sole source but it is desirable if multiple suppliers can bid competitively. Availability is most important. (Siemens gear is hard to find in town).
 - (e) **KGB – The facility does not require an emergency or stand-by generator.**
 - (f) **KGB – Building site is subject to power issues including brown outs and power outages.**
 - (g) Transient Voltage Surge Suppression (TVSS) will be provided on the main service and on panelboards to protect equipment against transient voltage spikes.
 - (h) Phase monitor equipment will be included. (Will detect loss of phase and control motors off so motors don't burn out).
 - (i) VFDs will be used for 3-phase motors to protect them against single phasing and voltage imbalance.
 - (j) Hard-wired optical sensor operated faucets and flush valves.
 - (k) Built-in, wall mounted, hand/hair dryers.
 - (l) Swimsuit spinners are desired.
 - (m) Washer and dryer will be located in the office. Washer is 135# model. Dryer size was not known. Owner will forward information on existing units but both will be commercial grade.
 - (n) Break room will include full-size refrigerator; microwave; dishwasher; and convenience receptacles on dedicated circuits.
 - (o) Concession equipment will likely include: pizza cooker; hot dog roller; microwave; popcorn maker.
 - (p) A dedicated receptacle for a T-Shirt machine will likely be located in the entry.
 - (q) Pool area will have an electric sauna for 8 to 10 people. Sauna will be controlled by electro-mechanical twist timer.
 - (r) Classroom will have an interactive white board with integral projector.
- (2) Lighting
- (a) **KGB – Emergency lighting will be on battery packs instead of inverter.**



- (b) Lamps and fixtures should be as standardized as feasible while still allowing expression of design. **KGB prefers T5 lamps with rapid start ballasts.**
 - (c) Natatorium lighting will be a combination of direct fluorescent fixtures and indirect metal halide fixtures located around perimeter of pool so that they are maintainable from the pool deck. Care will be taken so swimmers doing the backstroke will not be negatively affected by the lighting.
 - (d) Motion light sensors for storage areas, JC and Mech / Elec rooms.
 - (e) Smart lighting wherever feasible (lights that detect the sun and turn down / off).
 - (f) Fluorescent lamps should be 5100K color temperature.
 - (g) Wall pack emergency lighting is preferred—no emergency ballasts. Use combination emergency wall packs/exit signs where possible.
 - (h) Lighting control should be centralized switch banks for override off control.
 - (i) Provide building with night lights (minimal amount of lighting in building 24/7).
- (3) Special Systems
- (a) Timing system will be located near break room. Likely, break room will have windows looking out to the pool with blinds. Break room will include storage for touch pads.
 - (b) Fire Alarm – Existing building Silent Knight system by Advanced Communications (Dave Deihl) reliable local source for fire alarm systems.
 - (c) New addition will have IP phone system.
 - (d) Data switches by Borough (use Dell Switches).
 - (e) Provide Cat 5e telecommunications cabling.
 - (f) Provide ceiling mounted jacks for future Owner furnished Owner installed wireless access point (WAP) data network equipment.
 - (g) Telecom backbone: Provide six Cat 6A cables, Cat 3 backbone (50 pair) and multi-mode optical fiber cable between existing Telecom room in Rec center and the Pool Addition.
 - (h) Provide standard telecom racks and cable management.
 - (i) Extend existing security system from Recreation Center. Devices to include door contacts on exterior doors; glass break sensors on grade level glass; motion detection in main corridors.
 - (j) CCTVs: Combine existing system and new addition. New cameras to be IP protocol. Existing cameras are analog with coax cable. Upgrade storage headend to accept IP and/or analog inputs.
 - (k) Provide a scoreboard for pool and coordinate electrical so cords do not have to drape down to standard outlet height (+/- 18 inches).
 - (l) Natatorium sound systems need separate zones for the competition area and the public seating area.



- (m) Facility needs a public address system. All calls will be placed over PA speakers with an output to natatorium sound system speakers. PA microphone inputs at multiple locations.
- (n) Cable TV system will be extended from Recreation Center to the addition.
- (o) Natatorium needs an emergency call switch for life guards to use. Look at wireless switch to annunciate emergency calls to main front desk (oval office)— at existing Recreation Center.
- (p) Extend existing central clock system into the addition. Large digital display clocks are desired for Natatorium.

The proceeding indicates the events of the meeting to our understanding. The noted attendees are asked to review the information and submit any omissions or corrections, no later than the 5th working day after issuance of these meeting minutes.

Sincerely,

Larz Hitchcock

Registered Architect (AK) / LEED AP (BDC)

Cc: Dan Bockhorst, RISE Alaska, Consultants, File



MEETING MINUTES – SITE DEVELOPMENT

PROJECT NAME: **Ketchikan Aquatic Center**

JOB NO.: **10015.01**

DATE: **April 21, 2010**

ATTENDEES

Name	Title	Company
Dan Bockhorst	Borough Manager	KGB
Amy Briggs	Administrative Asst. Lands, Planning Dept.	KGB
Jonathan Lappin	Lands Manager, Planning Dept.	KGB
Tom Williams	Director of Planning and Community Development	KGB
Agnes Moran	Borough Assembly Member	KGB
Dean Henrick	Maintenance Director	KGB School District
Karen Taylor	Aquatic Supervisor, Parks & Recreation	KGB
Wendy Mackie	Supervisor, Parks & Recreation	KGB
Ericka Rud	Asst. Aquatic Supervisor, Parks & Recreation	KGB
Scott Brandt-Ericksen	Borough Attorney	KGB
Mike Houts	Finance Director	KGB
Mike Carney	Airport Manager / Public Works Project Manager	KGB
Dan Kelley	Public Works	KGB
Joe May	Public Works Director	KGB
Kent Crandall	Project Manager	RISE Alaska
David Moore	Architect PM / PIC	Architects Alaska Inc
Larz Hitchcock	Architect PA / LEED AP	Architects Alaska Inc
Brad Doggett	Civil Engineer	DOWL HKM
Adam McGill	Civil Engineer	DOWL HKM
Peter Briggs	Landscape Architect	Corvus Design Inc
Trevor Sande	Survey / Geotech	R&M

1) On 21 April 2010 the listed attendees met to discuss the following:

- A. Introductions
- B. Site Development of the Larger Site
- C. Site Development of the Facilities Site

2) The following discussion occurred (← indicates action items):



A. Introductions.

B. Site Development of the Larger Site

NOTE: For discussion of the site layout, the Entry on the Face of the existing Rec. Facility is considered North with the parking beside it (near Maintenance yard) is considered East)

(1) Vehicular Circulation / Parking

- (a) AAI asked if the intersection every gets backed up from event parking? KGB stated it has never been an issue. Though traffic congestion from buses and parents picking up kids is an issue(see below).
- (b) Currently buses are cutting through the site and crossing paths with parents and facility users (cars and pedestrian walkways). This is a major issue and a safety hazard for school children.
- (c) AAI proposed a drive through circle around the school facility. KGB presented boards by another Architect showing a partial scheme of this alternative. While several site circulation options were considered, most have logistical impracticalities. The design team expanded on the previous loop scheme in several ways:
 - 1. Bus circulation would use only the Northern entry to the existing facility parking area. Buses would then travel East creating a bus drive / drop off lane on the North part of the school site. This route would eliminate most of the bus/private user traffic paths from crossing. Furthermore, this would enable the existing school parking (at the East side of the school) to be used entirely for parental pick up/drop off. That pick up/drop off zone could easily be expanded for greater ease of use by parents. While an access point would be allowed for maintenance vehicles, the central area of the school site (between these two drop zones) would become entirely a pedestrian zone. This solution would virtually eliminate children crossing bus/car loading areas and enables a high level of safety for children. It would also facilitate ability for pedestrians to approach/leave the Recreational Center via clear pedestrian paths, minimizing road crossing.
 - 2. The existing band building in the NW corner of the school area of the site would not be affected by the addition of the bus loop.
 - 3. The new circulation loop for the Recreation Center would enter from the existing parking on the NW corner of the site and run along the front of the building then down into the Southern part of the school area.
 - 4. The front of the Recreation Center could also have additional parking and dedicated parking spaces.
 - 5. If the entire loop is one way (entering from the North and exiting East), parking could be expanded by creating angled parking.
 - 6. RISE Alaska felt this loop would work well for construction as one side of the loop could be used by the existing facility and the other by the construction crews, thus extending the ability to keep the facility open throughout most of construction.

(2) Pedestrian / Children Circulation

- (a) In addition to the items described above, a raised (or sunken) area of the road could be created for slowing traffic at the pedestrian crossing from the school area.

C. Site Development of the Facilities Site

- (1) Building Placement – AAI agrees that the most logical location for the new facility is adjacent to the existing Recreation Center on the East end. Locating it adjacent to the facility in any other location appears to hinder site circulation. Locating the new facility elsewhere on the site also creates additional work and logistical issues. However, the preferred site on the East side also has several constraints that must be addressed in the design:

- (a) Fire lane access would be required on the East side of the building. This will most likely entail a fire lane being established through the south side of the Maintenance yard and a hammer head (turn around point) incorporated between the maintenance yard and new facility. This fire lane will most likely force the building's location forward (toward the North) as the Southern side of the site has an extreme slope than could be too costly to excavate. Another option to accommodate fire lane access would be to elongate the building to the East.
- (b) If the building is located toward the North, it will most likely spill into the green area between the existing Recreation Center parking and maintenance yard. If it is located to the East, it would position the building closer to the new loop road.
- (c) In either of the above schemes, the skateboard park would need to be relocated. Many felt that the area to the Southeast of the existing Recreation Center parking may be large enough. Parks and Recreation staff informed the design team that the new skateboard facility is anticipated to be 80'x100.' It appears the relocation area may still work with this size.
- (d) DOWL/HKM will verify the requirements of the feeder stream from various monitoring agencies (if any). ←
- (e) KGB requested information about chlorine being dumped into the feeder stream. Pool drainage will be through the existing sewer system not the stream and will be coordinated by DOWL/HKM with the utility. The design team also anticipates only a minimal amount of Chlorine from the draining of the pool. Councilman Hunsaker agreed to provide information regarding pool chemical treatment options. ←

(2) Civil:

- (a) Approximately 84 parking spaces will be needed for the aquatics/ recreational facility. This needs to be refined (building currently has 20 staff).
- (b) A through-road is desired.
- (c) Bio-Fuel – Should Bio Fuel be included in the project, an area of approximately 30x30 feet would be need if a silo were used for storage.
- (d) Keeping the feeder streams on-grade drainage would be ideal, but a culvert may be appropriate.



- (e) Separating bus traffic from private vehicles is highly desired. There is an opportunity for this at the Northeast corner of the site between the school and the street.
- (3) Landscaping:
- (a) Landscape items should be hearty, child-resistant and safe in design.
 - (b) KGB requested elimination of the cat litter volleyball court. The design team felt this to be an ideal location for the skate park (80'x100').
 - (c) Corvus felt there may be some design options to reduce the ice from the existing roof being such a hazard.
 - (d) Children's play area should be modified to include more 2-5 yr old friendly equipment (30 children). While the children's play area may need to be sheltered from weather it should be naturally lit.
 - (e) Bike racks shall remain per the existing location (one bike rack for approximately 11 spaces).
 - (f) Design Team should consider having the children's play area sheltered from weather. If doing so, allow for ample daylight.
 - (g) Safe pedestrian walkways should be made between the site and the school. (Two paths crossing to school, with traffic calming features).
 - (h) No landscape ordinance is required. Landscape should be easily maintained and perhaps focus on trees/ shrubs. Mowed grass is not desired.
- (4) Existing Roof has a tendency to have large sheets of ice shoot off it. Landscaping should be cognizant of the damage from this and aide in protection of pedestrian traffic. The new facility will certainly have a different roof configuration to avoid this issue for the new construction.

The proceeding indicates the events of the meeting to our understanding. The noted attendees are asked to review the information and submit any omissions or corrections, no later than the 5th working day after issuance of these meeting minutes.

Sincerely,

Larz Hitchcock

Registered Architect (AK) / LEED AP (BDC)

Cc: Dan Bockhorst, RISE Alaska, Consultants, File



MEETING MINUTES – EXECUTIVE SUMMARY

PROJECT NAME: **Ketchikan Aquatic Center**

JOB NO.: **10015.01**

DATE: **April 21, 2010**

ATTENDEES

Name	Title	Company
Dan Bockhorst	Borough Manager	KGB
Amy Briggs	Administrative Asst. Lands, Planning Dept.	KGB
Jonathan Lappin	Lands Manager, Planning Dept.	KGB
Glen Thompson	Borough Assembly	KGB
Agnes Moran	Borough Assembly Member	KGB
Karen Taylor	Aquatic Supervisor, Parks & Recreation	KGB
Wendy Mackie	Supervisor, Parks & Recreation	KGB
Ericka Rud	Asst. Aquatic Supervisor, Parks & Recreation	KGB
Mike Houts	Finance Director	KGB
Joe May	Public Works Director	KGB
Kent Crandall	Project Manager	RISE Alaska
David Moore	Architect PM / PIC	Architects Alaska Inc
Larz Hitchcock	Architect PA / LEED AP	Architects Alaska Inc
Brad Doggett	Civil Engineer	DOWL HKM
Adam McGill	Civil Engineer	DOWL HKM
Peter Briggs	Landscape Architect	Corvus Design Inc

- 1) On 21 April 2010 the listed attendees met to discuss the following:
 - A. Summary of previous three meetings

- 2) The following discussion occurred:
 - A. Aquatic Meeting Summary:
 - (1) Competition Pool has three possible configurations, though 'L' shape may be best.
 - (2) Recreational Pool shall include some fun amenities to draw people to use the pool.
 - (3) Natatorium as a whole shall have predominantly concrete features for lower maintenance and long lasting finishes.
 - (4) Programming for the pools shall be fun, family oriented, flexible and have capacity to be spectator location for swimming and diving events. Programming shall also allow multiple training purposes from young to old with specialty training for various agencies.



B. Programming Meeting Summary:

- (1) Facility requirements were documented and will be compiled into Room Functional Data Sheets for Steering Committee's review and approval.
- (2) Addition of some space for existing facility.
- (3) Mechanical systems to be independent from existing building.
- (4) Electrical systems will require a power upgrade to the site.
- (5) Maintenance systems to be economical, energy efficient and coordinated for ease of use, long life and new systems require proper training of users.
- (6) Alternate Energy systems will need further research and verification of construction and economic feasibility.
- (7) Regardless of systems used, mechanical systems should have a level of redundancy.
- (8) Heat retention, recovery and preservation are critical issues.
- (9) Reroof of existing facility will dovetail into new construction. New building's roof should be designed so it does not create hazards from ice flows.

C. Site Meeting Summary:

- (1) Loop design of site will offer:
 - (a) Reduction of issues between buses and cars.
 - (b) Improvement of safety for pedestrian traffic.
 - (c) Ease of existing facility use during construction.
- (2) Fire lane presents some challenges, but nothing that is insurmountable. This also will dictate the layout of the new buildings location/ shape.
- (3) Landscaping should be user friendly but hardy to children's wear and tear.

D. Wrap Up:

- (1) The Borough Manager expressed his satisfaction with the design team, its process, questions and presentation.
- (2) The Design Team was very pleased with the Steering Committee's knowledge of the various aspects to the project, promptness with making critical decisions, and enthusiasm for the project.
- (3) The next meetings will end with a public presentation of the work to date and may be televised or web broadcast for easy access to the public.

The proceeding indicates the events of the meeting to our understanding. The noted attendees are asked to review the information and submit any omissions or corrections, no later than the 5th working day after issuance of these meeting minutes.

Sincerely,



Larz Hitchcock

Registered Architect (AK) / LEED AP (BDC)

Cc: Dan Bockhorst, RISE Alaska, Consultants, File